Report Generated On 8/7/2006 3:52:51 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: ORG7829

Spectrum File: ORG7829
Sample ID: OOL-08-02-101-F-
Sample Title: OOL-08-02-101-F-G
Description: 100% VEGETATION

Sample Type:
Geometry:

Acquisition Started: 8/7/2006 3:42:50 PM
Live Time: 600.0 seconds
Real Time: 600.9 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-08-02-101-F-
Title: OOL-08-02-101-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	945-	960	954.51	238.60	0.77	5.27E+001	39.05	1.14E+002
2	2037-	2052	2042.46	510.63	0.58	3.90E+001	25.41	4.20E+001
3	2327-	2337	2332.33	583.10	0.76	1.63E+001	19.76	3.58E+001
4	3870-	3881	3875.14	968.86	0.31	1.44E+001	14.42	1.56E+001
5	5831-	5854	5842.59	1460.78	1.28	3.15E+002	36.76	9.12E+000
6	7053-	7066	7059.28	1765.00	0.35	1.72E+001	9.26	1.78E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: 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	2.14868E-001	1.43118E-001
K-40	1.000	1460.81*		10.67	2.21200E+001	3.14263E+000
Pb-212	0.421	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	5.38536E-001	4.07851E-001

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

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

I N T E R 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	2.148683E-001	1.431184E-001
	K-40		1.000	2.212002E+001	3.142633E+000
X	TL-208		0.753		
	Pb-212	@	0.421	5.385357E-001	4.078513E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	583.10	2.7083E-002	121.61
4	968.86	2.4042E-002	99.97
6	1765.00	2.8706E-002	53.79

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	2.8142E-001	2.41E-001	8.6651E-002
	1332.49	100.00	2.4113E-001		6.5249E-002
Nb-94	702.63	100.00	2.4351E-001	2.44E-001	6.3086E-002
	871.10	100.00	2.4542E-001		6.8112E-002
Ag-108m	79.20	7.10	2.1424E+001	2.97E-001	-6.6694E+000
	433.93	89.90	2.9731E-001		1.8544E-001
	614.37	90.40	3.3218E-001		-2.6194E-001
	722.95	90.50	3.0036E-001		3.3958E-002
Sb-125	176.33	6.89	5.8284E+000	8.54E-001	8.4154E-001
	427.89	29.33	8.5407E-001		2.4012E-001
	463.38	10.35	2.5413E+000		-3.0041E+000
	600.56	17.80	1.5784E+000		3.4612E-001
	606.64	5.02	6.3551E+000		5.0620E+000
	635.90	11.32	2.2937E+000		-2.1930E+000
Cs-134	563.23	8.38	3.2546E+000	3.00E-001	1.0125E+000
	569.32	15.43	1.6922E+000		6.5634E-001
	604.70	97.60	3.2158E-001		1.3711E-001
	795.84	85.40	3.0028E-001		1.0837E-001
	801.93	8.73	2.7108E+000		-6.0416E+000
Cs-137	661.65	85.12	3.3175E-001	3.32E-001	9.4504E-002
Eu-152	121.78	28.40	2.0082E+000	9.12E-001	-1.4357E+000
	244.69	7.49	4.5196E+000		-2.2357E+000
	344.27	26.50	1.0902E+000		-4.0507E-001
	778.89	12.74	2.0564E+000		-1.6953E+000
	867.32	4.16	5.9395E+000		-1.1139E+000
	964.01	14.40	2.0751E+000		-6.9208E-001
	1085.78	10.00	2.2455E+000		-1.3580E+000
	1112.02	13.30	1.9352E+000		-1.5657E+000
	1407.95	20.70	9.1158E-001		6.3342E-001
Eu-154	123.07	40.50	1.4058E+000	6.07E-001	-1.5073E-001
	247.94	6.60	5.0583E+000		-5.9362E+000
	591.81	4.83	5.5308E+000		-7.0646E+000
	723.30	19.70	1.3800E+000		5.1764E-001
	756.87	4.33	5.3441E+000		-1.1565E+000
	873.19	11.50	2.1014E+000		-6.0246E-001
	996.32	10.30	2.4670E+000		1.4126E+000
	1004.76	17.90	1.3054E+000		-1.0177E+000
	1274.45	35.50	6.0730E-001		-6.7797E-001
Eu-155	86.54	30.90	3.4944E+000	3.49E+000	1.0213E+000
	105.31	20.70	3.7460E+000		-6.3090E-001
Am-241	59.54	35.90	1.0060E+001	1.01E+001	-3.0146E+001
Cm-243	228.19	10.56	3.1703E+000	2.18E+000	-1.7515E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.1792E+000	2.18E+000	-2.6823E+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 3:40:10 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-08-02-102-F-
Sample Title: OOL-08-02-102-F-G
Description: 100% VEGETATION

Sample Type:
Geometry:

Acquisition Started: 8/7/2006 3:30:10 PM
Live Time: 600.0 seconds
Real Time: 601.0 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-08-02-102-F-
Title: OOL-08-02-102-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	2326-	2339	2332.39	583.12	0.69	3.61E+001	22.80	3.59E+001
2	3635-	3650	3643.00	910.82	0.76	4.21E+001	18.69	1.59E+001
3	5832-	5855	5843.36	1460.98	1.69	3.10E+002	36.53	9.21E+000
4	7052-	7065	7058.43	1764.79	0.50	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: ORG7829

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.999	1460.81*	10.67	2.17634E+001	3.11310E+000
TL-208	0.473	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.46200E-001	1.58724E-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	0.999	2.176343E+001	3.113100E+000
TL-208	0.473	2.461999E-001	1.587243E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	7.0115E-002	44.43
4	1764.79	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: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	2.7945E-001	2.14E-001	1.8110E-001
	1332.49	100.00	2.1367E-001		9.3491E-002
Nb-94	702.63	100.00	2.7304E-001	2.42E-001	1.5458E-001
	871.10	100.00	2.4152E-001		1.2927E-001
Ag-108m	79.20	7.10	2.1049E+001	2.82E-001	-2.5196E+001
	433.93	89.90	3.0375E-001		8.6479E-002
	614.37	90.40	3.3361E-001		-2.4928E-001
	722.95	90.50	2.8237E-001		3.9713E-002
Sb-125	176.33	6.89	6.0513E+000	8.91E-001	1.7366E+000
	427.89	29.33	8.9138E-001		1.9234E-001
	463.38	10.35	2.5888E+000		3.0908E-001
	600.56	17.80	1.4245E+000		5.4656E-001
	606.64	5.02	6.3551E+000		2.7728E+000
	635.90	11.32	2.2937E+000		-2.8055E-001
Cs-134	563.23	8.38	2.8939E+000	2.83E-001	-2.9964E+000
	569.32	15.43	1.5568E+000		3.6661E-001
	604.70	97.60	3.1525E-001		-6.2747E-003
	795.84	85.40	2.8326E-001		-2.0041E-001
	801.93	8.73	2.8609E+000		-1.7501E+000
Cs-137	661.65	85.12	3.1426E-001	3.14E-001	1.0103E-001
Eu-152	121.78	28.40	2.2380E+000	9.28E-001	-3.3442E-001
	244.69	7.49	4.4822E+000		-8.5496E+000
	344.27	26.50	1.1802E+000		-6.5540E-001
	778.89	12.74	1.9464E+000		-6.0458E-001
	867.32	4.16	6.0759E+000		2.1619E+000
	964.01	14.40	2.0979E+000		1.7416E+000
	1085.78	10.00	2.3163E+000		-1.1860E+000
	1112.02	13.30	1.7349E+000		-6.1635E-001
	1407.95	20.70	9.2838E-001		4.0217E-001
Eu-154	123.07	40.50	1.5580E+000	6.31E-001	2.6211E-001
	247.94	6.60	4.8827E+000		-5.6514E+000
	591.81	4.83	5.3501E+000		2.0739E+000
	723.30	19.70	1.2974E+000		7.3257E-001
	756.87	4.33	6.1621E+000		2.4567E+000
	873.19	11.50	2.0494E+000		-1.3315E+000
	996.32	10.30	2.2849E+000		1.5722E+000
	1004.76	17.90	1.2806E+000		-6.5155E-001
	1274.45	35.50	6.3051E-001		1.1326E-001
Eu-155	86.54	30.90	3.7169E+000	3.72E+000	2.4471E+000
	105.31	20.70	3.9362E+000		1.4199E+000
Am-241	59.54	35.90	1.2292E+001	1.23E+001	-1.2255E+001
Cm-243	228.19	10.56	3.2088E+000	2.27E+000	1.1161E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.2710E+000	2.27E+000	-8.5694E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 9:37:53 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: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-08-02-103-F-
Sample Title: OOL-08-02-103-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/4/2006 9:27:53 PM
Live Time: 600.0 seconds
Real Time: 600.6 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-08-02-103-F-
Title: OOL-08-02-103-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	950-	959	954.89	238.82	0.85	7.30E+001	31.09	7.90E+001
2	1400-	1413	1406.60	351.76	0.46	5.73E+001	25.14	3.87E+001
3	2324-	2335	2330.97	582.86	0.39	3.36E+001	20.34	2.94E+001
4	2430-	2439	2434.67	608.79	0.46	1.43E+001	17.14	2.67E+001
5	5832-	5853	5842.37	1460.76	1.79	3.11E+002	38.33	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: 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	2.04425E+001	3.01556E+000
TL-208	0.471	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	2.18134E-001	1.35079E-001
		860.37		12.46		
Pb-212	0.402	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.14502E-001	3.24225E-001
Bi-214	0.399	609.31*		46.30	1.70847E-001	2.05931E-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		1.000	2.044253E+001	3.015560E+000
TL-208		0.471	2.181340E-001	1.350788E-001
Pb-212	@	0.402	7.145015E-001	3.242249E-001
Bi-214		0.399	1.708466E-001	2.059311E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.76	9.5495E-002	43.87

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	2.1567E-001	1.73E-001	-1.1608E-001
	1332.49	100.00	1.7315E-001		-3.3336E-003
Nb-94	702.63	100.00	2.4119E-001	2.29E-001	-1.4489E-002
	871.10	100.00	2.2914E-001		5.6821E-002
Ag-108m	79.20	7.10	1.5914E+001	2.48E-001	-1.7931E+001
	433.93	89.90	2.4815E-001		-9.6362E-002
	614.37	90.40	2.5558E-001		5.5571E-002
	722.95	90.50	2.6115E-001		-3.4735E-002
Sb-125	176.33	6.89	5.2065E+000	7.40E-001	1.4155E+000
	427.89	29.33	7.3971E-001		1.9739E-001
	463.38	10.35	2.2853E+000		1.5076E+000
	600.56	17.80	1.2454E+000		-1.2466E+000
	606.64	5.02	5.2661E+000		1.0038E+000
	635.90	11.32	1.8117E+000		-1.2247E+000
Cs-134	563.23	8.38	2.3810E+000	2.45E-001	-5.7004E-001
	569.32	15.43	1.3728E+000		-7.3936E-001
	604.70	97.60	2.6787E-001		4.9518E-002
	795.84	85.40	2.4486E-001		9.2539E-002
	801.93	8.73	2.2353E+000		-4.3488E-001
Cs-137	661.65	85.12	2.6805E-001	2.68E-001	7.5417E-002
Eu-152	121.78	28.40	1.8544E+000	7.81E-001	5.9051E-001
	244.69	7.49	3.9158E+000		1.0997E+000
	344.27	26.50	9.6425E-001		-2.5129E-002
	778.89	12.74	1.6019E+000		5.1266E-001
	867.32	4.16	5.6353E+000		-2.7270E-001
	964.01	14.40	1.8119E+000		6.7647E-001
	1085.78	10.00	2.0337E+000		-7.6264E-001
	1112.02	13.30	1.7939E+000		3.9995E-001
	1407.95	20.70	7.8091E-001		-5.9780E-001
Eu-154	123.07	40.50	1.2842E+000	5.60E-001	-4.5249E-001
	247.94	6.60	4.1289E+000		3.1047E+000
	591.81	4.83	4.8244E+000		5.3972E-001
	723.30	19.70	1.1915E+000		-2.0746E-001
	756.87	4.33	5.2415E+000		-2.3104E+000
	873.19	11.50	1.9937E+000		-2.1425E-001
	996.32	10.30	2.1911E+000		-4.0792E-001
	1004.76	17.90	1.1934E+000		-3.2218E-001
	1274.45	35.50	5.6047E-001		-4.4493E-002
Eu-155	86.54	30.90	2.9387E+000	2.94E+000	2.4327E+000
	105.31	20.70	3.0245E+000		-1.1770E-001
Am-241	59.54	35.90	5.4800E+000	5.48E+000	1.3094E+000
Cm-243	228.19	10.56	2.8041E+000	1.93E+000	-7.3765E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.9347E+000	1.93E+000	-2.0310E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 10:07:43 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-08-02-104-F-
Sample Title: OOL-08-02-104-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/4/2006 9:57:42 PM
Live Time: 600.0 seconds
Real Time: 600.6 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-08-02-104-F-
Title: OOL-08-02-104-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	949-	958	953.50	238.47	0.76	4.80E+001	27.66	6.70E+001
2	2325-	2337	2331.34	582.95	1.35	3.92E+001	18.17	1.78E+001
3	5831-	5853	5843.32	1461.00	2.11	2.73E+002	34.99	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: 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	1.79810E+001	2.72332E+000
TL-208	0.472	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	2.54198E-001	1.22620E-001
		860.37		12.46		
Pb-212	0.403	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	4.69980E-001	2.80469E-001

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

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

I N T E R 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	1.798097E+001	2.723325E+000
TL-208	0.472	2.541982E-001	1.226196E-001
Pb-212 @	0.403	4.699802E-001	2.804694E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.2231E-001	2.07E-001	2.9252E-002
	1332.49	100.00	2.0673E-001		1.2064E-001
Nb-94	702.63	100.00	1.9319E-001	1.93E-001	-2.7767E-001
	871.10	100.00	2.2154E-001		1.1659E-001
Ag-108m	79.20	7.10	1.5886E+001	2.57E-001	-4.8358E+000
	433.93	89.90	2.6616E-001		-4.6129E-002
	614.37	90.40	2.9500E-001		-1.0006E-001
	722.95	90.50	2.5748E-001		-7.7837E-002
Sb-125	176.33	6.89	4.9983E+000	8.12E-001	5.4973E-001
	427.89	29.33	8.1248E-001		1.1822E-001
	463.38	10.35	2.1067E+000		6.2128E-001
	600.56	17.80	1.2091E+000		8.7697E-002
	606.64	5.02	5.4222E+000		3.7032E+000
	635.90	11.32	1.8890E+000		-5.1365E-001
Cs-134	563.23	8.38	2.6323E+000	2.61E-001	-5.2445E-001
	569.32	15.43	1.3302E+000		-1.8146E+000
	604.70	97.60	2.6091E-001		-1.6618E-001
	795.84	85.40	2.7103E-001		2.4750E-001
	801.93	8.73	2.3073E+000		1.3533E+000
Cs-137	661.65	85.12	2.3731E-001	2.37E-001	-1.1221E-001
Eu-152	121.78	28.40	1.8342E+000	8.31E-001	-3.7606E-001
	244.69	7.49	3.6811E+000		-1.1373E+000
	344.27	26.50	8.6080E-001		1.2510E-001
	778.89	12.74	1.5701E+000		-8.7055E-001
	867.32	4.16	4.9832E+000		-1.7437E+000
	964.01	14.40	1.7641E+000		5.4636E-002
	1085.78	10.00	1.8629E+000		-1.4240E-001
	1112.02	13.30	1.3064E+000		8.1954E-001
	1407.95	20.70	8.3093E-001		1.2129E-001
Eu-154	123.07	40.50	1.2882E+000	5.60E-001	1.0622E+000
	247.94	6.60	3.9925E+000		-2.0292E+000
	591.81	4.83	4.2282E+000		7.1015E-001
	723.30	19.70	1.2082E+000		4.9270E-001
	756.87	4.33	5.0762E+000		1.3739E+000
	873.19	11.50	1.8936E+000		-9.3071E-001
	996.32	10.30	1.8270E+000		7.0274E-001
	1004.76	17.90	1.0800E+000		2.5793E-001
	1274.45	35.50	5.6047E-001		-3.0708E-001
Eu-155	86.54	30.90	2.9850E+000	2.98E+000	1.2945E+000
	105.31	20.70	3.0581E+000		-2.7603E+000
Am-241	59.54	35.90	5.4467E+000	5.45E+000	-5.8845E-001
Cm-243	228.19	10.56	2.9484E+000	1.76E+000	-1.3321E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.7559E+000	1.76E+000	-8.0748E-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 8/4/2006 10:31:07 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-08-02-105-F-
Sample Title: OOL-08-02-105-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/4/2006 10:21:05 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: 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-08-02-105-F-
Title: OOL-08-02-105-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	1349-	1359	1353.32	338.29	0.76	1.85E+001	23.09	4.95E+001
2	2429-	2442	2435.29	608.78	0.37	3.70E+001	16.34	1.10E+001
3	3638-	3650	3644.78	911.16	0.77	2.97E+001	15.09	1.13E+001
4	5830-	5854	5842.00	1460.47	1.28	2.75E+002	34.65	9.25E+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	1.88508E+001	2.82525E+000
Bi-214	0.401	609.31*	46.30	4.56997E-001	2.09528E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.538	338.32*	11.40	7.83929E-001	9.85924E-001
		911.07*	27.70	6.71354E-001	3.49456E-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	0.996	1.885082E+001	2.825253E+000
Bi-214	0.401	4.569966E-001	2.095282E-001
Ac-228	0.538	6.839186E-001	3.293779E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.10E-001	-2.0764E-001
	1332.49	100.00	2.0959E-001		5.3036E-002
Nb-94	702.63	100.00	2.4896E-001	2.23E-001	-9.8556E-002
	871.10	100.00	2.2271E-001		1.0725E-002
Ag-108m	79.20	7.10	2.0624E+001	2.71E-001	-2.4206E+001
	433.93	89.90	2.9503E-001		2.2730E-001
	614.37	90.40	2.8916E-001		1.5852E-002
	722.95	90.50	2.7112E-001		2.1108E-001
Sb-125	176.33	6.89	6.4295E+000	9.01E-001	1.9730E+000
	427.89	29.33	9.0056E-001		5.9258E-001
	463.38	10.35	2.4910E+000		1.9940E+000
	600.56	17.80	1.5515E+000		1.6340E+000
	606.64	5.02	5.4922E+000		2.5813E+000
	635.90	11.32	2.0591E+000		-9.6433E-001
Cs-134	563.23	8.38	2.9828E+000	2.94E-001	2.6074E+000
	569.32	15.43	1.4993E+000		-1.3701E+000
	604.70	97.60	2.9440E-001		1.1838E-002
	795.84	85.40	3.0846E-001		4.5869E-002
	801.93	8.73	2.6639E+000		-2.4626E+000
Cs-137	661.65	85.12	2.9654E-001	2.97E-001	-7.7168E-002
Eu-152	121.78	28.40	2.1173E+000	1.00E+000	-1.6171E+000
	244.69	7.49	4.4553E+000		-3.5181E+000
	344.27	26.50	1.0673E+000		-4.6244E-001
	778.89	12.74	1.7406E+000		2.8551E-001
	867.32	4.16	5.4450E+000		-3.1738E-001
	964.01	14.40	1.8183E+000		1.3520E+000
	1085.78	10.00	1.8587E+000		-4.7097E-001
	1112.02	13.30	1.5955E+000		-2.0875E+000
	1407.95	20.70	1.0044E+000		2.9090E-001
Eu-154	123.07	40.50	1.4852E+000	5.73E-001	2.5676E-001
	247.94	6.60	4.9849E+000		-9.9290E-001
	591.81	4.83	5.1667E+000		-1.7463E+000
	723.30	19.70	1.2109E+000		-4.3476E-002
	756.87	4.33	5.4770E+000		-2.8191E+000
	873.19	11.50	2.0064E+000		1.6445E+000
	996.32	10.30	2.1212E+000		-6.9715E-001
	1004.76	17.90	1.0929E+000		2.4164E-001
	1274.45	35.50	5.7290E-001		-1.0307E-002
Eu-155	86.54	30.90	3.8414E+000	3.84E+000	1.1494E+000
	105.31	20.70	3.8765E+000		9.8256E-002
Am-241	59.54	35.90	9.0814E+000	9.08E+000	5.4826E+000
Cm-243	228.19	10.56	3.2483E+000	2.10E+000	-2.4135E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.0955E+000	2.10E+000	-3.0928E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 10:45:39 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: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-08-02-106-F-
Sample Title: OOL-08-02-106-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/4/2006 10:35:36 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-08-02-106-F-
Title: OOL-08-02-106-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	948-	960	955.10	238.73	0.99	5.60E+001	36.06	1.07E+002
2	3637-	3648	3642.63	910.62	1.30	3.42E+001	15.46	1.08E+001
3	5830-	5854	5841.76	1460.41	1.98	3.20E+002	39.09	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	0.995	1460.81*		10.67	2.19719E+001	3.21801E+000
Pb-212	0.427	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	5.65062E-001	3.74751E-001

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

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

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

Spectrum File:GRN7780

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

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.995	2.197187E+001	3.218007E+000
Pb-212 @	0.427	5.650624E-001	3.747512E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	910.62	5.7028E-002	45.19

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	2.4788E-001	1.89E-001	2.5182E-001
	1332.49	100.00	1.8945E-001		-1.8718E-001
Nb-94	702.63	100.00	2.1728E-001	2.17E-001	1.3001E-002
	871.10	100.00	2.2671E-001		5.9201E-002
Ag-108m	79.20	7.10	1.9459E+001	2.96E-001	-3.4290E+001
	433.93	89.90	2.9628E-001		2.3522E-001
	614.37	90.40	3.0922E-001		-2.6244E-001
	722.95	90.50	2.9934E-001		1.6895E-001
Sb-125	176.33	6.89	5.7814E+000	9.16E-001	-1.5030E+000
	427.89	29.33	9.1581E-001		-5.9763E-001
	463.38	10.35	2.3327E+000		-1.1486E-002
	600.56	17.80	1.2577E+000		-1.0897E+000
	606.64	5.02	6.0312E+000		4.0554E+000
	635.90	11.32	2.2424E+000		2.2656E+000
Cs-134	563.23	8.38	3.1809E+000	2.85E-001	9.3133E-001
	569.32	15.43	1.5974E+000		-1.8712E-001
	604.70	97.60	3.0482E-001		1.3180E-001
	795.84	85.40	2.8465E-001		2.2039E-001
	801.93	8.73	2.1922E+000		-2.6522E+000
Cs-137	661.65	85.12	2.9468E-001	2.95E-001	1.6138E-001
Eu-152	121.78	28.40	1.9550E+000	9.15E-001	-4.0774E-001
	244.69	7.49	4.2185E+000		-3.2941E+000
	344.27	26.50	1.0954E+000		-5.3941E-001
	778.89	12.74	1.8580E+000		-5.6809E-001
	867.32	4.16	5.7677E+000		-1.1171E+000
	964.01	14.40	1.9373E+000		1.2311E+000
	1085.78	10.00	2.0143E+000		-8.1202E-002
	1112.02	13.30	1.6652E+000		4.0913E-002
	1407.95	20.70	9.1463E-001		4.1659E-001
Eu-154	123.07	40.50	1.3353E+000	5.73E-001	-5.1869E-001
	247.94	6.60	4.5610E+000		-2.4835E+000
	591.81	4.83	4.8821E+000		-1.7133E+000
	723.30	19.70	1.3829E+000		7.8331E-001
	756.87	4.33	5.0025E+000		5.4642E+000
	873.19	11.50	1.9723E+000		5.6793E-001
	996.32	10.30	2.0119E+000		1.3193E+000
	1004.76	17.90	1.1854E+000		-7.4054E-001
	1274.45	35.50	5.7290E-001		3.8883E-001
Eu-155	86.54	30.90	3.5815E+000	3.55E+000	4.2400E+000
	105.31	20.70	3.5493E+000		2.7291E+000
Am-241	59.54	35.90	8.5527E+000	8.55E+000	2.5945E+000
Cm-243	228.19	10.56	3.1923E+000	2.21E+000	3.8296E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.2108E+000	2.21E+000	7.6063E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 4:09:58 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-08-02-107-F-
Sample Title: OOL-08-02-107-F-G
Description: 100% VEGETATION

Sample Type:
Geometry:

Acquisition Started: 8/7/2006 3:59:42 PM
Live Time: 600.0 seconds
Real Time: 600.9 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-08-02-107-F-
Title: OOL-08-02-107-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	2326-	2338	2332.60	583.17	0.38	3.88E+001	23.59	4.02E+001
2	2428-	2442	2435.10	608.80	1.24	4.45E+001	21.68	2.65E+001
3	5830-	5854	5841.29	1460.46	2.03	3.29E+002	36.31	3.34E+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: 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	2.30863E+001	3.16200E+000
TL-208	0.473	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.64323E-001	1.64503E-001
		860.37	12.46		
Bi-214	0.400	609.31*	46.30	5.58301E-001	2.80967E-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	0.996	2.308630E+001	3.162003E+000
TL-208	0.473	2.643227E-001	1.645029E-001
Bi-214	0.400	5.583013E-001	2.809672E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

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

Spectrum File:ORG7829
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	2.4791E-001	2.33E-001	-1.7380E-001
	1332.49	100.00	2.3326E-001		1.8030E-001
Nb-94	702.63	100.00	2.4698E-001	2.47E-001	-1.7322E-001
	871.10	100.00	2.5303E-001		-4.8005E-002
Ag-108m	79.20	7.10	2.2998E+001	2.74E-001	-1.0884E+001
	433.93	89.90	2.7420E-001		-7.2785E-003
	614.37	90.40	3.3503E-001		-1.0264E-001
	722.95	90.50	3.0210E-001		-7.8755E-002
Sb-125	176.33	6.89	6.3136E+000	8.79E-001	-2.8287E+000
	427.89	29.33	8.7913E-001		-3.7643E-001
	463.38	10.35	2.6006E+000		5.7147E-001
	600.56	17.80	1.5552E+000		1.2278E+000
	606.64	5.02	6.3790E+000		3.5421E+000
	635.90	11.32	2.1961E+000		8.3111E-001
Cs-134	563.23	8.38	3.1560E+000	2.98E-001	1.4561E+000
	569.32	15.43	1.7910E+000		1.0702E+000
	604.70	97.60	3.2283E-001		-8.6399E-002
	795.84	85.40	2.9821E-001		1.3885E-002
	801.93	8.73	3.0029E+000		3.0040E+000
Cs-137	661.65	85.12	3.1064E-001	3.11E-001	-1.8836E-001
Eu-152	121.78	28.40	2.2777E+000	8.02E-001	-2.5036E+000
	244.69	7.49	5.2651E+000		-2.5415E+000
	344.27	26.50	1.1769E+000		-4.1628E-001
	778.89	12.74	1.8140E+000		-7.5558E-001
	867.32	4.16	6.3822E+000		1.1223E+000
	964.01	14.40	1.9071E+000		1.1048E+000
	1085.78	10.00	2.5990E+000		1.0169E-001
	1112.02	13.30	1.9664E+000		1.3830E+000
	1407.95	20.70	8.0241E-001		4.0217E-001
Eu-154	123.07	40.50	1.6220E+000	6.60E-001	1.2439E+000
	247.94	6.60	5.6763E+000		-4.5994E+000
	591.81	4.83	5.5896E+000		-1.1203E-001
	723.30	19.70	1.4272E+000		6.3236E-001
	756.87	4.33	6.0856E+000		2.4394E+000
	873.19	11.50	2.2339E+000		1.7353E+000
	996.32	10.30	2.5435E+000		-8.4415E-001
	1004.76	17.90	1.3771E+000		-7.0481E-002
	1274.45	35.50	6.6008E-001		-2.7119E-001
Eu-155	86.54	30.90	3.8429E+000	3.84E+000	-1.3557E+000
	105.31	20.70	3.8936E+000		2.8052E+000
Am-241	59.54	35.90	1.1259E+001	1.13E+001	5.5398E+000
Cm-243	228.19	10.56	3.5539E+000	2.73E+000	-9.4686E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.7287E+000	2.73E+000	5.9272E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 9:22:33 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-08-02-108-F-
Sample Title: OOL-08-02-108-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/4/2006 9:12:32 PM
Live Time: 600.0 seconds
Real Time: 600.6 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-08-02-108-F-
Title: OOL-08-02-108-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	1398-	1410	1406.23	351.66	0.79	5.47E+001	24.71	3.93E+001
2	3637-	3649	3643.92	911.12	1.68	3.31E+001	14.44	7.91E+000
3	5832-	5855	5842.44	1460.78	1.35	3.67E+002	39.29	8.76E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: 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	2.41512E+001	3.24004E+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
K-40	1.000	2.415116E+001	3.240044E+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	351.66	9.1197E-002	45.15
2	911.12	5.5142E-002	43.64

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	2.3294E-001	1.91E-001	-1.1830E-002
	1332.49	100.00	1.9076E-001		1.2168E-001
Nb-94	702.63	100.00	2.2641E-001	2.20E-001	3.5736E-003
	871.10	100.00	2.1960E-001		-2.5417E-001
Ag-108m	79.20	7.10	1.6263E+001	2.24E-001	-9.8838E+000
	433.93	89.90	2.3785E-001		-3.9490E-003
	614.37	90.40	2.8758E-001		-4.1949E-001
	722.95	90.50	2.2370E-001		-6.4023E-003
Sb-125	176.33	6.89	5.2889E+000	6.48E-001	1.7562E+000
	427.89	29.33	6.4807E-001		-7.8513E-002
	463.38	10.35	2.2107E+000		9.8876E-001
	600.56	17.80	1.3481E+000		-1.1083E+000
	606.64	5.02	5.4985E+000		-3.2208E+000
	635.90	11.32	1.8431E+000		3.1181E-001
Cs-134	563.23	8.38	2.8935E+000	2.67E-001	9.8569E-001
	569.32	15.43	1.4039E+000		5.1366E-001
	604.70	97.60	2.8384E-001		1.0306E-001
	795.84	85.40	2.6686E-001		1.9212E-001
	801.93	8.73	2.3996E+000		-2.5950E+000
Cs-137	661.65	85.12	2.5421E-001	2.54E-001	7.1821E-002
Eu-152	121.78	28.40	1.8926E+000	7.98E-001	1.0653E+000
	244.69	7.49	4.0327E+000		-6.6054E-001
	344.27	26.50	8.9398E-001		-9.9833E-003
	778.89	12.74	1.6634E+000		2.1331E-001
	867.32	4.16	5.5026E+000		-6.3713E+000
	964.01	14.40	1.8698E+000		1.5415E+000
	1085.78	10.00	2.2114E+000		-1.0542E+000
	1112.02	13.30	1.5880E+000		-1.9123E-001
	1407.95	20.70	7.9798E-001		-4.1158E-001
Eu-154	123.07	40.50	1.2892E+000	4.45E-001	-6.5434E-001
	247.94	6.60	4.3770E+000		-3.2882E-002
	591.81	4.83	5.2101E+000		2.6348E+000
	723.30	19.70	1.0570E+000		3.4995E-001
	756.87	4.33	4.8167E+000		2.2558E+000
	873.19	11.50	1.8936E+000		5.4245E-003
	996.32	10.30	2.3415E+000		4.0716E-001
	1004.76	17.90	1.3703E+000		5.4661E-001
	1274.45	35.50	4.4545E-001		-3.3502E-001
Eu-155	86.54	30.90	3.0562E+000	3.06E+000	3.5758E+000
	105.31	20.70	3.0736E+000		-9.4704E-001
Am-241	59.54	35.90	5.1825E+000	5.18E+000	-2.4616E+000
Cm-243	228.19	10.56	2.9291E+000	1.89E+000	1.7864E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.8854E+000	1.89E+000	-1.6641E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 9:53:16 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: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-08-02-109-F-
Sample Title: OOL-08-02-109-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/4/2006 9:43:16 PM
Live Time: 600.0 seconds
Real Time: 600.6 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-08-02-109-F-
Title: OOL-08-02-109-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	855-	863	859.71	215.02	0.47	2.19E+001	22.73	5.21E+001
2	946-	958	954.09	238.62	0.53	3.52E+001	31.98	8.68E+001
3	1401-	1412	1407.64	352.01	1.18	4.38E+001	23.56	4.03E+001
4	2325-	2339	2330.49	582.74	0.34	4.14E+001	21.84	2.86E+001
5	5831-	5854	5842.91	1460.90	1.51	3.50E+002	37.87	5.87E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: BRN7722

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/GRAMS)	Activity Uncertainty
K-40	1.000	1460.81*		10.67	2.30270E+001	3.11103E+000
TL-208	0.469	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	2.68604E-001	1.46118E-001
		860.37		12.46		
Pb-212	0.403	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	3.44697E-001	3.17558E-001

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

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

I N T E R 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	2.302700E+001	3.111030E+000
TL-208	0.469	2.686037E-001	1.461182E-001
Pb-212 @	0.403	3.446972E-001	3.175576E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	215.02	3.6498E-002	103.81
3	352.01	7.2917E-002	53.85

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: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	2.3907E-001	1.57E-001	-1.0676E-001
	1332.49	100.00	1.5677E-001		-1.6118E-001
Nb-94	702.63	100.00	2.1773E-001	2.18E-001	1.1343E-001
	871.10	100.00	2.2154E-001		-3.2866E-001
Ag-108m	79.20	7.10	1.6089E+001	2.47E-001	-1.0808E+000
	433.93	89.90	2.4958E-001		1.0769E-001
	614.37	90.40	2.4689E-001		-2.4636E-001
	722.95	90.50	2.6476E-001		1.4257E-001
Sb-125	176.33	6.89	4.9428E+000	7.49E-001	-3.0128E+000
	427.89	29.33	7.4866E-001		-9.5557E-001
	463.38	10.35	2.1200E+000		1.3262E+000
	600.56	17.80	1.3064E+000		5.6192E-001
	606.64	5.02	5.5237E+000		7.0500E+000
	635.90	11.32	1.9631E+000		-2.3841E-001
Cs-134	563.23	8.38	2.7575E+000	2.38E-001	-1.0591E+000
	569.32	15.43	1.4638E+000		-8.0252E-001
	604.70	97.60	2.7060E-001		-1.4213E-001
	795.84	85.40	2.3783E-001		2.7388E-002
	801.93	8.73	2.4444E+000		2.2909E+000
Cs-137	661.65	85.12	2.7934E-001	2.79E-001	2.6827E-001
Eu-152	121.78	28.40	1.8182E+000	7.81E-001	-5.6444E-001
	244.69	7.49	3.7334E+000		-6.8676E-001
	344.27	26.50	8.9398E-001		4.9017E-002
	778.89	12.74	1.7797E+000		1.2299E-001
	867.32	4.16	5.5914E+000		3.7494E+000
	964.01	14.40	1.6117E+000		-4.0650E-001
	1085.78	10.00	2.1022E+000		9.2358E-001
	1112.02	13.30	1.4640E+000		-5.5641E-001
	1407.95	20.70	7.8091E-001		-2.9059E-001
Eu-154	123.07	40.50	1.2721E+000	6.22E-001	4.7411E-001
	247.94	6.60	4.2608E+000		1.3506E+000
	591.81	4.83	4.7934E+000		2.8564E+000
	723.30	19.70	1.2164E+000		7.4667E-001
	756.87	4.33	5.0762E+000		4.8024E+000
	873.19	11.50	2.0259E+000		7.1341E-001
	996.32	10.30	2.0286E+000		-1.8336E-001
	1004.76	17.90	1.1063E+000		-1.7013E-001
	1274.45	35.50	6.2233E-001		4.5157E-001
Eu-155	86.54	30.90	2.9932E+000	2.99E+000	2.9442E+000
	105.31	20.70	3.0086E+000		-4.8361E-001
Am-241	59.54	35.90	5.3358E+000	5.34E+000	2.4572E+000
Cm-243	228.19	10.56	2.8772E+000	1.76E+000	4.0054E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.7559E+000	1.76E+000	-6.6702E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 9:01:30 PM

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

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

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-08-02-110-F-
Sample Title: OOL-08-02-110-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/4/2006 8:51:29 PM
Live Time: 600.0 seconds
Real Time: 600.7 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780_2M90Soil170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: GRN7780
Log Number: OOL-08-02-110-F-
Title: OOL-08-02-110-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	945-	961	954.79	238.65	0.67	6.69E+001	44.67	1.44E+002
2	5830-	5855	5841.56	1460.36	1.97	3.26E+002	39.11	1.66E+001

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: GRN7780

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.993	1460.81*		10.67	2.23967E+001	3.23874E+000
Pb-212	0.427	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.75144E-001	4.63355E-001

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

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

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

Spectrum File:GRN7780

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

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.993	2.239671E+001	3.238737E+000
Pb-212	@	0.427	6.751442E-001	4.633546E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.3302E-001	2.30E-001	5.2374E-002
	1332.49	100.00	2.3028E-001		1.5663E-001
Nb-94	702.63	100.00	2.5702E-001	2.14E-001	8.3904E-002
	871.10	100.00	2.1447E-001		5.9868E-002
Ag-108m	79.20	7.10	2.2898E+001	2.71E-001	-7.8460E+000
	433.93	89.90	3.0371E-001		6.0770E-002
	614.37	90.40	2.9705E-001		-1.9199E-001
	722.95	90.50	2.7112E-001		-9.4061E-002
Sb-125	176.33	6.89	6.4751E+000	8.61E-001	-9.9536E-001
	427.89	29.33	8.6121E-001		6.4211E-002
	463.38	10.35	2.6614E+000		3.0522E-001
	600.56	17.80	1.5363E+000		-4.0382E-002
	606.64	5.02	5.9820E+000		5.2244E+000
	635.90	11.32	1.9371E+000		-1.6777E+000
Cs-134	563.23	8.38	3.1000E+000	2.85E-001	2.6514E+000
	569.32	15.43	1.5878E+000		-1.4978E+000
	604.70	97.60	3.0737E-001		8.0346E-002
	795.84	85.40	2.8465E-001		6.7698E-002
	801.93	8.73	2.4868E+000		-1.7670E+000
Cs-137	661.65	85.12	2.8325E-001	2.83E-001	1.1183E-001
Eu-152	121.78	28.40	2.3487E+000	8.49E-001	-4.2118E-001
	244.69	7.49	4.4920E+000		-7.7334E+000
	344.27	26.50	1.0919E+000		-1.5013E+000
	778.89	12.74	1.9410E+000		-4.8952E-001
	867.32	4.16	5.6775E+000		-1.5733E+000
	964.01	14.40	2.0051E+000		1.6175E+000
	1085.78	10.00	1.9121E+000		-1.8800E+000
	1112.02	13.30	1.8725E+000		-1.1832E+000
	1407.95	20.70	8.4884E-001		-2.2493E-001
Eu-154	123.07	40.50	1.6174E+000	7.15E-001	-6.4557E-001
	247.94	6.60	5.0380E+000		-2.5378E+000
	591.81	4.83	5.8005E+000		6.0896E-001
	723.30	19.70	1.2284E+000		-9.9950E-001
	756.87	4.33	5.5586E+000		-1.8588E+000
	873.19	11.50	1.8840E+000		-8.1216E-001
	996.32	10.30	2.1423E+000		-8.2326E-002
	1004.76	17.90	1.3392E+000		8.8154E-001
	1274.45	35.50	7.1453E-001		-1.2952E-001
Eu-155	86.54	30.90	4.2256E+000	4.16E+000	4.2235E+000
	105.31	20.70	4.1625E+000		-1.3931E+000
Am-241	59.54	35.90	9.8628E+000	9.86E+000	-7.6960E+000
Cm-243	228.19	10.56	3.5373E+000	2.23E+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	2.2332E+000	2.23E+000	-2.8435E-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 8:42:11 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-08-02-111-F-
Sample Title: OOL-08-02-111-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/4/2006 8:32:09 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-08-02-111-F-
Title: OOL-08-02-111-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	292-	321	300.08	74.97	0.87	1.61E+002	150.14	1.20E+003
2	2325-	2338	2331.50	582.84	0.33	2.98E+001	22.78	3.83E+001
3	2429-	2443	2435.77	608.90	1.57	3.51E+001	20.52	2.59E+001
4	3636-	3653	3644.13	911.00	0.82	4.84E+001	18.33	1.16E+001
5	5831-	5853	5842.71	1460.65	2.17	2.96E+002	37.32	1.73E+001
6	7050-	7063	7056.99	1764.22	0.36	1.22E+001	11.31	6.79E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: 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	2.02929E+001	3.04259E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.99140E-001	1.54742E-001
		860.37	12.46		
Bi-214	0.689	609.31*	46.30	4.33292E-001	2.59050E-001
		1120.29	15.10		
		1764.49*	15.80	6.32921E-001	5.89736E-001

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

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

I N T E R 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	2.029291E+001	3.042590E+000
TL-208	0.470	1.991401E-001	1.547421E-001
Bi-214	0.689	4.655809E-001	2.371764E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	74.97	2.6828E-001	93.27
4	911.00	8.0694E-002	37.87

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: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	2.15E-001	-1.2679E-001
	1332.49	100.00	2.1497E-001		8.2818E-002
Nb-94	702.63	100.00	2.1917E-001	2.19E-001	-1.1484E-001
	871.10	100.00	2.3827E-001		1.7062E-001
Ag-108m	79.20	7.10	2.1670E+001	2.62E-001	-4.2935E+000
	433.93	89.90	2.6153E-001		-1.2304E-001
	614.37	90.40	2.9860E-001		1.4340E-001
	722.95	90.50	2.8205E-001		3.0386E-001
Sb-125	176.33	6.89	6.4621E+000	7.94E-001	4.5151E+000
	427.89	29.33	7.9395E-001		5.0403E-001
	463.38	10.35	2.7371E+000		2.1815E+000
	600.56	17.80	1.5439E+000		1.9182E-001
	606.64	5.02	6.1041E+000		3.7434E+000
	635.90	11.32	1.9371E+000		-1.4495E+000
Cs-134	563.23	8.38	3.1164E+000	2.70E-001	-3.3058E-001
	569.32	15.43	1.7160E+000		7.5571E-001
	604.70	97.60	3.1364E-001		5.5836E-002
	795.84	85.40	2.6972E-001		2.0155E-001
	801.93	8.73	2.4404E+000		-2.3354E+000
Cs-137	661.65	85.12	3.0022E-001	3.00E-001	2.9519E-001
Eu-152	121.78	28.40	2.1438E+000	7.77E-001	-1.0462E+000
	244.69	7.49	4.2477E+000		-4.1689E+000
	344.27	26.50	1.0348E+000		-9.9010E-001
	778.89	12.74	1.7707E+000		3.8068E-001
	867.32	4.16	5.4924E+000		-8.2437E+000
	964.01	14.40	2.0051E+000		1.3245E+000
	1085.78	10.00	2.3554E+000		8.1827E-002
	1112.02	13.30	1.6652E+000		-9.1591E-001
	1407.95	20.70	7.7675E-001		1.2977E-001
Eu-154	123.07	40.50	1.4968E+000	6.24E-001	3.6233E-001
	247.94	6.60	4.5843E+000		-4.7354E+000
	591.81	4.83	5.6909E+000		3.3387E+000
	723.30	19.70	1.2959E+000		1.0104E+000
	756.87	4.33	6.2779E+000		5.1003E+000
	873.19	11.50	1.8840E+000		-1.7614E+000
	996.32	10.30	1.8222E+000		-1.0614E+000
	1004.76	17.90	1.0648E+000		-3.6214E-001
	1274.45	35.50	6.2402E-001		1.3617E-001
Eu-155	86.54	30.90	4.0496E+000	3.91E+000	4.1453E+000
	105.31	20.70	3.9114E+000		3.6427E-002
Am-241	59.54	35.90	8.8370E+000	8.84E+000	7.5765E-001
Cm-243	228.19	10.56	3.4515E+000	2.17E+000	-2.4654E-002

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	3.3710E-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 7:08:32 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-08-02-112-F-
Sample Title: OOL-08-02-112-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/4/2006 6:58:31 PM
Live Time: 600.0 seconds
Real Time: 600.5 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-08-02-112-F-
Title: OOL-08-02-112-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	945-	959	953.91	238.58	0.85	8.03E+001	39.16	1.11E+002
2	1401-	1412	1407.52	351.98	0.73	3.73E+001	22.31	3.67E+001
3	2325-	2335	2330.99	582.87	0.76	3.39E+001	19.20	2.61E+001
4	2428-	2442	2436.70	609.29	0.48	4.55E+001	21.69	2.65E+001
5	5832-	5857	5844.04	1461.18	1.47	3.74E+002	38.64	3.42E+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: 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	2.45718E+001	3.22763E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.19822E-001	1.27920E-001
		860.37	12.46		
Pb-212	0.403	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.85676E-001	4.02534E-001
Bi-214	0.405	609.31*	46.30	5.44265E-001	2.68036E-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	2.457176E+001	3.227628E+000
TL-208		0.471	2.198224E-001	1.279197E-001
Pb-212	@	0.403	7.856760E-001	4.025342E-001
Bi-214		0.405	5.442651E-001	2.680364E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.98	6.2213E-002	59.76

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	2.3907E-001	2.09E-001	2.9232E-002
	1332.49	100.00	2.0927E-001		4.5925E-002
Nb-94	702.63	100.00	2.3960E-001	2.08E-001	-4.0120E-002
	871.10	100.00	2.0751E-001		-5.5036E-002
Ag-108m	79.20	7.10	1.5689E+001	2.48E-001	-1.4808E+001
	433.93	89.90	2.4815E-001		-5.2244E-002
	614.37	90.40	3.0080E-001		-5.9016E-002
	722.95	90.50	2.6476E-001		1.7926E-001
Sb-125	176.33	6.89	4.7724E+000	8.00E-001	1.2126E+000
	427.89	29.33	8.0015E-001		1.3813E-001
	463.38	10.35	2.1852E+000		-7.6604E-001
	600.56	17.80	1.3644E+000		-2.5753E-001
	606.64	5.02	5.7931E+000		4.4469E+000
	635.90	11.32	1.8117E+000		4.3151E-001
Cs-134	563.23	8.38	3.0546E+000	2.49E-001	1.4330E+000
	569.32	15.43	1.3517E+000		-1.6098E+000
	604.70	97.60	2.7994E-001		-6.5030E-002
	795.84	85.40	2.4943E-001		-1.7353E-003
	801.93	8.73	2.3539E+000		5.3552E-002
Cs-137	661.65	85.12	2.6805E-001	2.68E-001	1.8124E-002
Eu-152	121.78	28.40	1.7768E+000	6.02E-001	5.7744E-001
	244.69	7.49	3.5081E+000		-2.6217E+000
	344.27	26.50	8.6922E-001		7.7754E-003
	778.89	12.74	1.6483E+000		1.1520E+000
	867.32	4.16	5.1305E+000		3.0060E+000
	964.01	14.40	1.7274E+000		9.1435E-001
	1085.78	10.00	2.1685E+000		1.4550E-001
	1112.02	13.30	1.5709E+000		3.2269E-001
	1407.95	20.70	6.0236E-001		-1.3949E+000
Eu-154	123.07	40.50	1.2105E+000	5.60E-001	-1.9372E-001
	247.94	6.60	3.9160E+000		-2.4152E-001
	591.81	4.83	4.3682E+000		-2.5407E+000
	723.30	19.70	1.2328E+000		1.0565E+000
	756.87	4.33	4.9049E+000		7.6224E-001
	873.19	11.50	1.7690E+000		-7.0721E-001
	996.32	10.30	2.0912E+000		6.2361E-002
	1004.76	17.90	1.3070E+000		5.0551E-001
	1274.45	35.50	5.6047E-001		4.9393E-002
Eu-155	86.54	30.90	2.8679E+000	2.87E+000	2.8280E+000
	105.31	20.70	3.2060E+000		3.2736E+000
Am-241	59.54	35.90	5.4705E+000	5.47E+000	6.5162E-001
Cm-243	228.19	10.56	2.6012E+000	1.93E+000	-1.0036E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.9286E+000	1.93E+000	1.1206E+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 6:50:56 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: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-08-02-113-F-
Sample Title: OOL-08-02-113-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/4/2006 6:40:56 PM
Live Time: 600.0 seconds
Real Time: 600.5 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-08-02-113-F-
Title: OOL-08-02-113-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	946-	959	953.95	238.59	0.92	6.56E+001	33.24	8.04E+001
2	1403-	1413	1406.70	351.78	0.43	3.44E+001	20.60	3.16E+001
3	2430-	2441	2435.66	609.04	0.56	2.76E+001	17.10	1.94E+001
4	5834-	5855	5844.58	1461.32	2.09	3.22E+002	37.89	1.37E+001

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: BRN7722

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/GRAMS)	Activity Uncertainty
K-40	0.990	1460.81*		10.67	2.11991E+001	3.02585E+000
Pb-212	0.403	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.41432E-001	3.40422E-001
Bi-214	0.403	609.31*		46.30	3.30413E-001	2.08572E-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		0.990	2.119908E+001	3.025854E+000
Pb-212	@	0.403	6.414318E-001	3.404220E-001
Bi-214		0.403	3.304126E-001	2.085723E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.78	5.7273E-002	59.95

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	2.2875E-001	1.67E-001	1.2913E-001
	1332.49	100.00	1.6681E-001		-1.8335E-002
Nb-94	702.63	100.00	1.9116E-001	1.91E-001	-9.6127E-002
	871.10	100.00	2.2914E-001		1.7670E-001
Ag-108m	79.20	7.10	1.5481E+001	2.41E-001	-1.6578E+001
	433.93	89.90	2.4084E-001		-1.1587E-001
	614.37	90.40	2.4151E-001		-1.3608E-001
	722.95	90.50	2.5376E-001		8.1400E-002
Sb-125	176.33	6.89	4.4911E+000	7.40E-001	7.7216E-001
	427.89	29.33	7.3971E-001		4.1630E-001
	463.38	10.35	2.1463E+000		2.2618E-001
	600.56	17.80	1.2091E+000		-6.4256E-001
	606.64	5.02	4.9664E+000		5.5066E-001
	635.90	11.32	1.8274E+000		2.1829E-001
Cs-134	563.23	8.38	2.8602E+000	2.35E-001	1.2907E-001
	569.32	15.43	1.3623E+000		-1.4643E+000
	604.70	97.60	2.4935E-001		-6.6923E-002
	795.84	85.40	2.3543E-001		2.7765E-002
	801.93	8.73	1.9463E+000		-1.2162E+000
Cs-137	661.65	85.12	2.6612E-001	2.66E-001	1.1810E-001
Eu-152	121.78	28.40	1.7753E+000	6.88E-001	7.5152E-001
	244.69	7.49	3.5081E+000		-2.8904E+000
	344.27	26.50	8.1283E-001		-1.2089E-001
	778.89	12.74	1.4354E+000		-4.1194E-001
	867.32	4.16	5.2262E+000		-6.5876E-001
	964.01	14.40	1.5434E+000		7.6090E-001
	1085.78	10.00	2.0797E+000		-1.1407E+000
	1112.02	13.30	1.5185E+000		4.6673E-001
	1407.95	20.70	6.8833E-001		-2.9945E-001
Eu-154	123.07	40.50	1.2159E+000	4.98E-001	2.3490E-001
	247.94	6.60	4.0177E+000		1.9836E+000
	591.81	4.83	4.7934E+000		-1.7044E+000
	723.30	19.70	1.1830E+000		8.7622E-001
	756.87	4.33	5.1181E+000		-1.4074E+000
	873.19	11.50	1.9106E+000		3.6887E-001
	996.32	10.30	1.9858E+000		-2.5181E-003
	1004.76	17.90	1.1319E+000		-4.9357E-001
	1274.45	35.50	4.9837E-001		-3.2786E-001
Eu-155	86.54	30.90	2.9370E+000	2.90E+000	2.3566E+000
	105.31	20.70	2.9048E+000		6.9359E-001
Am-241	59.54	35.90	5.3988E+000	5.40E+000	7.8436E-001
Cm-243	228.19	10.56	2.5047E+000	1.72E+000	-1.0835E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.7219E+000	1.72E+000	6.3821E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 6:31:26 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-08-02-114-F-
Sample Title: OOL-08-02-114-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/4/2006 6:21:24 PM
Live Time: 600.0 seconds
Real Time: 600.5 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-08-02-114-F-
Title: OOL-08-02-114-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	3638-	3649	3644.34	911.22	0.75	3.09E+001	15.36	1.21E+001
2	5835-	5857	5846.08	1461.69	1.39	2.97E+002	35.04	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: 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	0.970	1460.81*	10.67	1.95549E+001	2.79635E+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
K-40	0.970	1.955487E+001	2.796351E+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	911.22	5.1570E-002	49.65

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	2.0644E-001	1.85E-001	5.7018E-002
	1332.49	100.00	1.8509E-001		-2.1668E-002
Nb-94	702.63	100.00	2.1595E-001	2.05E-001	-4.9328E-002
	871.10	100.00	2.0543E-001		-1.0801E-002
Ag-108m	79.20	7.10	1.5802E+001	2.36E-001	-1.9855E+001
	433.93	89.90	2.6076E-001		3.6598E-002
	614.37	90.40	2.7994E-001		-2.9015E-001
	722.95	90.50	2.3622E-001		-1.4286E-002
Sb-125	176.33	6.89	4.8624E+000	8.25E-001	1.9225E-001
	427.89	29.33	8.2461E-001		-2.0206E-001
	463.38	10.35	2.1200E+000		4.4323E-001
	600.56	17.80	1.2631E+000		-7.9023E-001
	606.64	5.02	5.2396E+000		3.6651E-001
	635.90	11.32	1.9190E+000		1.2741E+000
Cs-134	563.23	8.38	2.5388E+000	2.58E-001	6.4454E-001
	569.32	15.43	1.4039E+000		-2.1453E-001
	604.70	97.60	2.5950E-001		-1.0823E-001
	795.84	85.40	2.5830E-001		6.0800E-002
	801.93	8.73	2.3539E+000		4.0996E-001
Cs-137	661.65	85.12	2.6418E-001	2.64E-001	-6.1466E-002
Eu-152	121.78	28.40	1.7887E+000	7.27E-001	-2.4117E-001
	244.69	7.49	3.6172E+000		-9.1462E-001
	344.27	26.50	9.3758E-001		-9.9467E-002
	778.89	12.74	1.7514E+000		4.5297E-001
	867.32	4.16	4.8823E+000		-1.9006E+000
	964.01	14.40	1.8001E+000		1.4277E-001
	1085.78	10.00	1.9625E+000		-5.8885E-001
	1112.02	13.30	1.6048E+000		-7.3828E-001
	1407.95	20.70	7.2698E-001		8.0097E-002
Eu-154	123.07	40.50	1.2380E+000	5.46E-001	4.9147E-001
	247.94	6.60	4.0675E+000		2.0177E+000
	591.81	4.83	5.0655E+000		2.5976E+000
	723.30	19.70	1.0665E+000		-5.7528E-001
	756.87	4.33	5.0762E+000		-1.9096E+000
	873.19	11.50	1.8055E+000		-2.8496E-001
	996.32	10.30	2.1116E+000		-4.4820E-001
	1004.76	17.90	1.1814E+000		-9.2978E-001
	1274.45	35.50	5.4567E-001		3.6235E-002
Eu-155	86.54	30.90	2.8984E+000	2.90E+000	2.2049E+000
	105.31	20.70	2.9352E+000		-1.0557E+000
Am-241	59.54	35.90	5.3212E+000	5.32E+000	-4.0019E-001
Cm-243	228.19	10.56	2.7838E+000	1.86E+000	-9.6949E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.8603E+000	1.86E+000	1.3537E+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 12:18:18 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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-02-115-F-G
Sample ID: OOL-08-02-115-F
Sample Title: OOL-08-02-115-F-G
Description: 100% Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/7/2006 10:30:11 AM
Live Time: 600.0 seconds
Real Time: 600.7 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780_2M90Soil170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-02-115-F-G
Log Number: OOL-08-02-115-F
Title: OOL-08-02-115-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	2327-	2340	2333.28	583.28	0.68	4.80E+001	20.16	2.10E+001
2	3640-	3653	3645.58	911.36	0.47	2.98E+001	19.19	2.12E+001
3	5833-	5858	5847.03	1461.73	2.34	3.96E+002	39.62	3.09E+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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-02-115-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	0.973	1460.81*	10.67	2.71771E+001	3.49827E+000
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.21622E-001	1.41545E-001
		860.37	12.46		

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

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

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

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-02-115-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	0.973	2.717705E+001	3.498273E+000
TL-208	0.472	3.216225E-001	1.415449E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	911.36	4.9608E-002	64.48

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:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-02-115-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.6567E-001	1.95E-001	1.2211E-001
	1332.49	100.00	1.9544E-001		6.4995E-002
Nb-94	702.63	100.00	2.3890E-001	2.34E-001	-5.0720E-002
	871.10	100.00	2.3449E-001		1.2551E-001
Ag-108m	79.20	7.10	2.0307E+001	2.87E-001	-5.1741E+000
	433.93	89.90	2.9503E-001		-1.0003E-001
	614.37	90.40	3.1512E-001		-7.0403E-002
	722.95	90.50	2.8736E-001		-7.2823E-002
Sb-125	176.33	6.89	5.8754E+000	9.23E-001	-1.9954E+000
	427.89	29.33	9.2333E-001		-3.9694E-002
	463.38	10.35	2.5491E+000		9.2638E-002
	600.56	17.80	1.4416E+000		1.3587E-001
	606.64	5.02	6.1282E+000		3.3809E+000
	635.90	11.32	2.0591E+000		-1.2851E+000
Cs-134	563.23	8.38	2.9999E+000	2.97E-001	-8.0169E-001
	569.32	15.43	1.6532E+000		4.6330E-001
	604.70	97.60	2.9704E-001		-1.2451E-001
	795.84	85.40	3.0463E-001		1.8545E-001
	801.93	8.73	2.8489E+000		-4.1124E-001
Cs-137	661.65	85.12	2.7334E-001	2.73E-001	-3.0770E-001
Eu-152	121.78	28.40	2.0560E+000	8.66E-001	1.6632E+000
	244.69	7.49	4.4276E+000		-6.9414E+000
	344.27	26.50	1.0384E+000		-4.3294E-001
	778.89	12.74	1.8149E+000		-2.8091E+000
	867.32	4.16	5.5393E+000		-7.7812E-002
	964.01	14.40	2.0051E+000		6.4387E-001
	1085.78	10.00	2.0874E+000		-2.3711E+000
	1112.02	13.30	1.7642E+000		2.9169E-001
	1407.95	20.70	8.6582E-001		-1.7867E-001
Eu-154	123.07	40.50	1.4051E+000	6.03E-001	5.0290E-002
	247.94	6.60	5.1732E+000		4.0617E+000
	591.81	4.83	5.2880E+000		1.1384E+000
	723.30	19.70	1.3122E+000		3.4486E-001
	756.87	4.33	5.4357E+000		-4.6957E-001
	873.19	11.50	2.0400E+000		-5.6048E-001
	996.32	10.30	2.0119E+000		1.7025E-001
	1004.76	17.90	1.4146E+000		1.3383E+000
	1274.45	35.50	6.0269E-001		-4.6362E-001
Eu-155	86.54	30.90	3.6244E+000	3.62E+000	2.2644E+000
	105.31	20.70	3.8037E+000		4.1927E-001
Am-241	59.54	35.90	8.5145E+000	8.51E+000	-4.7795E+000
Cm-243	228.19	10.56	3.2729E+000	2.19E+000	-2.3901E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.1939E+000	2.19E+000	4.8640E-001

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

Report Generated On 8/7/2006 12:18:51 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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-02-116-F-G
Sample ID: OOL-08-02-116-F
Sample Title: OOL-08-02-116-F-G
Description: 100% Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/7/2006 10:16:49 AM
Live Time: 600.0 seconds
Real Time: 600.7 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780_2M90Soil170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-02-116-F-G
Log Number: OOL-08-02-116-F
Title: OOL-08-02-116-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	4478-	4490	4483.80	1120.92	0.31	1.72E+001	13.00	8.83E+000
2	5833-	5860	5846.98	1461.71	2.60	3.80E+002	38.21	0.00E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-02-116-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	0.974	1460.81*	10.67	2.60851E+001	3.36733E+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-08-02-116-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	0.974	2.608506E+001	3.367330E+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	1120.92	2.8622E-002	75.69

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:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-02-116-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	2.5396E-001	2.20E-001	-9.0913E-002
	1332.49	100.00	2.2020E-001		1.7505E-001
Nb-94	702.63	100.00	2.5543E-001	2.55E-001	-8.9102E-002
	871.10	100.00	2.6146E-001		1.7625E-001
Ag-108m	79.20	7.10	2.0416E+001	2.75E-001	-2.7642E+001
	433.93	89.90	2.7545E-001		-1.6873E-001
	614.37	90.40	3.3764E-001		-6.3812E-002
	722.95	90.50	2.9427E-001		1.2242E-001
Sb-125	176.33	6.89	6.1074E+000	9.23E-001	6.7954E+000
	427.89	29.33	9.2333E-001		4.2893E-001
	463.38	10.35	2.3578E+000		-1.7203E+000
	600.56	17.80	1.5287E+000		-2.9095E-001
	606.64	5.02	6.0799E+000		1.4734E+000
	635.90	11.32	2.3477E+000		6.5696E-001
Cs-134	563.23	8.38	3.3365E+000	3.03E-001	8.9455E-001
	569.32	15.43	1.7160E+000		-1.8887E+000
	604.70	97.60	3.1734E-001		-9.0310E-002
	795.84	85.40	3.0269E-001		-2.4341E-002
	801.93	8.73	2.7887E+000		7.9147E-001
Cs-137	661.65	85.12	3.0744E-001	3.07E-001	1.9931E-001
Eu-152	121.78	28.40	2.1631E+000	8.49E-001	-4.3485E-001
	244.69	7.49	4.6797E+000		-6.8703E+000
	344.27	26.50	1.0885E+000		-6.6314E-001
	778.89	12.74	1.6786E+000		-2.7803E+000
	867.32	4.16	6.1975E+000		-4.2712E+000
	964.01	14.40	2.1545E+000		1.3408E+000
	1085.78	10.00	2.3554E+000		-1.5691E+000
	1112.02	13.30	1.8115E+000		1.8638E-001
	1407.95	20.70	8.4884E-001		-2.3201E-002
Eu-154	123.07	40.50	1.5035E+000	6.71E-001	9.8706E-001
	247.94	6.60	4.9956E+000		-1.5746E+000
	591.81	4.83	5.2880E+000		8.3215E-001
	723.30	19.70	1.3598E+000		9.4936E-001
	756.87	4.33	5.4770E+000		1.2518E+000
	873.19	11.50	2.2449E+000		1.6445E-001
	996.32	10.30	2.3423E+000		5.4415E-001
	1004.76	17.90	1.2470E+000		-9.1006E-001
	1274.45	35.50	6.7093E-001		7.7837E-001
Eu-155	86.54	30.90	3.8494E+000	3.73E+000	2.4810E+000
	105.31	20.70	3.7273E+000		-1.3454E-002
Am-241	59.54	35.90	8.6933E+000	8.69E+000	2.6701E+000
Cm-243	228.19	10.56	3.2298E+000	2.27E+000	-7.6723E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.2717E+000	2.27E+000	9.4893E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 9:45:37 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-08-02-117-F
Sample Title: OOL-08-02-117-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/7/2006 9:35:34 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-08-02-117-F
Title: OOL-08-02-117-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-	960	955.44	238.82	0.52	4.31E+001	34.11	1.09E+002
2	1401-	1415	1409.49	352.33	0.38	4.46E+001	23.27	3.34E+001
3	5834-	5859	5845.84	1461.43	2.03	3.49E+002	40.33	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
K-40	0.988	1460.81*		10.67	2.39417E+001	3.37927E+000
Pb-212	0.427	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	4.35248E-001	3.51208E-001

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

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

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

Spectrum File:GRN7780

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

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.988	2.394166E+001	3.379268E+000
Pb-212 @	0.427	4.352483E-001	3.512083E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	352.33	7.4306E-002	52.19

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	2.3951E-001	2.15E-001	8.0921E-002
	1332.49	100.00	2.1497E-001		6.5861E-002
Nb-94	702.63	100.00	2.3193E-001	2.29E-001	-4.3212E-002
	871.10	100.00	2.2868E-001		-3.5924E-002
Ag-108m	79.20	7.10	2.0975E+001	2.77E-001	-2.1992E+001
	433.93	89.90	2.8345E-001		1.1567E-001
	614.37	90.40	3.3354E-001		1.3785E-002
	722.95	90.50	2.7664E-001		8.0859E-002
Sb-125	176.33	6.89	5.9040E+000	9.34E-001	4.4805E+000
	427.89	29.33	9.3449E-001		6.3693E-001
	463.38	10.35	2.5261E+000		3.1929E-001
	600.56	17.80	1.4252E+000		7.1931E-002
	606.64	5.02	6.0312E+000		1.7912E+000
	635.90	11.32	2.0739E+000		8.0620E-001
Cs-134	563.23	8.38	2.8783E+000	2.87E-001	3.6719E-001
	569.32	15.43	1.4263E+000		-3.1283E-002
	604.70	97.60	2.9174E-001		-2.3345E-001
	795.84	85.40	2.8671E-001		-1.5026E-001
	801.93	8.73	2.6424E+000		1.1665E+000
Cs-137	661.65	85.12	2.9468E-001	2.95E-001	-1.8792E-001
Eu-152	121.78	28.40	2.0661E+000	9.90E-001	-1.1429E-001
	244.69	7.49	4.7059E+000		-5.6977E+000
	344.27	26.50	1.1092E+000		1.1516E+000
	778.89	12.74	1.8149E+000		-1.0506E+000
	867.32	4.16	5.7228E+000		-3.0402E+000
	964.01	14.40	2.0705E+000		9.9194E-001
	1085.78	10.00	2.3130E+000		-1.8677E-001
	1112.02	13.30	1.7155E+000		-8.6839E-001
	1407.95	20.70	9.9010E-001		-1.5377E-001
Eu-154	123.07	40.50	1.4387E+000	6.31E-001	-1.4127E-002
	247.94	6.60	5.3842E+000		4.3140E+000
	591.81	4.83	5.2880E+000		1.1080E+000
	723.30	19.70	1.2793E+000		3.4559E-001
	756.87	4.33	5.6787E+000		-4.8726E-001
	873.19	11.50	1.8658E+000		-2.3228E+000
	996.32	10.30	2.2246E+000		6.5885E-001
	1004.76	17.90	1.2228E+000		-1.9551E-001
	1274.45	35.50	6.3095E-001		-1.2550E-001
Eu-155	86.54	30.90	3.7254E+000	3.73E+000	6.2998E-001
	105.31	20.70	3.7572E+000		-5.6845E+000
Am-241	59.54	35.90	9.2441E+000	9.24E+000	-1.4854E+001
Cm-243	228.19	10.56	3.2668E+000	2.19E+000	-2.9985E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.1939E+000	2.19E+000	1.1651E+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 8:46:45 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: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-08-02-
Sample Title: OOL-08-02-118-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/7/2006 8:36:42 AM
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-08-02-
Title: OOL-08-02-118-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	5833-	5858	5844.97	1461.21	1.81	3.30E+002	41.17	2.60E+001

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: GRN7780

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.995	1460.81*	10.67	2.26482E+001	3.36857E+000

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

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

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

Spectrum File:GRN7780

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

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.995	2.264818E+001	3.368573E+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	2.5792E-001	1.80E-001	1.2719E-001
	1332.49	100.00	1.8004E-001		-6.3296E-002
Nb-94	702.63	100.00	2.7827E-001	2.38E-001	1.3365E-001
	871.10	100.00	2.3827E-001		3.2840E-001
Ag-108m	79.20	7.10	1.9573E+001	2.96E-001	-2.0093E+001
	433.93	89.90	2.9628E-001		1.3822E-001
	614.37	90.40	3.3078E-001		-2.8899E-003
	722.95	90.50	2.9597E-001		-1.1954E-002
Sb-125	176.33	6.89	5.4508E+000	9.38E-001	2.1711E-001
	427.89	29.33	9.3818E-001		-2.0245E-001
	463.38	10.35	2.7898E+000		1.4030E+000
	600.56	17.80	1.5439E+000		5.0418E-001
	606.64	5.02	6.4329E+000		5.3902E+000
	635.90	11.32	2.2559E+000		2.0012E+000
Cs-134	563.23	8.38	3.1000E+000	2.97E-001	-1.1754E-001
	569.32	15.43	1.7248E+000		5.1661E-001
	604.70	97.60	3.2460E-001		-1.1031E-001
	795.84	85.40	2.9681E-001		9.3339E-002
	801.93	8.73	2.8489E+000		-2.2785E+000
Cs-137	661.65	85.12	3.0022E-001	3.00E-001	2.2728E-001
Eu-152	121.78	28.40	2.0002E+000	9.61E-001	-1.0686E-001
	244.69	7.49	4.3528E+000		-2.9974E+000
	344.27	26.50	1.0919E+000		-5.2716E-001
	778.89	12.74	2.0204E+000		1.5188E-001
	867.32	4.16	5.9867E+000		4.2499E+000
	964.01	14.40	1.9827E+000		9.9895E-001
	1085.78	10.00	2.2699E+000		-2.3833E+000
	1112.02	13.30	1.8875E+000		-1.2661E+000
	1407.95	20.70	9.6070E-001		5.1043E-001
Eu-154	123.07	40.50	1.3885E+000	6.31E-001	5.9419E-001
	247.94	6.60	4.6075E+000		-1.6769E+000
	591.81	4.83	5.4933E+000		5.9283E-002
	723.30	19.70	1.3829E+000		-3.0380E-001
	756.87	4.33	5.7181E+000		4.2686E-001
	873.19	11.50	2.0400E+000		4.3136E-001
	996.32	10.30	2.2646E+000		-1.2113E+000
	1004.76	17.90	1.3612E+000		7.9992E-001
	1274.45	35.50	6.3095E-001		3.9180E-001
Eu-155	86.54	30.90	3.5275E+000	3.53E+000	-3.3376E-001
	105.31	20.70	3.6558E+000		-1.4313E+000
Am-241	59.54	35.90	8.9886E+000	8.99E+000	3.1295E+000
Cm-243	228.19	10.56	3.1224E+000	2.07E+000	-1.9257E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.0656E+000	2.07E+000	-1.9903E+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 3:24:07 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-08-02-119-F-
Sample Title: OOL-08-02-119-F-G
Description: 100% VEGETATION

Sample Type:
Geometry:

Acquisition Started: 8/7/2006 3:14:19 PM
Live Time: 600.0 seconds
Real Time: 601.1 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-08-02-119-F-
Title: OOL-08-02-119-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	2037-	2050	2041.78	510.46	0.49	5.63E+001	26.13	4.27E+001
2	2430-	2443	2436.13	609.06	0.74	4.44E+001	21.94	2.86E+001
3	5831-	5854	5842.63	1460.80	1.64	3.36E+002	37.84	9.12E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: 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	0.990	511.00*	100.00	3.10084E-001	1.50294E-001
K-40	1.000	1460.81*	10.67	2.35953E+001	3.27357E+000
Bi-214	0.404	609.31*	46.30	5.57743E-001	2.84156E-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	0.990	3.100845E-001	1.502943E-001
K-40	1.000	2.359534E+001	3.273571E+000
Bi-214	0.404	5.577427E-001	2.841563E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

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

Spectrum File:ORG7829
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	2.5236E-001	2.25E-001	-1.4156E-001
	1332.49	100.00	2.2509E-001		1.2468E-001
Nb-94	702.63	100.00	2.5872E-001	2.51E-001	-2.7351E-001
	871.10	100.00	2.5115E-001		3.8818E-002
Ag-108m	79.20	7.10	2.5173E+001	3.12E-001	-8.4347E+000
	433.93	89.90	3.7210E-001		8.1149E-002
	614.37	90.40	3.6740E-001		-1.3784E-001
	722.95	90.50	3.1230E-001		-4.0425E-002
Sb-125	176.33	6.89	6.3607E+000	1.07E+000	2.3978E+000
	427.89	29.33	1.0676E+000		-6.7676E-001
	463.38	10.35	2.9093E+000		2.5857E-001
	600.56	17.80	1.6013E+000		6.9115E-001
	606.64	5.02	6.6819E+000		6.3698E+000
	635.90	11.32	2.6109E+000		4.5963E-001
Cs-134	563.23	8.38	3.2384E+000	3.08E-001	-1.1816E-001
	569.32	15.43	1.7910E+000		-1.1838E+000
	604.70	97.60	3.3625E-001		-7.2309E-002
	795.84	85.40	3.0841E-001		-2.2364E-002
	801.93	8.73	2.8609E+000		-6.3030E-001
Cs-137	661.65	85.12	3.2661E-001	3.27E-001	1.3338E-001
Eu-152	121.78	28.40	2.3928E+000	9.77E-001	9.6479E-001
	244.69	7.49	5.1201E+000		-6.5124E+000
	344.27	26.50	1.2226E+000		-1.8367E-001
	778.89	12.74	2.0961E+000		-1.1212E-002
	867.32	4.16	5.7996E+000		-4.1792E+000
	964.01	14.40	2.3538E+000		1.9389E+000
	1085.78	10.00	2.3847E+000		-5.8325E-001
	1112.02	13.30	1.8043E+000		-4.6243E-001
	1407.95	20.70	9.7687E-001		5.0942E-001
Eu-154	123.07	40.50	1.6425E+000	6.60E-001	-7.4205E-001
	247.94	6.60	5.6186E+000		1.4776E+000
	591.81	4.83	5.9845E+000		2.2889E+000
	723.30	19.70	1.4116E+000		-8.9123E-001
	756.87	4.33	5.8093E+000		9.7247E-001
	873.19	11.50	2.1354E+000		-1.4522E+000
	996.32	10.30	2.3879E+000		-1.2309E-001
	1004.76	17.90	1.3054E+000		3.9574E-001
	1274.45	35.50	6.6008E-001		-1.1706E-001
Eu-155	86.54	30.90	4.2051E+000	4.21E+000	3.4574E-001
	105.31	20.70	4.3895E+000		-3.1974E+000
Am-241	59.54	35.90	1.1697E+001	1.17E+001	-3.6024E+000
Cm-243	228.19	10.56	3.9713E+000	2.55E+000	2.8430E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.5459E+000	2.55E+000	4.7793E-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 8/7/2006 4:00:41 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: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-08-02-120-F-
Sample Title: OOL-08-02-120-F-G
Description: Vegetation and small rocks

Sample Type:
Geometry:

Acquisition Started: 8/7/2006 3:50:40 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-08-02-120-F-
Title: OOL-08-02-120-F-G
Description: Vegetation 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	3637-	3650	3644.23	911.02	0.67	2.70E+001	18.07	2.10E+001
2	5835-	5857	5845.53	1461.35	2.10	2.79E+002	35.09	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: 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	1.91495E+001	2.86439E+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	1.914946E+001	2.864393E+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	911.02	4.5000E-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: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	1.95E-001	-6.6058E-002
	1332.49	100.00	1.9544E-001		-3.0677E-002
Nb-94	702.63	100.00	2.4061E-001	2.36E-001	-1.4256E-001
	871.10	100.00	2.3639E-001		6.0856E-002
Ag-108m	79.20	7.10	2.1225E+001	2.77E-001	-3.9389E+001
	433.93	89.90	2.9503E-001		5.0279E-002
	614.37	90.40	3.0922E-001		-4.7007E-002
	722.95	90.50	2.7664E-001		3.3004E-003
Sb-125	176.33	6.89	6.2705E+000	8.28E-001	-9.0482E-001
	427.89	29.33	8.2831E-001		-9.7849E-001
	463.38	10.35	2.5834E+000		1.0675E+000
	600.56	17.80	1.5961E+000		5.8135E-001
	606.64	5.02	6.2942E+000		5.5143E+000
	635.90	11.32	2.1878E+000		-2.0030E+000
Cs-134	563.23	8.38	3.2284E+000	2.65E-001	3.9948E-001
	569.32	15.43	1.6894E+000		-1.1228E+000
	604.70	97.60	3.1856E-001		1.8984E-001
	795.84	85.40	2.6528E-001		2.5113E-002
	801.93	8.73	2.6208E+000		1.7087E-001
Cs-137	661.65	85.12	2.8325E-001	2.83E-001	2.4309E-001
Eu-152	121.78	28.40	2.2039E+000	8.66E-001	1.9725E+000
	244.69	7.49	4.5913E+000		-8.3078E+000
	344.27	26.50	1.0602E+000		-1.7959E+000
	778.89	12.74	1.7557E+000		-9.9752E-001
	867.32	4.16	5.6775E+000		-4.9149E-001
	964.01	14.40	1.8906E+000		1.5310E+000
	1085.78	10.00	2.2479E+000		-1.4478E-001
	1112.02	13.30	1.7642E+000		6.0166E-003
	1407.95	20.70	8.6582E-001		3.0279E-001
Eu-154	123.07	40.50	1.5093E+000	6.58E-001	-4.3611E-001
	247.94	6.60	4.8988E+000		-4.0115E-001
	591.81	4.83	5.4645E+000		-1.4365E+000
	723.30	19.70	1.2959E+000		1.6270E-001
	756.87	4.33	5.6787E+000		-5.3946E+000
	873.19	11.50	1.9723E+000		1.2844E-001
	996.32	10.30	2.2447E+000		8.5125E-001
	1004.76	17.90	1.1854E+000		-1.2672E+000
	1274.45	35.50	6.5790E-001		1.4192E-001
Eu-155	86.54	30.90	4.0097E+000	3.95E+000	4.5956E+000
	105.31	20.70	3.9460E+000		8.5033E-001
Am-241	59.54	35.90	1.0364E+001	1.04E+001	-1.0624E+000
Cm-243	228.19	10.56	3.3034E+000	2.32E+000	9.9573E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.3202E+000	2.32E+000	-8.8918E-001

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

Report Generated On 8/7/2006 3:40:31 PM

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

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

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-08-02-121-F-
Sample Title: OOL-08-02-121-F-G
Description: Vegetation and small rocks

Sample Type:
Geometry:

Acquisition Started: 8/7/2006 3:30:30 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-08-02-121-F-
Title: OOL-08-02-121-F-G
Description: Vegetation 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	2036-	2054	2042.78	510.65	0.62	6.13E+001	32.42	6.27E+001
2	2432-	2446	2438.48	609.58	0.39	4.05E+001	22.60	3.15E+001
3	3640-	3652	3646.54	911.60	0.67	2.77E+001	20.06	2.93E+001
4	3871-	3883	3876.78	969.16	0.28	2.68E+001	14.70	1.12E+001
5	5831-	5859	5846.69	1461.64	2.00	3.66E+002	38.43	3.78E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: 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	3.31085E-001	1.81191E-001
K-40	0.978	1460.81*	10.67	2.51381E+001	3.33158E+000
Bi-214	0.405	609.31*	46.30	5.00283E-001	2.85929E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.632	338.32	11.40		
		911.07*	27.70	6.26573E-001	4.58724E-001
		969.11*	16.60	1.02446E+000	5.71304E-001

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

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

I N T E R 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	3.310855E-001	1.811905E-001
K-40	0.978	2.513808E+001	3.331577E+000
Bi-214	0.405	5.002826E-001	2.859288E-001
Ac-228	0.632	7.825424E-001	3.576893E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.8405E-001	2.18E-001	1.6118E-002
	1332.49	100.00	2.1760E-001		-3.3660E-002
Nb-94	702.63	100.00	2.5383E-001	2.33E-001	-2.0273E-001
	871.10	100.00	2.3257E-001		7.9492E-002
Ag-108m	79.20	7.10	2.2361E+001	3.09E-001	-1.1905E+001
	433.93	89.90	3.0855E-001		3.2443E-001
	614.37	90.40	3.5224E-001		2.0889E-001
	722.95	90.50	3.0922E-001		-6.7548E-002
Sb-125	176.33	6.89	6.4686E+000	9.23E-001	7.5149E-001
	427.89	29.33	9.2333E-001		-3.0025E-001
	463.38	10.35	2.6614E+000		1.9384E+000
	600.56	17.80	1.6466E+000		6.3939E-001
	606.64	5.02	6.3175E+000		6.2740E+000
	635.90	11.32	2.2289E+000		-1.5350E+000
Cs-134	563.23	8.38	3.1326E+000	2.91E-001	-1.6503E-001
	569.32	15.43	1.6983E+000		-1.0301E+000
	604.70	97.60	3.1611E-001		-2.5091E-001
	795.84	85.40	2.9080E-001		-2.2871E-001
	801.93	8.73	2.8089E+000		4.6392E-001
Cs-137	661.65	85.12	2.8711E-001	2.87E-001	-1.5970E-001
Eu-152	121.78	28.40	2.1713E+000	1.05E+000	5.7135E-001
	244.69	7.49	5.0738E+000		-2.8022E+000
	344.27	26.50	1.1527E+000		-7.7959E-001
	778.89	12.74	1.9811E+000		-8.6332E-001
	867.32	4.16	5.6775E+000		3.5675E-001
	964.01	14.40	1.9257E+000		7.9196E-001
	1085.78	10.00	2.4777E+000		1.0696E-001
	1112.02	13.30	1.6989E+000		4.0269E-001
	1407.95	20.70	1.0462E+000		1.2112E+000
Eu-154	123.07	40.50	1.4832E+000	6.03E-001	-3.1446E-001
	247.94	6.60	5.3148E+000		-4.4449E+000
	591.81	4.83	5.6352E+000		-3.1877E-001
	723.30	19.70	1.4207E+000		-1.4439E-001
	756.87	4.33	5.4357E+000		-3.1655E+000
	873.19	11.50	1.9895E+000		-1.0310E+000
	996.32	10.30	2.1839E+000		3.1965E-001
	1004.76	17.90	1.3720E+000		2.8551E-001
	1274.45	35.50	6.0269E-001		-2.4217E-001
Eu-155	86.54	30.90	4.0496E+000	4.05E+000	2.2641E+000
	105.31	20.70	4.1182E+000		8.7530E-001
Am-241	59.54	35.90	8.6017E+000	8.60E+000	-2.3926E+000
Cm-243	228.19	10.56	3.4573E+000	2.21E+000	-2.6287E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.2052E+000	2.21E+000	-7.7177E-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 8/7/2006 3:27:22 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-08-02-122-F-
Sample Title: OOL-08-02-122-F-G
Description: Vegetation and small rocks

Sample Type:
Geometry:

Acquisition Started: 8/7/2006 3:17:21 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-08-02-122-F-
Title: OOL-08-02-122-F-G
Description: Vegetation 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	948-	961	954.66	238.62	0.78	1.06E+002	35.66	8.17E+001
2	3640-	3653	3645.79	911.41	1.02	3.73E+001	19.35	2.17E+001
3	5834-	5860	5847.24	1461.78	2.06	3.67E+002	38.97	6.51E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: 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	2.52269E+001	3.36575E+000
Pb-212	0.427	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	1.07382E+000	3.97503E-001

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

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

I N T E R 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	2.522693E+001	3.365746E+000
Pb-212 @	0.427	1.073822E+000	3.975028E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	911.41	6.2154E-002	51.89

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	2.2633E-001	2.26E-001	-8.8604E-002
	1332.49	100.00	2.3514E-001		1.2132E-001
Nb-94	702.63	100.00	2.5860E-001	2.53E-001	-7.6238E-002
	871.10	100.00	2.5281E-001		3.4102E-001
Ag-108m	79.20	7.10	2.4914E+001	2.83E-001	-2.5578E+001
	433.93	89.90	2.8345E-001		-1.5498E-001
	614.37	90.40	3.4569E-001		3.7892E-002
	722.95	90.50	3.3850E-001		3.3169E-001
Sb-125	176.33	6.89	6.1554E+000	8.93E-001	2.0002E+000
	427.89	29.33	8.9284E-001		-9.3684E-001
	463.38	10.35	2.7264E+000		4.2525E-001
	600.56	17.80	1.5363E+000		-1.3085E+000
	606.64	5.02	6.6793E+000		7.2160E+000
	635.90	11.32	2.2153E+000		-1.0548E+000
Cs-134	563.23	8.38	3.2752E+000	2.65E-001	-2.5903E+000
	569.32	15.43	1.6983E+000		-1.8106E+000
	604.70	97.60	3.3519E-001		1.8133E-001
	795.84	85.40	2.6528E-001		5.8944E-002
	801.93	8.73	2.8290E+000		-3.1430E-001
Cs-137	661.65	85.12	2.9281E-001	2.93E-001	2.9772E-001
Eu-152	121.78	28.40	2.2227E+000	8.82E-001	-8.5926E-001
	244.69	7.49	4.6091E+000		-2.8200E+000
	344.27	26.50	1.1092E+000		-1.8028E-001
	778.89	12.74	2.0074E+000		-1.5762E-001
	867.32	4.16	5.7228E+000		5.5506E-001
	964.01	14.40	2.0489E+000		-2.8419E-001
	1085.78	10.00	2.3969E+000		-8.8420E-002
	1112.02	13.30	1.9315E+000		6.9922E-001
	1407.95	20.70	8.8242E-001		-1.7735E-001
Eu-154	123.07	40.50	1.5611E+000	5.65E-001	4.9663E-001
	247.94	6.60	5.3546E+000		-1.7656E+000
	591.81	4.83	5.4933E+000		-3.1818E+000
	723.30	19.70	1.5416E+000		1.0961E+000
	756.87	4.33	5.1805E+000		-1.3017E+000
	873.19	11.50	2.1053E+000		6.4703E-001
	996.32	10.30	2.4173E+000		6.1047E-001
	1004.76	17.90	1.3280E+000		7.1231E-001
	1274.45	35.50	5.6518E-001		-1.5841E-001
Eu-155	86.54	30.90	4.2908E+000	4.07E+000	3.7886E+000
	105.31	20.70	4.0714E+000		-2.4395E+000
Am-241	59.54	35.90	1.0077E+001	1.01E+001	-9.1838E+000
Cm-243	228.19	10.56	3.6920E+000	2.17E+000	2.5253E+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	-2.9287E+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 3:10:50 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-08-02-123-F-
Sample Title: OOL-08-02-123-F-G
Description: Vegetation and small rocks

Sample Type:
Geometry:

Acquisition Started: 8/7/2006 3:00:50 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-08-02-123-F-
Title: OOL-08-02-123-F-G
Description: Vegetation 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	950-	960	954.54	238.59	1.14	6.70E+001	32.68	8.80E+001
2	1400-	1414	1407.72	351.89	1.22	5.69E+001	28.22	5.21E+001
3	2327-	2341	2334.09	583.48	0.89	4.42E+001	23.34	3.38E+001
4	5836-	5861	5847.57	1461.86	1.94	3.45E+002	39.80	1.60E+001

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: GRN7780

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.964	1460.81*		10.67	2.36862E+001	3.33824E+000
TL-208	0.470	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	2.95833E-001	1.61095E-001
		860.37		12.46		
Pb-212	0.427	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.76497E-001	3.46595E-001

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

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

I N T E R 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	0.964	2.368623E+001	3.338238E+000
TL-208	0.470	2.958329E-001	1.610949E-001
Pb-212 @	0.427	6.764969E-001	3.465950E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	9.4912E-002	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:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.5988E-001	2.51E-001	6.0198E-002
	1332.49	100.00	2.5137E-001		1.6985E-001
Nb-94	702.63	100.00	2.6635E-001	2.44E-001	-2.3978E-002
	871.10	100.00	2.4383E-001		-1.4280E-001
Ag-108m	79.20	7.10	2.4222E+001	2.90E-001	-1.1605E+001
	433.93	89.90	2.8994E-001		-3.8526E-002
	614.37	90.40	3.7849E-001		7.6471E-002
	722.95	90.50	3.0267E-001		6.5374E-002
Sb-125	176.33	6.89	6.2571E+000	9.08E-001	-7.9358E-002
	427.89	29.33	9.0822E-001		3.7659E-001
	463.38	10.35	2.6393E+000		7.8233E-001
	600.56	17.80	1.6607E+000		7.1089E-001
	606.64	5.02	6.8741E+000		9.0952E+000
	635.90	11.32	2.2153E+000		-1.2928E+000
Cs-134	563.23	8.38	3.2284E+000	3.32E-001	8.3943E-001
	569.32	15.43	1.6805E+000		-5.4957E-001
	604.70	97.60	3.3979E-001		1.9637E-001
	795.84	85.40	3.3221E-001		-1.1735E-002
	801.93	8.73	3.1317E+000		-2.7235E-001
Cs-137	661.65	85.12	3.0922E-001	3.09E-001	-4.2660E-002
Eu-152	121.78	28.40	2.3002E+000	8.66E-001	1.4095E-001
	244.69	7.49	4.8006E+000		-2.8740E+000
	344.27	26.50	1.1527E+000		-6.1806E-001
	778.89	12.74	1.8861E+000		-1.1670E-001
	867.32	4.16	5.9436E+000		2.4887E+000
	964.01	14.40	1.9715E+000		3.7802E-002
	1085.78	10.00	2.7226E+000		2.5127E+000
	1112.02	13.30	1.8725E+000		1.5956E+000
	1407.95	20.70	8.6582E-001		4.8522E-002
Eu-154	123.07	40.50	1.6066E+000	6.58E-001	1.1407E+000
	247.94	6.60	5.4039E+000		2.1791E-001
	591.81	4.83	5.7185E+000		8.6332E-001
	723.30	19.70	1.3598E+000		-3.9128E-001
	756.87	4.33	5.8347E+000		-9.7500E-001
	873.19	11.50	2.1213E+000		3.3308E-001
	996.32	10.30	2.2447E+000		-2.9526E-001
	1004.76	17.90	1.3612E+000		8.1530E-002
	1274.45	35.50	6.5790E-001		-3.2455E-001
Eu-155	86.54	30.90	4.0251E+000	4.03E+000	2.3926E+000
	105.31	20.70	4.0596E+000		-7.5757E-001
Am-241	59.54	35.90	9.9613E+000	9.96E+000	-1.5637E+001
Cm-243	228.19	10.56	3.4573E+000	2.39E+000	-1.6016E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.3886E+000	2.39E+000	7.6000E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 2:08:33 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-08-02-124-F-
Sample Title: OOL-08-02-124-F-G
Description: Vegetation and small rocks

Sample Type:
Geometry:

Acquisition Started: 8/7/2006 1:58:33 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-08-02-124-F-
Title: OOL-08-02-124-F-G
Description: Vegetation 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	1401-	1413	1408.97	352.20	0.56	3.69E+001	27.36	6.01E+001
2	2039-	2055	2043.79	510.91	0.76	6.30E+001	31.01	5.80E+001
3	3637-	3652	3644.49	911.09	1.33	5.08E+001	20.81	2.02E+001
4	5833-	5859	5847.16	1461.76	1.67	3.71E+002	39.96	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
ANN	1.000	511.00*	100.00	3.40141E-001	1.74235E-001
K-40	0.971	1460.81*	10.67	2.54565E+001	3.43124E+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	1.000	3.401408E-001	1.742346E-001
K-40	0.971	2.545650E+001	3.431240E+000

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	352.20	6.1426E-002	74.23
3	911.09	8.4718E-002	40.94

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	2.5396E-001	2.30E-001	1.6862E-001
	1332.49	100.00	2.3028E-001		-6.1266E-003
Nb-94	702.63	100.00	2.7088E-001	2.71E-001	3.8541E-002
	871.10	100.00	2.7308E-001		-1.8080E-001
Ag-108m	79.20	7.10	2.2898E+001	2.98E-001	-2.8569E+001
	433.93	89.90	3.3278E-001		-1.7824E-001
	614.37	90.40	3.5224E-001		-5.0432E-002
	722.95	90.50	2.9766E-001		-1.5989E-001
Sb-125	176.33	6.89	6.7045E+000	9.95E-001	-1.0058E+000
	427.89	29.33	9.9526E-001		3.1752E-001
	463.38	10.35	2.6941E+000		-2.5298E-001
	600.56	17.80	1.6747E+000		7.7988E-001
	606.64	5.02	6.5685E+000		6.2443E+000
	635.90	11.32	2.3859E+000		4.7604E-002
Cs-134	563.23	8.38	3.2284E+000	3.19E-001	7.9057E-001
	569.32	15.43	1.8100E+000		1.2941E+000
	604.70	97.60	3.1856E-001		-3.7370E-001
	795.84	85.40	3.2868E-001		2.1504E-001
	801.93	8.73	3.3059E+000		1.5016E+000
Cs-137	661.65	85.12	3.5056E-001	3.51E-001	1.2212E-001
Eu-152	121.78	28.40	2.3626E+000	8.99E-001	1.1527E+000
	244.69	7.49	4.9927E+000		-5.3207E+000
	344.27	26.50	1.2103E+000		-4.1706E-001
	778.89	12.74	1.9943E+000		-5.3533E-001
	867.32	4.16	6.9368E+000		5.9543E+000
	964.01	14.40	2.0051E+000		1.0118E+000
	1085.78	10.00	2.5938E+000		-1.1211E+000
	1112.02	13.30	1.8423E+000		6.0603E-001
	1407.95	20.70	8.9869E-001		1.3600E-001
Eu-154	123.07	40.50	1.6439E+000	5.95E-001	1.4557E+000
	247.94	6.60	5.2242E+000		-4.8412E+000
	591.81	4.83	6.4417E+000		5.9162E+000
	723.30	19.70	1.3982E+000		3.2653E-001
	756.87	4.33	5.9110E+000		-1.4546E+000
	873.19	11.50	2.3185E+000		2.3976E-001
	996.32	10.30	2.3987E+000		-2.9510E-001
	1004.76	17.90	1.2589E+000		-5.5518E-001
	1274.45	35.50	5.9540E-001		-4.9159E-001
Eu-155	86.54	30.90	4.2576E+000	4.18E+000	3.5588E+000
	105.31	20.70	4.1835E+000		2.7375E+000
Am-241	59.54	35.90	1.0274E+001	1.03E+001	2.7656E+000
Cm-243	228.19	10.56	3.8090E+000	2.47E+000	3.1023E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.4750E+000	2.47E+000	1.3416E+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 1:54:44 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-08-02-125-F-
Sample Title: OOL-08-02-125-F-G
Description: 100% Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/7/2006 1:44:45 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-08-02-125-F-
Title: OOL-08-02-125-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	2208-	2219	2212.67	553.13	0.59	1.76E+001	15.94	1.94E+001
2	2325-	2338	2331.75	582.90	0.46	4.21E+001	23.08	3.49E+001
3	3637-	3653	3645.83	911.42	0.55	5.06E+001	21.29	2.14E+001
4	5832-	5859	5846.64	1461.63	2.47	3.48E+002	39.74	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	0.978	1460.81*	10.67	2.38876E+001	3.34362E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.81757E-001	1.58925E-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	0.978	2.388759E+001	3.343622E+000
TL-208	0.471	2.817568E-001	1.589249E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	553.13	2.9403E-002	90.37
3	911.42	8.4375E-002	42.06

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	2.7132E-001	2.58E-001	1.3600E-002
	1332.49	100.00	2.5798E-001		3.3523E-001
Nb-94	702.63	100.00	2.6635E-001	2.66E-001	1.0258E-001
	871.10	100.00	2.9186E-001		-4.3385E-002
Ag-108m	79.20	7.10	2.4890E+001	2.99E-001	-2.9577E+001
	433.93	89.90	3.1213E-001		-7.6748E-002
	614.37	90.40	3.8800E-001		3.0206E-001
	722.95	90.50	2.9934E-001		-2.7181E-001
Sb-125	176.33	6.89	7.2631E+000	1.02E+000	9.0996E-001
	427.89	29.33	1.0226E+000		1.9869E-001
	463.38	10.35	2.8313E+000		6.5436E-001
	600.56	17.80	1.6816E+000		4.2672E-002
	606.64	5.02	6.8741E+000		6.4339E+000
	635.90	11.32	2.5445E+000		-8.2597E-001
Cs-134	563.23	8.38	3.6543E+000	3.18E-001	2.4693E+000
	569.32	15.43	1.8991E+000		-5.7751E-001
	604.70	97.60	3.3519E-001		-1.7879E-001
	795.84	85.40	3.1782E-001		1.7017E-001
	801.93	8.73	3.1850E+000		-6.2859E-001
Cs-137	661.65	85.12	3.3952E-001	3.40E-001	-8.6202E-002
Eu-152	121.78	28.40	2.5508E+000	7.77E-001	3.1713E+000
	244.69	7.49	5.1695E+000		-8.0075E+000
	344.27	26.50	1.1946E+000		-3.9141E-001
	778.89	12.74	1.9138E+000		-2.5456E+000
	867.32	4.16	7.1534E+000		3.2004E+000
	964.01	14.40	2.2743E+000		2.3407E+000
	1085.78	10.00	2.5938E+000		-3.3065E-001
	1112.02	13.30	2.1243E+000		3.5385E-001
	1407.95	20.70	7.7675E-001		-9.1415E-001
Eu-154	123.07	40.50	1.7509E+000	7.08E-001	-1.1848E-001
	247.94	6.60	5.5775E+000		-4.8438E+000
	591.81	4.83	6.5620E+000		2.1146E+000
	723.30	19.70	1.3753E+000		-4.5706E-001
	756.87	4.33	6.0606E+000		3.2264E+000
	873.19	11.50	2.5259E+000		-4.3136E-001
	996.32	10.30	2.5428E+000		3.4323E-001
	1004.76	17.90	1.5250E+000		6.3420E-001
	1274.45	35.50	7.0848E-001		-1.2801E-002
Eu-155	86.54	30.90	4.4378E+000	4.44E+000	1.0671E+000
	105.31	20.70	4.4549E+000		-1.0863E+000
Am-241	59.54	35.90	1.0146E+001	1.01E+001	-2.5670E+000
Cm-243	228.19	10.56	3.9020E+000	2.62E+000	-5.9169E-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	-1.0580E+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 12:19:24 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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-02-126-F-G
Sample ID: OOL-08-02-126-F
Sample Title: OOL-08-02-126-F-G
Description: 100% Vegetation---small stones

Sample Type:
Geometry:

Acquisition Started: 8/7/2006 11:25:37 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: 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-08-02-126-F-G
Log Number: OOL-08-02-126-F
Title: OOL-08-02-126-F-G
Description: 100% Vegetation---small stones

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2430-	2446	2437.48	609.33	1.82	6.33E+001	28.49	4.57E+001
2	5327-	5340	5333.51	1333.34	0.42	3.14E+001	13.02	4.60E+000
3	5836-	5860	5847.57	1461.86	1.87	3.58E+002	38.96	9.16E+000
4	7058-	7071	7064.38	1766.07	0.33	1.30E+001	11.15	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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-02-126-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	0.964	1460.81*	10.67	2.45654E+001	3.33300E+000
Bi-214	0.677	609.31*	46.30	7.82107E-001	3.65002E-001
		1120.29	15.10		
		1764.49*	15.80	6.74261E-001	5.82026E-001

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

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

I N T E R 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-08-02-126-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	0.964	2.456544E+001	3.333004E+000
Bi-214	0.677	7.516652E-001	3.092256E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	1333.34	5.2326E-002	41.48

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:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-02-126-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	2.7502E-001	2.56E-001	-5.2374E-003
	1332.49	100.00	2.5580E-001		-1.9758E-001
Nb-94	702.63	100.00	2.7827E-001	2.75E-001	1.0524E-001
	871.10	100.00	2.7470E-001		-3.0462E-001
Ag-108m	79.20	7.10	2.5729E+001	3.21E-001	-3.1588E+001
	433.93	89.90	3.2148E-001		2.1028E-001
	614.37	90.40	4.0069E-001		-9.9289E-002
	722.95	90.50	3.3850E-001		2.9829E-001
Sb-125	176.33	6.89	7.7754E+000	1.01E+000	-7.2598E-001
	427.89	29.33	1.0090E+000		6.6928E-001
	463.38	10.35	2.8313E+000		6.5485E-001
	600.56	17.80	1.7759E+000		3.7093E-001
	606.64	5.02	7.3870E+000		7.8128E+000
	635.90	11.32	2.5207E+000		-6.0928E-001
Cs-134	563.23	8.38	3.9327E+000	3.32E-001	1.2038E-001
	569.32	15.43	2.0507E+000		1.1853E+000
	604.70	97.60	3.6715E-001		-1.4736E-001
	795.84	85.40	3.3221E-001		-1.4997E-001
	801.93	8.73	3.2374E+000		-1.1969E+000
Cs-137	661.65	85.12	3.7015E-001	3.70E-001	4.1894E-002
Eu-152	121.78	28.40	2.6876E+000	9.46E-001	-1.3064E-001
	244.69	7.49	5.6372E+000		-1.2328E+001
	344.27	26.50	1.2741E+000		-5.2317E-001
	778.89	12.74	2.2408E+000		-6.5547E-001
	867.32	4.16	6.7883E+000		-9.0300E+000
	964.01	14.40	2.4153E+000		5.5728E-001
	1085.78	10.00	2.6126E+000		-1.6465E+000
	1112.02	13.30	2.0712E+000		-2.2093E-001
	1407.95	20.70	9.4562E-001		-1.7303E-002
Eu-154	123.07	40.50	1.8563E+000	7.55E-001	-2.2370E-001
	247.94	6.60	6.2982E+000		-1.5646E+000
	591.81	4.83	6.7034E+000		-5.1209E+000
	723.30	19.70	1.5619E+000		1.3803E+000
	756.87	4.33	7.2623E+000		3.4705E+000
	873.19	11.50	2.4993E+000		2.7958E+000
	996.32	10.30	2.6621E+000		-8.6054E-002
	1004.76	17.90	1.4659E+000		3.7906E-001
	1274.45	35.50	7.5543E-001		5.2812E-001
Eu-155	86.54	30.90	4.6414E+000	4.64E+000	-3.4482E-002
	105.31	20.70	4.9315E+000		-4.5791E+000
Am-241	59.54	35.90	1.2781E+001	1.28E+001	1.0718E+001
Cm-243	228.19	10.56	4.2062E+000	2.96E+000	-8.2512E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.9555E+000	2.96E+000	1.7234E+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 12:55:14 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-08-02-127-F-
Sample Title: OOL-08-02-127-F-G
Description: 100% Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/7/2006 12:45:11 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: 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-08-02-127-F-
Title: OOL-08-02-127-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	2326-	2341	2333.27	583.28	0.64	5.73E+001	24.86	3.37E+001
2	5324-	5337	5330.06	1332.48	1.72	2.65E+001	10.83	1.54E+000
3	5833-	5857	5845.64	1461.38	1.77	3.82E+002	42.02	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	0.989	1460.81*	10.67	2.62359E+001	3.58181E+000
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.83514E-001	1.74006E-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	0.989	2.623594E+001	3.581806E+000
TL-208	0.472	3.835144E-001	1.740062E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	1332.48	4.4107E-002	40.91

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:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.5988E-001	2.38E-001	-1.1800E-001
	1332.49	100.00	2.3753E-001		2.6691E-001
Nb-94	702.63	100.00	2.8546E-001	2.73E-001	-1.8372E-001
	871.10	100.00	2.7308E-001		-1.1864E-001
Ag-108m	79.20	7.10	2.5349E+001	3.23E-001	-2.9025E+001
	433.93	89.90	3.3389E-001		1.5424E-001
	614.37	90.40	3.6872E-001		-1.3510E-001
	722.95	90.50	3.2344E-001		-1.3668E-001
Sb-125	176.33	6.89	7.3034E+000	1.05E+000	-9.4701E-001
	427.89	29.33	1.0458E+000		-2.2336E-002
	463.38	10.35	2.9421E+000		3.6201E-001
	600.56	17.80	1.6747E+000		-7.4518E-001
	606.64	5.02	6.8313E+000		5.9279E+000
	635.90	11.32	2.5326E+000		5.0211E-001
Cs-134	563.23	8.38	3.4263E+000	3.25E-001	-3.6588E-001
	569.32	15.43	1.7764E+000		-1.1642E+000
	604.70	97.60	3.3287E-001		-6.6758E-002
	795.84	85.40	3.2510E-001		-1.0584E-001
	801.93	8.73	3.0956E+000		-2.1433E+000
Cs-137	661.65	85.12	3.5519E-001	3.55E-001	1.9012E-002
Eu-152	121.78	28.40	2.6986E+000	1.05E+000	1.3247E+000
	244.69	7.49	5.7586E+000		-8.3135E+000
	344.27	26.50	1.2134E+000		-1.0556E+000
	778.89	12.74	1.9679E+000		-1.6013E+000
	867.32	4.16	6.7127E+000		-5.1087E+000
	964.01	14.40	2.1545E+000		1.9033E+000
	1085.78	10.00	2.3554E+000		-2.0591E+000
	1112.02	13.30	1.9603E+000		-3.4578E-001
	1407.95	20.70	1.0462E+000		-5.2402E-002
Eu-154	123.07	40.50	1.8478E+000	6.90E-001	-1.3928E+000
	247.94	6.60	6.3149E+000		-2.3682E+000
	591.81	4.83	6.2941E+000		5.2329E+000
	723.30	19.70	1.4789E+000		-6.5194E-001
	756.87	4.33	6.0236E+000		-8.7010E-001
	873.19	11.50	2.4038E+000		1.7254E+000
	996.32	10.30	2.3801E+000		-1.0758E+000
	1004.76	17.90	1.4659E+000		6.0435E-001
	1274.45	35.50	6.8998E-001		-9.4408E-002
Eu-155	86.54	30.90	4.6374E+000	4.64E+000	8.3473E-001
	105.31	20.70	4.7457E+000		7.5187E-001
Am-241	59.54	35.90	1.1486E+001	1.15E+001	8.6977E+000
Cm-243	228.19	10.56	4.0027E+000	2.81E+000	-8.9948E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.8106E+000	2.81E+000	4.5502E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 12:19:56 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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-02-128-F-G
Sample ID: OOL-08-02-128-F
Sample Title: OOL-08-02-128-F-G
Description: 100% Vegetation---small stones

Sample Type:
Geometry:

Acquisition Started: 8/7/2006 11:03:51 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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-02-128-F-G
Log Number: OOL-08-02-128-F
Title: OOL-08-02-128-F-G
Description: 100% Vegetation---small stones

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2434-	2446	2439.57	609.85	0.41	3.49E+001	23.23	4.01E+001
2	3870-	3883	3876.72	969.14	0.87	2.72E+001	18.76	2.28E+001
3	5835-	5859	5848.26	1462.03	2.11	3.67E+002	41.27	1.85E+001

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-02-128-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	0.952	1460.81*	10.67	2.52295E+001	3.49269E+000
Bi-214	0.401	609.31*	46.30	4.30812E-001	2.91936E-001
		1120.29	15.10		
		1764.49	15.80		

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

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

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

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-02-128-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	0.952	2.522946E+001	3.492691E+000
Bi-214	0.401	4.308118E-001	2.919361E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	969.14	4.5375E-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:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-02-128-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	2.8405E-001	2.40E-001	-1.6422E-001
	1332.49	100.00	2.3990E-001		1.3895E-001
Nb-94	702.63	100.00	3.0462E-001	2.89E-001	8.7358E-002
	871.10	100.00	2.8882E-001		2.8318E-001
Ag-108m	79.20	7.10	2.6844E+001	3.31E-001	-1.4084E+001
	433.93	89.90	3.3055E-001		7.2398E-002
	614.37	90.40	3.7242E-001		-2.6156E-001
	722.95	90.50	3.4143E-001		3.7062E-002
Sb-125	176.33	6.89	7.4791E+000	9.92E-001	-2.4920E+000
	427.89	29.33	9.9180E-001		1.2741E-001
	463.38	10.35	2.7689E+000		-6.6007E-001
	600.56	17.80	1.6466E+000		-7.9923E-001
	606.64	5.02	6.8954E+000		3.6891E+000
	635.90	11.32	2.5679E+000		1.3986E+000
Cs-134	563.23	8.38	3.4410E+000	3.10E-001	-2.3709E+000
	569.32	15.43	1.9070E+000		1.1068E+000
	604.70	97.60	3.3519E-001		-1.5570E-001
	795.84	85.40	3.1035E-001		-2.0496E-001
	801.93	8.73	3.0956E+000		8.9050E-002
Cs-137	661.65	85.12	3.1794E-001	3.18E-001	9.3059E-002
Eu-152	121.78	28.40	2.7443E+000	8.31E-001	2.7960E-001
	244.69	7.49	5.5130E+000		-1.0243E+000
	344.27	26.50	1.2411E+000		-8.9850E-001
	778.89	12.74	2.2524E+000		7.4222E-001
	867.32	4.16	7.0460E+000		-9.7081E-001
	964.01	14.40	2.1647E+000		-6.5952E-002
	1085.78	10.00	2.5557E+000		1.5428E+000
	1112.02	13.30	2.0027E+000		3.2590E-001
	1407.95	20.70	8.3148E-001		-4.8159E-001
Eu-154	123.07	40.50	1.8772E+000	6.84E-001	8.6963E-002
	247.94	6.60	5.8189E+000		-1.6543E+000
	591.81	4.83	5.7460E+000		-2.9023E+000
	723.30	19.70	1.5886E+000		9.4370E-001
	756.87	4.33	6.5558E+000		1.2181E+000
	873.19	11.50	2.4859E+000		7.2791E-001
	996.32	10.30	2.4173E+000		6.5741E-001
	1004.76	17.90	1.4859E+000		1.5451E+000
	1274.45	35.50	6.8369E-001		-2.4040E-001
Eu-155	86.54	30.90	4.7697E+000	4.77E+000	3.3927E+000
	105.31	20.70	4.8420E+000		-2.6911E+000
Am-241	59.54	35.90	1.1133E+001	1.11E+001	7.8359E+000
Cm-243	228.19	10.56	4.3593E+000	2.81E+000	2.2885E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.8150E+000	2.81E+000	2.8470E+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 12:20:42 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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-02-129-F-G
Sample ID: OOL-08-02-129-F
Sample Title: OOL-08-02-129-F-G
Description: 100% Vegetation---small stones

Sample Type:
Geometry:

Acquisition Started: 8/7/2006 10:50:16 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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-02-129-F-G
Log Number: OOL-08-02-129-F
Title: OOL-08-02-129-F-G
Description: 100% Vegetation---small stones

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	310	301.36	75.30	0.84	1.59E+002	108.86	9.71E+002
2	949-	964	955.55	238.84	1.55	8.38E+001	49.88	1.84E+002
3	2433-	2444	2437.04	609.22	0.95	3.89E+001	21.14	3.01E+001
4	2905-	2916	2910.31	727.54	1.24	1.52E+001	15.53	1.88E+001
5	5836-	5861	5848.28	1462.04	2.16	3.48E+002	37.33	3.43E+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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-02-129-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	0.952	1460.81*	10.67	2.38618E+001	3.20966E+000
Bi-212	0.996	727.17*	11.80	7.69636E-001	7.92352E-001
Pb-212	0.580	74.81* @	10.70	1.67119E+001	1.19248E+001
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.46582E-001	5.20933E-001
Bi-214	0.406	609.31*	46.30	4.79928E-001	2.67756E-001
		1120.29	15.10		
		1764.49	15.80		

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

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

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

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-02-129-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	0.952	2.386180E+001	3.209656E+000
Bi-212	0.996	7.696358E-001	7.923523E-001
Pb-212 @	0.580	8.465815E-001	5.209328E-001
Bi-214	0.406	4.799281E-001	2.677560E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

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

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-02-129-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	2.8227E-001	2.79E-001	8.2684E-002
	1332.49	100.00	2.7882E-001		2.1092E-001
Nb-94	702.63	100.00	3.0063E-001	3.01E-001	-1.3731E-001
	871.10	100.00	3.0658E-001		2.0792E-001
Ag-108m	79.20	7.10	2.6327E+001	3.23E-001	-7.0765E+000
	433.93	89.90	3.2263E-001		1.1984E-001
	614.37	90.40	3.7364E-001		-3.3417E-001
	722.95	90.50	3.4143E-001		-1.5545E-001
Sb-125	176.33	6.89	7.6997E+000	9.88E-001	-2.2053E+000
	427.89	29.33	9.8832E-001		-4.0721E-002
	463.38	10.35	2.9618E+000		2.5298E-002
	600.56	17.80	1.7759E+000		6.3375E-001
	606.64	5.02	6.9377E+000		3.2880E+000
	635.90	11.32	2.5679E+000		-1.5126E-001
Cs-134	563.23	8.38	3.6127E+000	3.37E-001	6.9850E-001
	569.32	15.43	1.8991E+000		-3.1483E-001
	604.70	97.60	3.5430E-001		-4.4381E-001
	795.84	85.40	3.3744E-001		2.9775E-002
	801.93	8.73	3.0773E+000		-2.5683E-001
Cs-137	661.65	85.12	3.3140E-001	3.31E-001	1.1313E-001
Eu-152	121.78	28.40	2.7658E+000	9.15E-001	-4.5917E-001
	244.69	7.49	5.5864E+000		1.0303E-001
	344.27	26.50	1.2009E+000		-1.2842E+000
	778.89	12.74	2.2057E+000		-1.7090E+000
	867.32	4.16	7.1178E+000		-4.0223E-001
	964.01	14.40	2.0161E+000		1.3291E+000
	1085.78	10.00	2.5748E+000		7.7954E-001
	1112.02	13.30	1.9745E+000		1.1218E+000
	1407.95	20.70	9.1463E-001		-8.6513E-002
Eu-154	123.07	40.50	1.9076E+000	7.61E-001	-1.1435E+000
	247.94	6.60	6.0504E+000		3.2910E+000
	591.81	4.83	6.1682E+000		-3.6897E+000
	723.30	19.70	1.5687E+000		-3.1843E-001
	756.87	4.33	6.5896E+000		-3.5500E+000
	873.19	11.50	2.6672E+000		2.8996E+000
	996.32	10.30	2.5947E+000		2.4125E+000
	1004.76	17.90	1.4659E+000		1.9629E-001
	1274.45	35.50	7.6108E-001		3.2026E-001
Eu-155	86.54	30.90	4.7529E+000	4.75E+000	5.0633E+000
	105.31	20.70	4.8878E+000		-4.2290E+000
Am-241	59.54	35.90	1.1340E+001	1.13E+001	7.1121E+000
Cm-243	228.19	10.56	4.2392E+000	2.57E+000	1.2838E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.5680E+000	2.57E+000	-2.1304E+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 6:45:21 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-08-02-130-F-
Sample Title: OOL-08-02-130-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/4/2006 6:35:18 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-08-02-130-F-
Title: OOL-08-02-130-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	945-	965	956.10	238.98	1.58	1.29E+002	50.98	1.51E+002
2	1398-	1411	1406.06	351.47	0.78	3.36E+001	26.76	5.54E+001
3	2323-	2339	2332.57	583.10	1.96	6.16E+001	26.87	4.04E+001
4	2429-	2444	2436.54	609.09	0.52	4.28E+001	23.20	3.22E+001
5	3635-	3651	3644.17	911.01	0.28	4.86E+001	20.59	1.94E+001
6	4902-	4913	4907.12	1226.75	0.34	8.00E+000	9.46	6.00E+000
7	5832-	5856	5844.53	1461.10	1.19	3.08E+002	36.50	9.44E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: 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	2.11072E+001	3.03216E+000
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	4.12401E-001	1.87985E-001
		860.37	12.46		
Pb-212	0.425	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	1.30258E+000	5.53943E-001
Bi-214	0.405	609.31*	46.30	5.28670E-001	2.93906E-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	2.110721E+001	3.032156E+000
TL-208		0.472	4.124007E-001	1.879852E-001
Pb-212	@	0.425	1.302575E+000	5.539433E-001
Bi-214		0.405	5.286698E-001	2.939061E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.47	5.6039E-002	79.59
5	911.01	8.1048E-002	42.34
6	1226.75	1.3333E-002	118.23

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:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.5988E-001	1.89E-001	5.1355E-002
	1332.49	100.00	1.8945E-001		1.0399E-002
Nb-94	702.63	100.00	2.5221E-001	2.14E-001	6.3734E-002
	871.10	100.00	2.1447E-001		-6.4549E-002
Ag-108m	79.20	7.10	2.1567E+001	2.65E-001	-1.4061E+001
	433.93	89.90	3.0975E-001		1.0826E-001
	614.37	90.40	3.3764E-001		-1.6445E-001
	722.95	90.50	2.6547E-001		1.6570E-001
Sb-125	176.33	6.89	6.2234E+000	9.16E-001	-2.2700E-001
	427.89	29.33	9.1581E-001		4.7697E-001
	463.38	10.35	2.6171E+000		7.0879E-001
	600.56	17.80	1.2857E+000		-2.8145E-001
	606.64	5.02	6.0556E+000		4.2338E+000
	635.90	11.32	2.0591E+000		1.3221E+000
Cs-134	563.23	8.38	3.1488E+000	2.80E-001	5.3273E-001
	569.32	15.43	1.6714E+000		-1.5332E+000
	604.70	97.60	3.0737E-001		-1.9478E-002
	795.84	85.40	2.8047E-001		1.9243E-001
	801.93	8.73	2.6851E+000		-2.0542E+000
Cs-137	661.65	85.12	3.1622E-001	3.16E-001	2.0123E-001
Eu-152	121.78	28.40	2.1700E+000	9.90E-001	-6.6536E-001
	244.69	7.49	4.6621E+000		1.4877E-001
	344.27	26.50	1.0237E+000		-5.4538E-001
	778.89	12.74	1.8149E+000		-2.1003E+000
	867.32	4.16	5.2013E+000		-6.7048E+000
	964.01	14.40	1.9939E+000		1.5679E+000
	1085.78	10.00	2.2258E+000		-9.5960E-001
	1112.02	13.30	1.6822E+000		-8.7146E-001
	1407.95	20.70	9.9010E-001		-4.0856E-001
Eu-154	123.07	40.50	1.5035E+000	5.33E-001	-5.9805E-002
	247.94	6.60	4.9421E+000		-3.7281E+000
	591.81	4.83	4.9469E+000		1.1417E+000
	723.30	19.70	1.2197E+000		8.0714E-001
	756.87	4.33	5.5990E+000		3.2126E-002
	873.19	11.50	1.9020E+000		3.2022E-001
	996.32	10.30	2.3612E+000		7.9308E-001
	1004.76	17.90	1.2228E+000		-1.8042E+000
	1274.45	35.50	5.3307E-001		5.5685E-001
Eu-155	86.54	30.90	3.9131E+000	3.87E+000	-4.4368E-001
	105.31	20.70	3.8683E+000		7.2799E-002
Am-241	59.54	35.90	9.1479E+000	9.15E+000	4.9066E+000
Cm-243	228.19	10.56	3.3931E+000	2.35E+000	-1.5706E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.3520E+000	2.35E+000	1.9150E+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 7:30:24 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-08-02-131-F-
Sample Title: OOL-08-02-131-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/4/2006 7:20:22 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-08-02-131-F-
Title: OOL-08-02-131-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	948-	963	953.35	238.29	0.42	5.17E+001	42.77	1.41E+002
2	1402-	1414	1406.29	351.53	0.55	4.40E+001	25.06	4.50E+001
3	2428-	2442	2435.62	608.87	0.73	4.95E+001	20.96	2.25E+001
4	3636-	3652	3643.95	910.95	0.38	5.18E+001	17.94	1.02E+001
5	5831-	5856	5842.77	1460.66	1.85	3.25E+002	37.97	1.23E+001
6	7051-	7064	7057.85	1764.44	0.31	1.80E+001	14.06	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	2.22793E+001	3.16903E+000
Pb-212	0.425	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	5.22007E-001	4.39465E-001
Bi-214	0.689	609.31*		46.30	6.11070E-001	2.69687E-001
		1120.29		15.10		
		1764.49*		15.80	9.34376E-001	7.34973E-001

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

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

I N T E R 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	2.227926E+001	3.169026E+000
Pb-212	@	0.425	5.220072E-001	4.394649E-001
Bi-214		0.689	6.494342E-001	2.531805E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.53	7.3413E-002	56.89
4	910.95	8.6310E-002	34.64

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

Errors quoted at 1.960 sigma

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

Spectrum File: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	2.5195E-001	1.98E-001	-1.4994E-001
	1332.49	100.00	1.9836E-001		-1.1461E-001
Nb-94	702.63	100.00	2.5221E-001	2.40E-001	1.0021E-001
	871.10	100.00	2.4014E-001		6.9829E-002
Ag-108m	79.20	7.10	2.1828E+001	2.87E-001	-1.7635E+001
	433.93	89.90	2.9250E-001		1.8280E-001
	614.37	90.40	3.1947E-001		-7.6883E-002
	722.95	90.50	2.8736E-001		9.8047E-002
Sb-125	176.33	6.89	6.1759E+000	8.65E-001	3.8541E-001
	427.89	29.33	8.6523E-001		-4.5100E-001
	463.38	10.35	2.5834E+000		-2.5755E+000
	600.56	17.80	1.4976E+000		9.0651E-001
	606.64	5.02	6.3639E+000		6.6474E+000
	635.90	11.32	2.2957E+000		5.1684E-001
Cs-134	563.23	8.38	3.1488E+000	2.83E-001	-2.1385E-001
	569.32	15.43	1.6894E+000		1.0080E+000
	604.70	97.60	3.2580E-001		-1.4090E-001
	795.84	85.40	2.8257E-001		1.1279E-001
	801.93	8.73	2.5770E+000		-1.2992E+000
Cs-137	661.65	85.12	2.9468E-001	2.95E-001	4.4825E-002
Eu-152	121.78	28.40	2.1795E+000	9.30E-001	-2.5514E+000
	244.69	7.49	4.9433E+000		1.4568E+000
	344.27	26.50	1.0673E+000		-1.0495E+000
	778.89	12.74	1.8861E+000		-6.3220E-001
	867.32	4.16	5.8122E+000		8.2055E-001
	964.01	14.40	2.1234E+000		2.5392E+000
	1085.78	10.00	2.3554E+000		6.8710E-002
	1112.02	13.30	1.7481E+000		2.2633E-001
	1407.95	20.70	9.3027E-001		6.6711E-001
Eu-154	123.07	40.50	1.5103E+000	6.17E-001	-1.3904E-003
	247.94	6.60	5.3148E+000		-1.0465E+000
	591.81	4.83	5.2579E+000		-6.8799E+000
	723.30	19.70	1.3362E+000		9.0624E-001
	756.87	4.33	6.1340E+000		4.5866E+000
	873.19	11.50	2.0729E+000		7.4436E-001
	996.32	10.30	2.4538E+000		-4.4909E-001
	1004.76	17.90	1.4456E+000		1.6643E+000
	1274.45	35.50	6.1700E-001		-3.4611E-001
Eu-155	86.54	30.90	3.8909E+000	3.89E+000	3.3548E+000
	105.31	20.70	3.9942E+000		-7.8561E-001
Am-241	59.54	35.90	9.0403E+000	9.04E+000	-2.3067E+000
Cm-243	228.19	10.56	3.3753E+000	2.54E+000	-1.9081E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.5390E+000	2.54E+000	1.3810E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 8:39:39 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-08-02-132-F-
Sample Title: OOL-08-02-132-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/4/2006 8:29:38 PM
Live Time: 600.0 seconds
Real Time: 600.6 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-08-02-132-F-
Title: OOL-08-02-132-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	1402-	1414	1407.08	351.87	0.78	4.60E+001	23.06	3.40E+001
2	2429-	2443	2435.76	609.06	0.32	5.10E+001	21.92	2.50E+001
3	2781-	2790	2785.53	696.51	0.36	1.49E+001	10.50	6.12E+000
4	5831-	5854	5843.19	1460.97	2.01	3.50E+002	37.89	5.93E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: BRN7722

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/GRAMS)	Activity Uncertainty
K-40	0.999	1460.81*	10.67	2.30231E+001	3.11196E+000
Bi-214	0.404	609.31*	46.30	6.09864E-001	2.72876E-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	2.302307E+001	3.111957E+000
Bi-214	0.404	6.098641E-001	2.728764E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.87	7.6599E-002	50.16
3	696.51	2.4802E-002	70.53

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	2.2448E-001	1.53E-001	6.4112E-002
	1332.49	100.00	1.5326E-001		8.1235E-002
Nb-94	702.63	100.00	2.1949E-001	1.92E-001	-4.2839E-002
	871.10	100.00	1.9237E-001		-4.1231E-002
Ag-108m	79.20	7.10	1.5736E+001	2.48E-001	-9.2774E+000
	433.93	89.90	2.4815E-001		-1.2002E-001
	614.37	90.40	2.6725E-001		-1.3542E-001
	722.95	90.50	2.6115E-001		1.0454E-001
Sb-125	176.33	6.89	4.7225E+000	7.83E-001	8.5099E-002
	427.89	29.33	7.8338E-001		6.6678E-001
	463.38	10.35	2.1463E+000		-8.0981E-001
	600.56	17.80	1.2543E+000		4.0292E-001
	606.64	5.02	5.7209E+000		8.0718E+000
	635.90	11.32	1.8890E+000		1.8360E-002
Cs-134	563.23	8.38	2.7922E+000	2.28E-001	-1.2907E-001
	569.32	15.43	1.4638E+000		-8.1684E-001
	604.70	97.60	2.7195E-001		-3.1522E-001
	795.84	85.40	2.2809E-001		7.8420E-002
	801.93	8.73	1.9463E+000		-2.4127E+000
Cs-137	661.65	85.12	2.5623E-001	2.56E-001	4.7305E-002
Eu-152	121.78	28.40	1.7693E+000	8.73E-001	1.1201E-001
	244.69	7.49	3.7021E+000		1.2684E+000
	344.27	26.50	8.7340E-001		-9.4793E-002
	778.89	12.74	1.5540E+000		3.5666E-001
	867.32	4.16	4.7791E+000		-1.1774E-001
	964.01	14.40	1.8001E+000		9.6034E-002
	1085.78	10.00	2.1685E+000		-6.3289E-002
	1112.02	13.30	1.6048E+000		4.4873E-001
	1407.95	20.70	8.9279E-001		-2.2540E-001
Eu-154	123.07	40.50	1.2222E+000	5.53E-001	7.2942E-002
	247.94	6.60	4.0922E+000		-5.5803E-001
	591.81	4.83	4.6024E+000		-1.7599E+000
	723.30	19.70	1.1745E+000		-2.5462E-001
	756.87	4.33	5.2007E+000		3.9947E+000
	873.19	11.50	1.7125E+000		-2.0982E-001
	996.32	10.30	2.0912E+000		7.6183E-002
	1004.76	17.90	1.1814E+000		3.8352E-001
	1274.45	35.50	5.5313E-001		-4.0595E-001
Eu-155	86.54	30.90	2.9253E+000	2.93E+000	1.6506E+000
	105.31	20.70	3.0222E+000		-6.9929E-001
Am-241	59.54	35.90	5.3407E+000	5.34E+000	1.3514E+000
Cm-243	228.19	10.56	2.8309E+000	1.73E+000	-7.4761E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.7288E+000	1.73E+000	-1.0038E+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 8:53:43 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-08-02-133-F-
Sample Title: OOL-08-02-133-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/4/2006 8:43:42 PM
Live Time: 600.0 seconds
Real Time: 600.6 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-08-02-133-F-
Title: OOL-08-02-133-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	296-	306	300.20	75.14	1.12	8.17E+001	71.50	5.20E+002
2	2429-	2440	2434.96	608.86	1.06	3.15E+001	20.59	3.15E+001
3	5325-	5336	5330.73	1332.84	0.37	2.25E+001	12.45	6.51E+000
4	5832-	5854	5843.69	1461.09	1.98	2.98E+002	36.34	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: 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	1.96265E+001	2.87002E+000
Bi-214	0.401	609.31*	46.30	3.76167E-001	2.50605E-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	1.962647E+001	2.870020E+000
Bi-214	0.401	3.761673E-001	2.506048E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	75.14	1.3622E-001	87.48
3	1332.84	3.7486E-002	55.34

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	2.5464E-001	2.46E-001	2.4734E-001
	1332.49	100.00	2.4600E-001		2.3203E-001
Nb-94	702.63	100.00	2.3145E-001	2.31E-001	-1.1720E-001
	871.10	100.00	2.5550E-001		1.9974E-001
Ag-108m	79.20	7.10	1.6851E+001	2.85E-001	-2.4483E+000
	433.93	89.90	3.0462E-001		-1.6632E-001
	614.37	90.40	2.8455E-001		-2.8616E-001
	722.95	90.50	3.0919E-001		2.9777E-002
Sb-125	176.33	6.89	5.6826E+000	1.00E+000	4.0460E-001
	427.89	29.33	1.0012E+000		3.0736E-001
	463.38	10.35	2.7789E+000		2.9952E-001
	600.56	17.80	1.4199E+000		-7.8092E-001
	606.64	5.02	6.0041E+000		4.3076E+000
	635.90	11.32	2.2958E+000		-2.6833E-001
Cs-134	563.23	8.38	3.4500E+000	3.02E-001	7.8564E-001
	569.32	15.43	1.7473E+000		-8.1436E-001
	604.70	97.60	3.0495E-001		1.4148E-002
	795.84	85.40	3.0218E-001		2.4813E-001
	801.93	8.73	2.7161E+000		-1.1501E+000
Cs-137	661.65	85.12	2.8660E-001	2.87E-001	-9.5665E-002
Eu-152	121.78	28.40	1.9533E+000	8.62E-001	-1.7206E+000
	244.69	7.49	4.7441E+000		7.6316E-001
	344.27	26.50	1.0434E+000		-4.6380E-001
	778.89	12.74	1.6330E+000		-1.0817E+000
	867.32	4.16	6.0147E+000		-5.5452E+000
	964.01	14.40	1.9036E+000		1.0744E+000
	1085.78	10.00	2.4139E+000		3.0117E-001
	1112.02	13.30	1.5709E+000		1.0529E-002
	1407.95	20.70	8.6248E-001		3.7329E-001
Eu-154	123.07	40.50	1.3718E+000	5.60E-001	-2.2677E-001
	247.94	6.60	5.2495E+000		-1.2826E+000
	591.81	4.83	5.9024E+000		2.8924E+000
	723.30	19.70	1.4275E+000		6.0550E-001
	756.87	4.33	6.2030E+000		-1.6406E+000
	873.19	11.50	2.1193E+000		-7.2457E-001
	996.32	10.30	2.3953E+000		2.5827E-001
	1004.76	17.90	1.3178E+000		7.8980E-001
	1274.45	35.50	5.6047E-001		1.7612E-001
Eu-155	86.54	30.90	3.2440E+000	3.24E+000	2.0385E+000
	105.31	20.70	3.4096E+000		1.2161E+000
Am-241	59.54	35.90	5.6527E+000	5.65E+000	-3.7126E+000
Cm-243	228.19	10.56	3.5016E+000	2.42E+000	8.7833E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	2.4232E+000	2.42E+000	2.7728E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 9:08:11 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-08-02-134-F-
Sample Title: OOL-08-02-134-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/4/2006 8:58:10 PM
Live Time: 600.0 seconds
Real Time: 600.6 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-08-02-134-F-
Title: OOL-08-02-134-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	305	291.50	72.96	0.84	6.82E+001	31.39	4.11E+002
m	2	285-	305	299.99	75.09	0.85	1.22E+002	36.37	4.81E+002
	3	946-	960	954.24	238.66	0.88	6.62E+001	35.30	8.98E+001
	4	1401-	1411	1405.59	351.50	0.65	2.93E+001	21.04	3.58E+001
	5	2429-	2444	2436.10	609.15	0.92	4.68E+001	22.06	2.62E+001
	6	3637-	3648	3643.49	911.01	0.96	2.80E+001	14.94	1.20E+001
	7	5833-	5854	5843.18	1460.97	1.07	3.05E+002	36.37	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
K-40	0.999	1460.81*	10.67	2.00848E+001	2.89250E+000
Pb-212	0.566	74.81* @	10.70	1.07688E+001	3.84356E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.48247E-001	3.60125E-001
Bi-214	0.405	609.31*	46.30	5.59166E-001	2.72777E-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	2.008476E+001	2.892503E+000
Pb-212	@	0.566	6.482475E-001	3.601248E-001
Bi-214		0.405	5.591664E-001	2.727766E-001

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

Errors quoted at 1.960 sigma

U N I D E N T I 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	1.1366E-001	46.03
	4	351.50	4.8750E-002	71.93
	6	911.01	4.6667E-002	53.35

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	2.3294E-001	2.09E-001	1.0786E-001
	1332.49	100.00	2.0927E-001		-1.3005E-001
Nb-94	702.63	100.00	2.1415E-001	2.14E-001	-1.3367E-001
	871.10	100.00	2.2154E-001		-9.1506E-002
Ag-108m	79.20	7.10	1.5969E+001	2.41E-001	-5.0629E+000
	433.93	89.90	2.4084E-001		-2.1013E-001
	614.37	90.40	2.5558E-001		1.6155E-002
	722.95	90.50	2.4806E-001		5.8100E-002
Sb-125	176.33	6.89	4.9983E+000	7.17E-001	-1.3784E+000
	427.89	29.33	7.1681E-001		-1.0962E-001
	463.38	10.35	2.1852E+000		-1.7364E-001
	600.56	17.80	1.2978E+000		2.5253E-001
	606.64	5.02	5.6967E+000		3.8494E+000
	635.90	11.32	1.9339E+000		-8.7325E-001
Cs-134	563.23	8.38	2.7922E+000	2.65E-001	-1.3981E+000
	569.32	15.43	1.5024E+000		-5.7135E-002
	604.70	97.60	2.8384E-001		6.4914E-002
	795.84	85.40	2.6474E-001		1.3105E-001
	801.93	8.73	2.2596E+000		5.7664E-001
Cs-137	661.65	85.12	2.9015E-001	2.90E-001	2.8521E-002
Eu-152	121.78	28.40	1.7887E+000	6.25E-001	-1.6634E+000
	244.69	7.49	3.9059E+000		2.1133E-001
	344.27	26.50	8.7340E-001		-1.0749E-001
	778.89	12.74	1.5540E+000		3.8060E-001
	867.32	4.16	5.4575E+000		-3.6360E-002
	964.01	14.40	1.8001E+000		6.3352E-001
	1085.78	10.00	2.0797E+000		4.2720E-001
	1112.02	13.30	1.5362E+000		1.3350E+000
	1407.95	20.70	6.2515E-001		-5.5005E-001
Eu-154	123.07	40.50	1.2629E+000	5.82E-001	1.2622E-001
	247.94	6.60	4.3077E+000		1.6087E+000
	591.81	4.83	4.8244E+000		1.4561E+000
	723.30	19.70	1.1397E+000		2.0737E-001
	756.87	4.33	4.9483E+000		-1.3783E-001
	873.19	11.50	1.9106E+000		-1.5715E+000
	996.32	10.30	2.2864E+000		1.6311E+000
	1004.76	17.90	1.1692E+000		-7.7735E-001
	1274.45	35.50	5.8189E-001		-2.7516E-001
Eu-155	86.54	30.90	2.9553E+000	2.96E+000	1.0598E+000
	105.31	20.70	2.9790E+000		-7.6930E-001
Am-241	59.54	35.90	5.2473E+000	5.25E+000	7.4726E-001
Cm-243	228.19	10.56	2.9356E+000	1.83E+000	5.2979E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.8348E+000	1.83E+000	3.0888E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 9:24:29 PM

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

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

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-08-02-135-F-
Sample Title: OOL-08-02-135-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/4/2006 9:14:27 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: 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-08-02-135-F-
Title: OOL-08-02-135-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	949-	959	954.64	238.62	0.42	4.40E+001	34.20	1.09E+002
2	1820-	1830	1825.05	456.22	0.54	2.05E+001	16.32	2.05E+001
3	2326-	2340	2330.97	582.70	0.41	5.58E+001	21.77	2.32E+001
4	5830-	5853	5842.22	1460.52	1.97	3.24E+002	37.20	8.99E+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	0.997	1460.81*		10.67	2.22306E+001	3.12312E+000
TL-208	0.468	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	3.73490E-001	1.53882E-001
		860.37		12.46		
Pb-212	0.427	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	4.43896E-001	3.52253E-001

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

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

I N T E R 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	2.223064E+001	3.123121E+000
TL-208	0.468	3.734902E-001	1.538815E-001
Pb-212 @	0.427	4.438965E-001	3.522525E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	456.22	3.4207E-002	79.53

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	2.6376E-001	1.95E-001	-5.3285E-002
	1332.49	100.00	1.9544E-001		2.1029E-002
Nb-94	702.63	100.00	2.3890E-001	2.39E-001	1.9625E-002
	871.10	100.00	2.4199E-001		1.3737E-001
Ag-108m	79.20	7.10	2.3518E+001	2.81E-001	-2.3436E+001
	433.93	89.90	2.8081E-001		7.5431E-002
	614.37	90.40	2.9392E-001		-2.5284E-001
	722.95	90.50	2.8910E-001		8.3144E-002
Sb-125	176.33	6.89	6.6542E+000	8.61E-001	-1.6811E+000
	427.89	29.33	8.6121E-001		-5.3032E-001
	463.38	10.35	2.2816E+000		6.6049E-001
	600.56	17.80	1.6607E+000		2.3457E+000
	606.64	5.02	5.7555E+000		-7.6496E-001
	635.90	11.32	2.0443E+000		-6.1660E-001
Cs-134	563.23	8.38	3.2597E+000	3.11E-001	2.1444E+000
	569.32	15.43	1.7248E+000		1.8036E+000
	604.70	97.60	3.1115E-001		4.8490E-001
	795.84	85.40	3.1411E-001		7.0410E-002
	801.93	8.73	2.9655E+000		2.5431E+000
Cs-137	661.65	85.12	3.1274E-001	3.13E-001	3.0015E-001
Eu-152	121.78	28.40	2.3826E+000	8.31E-001	-1.8939E-001
	244.69	7.49	4.6797E+000		-2.6229E+000
	344.27	26.50	1.0311E+000		-1.9937E+000
	778.89	12.74	1.9410E+000		1.2328E+000
	867.32	4.16	5.9436E+000		3.5819E-001
	964.01	14.40	1.9601E+000		1.3190E+000
	1085.78	10.00	2.3969E+000		2.0812E-001
	1112.02	13.30	1.7959E+000		-2.0426E-001
	1407.95	20.70	8.3148E-001		3.0321E-001
Eu-154	123.07	40.50	1.6657E+000	6.45E-001	6.7540E-001
	247.94	6.60	5.0800E+000		-1.6432E+000
	591.81	4.83	5.8276E+000		4.2525E+000
	723.30	19.70	1.3282E+000		2.2745E-001
	756.87	4.33	5.8347E+000		-4.3603E+000
	873.19	11.50	2.1053E+000		1.0333E+000
	996.32	10.30	2.1423E+000		1.2415E-001
	1004.76	17.90	1.2940E+000		1.9989E-001
	1274.45	35.50	6.4458E-001		-6.0267E-001
Eu-155	86.54	30.90	4.3109E+000	4.29E+000	2.6187E+000
	105.31	20.70	4.2871E+000		-1.9094E+000
Am-241	59.54	35.90	8.9730E+000	8.97E+000	-2.8528E+000
Cm-243	228.19	10.56	3.4107E+000	2.42E+000	-2.1647E+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	2.5765E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 9:43:54 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-08-02-136-F-
Sample Title: OOL-08-02-136-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/4/2006 9:33:51 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: 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-08-02-136-F-
Title: OOL-08-02-136-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	3638-	3650	3643.08	910.73	0.52	3.43E+001	15.20	9.75E+000
2	5831-	5854	5842.49	1460.59	1.38	3.32E+002	39.50	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	0.998	1460.81*	10.67	2.27580E+001	3.27730E+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	2.275805E+001	3.277302E+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	910.73	5.7083E-002	44.38

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	2.5988E-001	2.20E-001	-4.4003E-002
	1332.49	100.00	2.2020E-001		8.0304E-002
Nb-94	702.63	100.00	2.4896E-001	2.49E-001	-1.8364E-002
	871.10	100.00	2.4926E-001		-1.2398E-001
Ag-108m	79.20	7.10	2.5092E+001	2.90E-001	-3.1902E+001
	433.93	89.90	2.8994E-001		-1.8213E-001
	614.37	90.40	3.2091E-001		-1.7769E-001
	722.95	90.50	3.0760E-001		-3.5136E-002
Sb-125	176.33	6.89	7.6342E+000	9.38E-001	-1.4712E-001
	427.89	29.33	9.3818E-001		-2.1853E-001
	463.38	10.35	2.4193E+000		1.7692E+000
	600.56	17.80	1.5132E+000		-9.5595E-001
	606.64	5.02	6.3870E+000		3.6138E+000
	635.90	11.32	2.2424E+000		1.4016E+000
Cs-134	563.23	8.38	3.1649E+000	3.07E-001	-2.1368E+000
	569.32	15.43	1.7594E+000		-9.6268E-001
	604.70	97.60	3.2099E-001		1.8504E-002
	795.84	85.40	3.0655E-001		4.8263E-002
	801.93	8.73	2.7062E+000		-7.3336E-001
Cs-137	661.65	85.12	2.9092E-001	2.91E-001	-4.6549E-002
Eu-152	121.78	28.40	2.5728E+000	1.06E+000	-8.4756E-002
	244.69	7.49	5.1378E+000		-1.4845E+000
	344.27	26.50	1.0919E+000		-2.2303E-001
	778.89	12.74	1.9274E+000		1.8097E-001
	867.32	4.16	5.7228E+000		-4.2715E+000
	964.01	14.40	1.8183E+000		5.9978E-001
	1085.78	10.00	2.0874E+000		-1.0020E+000
	1112.02	13.30	1.6308E+000		-2.1265E+000
	1407.95	20.70	1.0597E+000		4.5515E-001
Eu-154	123.07	40.50	1.7868E+000	6.03E-001	1.1154E+000
	247.94	6.60	5.6059E+000		-2.4454E+000
	591.81	4.83	5.5505E+000		-5.3788E-001
	723.30	19.70	1.3982E+000		-4.6152E-001
	756.87	4.33	5.7961E+000		3.9861E+000
	873.19	11.50	2.2298E+000		4.1123E-001
	996.32	10.30	2.3423E+000		3.7146E-001
	1004.76	17.90	1.2470E+000		1.0565E+000
	1274.45	35.50	6.0269E-001		2.5518E-001
Eu-155	86.54	30.90	4.5907E+000	4.59E+000	4.8492E+000
	105.31	20.70	4.7390E+000		-1.5232E-001
Am-241	59.54	35.90	9.9473E+000	9.95E+000	-1.3717E-001
Cm-243	228.19	10.56	3.6757E+000	2.56E+000	-1.7409E+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	-8.4008E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 9:58:28 PM

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

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

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-08-02-137-F-
Sample Title: OOL-08-02-137-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/4/2006 9:48:26 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-08-02-137-F-
Title: OOL-08-02-137-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	293-	307	300.98	75.20	1.11	9.93E+001	105.47	9.70E+002
2	3635-	3649	3642.49	910.59	0.44	4.52E+001	18.96	1.68E+001
3	5831-	5852	5842.68	1460.64	1.76	3.38E+002	39.14	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: 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	2.31670E+001	3.27561E+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	2.316702E+001	3.275609E+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	75.20	1.6553E-001	106.19
2	910.59	7.5296E-002	41.96

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: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	2.5792E-001	2.58E-001	7.0931E-003
	1332.49	100.00	2.6653E-001		1.6730E-001
Nb-94	702.63	100.00	2.5543E-001	2.34E-001	-8.8369E-002
	871.10	100.00	2.3449E-001		-1.6810E-001
Ag-108m	79.20	7.10	2.6693E+001	2.98E-001	4.7668E+000
	433.93	89.90	2.9753E-001		-5.4828E-002
	614.37	90.40	3.2799E-001		-9.2329E-002
	722.95	90.50	3.0596E-001		7.4296E-002
Sb-125	176.33	6.89	7.9562E+000	8.97E-001	-5.9614E+000
	427.89	29.33	8.9671E-001		-2.2396E-002
	463.38	10.35	2.7264E+000		9.3602E-001
	600.56	17.80	1.6179E+000		8.4364E-001
	606.64	5.02	6.3175E+000		8.2869E-001
	635.90	11.32	2.2153E+000		-1.2298E+000
Cs-134	563.23	8.38	3.0504E+000	2.83E-001	-3.2743E+000
	569.32	15.43	1.7508E+000		1.6872E+000
	604.70	97.60	3.2220E-001		1.1936E-001
	795.84	85.40	2.8257E-001		-1.1972E-001
	801.93	8.73	2.6424E+000		-1.4048E+000
Cs-137	661.65	85.12	3.1966E-001	3.20E-001	1.3902E-001
Eu-152	121.78	28.40	2.8135E+000	8.14E-001	1.7418E-001
	244.69	7.49	5.4536E+000		5.3294E-001
	344.27	26.50	1.1023E+000		-1.3573E+000
	778.89	12.74	1.8861E+000		-6.2634E-001
	867.32	4.16	5.9867E+000		-3.1970E+000
	964.01	14.40	2.0271E+000		1.7517E+000
	1085.78	10.00	2.4577E+000		-7.9777E-003
	1112.02	13.30	1.8575E+000		-1.0575E+000
	1407.95	20.70	8.1370E-001		1.9898E-001
Eu-154	123.07	40.50	1.9390E+000	6.17E-001	-1.5176E+000
	247.94	6.60	5.7916E+000		-3.2368E+000
	591.81	4.83	6.2189E+000		3.8810E+000
	723.30	19.70	1.3906E+000		-5.9894E-001
	756.87	4.33	6.0236E+000		-1.5002E+000
	873.19	11.50	2.0729E+000		-9.9385E-001
	996.32	10.30	2.2246E+000		3.6144E-001
	1004.76	17.90	1.2105E+000		-1.1658E+000
	1274.45	35.50	6.1700E-001		-4.3048E-001
Eu-155	86.54	30.90	4.8134E+000	4.81E+000	3.7318E+000
	105.31	20.70	4.9685E+000		1.1201E+000
Am-241	59.54	35.90	1.1011E+001	1.10E+001	-7.0587E+000
Cm-243	228.19	10.56	3.9527E+000	2.43E+000	2.2281E+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	8.5345E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 3:43:34 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: GRN7780

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-02-138-F-G
Sample ID: OOL-08-02-138-F
Sample Title: OOL-08-02-138-F-G
Description: 100% Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/7/2006 11:41:06 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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-02-138-F-G
Log Number: OOL-08-02-138-F
Title: OOL-08-02-138-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	2329-	2339	2334.22	583.52	0.84	2.25E+001	16.87	2.15E+001
2	2428-	2447	2437.44	609.32	0.91	5.16E+001	28.91	4.74E+001
3	5327-	5341	5333.18	1333.26	0.41	3.33E+001	13.79	5.67E+000
4	5834-	5856	5845.94	1461.45	1.70	3.09E+002	36.79	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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-02-138-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	0.987	1460.81*	10.67	2.11861E+001	3.05240E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.50514E-001	1.14735E-001
		860.37	12.46		
Bi-214	0.406	609.31*	46.30	6.37283E-001	3.65640E-001
		1120.29	15.10		
		1764.49	15.80		

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

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

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

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-02-138-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	0.987	2.118608E+001	3.052399E+000
TL-208	0.469	1.505143E-001	1.147349E-001
Bi-214	0.406	6.372834E-001	3.656397E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	1333.26	5.5556E-002	41.37

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

Errors quoted at 1.960 sigma

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

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-02-138-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	2.8048E-001	2.71E-001	6.0176E-003
	1332.49	100.00	2.7069E-001		2.3225E-001
Nb-94	702.63	100.00	2.8261E-001	2.75E-001	-1.8518E-001
	871.10	100.00	2.7470E-001		1.5783E-001
Ag-108m	79.20	7.10	2.6980E+001	3.39E-001	-3.2323E+001
	433.93	89.90	3.3937E-001		6.0529E-002
	614.37	90.40	3.8328E-001		3.5444E-002
	722.95	90.50	3.5006E-001		5.5472E-002
Sb-125	176.33	6.89	8.2401E+000	1.02E+000	1.7680E+000
	427.89	29.33	1.0158E+000		-8.7965E-003
	463.38	10.35	3.0201E+000		2.8187E+000
	600.56	17.80	1.5740E+000		-9.9104E-003
	606.64	5.02	6.9377E+000		9.4753E+000
	635.90	11.32	2.7153E+000		2.5413E+000
Cs-134	563.23	8.38	3.5988E+000	3.37E-001	-1.3332E-001
	569.32	15.43	1.8429E+000		-6.6857E-001
	604.70	97.60	3.3979E-001		1.5542E-001
	795.84	85.40	3.3744E-001		8.1208E-002
	801.93	8.73	3.3895E+000		-1.8348E+000
Cs-137	661.65	85.12	3.4272E-001	3.43E-001	8.2754E-002
Eu-152	121.78	28.40	2.7966E+000	8.31E-001	3.1897E-001
	244.69	7.49	6.0746E+000		-6.3295E+000
	344.27	26.50	1.3262E+000		-3.6186E-001
	778.89	12.74	2.0333E+000		-6.7487E-001
	867.32	4.16	6.5197E+000		-4.9839E+000
	964.01	14.40	2.0051E+000		-1.2093E+000
	1085.78	10.00	2.6498E+000		-6.1714E-001
	1112.02	13.30	2.0441E+000		-3.1912E-001
	1407.95	20.70	8.3148E-001		2.8838E-003
Eu-154	123.07	40.50	1.9248E+000	7.02E-001	4.3202E-001
	247.94	6.60	6.5122E+000		1.2733E+000
	591.81	4.83	5.9611E+000		4.1946E-001
	723.30	19.70	1.6148E+000		3.7150E-001
	756.87	4.33	6.4184E+000		-3.8044E-001
	873.19	11.50	2.3898E+000		4.2259E-001
	996.32	10.30	2.5077E+000		-1.0306E+000
	1004.76	17.90	1.5250E+000		3.7980E-001
	1274.45	35.50	7.0237E-001		-2.1620E-001
Eu-155	86.54	30.90	4.9658E+000	4.97E+000	4.8388E+000
	105.31	20.70	5.1677E+000		-8.7987E-001
Am-241	59.54	35.90	1.0931E+001	1.09E+001	-5.8684E+000
Cm-243	228.19	10.56	4.2486E+000	2.83E+000	-2.9822E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.8281E+000	2.83E+000	7.0000E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 4:13:47 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-08-02-139-F-
Sample Title: OOL-08-02-139-F-G
Description: 100% Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/7/2006 4:03:46 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-08-02-139-F-
Title: OOL-08-02-139-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	947-	959	954.47	238.58	0.39	5.26E+001	38.44	1.26E+002
2	2428-	2443	2436.25	609.02	1.07	5.18E+001	24.44	3.42E+001
3	3635-	3647	3641.31	910.29	0.30	2.90E+001	15.57	1.30E+001
4	3868-	3880	3874.57	968.61	0.30	1.29E+001	16.19	2.11E+001
5	5831-	5856	5843.28	1460.79	2.06	3.40E+002	36.92	3.44E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: 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	2.33003E+001	3.15876E+000
Pb-212	0.427	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	5.31028E-001	3.96996E-001
Bi-214	0.405	609.31*		46.30	6.39401E-001	3.12005E-001
		1120.29		15.10		
		1764.49		15.80		
Ac-228	0.625	338.32		11.40		
		911.07*		27.70	6.54697E-001	3.59563E-001
		969.11*		16.60	4.94378E-001	6.20356E-001

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

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

I N T E R 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	2.330028E+001	3.158758E+000
Pb-212	@	0.427	5.310280E-001	3.969961E-001
Bi-214		0.405	6.394006E-001	3.120051E-001
Ac-228		0.625	6.143824E-001	3.110860E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.4788E-001	2.01E-001	1.0333E-001
	1332.49	100.00	2.0123E-001		8.0160E-003
Nb-94	702.63	100.00	2.5860E-001	2.10E-001	-8.4859E-003
	871.10	100.00	2.1022E-001		-1.7664E-001
Ag-108m	79.20	7.10	2.1670E+001	2.91E-001	-1.2717E+001
	433.93	89.90	2.9122E-001		-3.2907E-001
	614.37	90.40	3.3078E-001		-1.0433E-001
	722.95	90.50	3.0432E-001		-4.8785E-002
Sb-125	176.33	6.89	6.4490E+000	9.12E-001	1.7067E-001
	427.89	29.33	9.1202E-001		1.1027E-001
	463.38	10.35	2.5834E+000		-9.5569E-001
	600.56	17.80	1.5363E+000		-3.9415E-001
	606.64	5.02	6.7231E+000		4.7770E+000
	635.90	11.32	1.9838E+000		-1.6388E+000
Cs-134	563.23	8.38	3.3213E+000	3.21E-001	1.9353E+000
	569.32	15.43	1.7335E+000		-5.6270E-001
	604.70	97.60	3.4544E-001		-6.0381E-002
	795.84	85.40	3.2148E-001		2.9076E-001
	801.93	8.73	2.8884E+000		-2.1150E+000
Cs-137	661.65	85.12	3.3304E-001	3.33E-001	1.0226E-001
Eu-152	121.78	28.40	2.1438E+000	8.82E-001	-1.2196E+000
	244.69	7.49	4.6709E+000		-1.3202E+000
	344.27	26.50	1.0815E+000		-8.2255E-001
	778.89	12.74	2.0204E+000		-1.2947E+000
	867.32	4.16	5.3490E+000		-4.2373E+000
	964.01	14.40	1.9939E+000		8.9036E-001
	1085.78	10.00	2.0143E+000		6.0353E-001
	1112.02	13.30	1.7319E+000		-3.6396E-001
	1407.95	20.70	8.8242E-001		-3.8210E-001
Eu-154	123.07	40.50	1.4900E+000	6.58E-001	-1.9032E-001
	247.94	6.60	4.8112E+000		-4.4905E+000
	591.81	4.83	5.6631E+000		4.6612E+000
	723.30	19.70	1.4057E+000		1.1131E+000
	756.87	4.33	5.3521E+000		-4.9003E+000
	873.19	11.50	1.9020E+000		2.7950E-001
	996.32	10.30	2.2043E+000		-6.1909E-002
	1004.76	17.90	1.2470E+000		-9.9780E-001
	1274.45	35.50	6.5790E-001		4.8421E-001
Eu-155	86.54	30.90	3.9367E+000	3.94E+000	3.2587E+000
	105.31	20.70	3.9520E+000		3.5542E+000
Am-241	59.54	35.90	9.4975E+000	9.50E+000	7.0069E+000
Cm-243	228.19	10.56	3.4048E+000	2.22E+000	-2.3797E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.2164E+000	2.22E+000	-1.5533E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 2:57:10 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-08-02-140-F-
Sample Title: OOL-08-02-140-F-G
Description: 100% Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/7/2006 2:47:10 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-08-02-140-F-
Title: OOL-08-02-140-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	3640-	3653	3645.67	911.38	1.87	3.95E+001	18.38	1.75E+001
2	5834-	5858	5847.66	1461.88	1.85	3.37E+002	40.47	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	0.963	1460.81*	10.67	2.31576E+001	3.35185E+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	0.963	2.315761E+001	3.351851E+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	911.38	6.5833E-002	46.54

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	2.4992E-001	2.38E-001	6.4899E-002
	1332.49	100.00	2.3753E-001		1.7079E-001
Nb-94	702.63	100.00	2.5702E-001	2.31E-001	8.1814E-002
	871.10	100.00	2.3063E-001		-7.1810E-002
Ag-108m	79.20	7.10	2.2361E+001	2.96E-001	-2.9430E+001
	433.93	89.90	3.1684E-001		-2.1798E-002
	614.37	90.40	3.6122E-001		4.1030E-003
	722.95	90.50	2.9597E-001		-1.7844E-001
Sb-125	176.33	6.89	6.2369E+000	9.88E-001	1.4297E+000
	427.89	29.33	9.8832E-001		2.9633E-001
	463.38	10.35	2.5720E+000		1.7805E+000
	600.56	17.80	1.5590E+000		1.1685E+000
	606.64	5.02	6.6573E+000		9.4737E+000
	635.90	11.32	2.3088E+000		1.1034E+000
Cs-134	563.23	8.38	3.3516E+000	3.01E-001	1.3243E+000
	569.32	15.43	1.7508E+000		-1.8214E+000
	604.70	97.60	3.1488E-001		-2.3743E-001
	795.84	85.40	3.0074E-001		-1.5684E-001
	801.93	8.73	2.9655E+000		1.7461E-001
Cs-137	661.65	85.12	3.1966E-001	3.20E-001	-1.9082E-002
Eu-152	121.78	28.40	2.2976E+000	8.99E-001	7.8077E-001
	244.69	7.49	5.1139E+000		-5.3750E+000
	344.27	26.50	1.1625E+000		-9.3655E-001
	778.89	12.74	2.0841E+000		-1.0173E+000
	867.32	4.16	5.9867E+000		5.6337E-001
	964.01	14.40	2.2351E+000		1.8382E+000
	1085.78	10.00	2.2034E+000		-4.2478E-001
	1112.02	13.30	1.7959E+000		-2.7188E-001
	1407.95	20.70	8.9869E-001		5.9244E-001
Eu-154	123.07	40.50	1.5858E+000	6.90E-001	4.3987E-001
	247.94	6.60	5.3447E+000		-4.1589E+000
	591.81	4.83	5.9874E+000		6.0537E+000
	723.30	19.70	1.3906E+000		5.1184E-001
	756.87	4.33	6.0606E+000		7.4738E+000
	873.19	11.50	2.0400E+000		1.4804E-001
	996.32	10.30	2.1839E+000		-5.3034E-001
	1004.76	17.90	1.1980E+000		2.6199E-001
	1274.45	35.50	6.8998E-001		5.3087E-002
Eu-155	86.54	30.90	4.0845E+000	4.05E+000	2.5608E+000
	105.31	20.70	4.0537E+000		4.8123E-001
Am-241	59.54	35.90	9.5073E+000	9.51E+000	6.4347E-001
Cm-243	228.19	10.56	3.6866E+000	2.35E+000	4.7902E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.3468E+000	2.35E+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 8/7/2006 2:44:42 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-08-02-141-F-
Sample Title: OOL-08-02-141-F-G
Description: 100% Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/7/2006 2:34:41 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-08-02-141-F-
Title: OOL-08-02-141-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	946-	961	955.28	238.78	1.33	1.09E+002	43.00	1.24E+002
2	2078-	2087	2082.98	520.71	0.49	1.23E+001	14.46	1.87E+001
3	2327-	2343	2333.42	583.32	0.98	5.28E+001	22.26	2.42E+001
4	2504-	2514	2508.67	627.13	0.40	2.12E+001	14.26	1.28E+001
5	3641-	3655	3647.47	911.83	0.51	4.27E+001	15.28	6.35E+000
6	3872-	3883	3877.84	969.42	0.61	2.65E+001	13.19	7.49E+000
7	5834-	5860	5846.81	1461.67	1.84	3.08E+002	36.94	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: 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	2.11079E+001	3.05756E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.53647E-001	1.56210E-001
		860.37	12.46		
Pb-212	0.427	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	1.10074E+000	4.67241E-001
Ac-228	0.627	338.32	11.40		
		911.07*	27.70	9.63277E-001	3.62399E-001
		969.11*	16.60	1.01252E+000	5.14718E-001

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

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

I N T E R 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	2.110794E+001	3.057564E+000
TL-208		0.471	3.536468E-001	1.562097E-001
Pb-212	@	0.427	1.100739E+000	4.672408E-001
Ac-228		0.627	9.795984E-001	2.963209E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	520.71	2.0497E-002	117.56
4	627.13	3.5380E-002	67.20

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: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	2.07E-001	1.5177E-001
	1332.49	100.00	2.0685E-001		1.4039E-001
Nb-94	702.63	100.00	2.6017E-001	2.55E-001	-2.4130E-001
	871.10	100.00	2.5457E-001		-3.7437E-002
Ag-108m	79.20	7.10	2.2898E+001	2.84E-001	-4.3964E+000
	433.93	89.90	2.9753E-001		-1.1884E-001
	614.37	90.40	3.2518E-001		-6.5605E-002
	722.95	90.50	2.8383E-001		-1.2486E-001
Sb-125	176.33	6.89	6.5781E+000	9.53E-001	-1.4146E+000
	427.89	29.33	9.5279E-001		-1.1432E-001
	463.38	10.35	2.5491E+000		-1.2938E-001
	600.56	17.80	1.5665E+000		1.1498E+000
	606.64	5.02	6.0312E+000		2.2985E+000
	635.90	11.32	2.4235E+000		-4.7360E-001
Cs-134	563.23	8.38	3.2441E+000	3.04E-001	-2.4471E-001
	569.32	15.43	1.8017E+000		4.8302E-001
	604.70	97.60	3.0354E-001		-1.5683E-001
	795.84	85.40	3.1224E-001		4.8669E-003
	801.93	8.73	2.7683E+000		-3.2893E+000
Cs-137	661.65	85.12	3.4430E-001	3.44E-001	1.0542E-001
Eu-152	121.78	28.40	2.3015E+000	9.46E-001	8.0380E-001
	244.69	7.49	4.6797E+000		-4.2759E+000
	344.27	26.50	1.1722E+000		-2.8728E-001
	778.89	12.74	1.9000E+000		-1.9629E+000
	867.32	4.16	6.6362E+000		2.9399E+000
	964.01	14.40	2.0489E+000		5.5339E-002
	1085.78	10.00	2.3554E+000		-1.5916E+000
	1112.02	13.30	1.8115E+000		-2.2564E+000
	1407.95	20.70	9.4562E-001		2.3667E-001
Eu-154	123.07	40.50	1.6066E+000	6.17E-001	6.1244E-001
	247.94	6.60	5.1008E+000		-2.1695E+000
	591.81	4.83	5.4063E+000		4.0790E+000
	723.30	19.70	1.3122E+000		-1.9892E-001
	756.87	4.33	5.3941E+000		-8.8402E-001
	873.19	11.50	2.1372E+000		-3.2082E+000
	996.32	10.30	2.5775E+000		3.4581E-001
	1004.76	17.90	1.3935E+000		6.3728E-001
	1274.45	35.50	6.1700E-001		-1.4485E-001
Eu-155	86.54	30.90	4.0067E+000	4.01E+000	3.0120E+000
	105.31	20.70	4.0890E+000		3.9477E-001
Am-241	59.54	35.90	1.0537E+001	1.05E+001	-1.1716E+001
Cm-243	228.19	10.56	3.6210E+000	2.38E+000	-1.7435E+000

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	4.4538E-001

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

Report Generated On 8/7/2006 2:26:21 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-08-02-142-F-
Sample Title: OOL-08-02-142-F-G
Description: 100% Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/7/2006 2:16:20 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-08-02-142-F-
Title: OOL-08-02-142-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	2326-	2341	2333.81	583.41	0.54	4.60E+001	25.28	4.00E+001
2	5834-	5859	5846.84	1461.68	2.07	3.41E+002	36.93	3.32E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: GRN7780

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.976	1460.81*	10.67	2.33854E+001	3.16419E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.08012E-001	1.74081E-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	0.976	2.338541E+001	3.164191E+000
TL-208	0.470	3.080118E-001	1.740806E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.3737E-001	2.37E-001	-5.2814E-002
	1332.49	100.00	2.4685E-001		1.6472E-001
Nb-94	702.63	100.00	2.3890E-001	2.39E-001	-2.8216E-001
	871.10	100.00	2.5976E-001		1.6237E-002
Ag-108m	79.20	7.10	2.3741E+001	2.87E-001	-1.0469E+001
	433.93	89.90	2.9250E-001		-2.1389E-002
	614.37	90.40	3.6248E-001		9.7393E-002
	722.95	90.50	2.8736E-001		-5.3063E-002
Sb-125	176.33	6.89	6.6099E+000	9.46E-001	-4.7737E+000
	427.89	29.33	9.4551E-001		5.1941E-001
	463.38	10.35	2.6941E+000		-5.3125E-001
	600.56	17.80	1.6466E+000		3.0240E-001
	606.64	5.02	6.7449E+000		7.3579E+000
	635.90	11.32	2.5562E+000		4.3259E-001
Cs-134	563.23	8.38	3.4115E+000	2.72E-001	2.6735E+000
	569.32	15.43	1.7508E+000		-1.1014E+000
	604.70	97.60	3.3635E-001		1.1376E-001
	795.84	85.40	2.7190E-001		1.1440E-001
	801.93	8.73	2.8489E+000		1.3969E+000
Cs-137	661.65	85.12	3.4588E-001	3.46E-001	3.6598E-001
Eu-152	121.78	28.40	2.3079E+000	9.15E-001	2.0627E+000
	244.69	7.49	5.0496E+000		-4.5744E+000
	344.27	26.50	1.0673E+000		-1.0404E+000
	778.89	12.74	1.9679E+000		-2.7379E-001
	867.32	4.16	6.5976E+000		2.1556E+000
	964.01	14.40	2.0161E+000		9.3956E-001
	1085.78	10.00	1.9382E+000		-3.2094E+000
	1112.02	13.30	1.7642E+000		1.5769E+000
	1407.95	20.70	9.1463E-001		4.0661E-001
Eu-154	123.07	40.50	1.5804E+000	6.31E-001	-3.0346E-001
	247.94	6.60	5.4527E+000		-9.4888E-001
	591.81	4.83	5.8276E+000		1.3169E+000
	723.30	19.70	1.3362E+000		-9.5777E-002
	756.87	4.33	5.9110E+000		3.0704E-001
	873.19	11.50	2.1840E+000		3.4598E-001
	996.32	10.30	2.4899E+000		8.6673E-001
	1004.76	17.90	1.4558E+000		7.8875E-001
	1274.45	35.50	6.3095E-001		2.7842E-001
Eu-155	86.54	30.90	4.0905E+000	4.09E+000	1.4883E+000
	105.31	20.70	4.2554E+000		7.0173E-001
Am-241	59.54	35.90	9.8534E+000	9.85E+000	4.0484E-001
Cm-243	228.19	10.56	3.7827E+000	2.39E+000	1.1007E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.3886E+000	2.39E+000	-1.9075E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 1:35:23 PM

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

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

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-08-02-143-F-
Sample Title: OOL-08-02-143-F-G
Description: 100% Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/7/2006 1:25:26 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-08-02-143-F-
Title: OOL-08-02-143-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	292-	306	301.14	75.24	1.65	2.03E+002	93.91	7.25E+002
2	949-	960	954.38	238.55	0.85	5.91E+001	35.45	1.06E+002
3	2325-	2339	2332.68	583.13	1.23	5.16E+001	25.17	3.94E+001
4	3639-	3653	3645.50	911.34	0.56	4.15E+001	19.93	2.15E+001
5	5833-	5858	5845.48	1461.34	2.10	3.09E+002	38.78	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: 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	2.11737E+001	3.16578E+000
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.45576E-001	1.74591E-001
		860.37	12.46		
Pb-212	0.581	74.81* @	10.70	2.14027E+001	1.07649E+001
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.97169E-001	3.69987E-001

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

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

I N T E R 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	2.117372E+001	3.165782E+000
TL-208	0.472	3.455764E-001	1.745914E-001
Pb-212 @	0.581	5.971692E-001	3.699873E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	911.34	6.9233E-002	47.98

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

Errors quoted at 1.960 sigma

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

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.7502E-001	2.51E-001	1.0805E-001
	1332.49	100.00	2.5137E-001		1.7139E-001
Nb-94	702.63	100.00	2.5702E-001	2.57E-001	-5.1800E-002
	871.10	100.00	2.9486E-001		4.2455E-001
Ag-108m	79.20	7.10	2.2942E+001	3.01E-001	-1.8328E+001
	433.93	89.90	3.2943E-001		9.6575E-002
	614.37	90.40	3.6122E-001		2.1850E-001
	722.95	90.50	3.0101E-001		6.0436E-002
Sb-125	176.33	6.89	7.2052E+000	9.53E-001	4.4672E+000
	427.89	29.33	9.5279E-001		-3.7641E-002
	463.38	10.35	2.7157E+000		-1.4417E+000
	600.56	17.80	1.6466E+000		2.2669E-001
	606.64	5.02	6.4784E+000		4.9428E+000
	635.90	11.32	2.4482E+000		1.1137E+000
Cs-134	563.23	8.38	3.4848E+000	3.27E-001	2.0351E+000
	569.32	15.43	1.7594E+000		-5.4651E-001
	604.70	97.60	3.2699E-001		-3.0054E-001
	795.84	85.40	3.3744E-001		-1.9969E-001
	801.93	8.73	3.2374E+000		5.1113E-001
Cs-137	661.65	85.12	3.2136E-001	3.21E-001	7.9326E-002
Eu-152	121.78	28.40	2.3925E+000	8.49E-001	1.0211E+000
	244.69	7.49	4.8515E+000		-1.8079E+000
	344.27	26.50	1.2134E+000		-6.8331E-001
	778.89	12.74	1.9811E+000		2.5390E-001
	867.32	4.16	7.0460E+000		-1.6140E-001
	964.01	14.40	2.1851E+000		1.1212E+000
	1085.78	10.00	2.4974E+000		-2.1911E-001
	1112.02	13.30	1.9315E+000		-1.1799E-001
	1407.95	20.70	8.4884E-001		7.6131E-001
Eu-154	123.07	40.50	1.6316E+000	7.08E-001	-7.9410E-001
	247.94	6.60	5.3148E+000		-1.5815E+000
	591.81	4.83	6.1427E+000		-1.7739E+000
	723.30	19.70	1.3829E+000		2.4796E-001
	756.87	4.33	6.4875E+000		3.0674E+000
	873.19	11.50	2.5127E+000		-1.4925E+000
	996.32	10.30	2.7600E+000		2.3187E+000
	1004.76	17.90	1.3280E+000		-1.6693E+000
	1274.45	35.50	7.0848E-001		-1.7210E-001
Eu-155	86.54	30.90	4.4029E+000	4.40E+000	3.5719E+000
	105.31	20.70	4.4099E+000		8.1086E-001
Am-241	59.54	35.90	9.8911E+000	9.89E+000	-6.2314E+000
Cm-243	228.19	10.56	3.6920E+000	2.43E+000	-1.7181E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.4296E+000	2.43E+000	2.5624E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 1:16:15 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-08-02-144-F-
Sample Title: OOL-08-02-144-F-G
Description: 100% Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/7/2006 1:06:07 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: 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-08-02-144-F-
Title: OOL-08-02-144-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	2042-	2051	2046.08	511.48	0.35	3.30E+001	25.50	6.00E+001
2	5833-	5858	5845.77	1461.41	2.28	3.79E+002	40.24	9.87E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: 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	0.992	511.00*	100.00	1.78629E-001	1.40090E-001
K-40	0.988	1460.81*	10.67	2.60225E+001	3.47376E+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	0.992	1.786291E-001	1.400902E-001
K-40	0.988	2.602248E+001	3.473761E+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	2.6183E-001	2.62E-001	-1.3348E-001
	1332.49	100.00	2.9436E-001		2.2012E-001
Nb-94	702.63	100.00	2.8687E-001	2.84E-001	-6.4243E-002
	871.10	100.00	2.8419E-001		-3.4304E-002
Ag-108m	79.20	7.10	2.5237E+001	3.54E-001	-2.3489E+001
	433.93	89.90	3.5424E-001		-2.0706E-001
	614.37	90.40	3.9382E-001		2.5277E-001
	722.95	90.50	3.7470E-001		-1.1661E-001
Sb-125	176.33	6.89	7.7376E+000	1.12E+000	9.6572E+000
	427.89	29.33	1.1187E+000		7.2688E-001
	463.38	10.35	2.7157E+000		-2.9743E+000
	600.56	17.80	1.7694E+000		1.2825E-001
	606.64	5.02	6.9166E+000		3.9853E+000
	635.90	11.32	2.4968E+000		-1.5334E-001
Cs-134	563.23	8.38	3.7896E+000	3.42E-001	2.9214E-001
	569.32	15.43	2.1081E+000		-3.5085E-001
	604.70	97.60	3.4206E-001		-4.4628E-001
	795.84	85.40	3.6240E-001		3.6523E-001
	801.93	8.73	3.1850E+000		-3.6606E+000
Cs-137	661.65	85.12	3.9559E-001	3.96E-001	2.5613E-001
Eu-152	121.78	28.40	2.6611E+000	9.30E-001	-1.1995E+000
	244.69	7.49	5.6660E+000		-3.9103E+000
	344.27	26.50	1.2975E+000		-1.1800E+000
	778.89	12.74	2.0966E+000		-2.0499E+000
	867.32	4.16	7.0460E+000		9.7890E-001
	964.01	14.40	2.3318E+000		3.1556E+000
	1085.78	10.00	2.4577E+000		-8.4821E-001
	1112.02	13.30	1.9315E+000		-1.0324E+000
	1407.95	20.70	9.3027E-001		-1.2817E-002
Eu-154	123.07	40.50	1.8447E+000	7.21E-001	9.2695E-001
	247.94	6.60	6.0241E+000		-6.3688E+000
	591.81	4.83	7.1319E+000		4.4893E+000
	723.30	19.70	1.7093E+000		-1.0882E-001
	756.87	4.33	6.7232E+000		9.4080E-001
	873.19	11.50	2.4315E+000		1.4761E+000
	996.32	10.30	2.6787E+000		-1.6483E+000
	1004.76	17.90	1.6365E+000		9.8922E-001
	1274.45	35.50	7.2052E-001		1.4658E-001
Eu-155	86.54	30.90	4.6255E+000	4.61E+000	6.4576E+000
	105.31	20.70	4.6130E+000		1.4943E+000
Am-241	59.54	35.90	1.0612E+001	1.06E+001	-3.8234E+000
Cm-243	228.19	10.56	4.0864E+000	2.78E+000	1.5355E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.7754E+000	2.78E+000	-1.0807E+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 8:54:28 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: ORG7829

Spectrum File: ORG7829
Sample ID: OOL-08-02-145-F-
Sample Title: OOL-08-02-145-F-G
Description: 2 ft. tall vegetation

Sample Type:
Geometry:

Acquisition Started: 8/7/2006 8:44:26 AM
Live Time: 600.0 seconds
Real Time: 600.9 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-08-02-145-F-
Title: OOL-08-02-145-F-G
Description: 2 ft. tall vegetation

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2431-	2444	2437.06	609.29	0.38	4.21E+001	21.92	2.99E+001
2	5832-	5856	5844.36	1461.23	1.28	3.30E+002	37.65	9.47E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: 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	2.31517E+001	3.24172E+000
Bi-214	0.405	609.31*	46.30	5.28791E-001	2.83024E-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: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	2.315174E+001	3.241719E+000
Bi-214	0.405	5.287914E-001	2.830238E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

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

Spectrum File:ORG7829
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	2.7143E-001	2.41E-001	-1.2463E-001
	1332.49	100.00	2.4113E-001		-4.0643E-002
Nb-94	702.63	100.00	2.8512E-001	2.57E-001	-2.0892E-002
	871.10	100.00	2.5674E-001		-6.0990E-002
Ag-108m	79.20	7.10	2.3091E+001	3.26E-001	-4.7571E+000
	433.93	89.90	3.2584E-001		-2.6832E-001
	614.37	90.40	3.4890E-001		-3.4021E-001
	722.95	90.50	3.4098E-001		1.0065E-001
Sb-125	176.33	6.89	5.8868E+000	1.05E+000	-4.3194E+000
	427.89	29.33	1.0541E+000		-3.7511E-001
	463.38	10.35	2.6006E+000		-1.1927E+000
	600.56	17.80	1.6089E+000		1.0896E+000
	606.64	5.02	6.5206E+000		3.6731E+000
	635.90	11.32	2.4259E+000		-1.4652E-001
Cs-134	563.23	8.38	3.6062E+000	3.10E-001	2.2213E+000
	569.32	15.43	2.0273E+000		1.8852E+000
	604.70	97.60	3.2777E-001		-1.2544E-002
	795.84	85.40	3.1041E-001		-1.5353E-001
	801.93	8.73	3.0422E+000		-1.0752E+000
Cs-137	661.65	85.12	3.2138E-001	3.21E-001	1.2709E-001
Eu-152	121.78	28.40	2.2192E+000	1.02E+000	-5.5055E-001
	244.69	7.49	5.0708E+000		-6.3333E+000
	344.27	26.50	1.0902E+000		-1.7192E+000
	778.89	12.74	1.8741E+000		-1.1334E+000
	867.32	4.16	6.2529E+000		-2.0752E+000
	964.01	14.40	2.1539E+000		1.9678E+000
	1085.78	10.00	2.6993E+000		-3.8555E-002
	1112.02	13.30	1.9352E+000		2.5777E-001
	1407.95	20.70	1.0228E+000		-3.2289E-001
Eu-154	123.07	40.50	1.5571E+000	7.54E-001	-6.4607E-002
	247.94	6.60	5.4418E+000		-5.4071E+000
	591.81	4.83	5.9572E+000		2.1144E+000
	723.30	19.70	1.5526E+000		6.1092E-002
	756.87	4.33	6.5304E+000		-2.0613E+000
	873.19	11.50	2.2814E+000		-2.6179E-001
	996.32	10.30	2.5246E+000		1.9849E+000
	1004.76	17.90	1.4559E+000		-2.7561E-001
	1274.45	35.50	7.5378E-001		1.6851E-001
Eu-155	86.54	30.90	3.8835E+000	3.88E+000	-3.2013E-001
	105.31	20.70	4.0180E+000		6.8381E-001
Am-241	59.54	35.90	1.0160E+001	1.02E+001	-2.1189E+001
Cm-243	228.19	10.56	3.4783E+000	2.52E+000	2.3505E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.5208E+000	2.52E+000	2.2131E+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 10:45:48 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-08-02-146-F-
Sample Title: OOL-08-02-146-F-G
Description: 100% VEGETATION

Sample Type:
Geometry:

Acquisition Started: 8/7/2006 10:35:44 AM
Live Time: 600.0 seconds
Real Time: 601.0 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-08-02-146-F-
Title: OOL-08-02-146-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	948-	961	956.09	239.00	1.47	7.04E+001	42.31	1.44E+002
2	1403-	1416	1408.15	352.03	1.03	3.90E+001	30.81	7.50E+001
3	2040-	2051	2044.08	511.03	1.07	3.74E+001	27.22	6.16E+001
4	2431-	2446	2437.62	609.43	0.78	4.95E+001	23.42	3.05E+001
5	5835-	5858	5847.13	1461.92	1.89	3.30E+002	38.70	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: 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	2.05840E-001	1.52636E-001
K-40	0.960	1460.81*		10.67	2.31909E+001	3.30443E+000
Pb-212	0.419	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.19173E-001	4.46944E-001
Bi-214	0.405	609.31*		46.30	6.22400E-001	3.04152E-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	1.000	2.058404E-001	1.526359E-001
K-40	0.960	2.319086E+001	3.304433E+000
Pb-212 @	0.419	7.191730E-001	4.469439E-001
Bi-214	0.405	6.224001E-001	3.041524E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	352.03	6.4949E-002	79.05

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	2.7346E-001	2.73E-001	-1.1315E-001
	1332.49	100.00	3.0021E-001		4.4368E-001
Nb-94	702.63	100.00	2.7304E-001	2.73E-001	-1.1050E-001
	871.10	100.00	2.9591E-001		1.2100E-001
Ag-108m	79.20	7.10	2.5532E+001	3.42E-001	-2.2033E+001
	433.93	89.90	3.7107E-001		1.9544E-001
	614.37	90.40	3.7378E-001		-4.0802E-002
	722.95	90.50	3.4250E-001		1.3096E-001
Sb-125	176.33	6.89	6.6999E+000	1.05E+000	4.0424E+000
	427.89	29.33	1.0473E+000		5.5691E-002
	463.38	10.35	3.2432E+000		3.3293E+000
	600.56	17.80	1.8528E+000		1.3014E+000
	606.64	5.02	6.9710E+000		6.6781E+000
	635.90	11.32	2.6696E+000		-6.5800E-001
Cs-134	563.23	8.38	3.4275E+000	3.41E-001	-1.9640E+000
	569.32	15.43	1.8760E+000		8.8380E-002
	604.70	97.60	3.5482E-001		-1.0545E-001
	795.84	85.40	3.4068E-001		7.9309E-002
	801.93	8.73	3.0422E+000		-4.2600E+000
Cs-137	661.65	85.12	3.5629E-001	3.56E-001	3.5535E-003
Eu-152	121.78	28.40	2.3116E+000	9.61E-001	1.5793E+000
	244.69	7.49	5.1608E+000		-3.7259E+000
	344.27	26.50	1.1934E+000		-2.0149E+000
	778.89	12.74	2.3309E+000		2.5203E-001
	867.32	4.16	7.0674E+000		-2.3183E+000
	964.01	14.40	2.2509E+000		-1.9463E+000
	1085.78	10.00	2.4944E+000		-1.9849E+000
	1112.02	13.30	1.9818E+000		-9.4370E-001
	1407.95	20.70	9.6101E-001		-1.7874E-002
Eu-154	123.07	40.50	1.6040E+000	8.02E-001	-7.9334E-001
	247.94	6.60	5.5014E+000		1.5155E+000
	591.81	4.83	5.7340E+000		-8.2299E+000
	723.30	19.70	1.5874E+000		1.1548E+000
	756.87	4.33	6.8439E+000		-4.3328E+000
	873.19	11.50	2.4762E+000		2.6195E-001
	996.32	10.30	2.6717E+000		-3.2450E+000
	1004.76	17.90	1.6498E+000		2.0764E+000
	1274.45	35.50	8.0207E-001		4.6375E-002
Eu-155	86.54	30.90	4.0505E+000	4.05E+000	-1.3859E+000
	105.31	20.70	4.0826E+000		-4.0648E-001
Am-241	59.54	35.90	1.3367E+001	1.34E+001	1.2677E+001
Cm-243	228.19	10.56	3.6109E+000	2.53E+000	-1.0342E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.5259E+000	2.53E+000	-7.4014E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 10:59:02 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-08-02-147-F-
Sample Title: OOL-08-02-147-F-G
Description: 100% VEGETATION

Sample Type:
Geometry:

Acquisition Started: 8/7/2006 10:48:59 AM
Live Time: 600.0 seconds
Real Time: 600.9 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-08-02-147-F-
Title: OOL-08-02-147-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	206-	220	215.63	53.86	0.45	1.37E+002	100.01	8.54E+002
2	4286-	4297	4291.49	1072.96	0.31	1.18E+001	11.71	9.19E+000
3	5836-	5861	5847.80	1462.09	1.64	3.69E+002	40.06	1.20E+001

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: ORG7829

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.947	1460.81*	10.67	2.59270E+001	3.51161E+000

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

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

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

Spectrum File:ORG7829

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

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40	0.947	2.592696E+001	3.511606E+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	53.86	2.2886E-001	72.83
2	1072.96	1.9683E-002	99.15

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	3.1111E-001	2.75E-001	3.8980E-001
	1332.49	100.00	2.7464E-001		3.1396E-001
Nb-94	702.63	100.00	2.9384E-001	2.94E-001	9.2850E-003
	871.10	100.00	3.0981E-001		-1.9694E-002
Ag-108m	79.20	7.10	2.3778E+001	3.35E-001	-4.9630E+001
	433.93	89.90	3.4646E-001		-2.6639E-001
	614.37	90.40	3.8620E-001		2.2961E-001
	722.95	90.50	3.3483E-001		-1.3995E-001
Sb-125	176.33	6.89	6.6103E+000	1.06E+000	2.4713E+000
	427.89	29.33	1.0575E+000		9.7749E-002
	463.38	10.35	3.0316E+000		9.3471E-001
	600.56	17.80	1.7595E+000		5.1020E-001
	606.64	5.02	7.0144E+000		4.3362E+000
	635.90	11.32	2.7270E+000		1.8350E+000
Cs-134	563.23	8.38	3.6062E+000	3.43E-001	7.8903E-001
	569.32	15.43	1.8843E+000		-1.2110E+000
	604.70	97.60	3.4334E-001		-2.8491E-002
	795.84	85.40	3.6833E-001		1.9138E-001
	801.93	8.73	3.2493E+000		-3.4311E-001
Cs-137	661.65	85.12	3.7170E-001	3.72E-001	6.1371E-002
Eu-152	121.78	28.40	2.3991E+000	8.41E-001	1.0082E+000
	244.69	7.49	5.3439E+000		-9.3879E+000
	344.27	26.50	1.1702E+000		-3.0509E-001
	778.89	12.74	2.3309E+000		-3.1724E-001
	867.32	4.16	8.1953E+000		3.9959E+000
	964.01	14.40	2.2509E+000		-1.8509E+000
	1085.78	10.00	2.6194E+000		-1.1245E+000
	1112.02	13.30	2.1153E+000		-3.8362E-001
	1407.95	20.70	8.4058E-001		-2.6811E-001
Eu-154	123.07	40.50	1.6469E+000	8.08E-001	5.4986E-001
	247.94	6.60	5.6954E+000		-3.1290E+000
	591.81	4.83	6.3535E+000		-4.3428E+000
	723.30	19.70	1.5805E+000		1.5032E+000
	756.87	4.33	7.2717E+000		7.7044E+000
	873.19	11.50	2.6156E+000		-8.0600E-001
	996.32	10.30	2.7420E+000		6.5775E-001
	1004.76	17.90	1.6012E+000		2.4395E-001
	1274.45	35.50	8.0789E-001		7.1544E-002
Eu-155	86.54	30.90	4.2237E+000	4.12E+000	3.0558E+000
	105.31	20.70	4.1155E+000		-2.3645E+000
Am-241	59.54	35.90	1.1658E+001	1.17E+001	9.4116E-001
Cm-243	228.19	10.56	3.8726E+000	2.66E+000	-3.5272E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.6629E+000	2.66E+000	-2.3597E+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 11:11:49 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-08-02-148-F-
Sample Title: OOL-08-02-148-F-G
Description: 100% VEGETATION

Sample Type:
Geometry:

Acquisition Started: 8/7/2006 11:01:46 AM
Live Time: 600.0 seconds
Real Time: 600.9 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-08-02-148-F-
Title: OOL-08-02-148-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	296-	306	300.20	75.01	0.37	8.58E+001	75.39	5.83E+002
2	2327-	2343	2335.15	583.81	0.82	6.42E+001	26.12	3.58E+001
3	2401-	2411	2405.85	601.49	0.93	2.50E+001	17.07	2.00E+001
4	4663-	4674	4668.76	1167.29	0.34	9.50E+000	11.10	8.50E+000
5	5837-	5863	5849.04	1462.40	1.14	3.34E+002	38.39	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	0.920	1460.81*	10.67	2.34602E+001	3.29957E+000
TL-208	0.463	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	4.37895E-001	1.87205E-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	0.920	2.346022E+001	3.299571E+000
TL-208	0.463	4.378948E-001	1.872045E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	75.01	1.4301E-001	87.87
3	601.49	4.1667E-002	68.28
4	1167.29	1.5833E-002	116.86

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: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	3.0398E-001	2.98E-001	-6.4807E-002
	1332.49	100.00	2.9817E-001		1.7518E-001
Nb-94	702.63	100.00	2.9384E-001	2.94E-001	1.4898E-001
	871.10	100.00	3.0217E-001		-1.6636E-001
Ag-108m	79.20	7.10	2.4675E+001	3.39E-001	-1.1815E+001
	433.93	89.90	3.3860E-001		-1.6526E-001
	614.37	90.40	3.8004E-001		8.8736E-002
	722.95	90.50	3.5294E-001		-6.1849E-002
Sb-125	176.33	6.89	6.6999E+000	1.03E+000	8.9860E-001
	427.89	29.33	1.0300E+000		-3.2558E-001
	463.38	10.35	3.1964E+000		4.2568E-001
	600.56	17.80	1.8593E+000		4.8609E-001
	606.64	5.02	7.1003E+000		4.1143E+000
	635.90	11.32	2.8380E+000		-5.3464E-001
Cs-134	563.23	8.38	3.8445E+000	3.39E-001	7.9013E-001
	569.32	15.43	2.0875E+000		-5.7560E-002
	604.70	97.60	3.5482E-001		-7.3740E-002
	795.84	85.40	3.3887E-001		-4.7354E-003
	801.93	8.73	2.9631E+000		-2.0086E+000
Cs-137	661.65	85.12	3.7768E-001	3.78E-001	-1.6452E-001
Eu-152	121.78	28.40	2.4882E+000	1.12E+000	-9.9905E-001
	244.69	7.49	5.2492E+000		-5.8360E+000
	344.27	26.50	1.3239E+000		-1.1711E+000
	778.89	12.74	2.3192E+000		-2.8185E+000
	867.32	4.16	7.4394E+000		1.1458E-002
	964.01	14.40	2.2509E+000		-2.1351E+000
	1085.78	10.00	2.9963E+000		-1.7345E-001
	1112.02	13.30	2.1578E+000		1.1253E+000
	1407.95	20.70	1.1221E+000		3.7536E-001
Eu-154	123.07	40.50	1.7261E+000	8.02E-001	3.2887E-001
	247.94	6.60	5.7617E+000		-5.1888E+000
	591.81	4.83	6.5793E+000		2.4785E+000
	723.30	19.70	1.6080E+000		-3.4216E-001
	756.87	4.33	7.0448E+000		3.4060E+000
	873.19	11.50	2.7087E+000		1.7556E-001
	996.32	10.30	2.7593E+000		-1.1401E-001
	1004.76	17.90	1.5813E+000		1.4303E-001
	1274.45	35.50	8.0207E-001		1.6431E-001
Eu-155	86.54	30.90	4.3375E+000	4.22E+000	3.8367E+000
	105.31	20.70	4.2239E+000		3.8341E-001
Am-241	59.54	35.90	1.2823E+001	1.28E+001	-2.4476E+001
Cm-243	228.19	10.56	3.7003E+000	2.61E+000	-2.9639E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.6051E+000	2.61E+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 8/7/2006 11:34:58 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-08-02-149-F-
Sample Title: OOL-08-02-149-F-G
Description: 100% VEGETATION

Sample Type:
Geometry:

Acquisition Started: 8/7/2006 11:24:56 AM
Live Time: 600.0 seconds
Real Time: 601.0 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-08-02-149-F-
Title: OOL-08-02-149-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	197-	210	201.52	50.33	0.84	1.11E+002	113.20	1.12E+003
2	2325-	2336	2331.23	582.83	0.38	3.83E+001	22.02	3.47E+001
3	2375-	2386	2381.55	595.41	0.56	2.67E+001	20.33	2.93E+001
4	5321-	5332	5326.29	1331.69	1.34	3.23E+001	14.41	8.70E+000
5	5829-	5852	5840.54	1460.27	1.77	3.11E+002	37.72	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: 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	0.990	1460.81*	10.67	2.18521E+001	3.18608E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.61103E-001	1.53937E-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	0.990	2.185214E+001	3.186083E+000
TL-208	0.471	2.611033E-001	1.539369E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
1	50.33	1.8511E-001	101.92
3	595.41	4.4442E-002	76.24
4	1331.69	5.3841E-002	44.60

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: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	3.0398E-001	2.81E-001	-3.4496E-003
	1332.49	100.00	2.8127E-001		1.7150E-001
Nb-94	702.63	100.00	2.9669E-001	2.97E-001	-8.8482E-002
	871.10	100.00	3.2163E-001		-1.4806E-001
Ag-108m	79.20	7.10	2.8007E+001	3.42E-001	-6.9098E-001
	433.93	89.90	3.4199E-001		7.3437E-002
	614.37	90.40	3.7629E-001		-3.7988E-001
	722.95	90.50	3.8111E-001		2.2778E-001
Sb-125	176.33	6.89	6.8817E+000	1.06E+000	4.5021E+000
	427.89	29.33	1.0575E+000		-2.5928E-001
	463.38	10.35	2.9404E+000		-8.6837E-001
	600.56	17.80	2.0201E+000		2.7954E-001
	606.64	5.02	7.5346E+000		3.3941E+000
	635.90	11.32	2.7942E+000		1.6450E+000
Cs-134	563.23	8.38	3.8036E+000	3.57E-001	9.1968E-002
	569.32	15.43	2.0801E+000		-2.1178E-001
	604.70	97.60	4.0132E-001		3.2222E-001
	795.84	85.40	3.5652E-001		-7.6576E-002
	801.93	8.73	3.5109E+000		1.1406E+000
Cs-137	661.65	85.12	3.9926E-001	3.99E-001	2.7838E-001
Eu-152	121.78	28.40	2.4508E+000	9.92E-001	-8.2385E-001
	244.69	7.49	5.3751E+000		-8.7592E+000
	344.27	26.50	1.2758E+000		-3.6154E-001
	778.89	12.74	2.6061E+000		3.2064E-001
	867.32	4.16	7.5472E+000		-1.5713E+000
	964.01	14.40	2.4617E+000		1.2579E+000
	1085.78	10.00	2.7957E+000		-2.3862E+000
	1112.02	13.30	2.1153E+000		-1.0358E+000
	1407.95	20.70	9.9245E-001		2.4654E-002
Eu-154	123.07	40.50	1.6870E+000	7.28E-001	-1.3785E+000
	247.94	6.60	5.9378E+000		-9.4246E-001
	591.81	4.83	6.9849E+000		3.8766E+000
	723.30	19.70	1.7259E+000		-7.6019E-001
	756.87	4.33	7.6139E+000		-4.8066E+000
	873.19	11.50	2.8360E+000		-4.5091E-001
	996.32	10.30	2.9101E+000		4.8128E-001
	1004.76	17.90	1.5304E+000		-1.3894E+000
	1274.45	35.50	7.2834E-001		-6.0264E-002
Eu-155	86.54	30.90	4.7591E+000	4.42E+000	1.4392E+000
	105.31	20.70	4.4218E+000		-5.9279E+000
Am-241	59.54	35.90	1.2397E+001	1.24E+001	1.2582E+001
Cm-243	228.19	10.56	3.5825E+000	2.71E+000	-1.7387E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.7054E+000	2.71E+000	6.7794E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 1:55:14 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-08-02-150-F-
Sample Title: OOL-08-02-150-F-G
Description: 100% VEGETATION

Sample Type:
Geometry:

Acquisition Started: 8/7/2006 1:45:11 PM
Live Time: 600.0 seconds
Real Time: 601.0 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-08-02-150-F-
Title: OOL-08-02-150-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	948-	961	953.74	238.41	0.75	1.01E+002	44.21	1.46E+002
2	2323-	2339	2330.63	582.68	0.74	5.92E+001	28.76	4.98E+001
3	5828-	5853	5841.96	1460.63	2.00	3.19E+002	38.25	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: ORG7829

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.999	1460.81*		10.67	2.23966E+001	3.24126E+000
TL-208	0.468	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	4.03091E-001	2.03017E-001
		860.37		12.46		
Pb-212	0.420	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	1.02713E+000	4.79449E-001

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

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

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

Spectrum File:ORG7829

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

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40	0.999	2.239658E+001	3.241262E+000
TL-208	0.468	4.030907E-001	2.030165E-001
Pb-212 @	0.420	1.027128E+000	4.794489E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

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

Spectrum File:ORG7829
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	3.3318E-001	3.24E-001	1.4876E-001
	1332.49	100.00	3.2362E-001		3.8837E-001
Nb-94	702.63	100.00	3.2110E-001	3.20E-001	9.0356E-002
	871.10	100.00	3.2018E-001		1.1650E-001
Ag-108m	79.20	7.10	2.6668E+001	3.66E-001	-9.2744E+000
	433.93	89.90	3.6586E-001		3.0858E-001
	614.37	90.40	4.0057E-001		-2.6050E-001
	722.95	90.50	3.6731E-001		-3.5372E-002
Sb-125	176.33	6.89	7.0526E+000	1.08E+000	4.2201E+000
	427.89	29.33	1.0842E+000		-3.9065E-001
	463.38	10.35	3.2618E+000		2.3446E+000
	600.56	17.80	1.9962E+000		-4.7442E-001
	606.64	5.02	7.6343E+000		2.8669E+000
	635.90	11.32	2.8489E+000		6.5072E-002
Cs-134	563.23	8.38	3.9382E+000	3.86E-001	1.5150E+000
	569.32	15.43	1.9651E+000		-2.2299E-001
	604.70	97.60	4.0428E-001		6.1859E-001
	795.84	85.40	3.8614E-001		5.0444E-001
	801.93	8.73	3.4088E+000		-1.3024E+000
Cs-137	661.65	85.12	3.9926E-001	3.99E-001	1.9458E-001
Eu-152	121.78	28.40	2.5381E+000	1.05E+000	-1.0969E+000
	244.69	7.49	5.4981E+000		-5.4785E+000
	344.27	26.50	1.3121E+000		-1.1180E+000
	778.89	12.74	2.4000E+000		-1.7147E+000
	867.32	4.16	7.6534E+000		-1.1477E+001
	964.01	14.40	2.5278E+000		1.0360E+000
	1085.78	10.00	2.6396E+000		-2.7717E+000
	1112.02	13.30	1.9664E+000		-1.2727E+000
	1407.95	20.70	1.0522E+000		1.1797E+000
Eu-154	123.07	40.50	1.7569E+000	9.21E-001	-1.0817E-001
	247.94	6.60	6.0820E+000		-5.9189E+000
	591.81	4.83	7.4325E+000		8.1705E+000
	723.30	19.70	1.7005E+000		5.9699E-001
	756.87	4.33	7.7641E+000		-3.5248E+000
	873.19	11.50	2.8110E+000		2.9711E-001
	996.32	10.30	3.4032E+000		5.7356E-001
	1004.76	17.90	1.9060E+000		4.1464E-002
	1274.45	35.50	9.2111E-001		1.0336E+000
Eu-155	86.54	30.90	4.6273E+000	4.51E+000	3.4151E+000
	105.31	20.70	4.5105E+000		-1.8888E+000
Am-241	59.54	35.90	1.1815E+001	1.18E+001	-1.3137E+001
Cm-243	228.19	10.56	3.8621E+000	2.76E+000	-3.8769E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.7564E+000	2.76E+000	3.4015E+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 2:33:12 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-08-02-150-F-
Sample Title: OOL-08-02-151-F-G
Description: 100% VEGETATION

Sample Type:
Geometry:

Acquisition Started: 8/7/2006 2:23:08 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-08-02-150-F-
Title: OOL-08-02-151-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	224-	239	230.71	57.63	0.77	1.22E+002	109.49	9.92E+002
2	2431-	2442	2435.72	608.96	0.74	3.77E+001	22.95	3.93E+001
3	5324-	5339	5329.63	1332.53	0.62	4.49E+001	18.41	1.41E+001
4	5830-	5854	5842.67	1460.81	1.90	3.09E+002	39.76	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	1.000	1460.81*	10.67	2.17158E+001	3.30030E+000
Bi-214	0.402	609.31*	46.30	4.73535E-001	2.94168E-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	2.171581E+001	3.300298E+000
Bi-214	0.402	4.735349E-001	2.941681E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	57.63	2.0376E-001	89.56
3	1332.53	7.4809E-002	41.01

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	3.3318E-001	3.33E-001	2.9666E-001
	1332.49	100.00	3.4536E-001		3.3211E-001
Nb-94	702.63	100.00	3.5090E-001	3.43E-001	2.4238E-001
	871.10	100.00	3.4265E-001		2.3345E-001
Ag-108m	79.20	7.10	2.8951E+001	3.67E-001	-2.7816E+001
	433.93	89.90	3.6691E-001		-4.3428E-001
	614.37	90.40	4.2117E-001		-8.4735E-002
	722.95	90.50	3.9701E-001		3.3085E-001
Sb-125	176.33	6.89	7.4282E+000	1.20E+000	3.4364E+000
	427.89	29.33	1.2028E+000		4.8754E-001
	463.38	10.35	3.5019E+000		1.1319E+000
	600.56	17.80	2.0784E+000		-4.1069E-001
	606.64	5.02	7.9253E+000		3.4203E+000
	635.90	11.32	2.8162E+000		7.1376E-001
Cs-134	563.23	8.38	4.3518E+000	4.05E-001	1.6406E+000
	569.32	15.43	2.2718E+000		8.6679E-001
	604.70	97.60	4.0527E-001		-2.2895E-001
	795.84	85.40	4.4735E-001		-6.2002E-003
	801.93	8.73	4.1101E+000		-3.9799E+000
Cs-137	661.65	85.12	4.0756E-001	4.08E-001	-2.4901E-002
Eu-152	121.78	28.40	2.7673E+000	9.28E-001	-1.3103E+000
	244.69	7.49	5.8510E+000		-8.0372E+000
	344.27	26.50	1.3531E+000		1.0511E-001
	778.89	12.74	2.7963E+000		9.3502E-001
	867.32	4.16	8.0634E+000		2.2444E+000
	964.01	14.40	2.7248E+000		2.2297E+000
	1085.78	10.00	3.0312E+000		-3.4946E+000
	1112.02	13.30	2.3709E+000		-1.2584E-001
	1407.95	20.70	9.2838E-001		-2.9600E-001
Eu-154	123.07	40.50	1.9201E+000	7.72E-001	3.7625E-001
	247.94	6.60	6.4698E+000		-2.7901E+000
	591.81	4.83	7.3890E+000		-2.2700E+000
	723.30	19.70	1.8181E+000		6.4483E-001
	756.87	4.33	8.7932E+000		9.5419E+000
	873.19	11.50	2.9337E+000		5.4634E-001
	996.32	10.30	3.0374E+000		-1.1805E-001
	1004.76	17.90	1.8391E+000		4.6639E-001
	1274.45	35.50	7.7227E-001		-5.5923E-002
Eu-155	86.54	30.90	5.1366E+000	4.90E+000	7.6482E+000
	105.31	20.70	4.9039E+000		2.1682E+000
Am-241	59.54	35.90	1.2708E+001	1.27E+001	-2.5954E+000
Cm-243	228.19	10.56	3.8515E+000	2.86E+000	-5.3084E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.8601E+000	2.86E+000	5.9100E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 2:47:25 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-08-02-152-F-
Sample Title: OOL-08-02-152-F-G
Description: 100% VEGETATION

Sample Type:
Geometry:

Acquisition Started: 8/7/2006 2:37:12 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-08-02-152-F-
Title: OOL-08-02-152-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	949-	960	953.14	238.26	1.10	7.15E+001	42.66	1.59E+002
2	2902-	2915	2907.94	727.03	0.67	2.75E+001	20.34	2.85E+001
3	3869-	3880	3874.96	968.81	0.35	3.17E+001	19.72	2.63E+001
4	5831-	5856	5842.54	1460.77	2.11	3.01E+002	36.14	9.44E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: 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	2.11135E+001	3.06073E+000
Bi-212	0.999	727.17*		11.80	1.42529E+000	1.06596E+000
Pb-212	0.419	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.30310E-001	4.50567E-001

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

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

I N T E R 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	2.111350E+001	3.060729E+000
Bi-212	0.999	1.425291E+000	1.065965E+000
Pb-212 @	0.419	7.303105E-001	4.505672E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	968.81	5.2909E-002	62.12

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	3.5380E-001	3.40E-001	4.8148E-001
	1332.49	100.00	3.4007E-001		2.5770E-001
Nb-94	702.63	100.00	3.4249E-001	3.39E-001	-4.8585E-002
	871.10	100.00	3.3856E-001		2.7864E-001
Ag-108m	79.20	7.10	3.1034E+001	4.00E-001	8.7411E+000
	433.93	89.90	4.0648E-001		2.2118E-001
	614.37	90.40	4.1893E-001		-5.7496E-002
	722.95	90.50	3.9960E-001		-1.3109E-001
Sb-125	176.33	6.89	8.0688E+000	1.18E+000	2.7090E+000
	427.89	29.33	1.1789E+000		-1.2572E+000
	463.38	10.35	3.3348E+000		5.8091E-001
	600.56	17.80	2.0082E+000		1.3550E+000
	606.64	5.02	7.3518E+000		1.7739E+000
	635.90	11.32	3.0875E+000		-1.9944E+000
Cs-134	563.23	8.38	4.3279E+000	3.84E-001	1.4228E+000
	569.32	15.43	2.3055E+000		-6.7635E-001
	604.70	97.60	3.8405E-001		9.1760E-002
	795.84	85.40	4.2654E-001		2.3783E-001
	801.93	8.73	4.1944E+000		1.2918E+000
Cs-137	661.65	85.12	3.9078E-001	3.91E-001	-1.7252E-002
Eu-152	121.78	28.40	2.9242E+000	1.05E+000	-2.5978E+000
	244.69	7.49	6.2835E+000		-1.0018E+000
	344.27	26.50	1.4095E+000		-9.3030E-001
	778.89	12.74	2.8059E+000		1.5802E+000
	867.32	4.16	8.2279E+000		2.6101E+000
	964.01	14.40	2.7760E+000		-8.5263E-001
	1085.78	10.00	3.1336E+000		1.1867E+000
	1112.02	13.30	2.4335E+000		-7.4991E-001
	1407.95	20.70	1.0522E+000		-5.1998E-002
Eu-154	123.07	40.50	2.0401E+000	9.41E-001	1.1452E-001
	247.94	6.60	6.9757E+000		4.1488E-001
	591.81	4.83	7.5826E+000		5.7666E+000
	723.30	19.70	1.8181E+000		1.2382E-001
	756.87	4.33	7.5529E+000		-5.0914E+000
	873.19	11.50	2.9096E+000		-1.2943E+000
	996.32	10.30	3.1293E+000		6.0765E-001
	1004.76	17.90	1.7695E+000		6.0431E-001
	1274.45	35.50	9.4104E-001		-3.7497E-002
Eu-155	86.54	30.90	5.1946E+000	5.12E+000	5.2745E+000
	105.31	20.70	5.1169E+000		2.1596E+000
Am-241	59.54	35.90	1.3529E+001	1.35E+001	-1.1393E+001
Cm-243	228.19	10.56	4.6368E+000	3.01E+000	2.1662E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	3.0066E+000	3.01E+000	3.4873E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 9:43:54 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: ORG7829

Spectrum File: ORG7829
Sample ID: OOL-08-02-153-F-
Sample Title: OOL-08-02-153-F-G
Description: 100% VEGETATION

Sample Type:
Geometry:

Acquisition Started: 8/7/2006 9:33:47 AM
Live Time: 600.0 seconds
Real Time: 601.1 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-08-02-153-F-
Title: OOL-08-02-153-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	947-	963	955.22	238.78	0.37	8.10E+001	50.36	1.85E+002
2	3641-	3654	3647.64	911.98	1.05	5.48E+001	20.86	2.12E+001
3	3849-	3860	3854.47	963.69	0.59	2.08E+001	14.26	1.22E+001
4	5834-	5857	5844.79	1461.34	1.72	2.91E+002	37.98	2.11E+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: 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	2.04395E+001	3.14003E+000
Pb-212	0.421	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	8.27950E-001	5.30787E-001

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

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

I N T E R 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	2.043946E+001	3.140033E+000
Pb-212 @	0.421	8.279498E-001	5.307867E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	911.98	9.1299E-002	38.07
3	963.69	3.4697E-002	68.48

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: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	2.8724E-001	2.66E-001	-1.6233E-001
	1332.49	100.00	2.6553E-001		1.9008E-001
Nb-94	702.63	100.00	2.8806E-001	2.88E-001	-1.8474E-001
	871.10	100.00	3.0217E-001		6.1566E-002
Ag-108m	79.20	7.10	2.3843E+001	3.21E-001	-2.7676E+001
	433.93	89.90	3.2820E-001		-1.8898E-001
	614.37	90.40	3.8251E-001		6.0965E-002
	722.95	90.50	3.2054E-001		3.4013E-002
Sb-125	176.33	6.89	6.3203E+000	1.06E+000	1.9401E+000
	427.89	29.33	1.0608E+000		-3.6552E-002
	463.38	10.35	3.0908E+000		1.7297E+000
	600.56	17.80	1.7388E+000		-3.6433E-001
	606.64	5.02	6.7722E+000		5.2228E+000
	635.90	11.32	2.4514E+000		-2.5222E+000
Cs-134	563.23	8.38	3.4731E+000	3.28E-001	-3.6831E+000
	569.32	15.43	1.9730E+000		1.2768E+000
	604.70	97.60	3.3505E-001		3.4996E-002
	795.84	85.40	3.2780E-001		1.4247E-001
	801.93	8.73	3.1192E+000		-2.3256E+000
Cs-137	661.65	85.12	3.3848E-001	3.38E-001	1.5020E-001
Eu-152	121.78	28.40	2.2711E+000	9.12E-001	-2.2540E+000
	244.69	7.49	5.3047E+000		-4.5265E-001
	344.27	26.50	1.2322E+000		-1.5386E+000
	778.89	12.74	2.2716E+000		-2.8303E-001
	867.32	4.16	7.3299E+000		-4.2229E+000
	964.01	14.40	2.4902E+000		2.8857E+000
	1085.78	10.00	2.8704E+000		-1.4778E+000
	1112.02	13.30	1.8043E+000		-7.9490E-001
	1407.95	20.70	9.1158E-001		-1.2512E-001
Eu-154	123.07	40.50	1.5867E+000	6.74E-001	5.7383E-002
	247.94	6.60	5.7711E+000		8.0858E-001
	591.81	4.83	6.7253E+000		6.5504E+000
	723.30	19.70	1.4802E+000		5.3521E-001
	756.87	4.33	6.8439E+000		-5.6397E+000
	873.19	11.50	2.5884E+000		-2.0430E+000
	996.32	10.30	2.3677E+000		-1.6800E+000
	1004.76	17.90	1.4559E+000		-9.6158E-001
	1274.45	35.50	6.7433E-001		-9.2050E-001
Eu-155	86.54	30.90	4.0949E+000	3.97E+000	4.2679E+000
	105.31	20.70	3.9703E+000		2.8425E-002
Am-241	59.54	35.90	1.3053E+001	1.31E+001	-3.7158E-001
Cm-243	228.19	10.56	3.8621E+000	2.71E+000	1.7854E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.7147E+000	2.71E+000	-7.4731E-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 8/7/2006 10:27:45 AM

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

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

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: OOL-08-02-154-F-
Sample Title: OOL-08-02-154-F-G
Description: 100% VEGETATION

Sample Type:
Geometry:

Acquisition Started: 8/7/2006 10:17:42 AM
Live Time: 600.0 seconds
Real Time: 601.1 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-08-02-154-F-
Title: OOL-08-02-154-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	948-	961	956.00	238.98	0.79	4.84E+001	43.14	1.58E+002
2	2434-	2446	2439.04	609.79	0.76	4.41E+001	23.39	3.69E+001
3	3641-	3653	3647.75	912.00	0.37	3.60E+001	17.91	1.80E+001
4	5835-	5860	5846.96	1461.88	1.92	3.18E+002	36.27	6.04E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: 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	2.23418E+001	3.12518E+000
Pb-212	0.419	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	4.94965E-001	4.47658E-001
Bi-214	0.401	609.31*		46.30	5.54065E-001	3.01866E-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		0.963	2.234179E+001	3.125184E+000
Pb-212	@	0.419	4.949650E-001	4.476577E-001
Bi-214		0.401	5.540654E-001	3.018664E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	912.00	6.0062E-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: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	2.7143E-001	2.71E-001	-7.5529E-002
	1332.49	100.00	2.8559E-001		4.5007E-001
Nb-94	702.63	100.00	3.0506E-001	2.91E-001	1.5894E-001
	871.10	100.00	2.9112E-001		-7.8990E-002
Ag-108m	79.20	7.10	2.3183E+001	3.10E-001	-2.3017E+001
	433.93	89.90	3.1005E-001		-2.0816E-001
	614.37	90.40	3.9584E-001		6.5175E-002
	722.95	90.50	3.3483E-001		-3.3456E-002
Sb-125	176.33	6.89	7.1126E+000	1.01E+000	-1.2402E+000
	427.89	29.33	1.0089E+000		3.9544E-001
	463.38	10.35	3.1006E+000		7.7035E-001
	600.56	17.80	1.6238E+000		5.2182E-001
	606.64	5.02	6.9054E+000		4.8479E+000
	635.90	11.32	2.5751E+000		8.3549E-001
Cs-134	563.23	8.38	3.6062E+000	3.46E-001	2.8964E+000
	569.32	15.43	2.0425E+000		6.8403E-001
	604.70	97.60	3.4567E-001		-4.5589E-001
	795.84	85.40	3.5306E-001		5.5097E-002
	801.93	8.73	3.2674E+000		1.1843E+000
Cs-137	661.65	85.12	3.5312E-001	3.53E-001	-6.9854E-002
Eu-152	121.78	28.40	2.3928E+000	1.02E+000	-1.6689E+000
	244.69	7.49	5.5960E+000		-3.3401E+000
	344.27	26.50	1.2666E+000		-1.1337E+000
	778.89	12.74	2.4000E+000		-1.1420E+000
	867.32	4.16	6.8339E+000		-1.2911E+001
	964.01	14.40	2.4230E+000		6.3079E-001
	1085.78	10.00	2.6993E+000		-7.6212E-001
	1112.02	13.30	1.8545E+000		-7.4953E-001
	1407.95	20.70	1.0228E+000		6.6250E-001
Eu-154	123.07	40.50	1.6548E+000	7.96E-001	-3.6206E-001
	247.94	6.60	6.0909E+000		5.5017E-001
	591.81	4.83	6.3790E+000		2.8150E+000
	723.30	19.70	1.5240E+000		-1.0757E-002
	756.87	4.33	6.9451E+000		-3.7058E-001
	873.19	11.50	2.5608E+000		7.9486E-002
	996.32	10.30	2.7765E+000		9.8240E-001
	1004.76	17.90	1.5813E+000		9.7642E-002
	1274.45	35.50	7.9621E-001		6.2583E-001
Eu-155	86.54	30.90	4.1937E+000	4.19E+000	2.2834E+000
	105.31	20.70	4.2557E+000		1.9986E+000
Am-241	59.54	35.90	1.0891E+001	1.09E+001	-1.9104E+001
Cm-243	228.19	10.56	3.9455E+000	2.83E+000	3.7438E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.8334E+000	2.83E+000	2.4125E+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 1:07:18 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: ORG7829

Spectrum File: ORG7829
Sample ID: OOL-08-02-155-F-
Sample Title: OOL-08-02-155-F-G
Description: 100% VEGETATION

Sample Type:
Geometry:

Acquisition Started: 8/7/2006 12:57:14 PM
Live Time: 600.0 seconds
Real Time: 601.0 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-08-02-155-F-
Title: OOL-08-02-155-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
M	1	282-	315	291.81	72.91	1.26	1.52E+002	44.27	8.77E+002
m	2	282-	315	300.65	75.12	1.26	1.84E+002	45.98	9.83E+002
	3	2033-	2044	2039.49	509.88	0.44	4.78E+001	28.51	6.42E+001
	4	2324-	2336	2329.86	582.49	1.41	2.40E+001	24.72	5.10E+001
	5	3637-	3648	3642.74	910.75	0.46	2.59E+001	18.29	2.41E+001
	6	5827-	5852	5839.65	1460.05	1.76	3.03E+002	35.61	6.50E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: ORG7829

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
ANN	0.959	511.00*	100.00	2.63310E-001	1.61187E-001
K-40	0.981	1460.81*	10.67	2.12464E+001	3.03581E+000
TL-208	0.739	277.35	6.80		
		510.84*	21.60	1.21903E+000	7.52846E-001
		583.14*	84.20	1.63145E-001	1.69741E-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	0.959	2.280709E-001	1.653000E-001
K-40	0.981	2.124643E+001	3.035813E+000
TL-208	0.739	1.631454E-001	1.696580E-001

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

Errors quoted at 1.960 sigma

U N I D E N T I 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	2.5343E-001	29.11
m 2	75.12	3.0655E-001	25.00
5	910.75	4.3200E-002	70.57

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	2.7747E-001	2.77E-001	-9.4969E-002
	1332.49	100.00	2.8559E-001		1.5063E-001
Nb-94	702.63	100.00	3.0915E-001	3.01E-001	-2.7331E-002
	871.10	100.00	3.0062E-001		-4.8019E-002
Ag-108m	79.20	7.10	2.5886E+001	3.69E-001	-4.2064E+000
	433.93	89.90	3.6899E-001		4.1958E-003
	614.37	90.40	3.8128E-001		-2.6727E-001
	722.95	90.50	3.7703E-001		2.1302E-001
Sb-125	176.33	6.89	6.6808E+000	1.13E+000	3.0758E+000
	427.89	29.33	1.1263E+000		1.0460E-001
	463.38	10.35	3.0116E+000		-7.9383E-001
	600.56	17.80	1.8332E+000		-4.2930E-001
	606.64	5.02	7.3928E+000		6.8943E+000
	635.90	11.32	2.6463E+000		-2.6555E+000
Cs-134	563.23	8.38	3.7204E+000	3.75E-001	-2.0629E+000
	569.32	15.43	1.8593E+000		-1.1070E+000
	604.70	97.60	3.7457E-001		3.0149E-001
	795.84	85.40	4.0462E-001		1.2048E-001
	801.93	8.73	3.6903E+000		1.0471E+000
Cs-137	661.65	85.12	3.8210E-001	3.82E-001	2.0204E-001
Eu-152	121.78	28.40	2.3526E+000	6.96E-001	-1.1604E+000
	244.69	7.49	5.3829E+000		-6.8745E+000
	344.27	26.50	1.2971E+000		2.8386E-001
	778.89	12.74	2.2836E+000		6.7704E-002
	867.32	4.16	7.5114E+000		3.0492E+000
	964.01	14.40	2.3936E+000		4.9283E-001
	1085.78	10.00	2.6597E+000		1.0667E+000
	1112.02	13.30	2.1009E+000		-4.4154E-001
	1407.95	20.70	6.9644E-001		2.6193E-001
Eu-154	123.07	40.50	1.6327E+000	7.66E-001	-2.3653E-001
	247.94	6.60	5.9923E+000		-1.7731E-001
	591.81	4.83	6.8446E+000		4.3871E+000
	723.30	19.70	1.7322E+000		1.1234E+000
	756.87	4.33	7.5834E+000		1.0621E-001
	873.19	11.50	2.6692E+000		4.9581E-001
	996.32	10.30	2.6894E+000		8.3060E-001
	1004.76	17.90	1.5095E+000		-5.3756E-001
	1274.45	35.50	7.6616E-001		4.7362E-001
Eu-155	86.54	30.90	4.4968E+000	4.48E+000	1.9294E+000
	105.31	20.70	4.4806E+000		-1.3290E+000
Am-241	59.54	35.90	1.1010E+001	1.10E+001	-1.1255E+001
Cm-243	228.19	10.56	3.7496E+000	2.94E+000	-7.1269E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.9429E+000	2.94E+000	1.3555E+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 1:20:27 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-08-02-156-F-
Sample Title: OOL-08-02-156-F-G
Description: 100% VEGETATION

Sample Type:
Geometry:

Acquisition Started: 8/7/2006 1:10:25 PM
Live Time: 600.0 seconds
Real Time: 601.1 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-08-02-156-F-
Title: OOL-08-02-156-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	1320-	1329	1324.46	331.11	0.34	2.17E+001	22.91	5.03E+001
2	2324-	2338	2330.54	582.66	0.30	2.64E+001	26.16	5.26E+001
3	5318-	5330	5324.44	1331.23	0.68	2.41E+001	16.62	1.79E+001
4	5827-	5850	5838.44	1459.75	1.55	2.95E+002	38.13	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: 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	2.07247E+001	3.16038E+000
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.79752E-001	1.79777E-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	0.963	2.072466E+001	3.160384E+000
TL-208	0.468	1.797524E-001	1.797771E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	331.11	3.6111E-002	105.72
3	1331.23	4.0119E-002	69.04

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: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	-3.7945E-002
	1332.49	100.00	3.1985E-001		3.7385E-001
Nb-94	702.63	100.00	3.1980E-001	3.20E-001	-1.3884E-002
	871.10	100.00	3.3580E-001		-1.2639E-001
Ag-108m	79.20	7.10	2.5242E+001	3.66E-001	-3.5566E+001
	433.93	89.90	3.6586E-001		-9.6843E-002
	614.37	90.40	3.9939E-001		-6.0404E-002
	722.95	90.50	3.7565E-001		3.6156E-001
Sb-125	176.33	6.89	6.9063E+000	1.14E+000	2.9529E+000
	427.89	29.33	1.1420E+000		4.7366E-001
	463.38	10.35	3.1680E+000		-1.0483E+000
	600.56	17.80	1.8722E+000		-3.8205E-001
	606.64	5.02	7.3928E+000		7.6018E+000
	635.90	11.32	2.7942E+000		8.9148E-001
Cs-134	563.23	8.38	3.9382E+000	3.65E-001	2.0599E+000
	569.32	15.43	2.0651E+000		-6.1786E-001
	604.70	97.60	3.6484E-001		7.2707E-002
	795.84	85.40	4.0762E-001		3.4031E-001
	801.93	8.73	3.6099E+000		4.3280E-001
Cs-137	661.65	85.12	3.6253E-001	3.63E-001	-2.1708E-001
Eu-152	121.78	28.40	2.5085E+000	9.12E-001	-2.6368E-001
	244.69	7.49	5.2651E+000		-1.0586E+001
	344.27	26.50	1.3415E+000		-6.4147E-001
	778.89	12.74	2.3192E+000		1.4384E+000
	867.32	4.16	7.7580E+000		-4.5756E+000
	964.01	14.40	2.5185E+000		3.0107E+000
	1085.78	10.00	2.7383E+000		5.8820E-001
	1112.02	13.30	2.2803E+000		-4.2198E-001
	1407.95	20.70	9.1158E-001		-9.2387E-001
Eu-154	123.07	40.50	1.7286E+000	8.69E-001	-8.3976E-001
	247.94	6.60	5.9195E+000		-1.7322E+000
	591.81	4.83	6.9849E+000		-4.8900E+000
	723.30	19.70	1.7132E+000		6.8899E-001
	756.87	4.33	7.5834E+000		3.5315E+000
	873.19	11.50	3.0048E+000		1.0378E+000
	996.32	10.30	3.0990E+000		1.7306E+000
	1004.76	17.90	1.6688E+000		-1.4054E+000
	1274.45	35.50	8.6916E-001		5.5896E-001
Eu-155	86.54	30.90	4.5195E+000	4.52E+000	1.3815E+000
	105.31	20.70	4.5542E+000		1.4308E+000
Am-241	59.54	35.90	1.2016E+001	1.20E+001	-4.0960E+000
Cm-243	228.19	10.56	3.8831E+000	2.81E+000	-2.7295E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.8110E+000	2.81E+000	3.3245E+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 1:39:35 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: ORG7829

Spectrum File: ORG7829
Sample ID: OOL-08-02-157-F-
Sample Title: OOL-08-02-157-F-G
Description: 100% VEGETATION

Sample Type:
Geometry:

Acquisition Started: 8/7/2006 1:29:33 PM
Live Time: 600.0 seconds
Real Time: 601.0 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-08-02-157-F-
Title: OOL-08-02-157-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	945-	959	954.37	238.57	0.83	6.92E+001	42.31	1.38E+002
2	2322-	2339	2329.65	582.44	0.98	5.18E+001	30.09	5.62E+001
3	3632-	3647	3640.78	910.26	0.68	4.94E+001	24.68	3.56E+001
4	5826-	5849	5838.32	1459.72	1.95	3.08E+002	38.21	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: ORG7829

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.961	1460.81*		10.67	2.16310E+001	3.20426E+000
TL-208	0.462	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	3.52930E-001	2.10161E-001
		860.37		12.46		
Pb-212	0.421	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.07367E-001	4.46254E-001

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

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

I N T E R 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	0.961	2.163101E+001	3.204259E+000
TL-208	0.462	3.529305E-001	2.101612E-001
Pb-212 @	0.421	7.073667E-001	4.462543E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	910.26	8.2373E-002	49.94

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	3.5226E-001	3.04E-001	3.3191E-001
	1332.49	100.00	3.0424E-001		2.4853E-001
Nb-94	702.63	100.00	3.2370E-001	3.24E-001	3.5222E-002
	871.10	100.00	3.4400E-001		1.3250E-001
Ag-108m	79.20	7.10	2.5969E+001	3.82E-001	-4.6169E+001
	433.93	89.90	3.9505E-001		-2.4955E-002
	614.37	90.40	3.9584E-001		-7.5550E-001
	722.95	90.50	3.8246E-001		-2.4259E-001
Sb-125	176.33	6.89	6.7063E+000	1.13E+000	2.9769E+000
	427.89	29.33	1.1294E+000		-1.0120E+000
	463.38	10.35	3.0908E+000		2.5443E+000
	600.56	17.80	1.9842E+000		5.0341E-002
	606.64	5.02	7.6144E+000		7.4598E+000
	635.90	11.32	2.9655E+000		1.5233E+000
Cs-134	563.23	8.38	4.1190E+000	3.65E-001	-4.6073E-001
	569.32	15.43	2.2168E+000		-2.4613E-001
	604.70	97.60	3.8818E-001		1.3123E-001
	795.84	85.40	3.6500E-001		-6.1804E-002
	801.93	8.73	3.6903E+000		-1.8401E-001
Cs-137	661.65	85.12	3.7170E-001	3.72E-001	5.1393E-001
Eu-152	121.78	28.40	2.4471E+000	1.08E+000	-5.3806E-001
	244.69	7.49	5.1119E+000		-4.9656E+000
	344.27	26.50	1.3180E+000		9.5969E-002
	778.89	12.74	2.6165E+000		1.5632E+000
	867.32	4.16	8.1625E+000		-7.3853E-001
	964.01	14.40	2.4327E+000		1.5301E+000
	1085.78	10.00	3.0312E+000		1.6303E+000
	1112.02	13.30	2.1856E+000		8.4897E-001
	1407.95	20.70	1.0808E+000		7.5966E-001
Eu-154	123.07	40.50	1.6835E+000	8.47E-001	-4.2982E-001
	247.94	6.60	5.6475E+000		-1.4795E+000
	591.81	4.83	7.0310E+000		1.2524E+000
	723.30	19.70	1.7510E+000		-1.9863E+000
	756.87	4.33	7.3035E+000		-3.6715E+000
	873.19	11.50	2.8853E+000		-3.9228E+000
	996.32	10.30	2.9903E+000		4.2900E-001
	1004.76	17.90	1.9224E+000		1.7856E+000
	1274.45	35.50	8.4743E-001		8.4313E-001
Eu-155	86.54	30.90	4.6815E+000	4.55E+000	2.3455E+000
	105.31	20.70	4.5472E+000		2.3313E+000
Am-241	59.54	35.90	1.2217E+001	1.22E+001	-2.1915E+000
Cm-243	228.19	10.56	3.7168E+000	2.70E+000	2.8388E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.6960E+000	2.70E+000	1.6867E+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 9:56:19 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: ORG7829

Spectrum File: ORG7829
Sample ID: OOL-08-02-158-F-
Sample Title: OOL-08-02-158-F-G
Description: 100% VEGETATION

Sample Type:
Geometry:

Acquisition Started: 8/7/2006 9:46:21 AM
Live Time: 600.0 seconds
Real Time: 600.9 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-08-02-158-F-
Title: OOL-08-02-158-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	297-	309	300.76	75.15	0.75	1.07E+002	82.28	6.26E+002
2	950-	964	954.50	238.60	0.49	5.56E+001	44.62	1.58E+002
3	3871-	3883	3876.67	969.24	0.47	2.85E+001	18.35	2.25E+001
4	5834-	5859	5846.65	1461.80	2.10	3.23E+002	36.68	6.50E+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	0.968	1460.81*	10.67	2.26606E+001	3.16345E+000
Pb-212	0.577	74.81* @	10.70	1.10604E+001	8.76413E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.68207E-001	4.64548E-001

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

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

I N T E R 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	2.266060E+001	3.163451E+000
Pb-212 @	0.577	5.682068E-001	4.645477E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	969.24	4.7467E-002	64.44

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

Errors quoted at 1.960 sigma

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

Spectrum File:ORG7829
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	2.8337E-001	2.63E-001	6.4933E-003
	1332.49	100.00	2.6320E-001		2.2294E-001
Nb-94	702.63	100.00	2.8066E-001	2.81E-001	-2.8416E-001
	871.10	100.00	2.9591E-001		5.3247E-002
Ag-108m	79.20	7.10	2.3860E+001	3.54E-001	-3.9987E+000
	433.93	89.90	3.6376E-001		1.1816E-001
	614.37	90.40	3.8251E-001		-2.1423E-001
	722.95	90.50	3.5440E-001		1.0597E-001
Sb-125	176.33	6.89	6.6296E+000	1.11E+000	9.3173E-001
	427.89	29.33	1.1135E+000		-4.1921E-001
	463.38	10.35	3.0908E+000		1.9743E+000
	600.56	17.80	1.7319E+000		7.3367E-001
	606.64	5.02	7.4742E+000		1.2116E+001
	635.90	11.32	2.4767E+000		-1.3755E+000
Cs-134	563.23	8.38	3.2867E+000	3.60E-001	-1.1573E-001
	569.32	15.43	1.9089E+000		-1.5230E+000
	604.70	97.60	3.7350E-001		4.5055E-001
	795.84	85.40	3.5993E-001		8.0601E-002
	801.93	8.73	3.4261E+000		-2.7688E-001
Cs-137	661.65	85.12	3.3345E-001	3.33E-001	-5.6221E-002
Eu-152	121.78	28.40	2.4115E+000	9.12E-001	2.9948E-001
	244.69	7.49	4.9875E+000		-1.6330E+000
	344.27	26.50	1.2511E+000		-6.6457E-001
	778.89	12.74	2.1732E+000		-9.4063E-001
	867.32	4.16	6.9517E+000		-5.9018E+000
	964.01	14.40	2.3638E+000		-1.3412E+000
	1085.78	10.00	2.6993E+000		-3.7763E-001
	1112.02	13.30	1.9034E+000		2.7272E-001
	1407.95	20.70	9.1158E-001		2.1673E-001
Eu-154	123.07	40.50	1.6627E+000	7.28E-001	-6.0746E-001
	247.94	6.60	5.5604E+000		-1.7803E+000
	591.81	4.83	6.8446E+000		1.0496E+001
	723.30	19.70	1.5943E+000		-8.7870E-002
	756.87	4.33	6.3491E+000		-1.2396E-001
	873.19	11.50	2.5608E+000		4.3478E-001
	996.32	10.30	2.7593E+000		2.8556E-001
	1004.76	17.90	1.6688E+000		6.3535E-003
	1274.45	35.50	7.2834E-001		-3.6545E-001
Eu-155	86.54	30.90	4.1547E+000	4.15E+000	1.0156E+000
	105.31	20.70	4.4469E+000		2.0719E+000
Am-241	59.54	35.90	1.1440E+001	1.14E+001	1.5615E+001
Cm-243	228.19	10.56	3.6447E+000	2.60E+000	1.4527E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.6002E+000	2.60E+000	2.1990E+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 10:09:04 AM

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

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

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: OOL-08-02-159-F-
Sample Title: OOL-08-02-159-F-G
Description: 100% VEGETATION

Sample Type:
Geometry:

Acquisition Started: 8/7/2006 9:59:02 AM
Live Time: 600.0 seconds
Real Time: 601.0 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-08-02-159-F-
Title: OOL-08-02-159-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	947-	961	956.36	239.07	0.74	4.02E+001	47.02	1.86E+002
2	2035-	2052	2042.86	510.73	1.04	7.20E+001	32.66	6.30E+001
3	5327-	5338	5332.27	1333.19	0.54	1.39E+001	14.07	1.41E+001
4	5834-	5858	5846.80	1461.84	1.90	2.88E+002	37.50	1.87E+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: 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	3.96421E-001	1.88202E-001
K-40	0.966	1460.81*		10.67	2.02545E+001	3.10375E+000
Pb-212	0.418	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	4.10879E-001	4.84966E-001

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

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

I N T E R 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	3.964213E-001	1.882021E-001
K-40	0.966	2.025454E+001	3.103745E+000
Pb-212 @	0.418	4.108786E-001	4.849665E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	1333.19	2.3140E-002	101.36

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	2.7346E-001	2.66E-001	1.5978E-001
	1332.49	100.00	2.6553E-001		1.8511E-001
Nb-94	702.63	100.00	3.2240E-001	3.22E-001	-6.7398E-002
	871.10	100.00	3.3718E-001		6.5861E-002
Ag-108m	79.20	7.10	2.5736E+001	3.31E-001	8.9309E+000
	433.93	89.90	3.3054E-001		9.2086E-003
	614.37	90.40	3.7755E-001		-1.2654E-001
	722.95	90.50	3.5147E-001		-4.8251E-002
Sb-125	176.33	6.89	6.8071E+000	1.04E+000	-1.7666E+000
	427.89	29.33	1.0438E+000		9.3741E-001
	463.38	10.35	3.0614E+000		4.8460E-001
	600.56	17.80	1.9040E+000		1.8336E+000
	606.64	5.02	7.2272E+000		7.7510E-001
	635.90	11.32	2.5871E+000		4.9761E-001
Cs-134	563.23	8.38	3.4580E+000	3.41E-001	-3.0476E-001
	569.32	15.43	1.9251E+000		-1.4585E+000
	604.70	97.60	3.6920E-001		6.0401E-002
	795.84	85.40	3.4068E-001		5.0949E-002
	801.93	8.73	3.3565E+000		-7.2646E-001
Cs-137	661.65	85.12	3.4831E-001	3.48E-001	-1.1776E-001
Eu-152	121.78	28.40	2.5310E+000	1.08E+000	1.3454E+000
	244.69	7.49	5.3283E+000		-4.6912E+000
	344.27	26.50	1.2971E+000		7.0604E-002
	778.89	12.74	2.3309E+000		-1.1020E+000
	867.32	4.16	7.6884E+000		-1.2253E+001
	964.01	14.40	2.3437E+000		3.6403E-001
	1085.78	10.00	2.7957E+000		3.5492E-001
	1112.02	13.30	2.1153E+000		1.8866E+000
	1407.95	20.70	1.0808E+000		9.8513E-001
Eu-154	123.07	40.50	1.7378E+000	6.88E-001	4.1223E-002
	247.94	6.60	5.8735E+000		3.1065E+000
	591.81	4.83	6.5793E+000		-3.3151E+000
	723.30	19.70	1.6283E+000		3.9353E-001
	756.87	4.33	7.4293E+000		7.7261E+000
	873.19	11.50	2.8608E+000		-6.8723E-001
	996.32	10.30	2.6894E+000		3.9722E-001
	1004.76	17.90	1.6012E+000		2.0281E-001
	1274.45	35.50	6.8826E-001		3.8822E-001
Eu-155	86.54	30.90	4.5275E+000	4.25E+000	-5.2599E-002
	105.31	20.70	4.2482E+000		2.3048E+000
Am-241	59.54	35.90	1.2220E+001	1.22E+001	-7.4054E+000
Cm-243	228.19	10.56	3.9455E+000	2.60E+000	8.6937E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.6002E+000	2.60E+000	1.6389E+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 2:10:19 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-08-02-160-F-
Sample Title: OOL-08-02-160-F-G
Description: 100% VEGETATION

Sample Type:
Geometry:

Acquisition Started: 8/7/2006 1:59:34 PM
Live Time: 600.0 seconds
Real Time: 600.9 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-08-02-160-F-
Title: OOL-08-02-160-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	945-	961	954.44	238.59	0.37	8.84E+001	45.65	1.45E+002
2	2326-	2337	2332.57	583.16	0.91	2.66E+001	20.90	3.34E+001
3	5322-	5338	5329.41	1332.47	0.32	3.78E+001	17.07	1.22E+001
4	5830-	5854	5842.39	1460.74	1.79	3.10E+002	37.93	1.56E+001

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: 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	2.18069E+001	3.19646E+000
TL-208	0.473	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	1.81237E-001	1.44420E-001
		860.37		12.46		
Pb-212	0.421	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	9.03506E-001	4.87487E-001

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

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

I N T E R 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	2.180687E+001	3.196459E+000
TL-208	0.473	1.812369E-001	1.444196E-001
Pb-212 @	0.421	9.035062E-001	4.874873E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	1332.47	6.2933E-002	45.20

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	2.9851E-001	2.99E-001	1.5868E-001
	1332.49	100.00	3.0424E-001		4.1761E-001
Nb-94	702.63	100.00	2.9810E-001	2.96E-001	-3.9598E-002
	871.10	100.00	2.9591E-001		5.4262E-002
Ag-108m	79.20	7.10	2.4215E+001	3.44E-001	-1.3908E+001
	433.93	89.90	3.4423E-001		2.8823E-001
	614.37	90.40	3.7504E-001		-7.9846E-002
	722.95	90.50	3.8515E-001		2.8971E-001
Sb-125	176.33	6.89	7.0042E+000	1.04E+000	6.4103E+000
	427.89	29.33	1.0404E+000		-1.1293E-001
	463.38	10.35	3.1584E+000		8.2325E-001
	600.56	17.80	1.7526E+000		-1.8211E-002
	606.64	5.02	6.9710E+000		4.0787E+000
	635.90	11.32	2.6463E+000		2.1893E-002
Cs-134	563.23	8.38	3.8036E+000	3.54E-001	-2.1215E-001
	569.32	15.43	2.1603E+000		3.0036E-001
	604.70	97.60	3.5369E-001		2.8275E-001
	795.84	85.40	4.1500E-001		1.5826E-001
	801.93	8.73	3.7999E+000		-4.4936E+000
Cs-137	661.65	85.12	3.9926E-001	3.99E-001	-3.5843E-002
Eu-152	121.78	28.40	2.4238E+000	8.41E-001	-1.4115E-001
	244.69	7.49	5.1527E+000		-6.9157E-001
	344.27	26.50	1.2097E+000		-1.2315E+000
	778.89	12.74	2.3309E+000		-5.9559E-001
	867.32	4.16	6.8339E+000		-8.2395E+000
	964.01	14.40	2.4808E+000		9.9449E-002
	1085.78	10.00	2.8704E+000		2.7889E+000
	1112.02	13.30	1.8380E+000		-1.2486E-001
	1407.95	20.70	8.4058E-001		-2.8778E-001
Eu-154	123.07	40.50	1.6548E+000	8.19E-001	-1.8012E+000
	247.94	6.60	5.8551E+000		-5.9953E-001
	591.81	4.83	6.3022E+000		-3.4999E-001
	723.30	19.70	1.7879E+000		1.9710E+000
	756.87	4.33	6.7411E+000		-1.0867E+000
	873.19	11.50	2.6426E+000		2.9549E-001
	996.32	10.30	2.5622E+000		-1.1781E+000
	1004.76	17.90	1.5713E+000		3.4231E-001
	1274.45	35.50	8.1940E-001		2.7591E-001
Eu-155	86.54	30.90	4.3153E+000	4.22E+000	1.5913E+000
	105.31	20.70	4.2201E+000		5.0693E-001
Am-241	59.54	35.90	1.0633E+001	1.06E+001	9.0080E-001
Cm-243	228.19	10.56	3.7058E+000	2.74E+000	-4.3912E-003

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.7426E+000	2.74E+000	1.6371E-001

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

Report Generated On 5/17/2006 3:16:11 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-08-05-101
Sample Title: OOL-08-05-101-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/17/2006 3:06:12 PM
Live Time: 600.0 seconds
Real Time: 601.0 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-08-05-101
Title: OOL-08-05-101-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	294-	309	300.57	75.04	1.10	4.02E+002	148.56	1.76E+003
2	330-	345	339.84	84.87	1.12	2.36E+002	126.41	1.30E+003
3	945-	960	954.64	238.61	1.42	2.18E+002	74.97	4.14E+002
4	1174-	1187	1181.17	295.25	0.81	6.40E+001	48.06	1.95E+002
5	1349-	1359	1354.31	338.55	0.67	4.51E+001	34.70	1.12E+002
6	1397-	1418	1408.25	352.04	0.69	1.17E+002	59.97	2.18E+002
7	2031-	2053	2041.36	510.36	1.13	1.51E+002	50.79	1.34E+002
8	2322-	2341	2331.68	582.96	1.44	1.65E+002	43.69	9.48E+001
9	2427-	2447	2436.95	609.28	1.54	1.64E+002	44.58	9.57E+001
10	3636-	3656	3644.88	911.34	1.55	1.15E+002	37.00	6.66E+001
11	3869-	3885	3876.24	969.20	0.58	6.65E+001	26.81	3.85E+001
12	4477-	4492	4482.98	1120.92	0.35	5.13E+001	23.28	2.97E+001
13	4687-	4702	4693.88	1173.66	1.00	4.65E+001	26.12	4.35E+001
14	5325-	5339	5332.07	1333.25	1.08	3.28E+001	20.46	2.63E+001
15	5832-	5861	5845.67	1461.69	1.86	9.37E+002	61.93	1.37E+001
16	7056-	7070	7062.18	1765.90	0.84	3.28E+001	16.14	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: 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	2.11804E-001	7.69864E-002
K-40	0.976	1460.81*	10.67	1.62184E+001	1.69479E+000
Co-60	0.988	1173.22*	100.00	8.18623E-002	4.64163E-002
		1332.49*	100.00	5.93681E-002	3.73891E-002
TL-208	0.750	277.35	6.80		
		510.84*	21.60	9.80574E-001	3.65304E-001
		583.14*	84.20	2.88341E-001	8.50018E-002
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	5.95381E+000	2.49146E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.46040E-001	2.06729E-001
Bi-214	0.985	609.31*	46.30	5.29062E-001	1.57656E-001
		1120.29*	15.10	5.89797E-001	2.75032E-001
		1764.49*	15.80	3.98179E-001	1.99874E-001
PB-214	0.582	74.82* @	6.21	1.02586E+001	4.35697E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	3.96519E-001	3.05060E-001
		351.92*	37.20	3.94178E-001	2.12041E-001
Ac-228	0.998	338.32*	11.40	4.89460E-001	3.84093E-001
		911.07*	27.70	6.82253E-001	2.32432E-001
		969.11*	16.60	6.68068E-001	2.78120E-001

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

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

I N T E R 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	1.495224E-001	7.911949E-002
K-40		0.976	1.621838E+001	1.694788E+000
Co-60		0.988	6.821997E-002	2.911744E-002
TL-208		0.750	2.883409E-001	8.448081E-002
Pb-212	@	0.521	5.460398E-001	2.067293E-001
Bi-214		0.985	4.975489E-001	1.128777E-001
PB-214	@	0.582	3.949402E-001	1.741120E-001
Ac-228		0.998	6.432592E-001	1.617612E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	3.9311E-001	53.59

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	7.1058E-002	5.70E-002	8.1862E-002
		1332.49*	100.00	5.6991E-002		5.9368E-002
	Nb-94	702.63	100.00	9.9134E-002	8.53E-002	2.2355E-002
		871.10	100.00	8.5271E-002		-2.9792E-002
	Ag-108m	79.20	7.10	5.0715E+000	1.17E-001	-3.3919E+000
		433.93	89.90	1.1716E-001		4.9983E-002
		614.37	90.40	1.4085E-001		-1.5928E-002
		722.95	90.50	1.2284E-001		1.0207E-001
	Sb-125	176.33	6.89	2.2924E+000	3.59E-001	-3.6294E-001
		427.89	29.33	3.5873E-001		1.8266E-001
		463.38	10.35	1.0474E+000		-3.1917E-001
		600.56	17.80	5.7391E-001		-2.7974E-001
		606.64	5.02	2.7061E+000		4.8707E+000
		635.90	11.32	8.0254E-001		-2.1350E-001
	Cs-134	563.23	8.38	1.2132E+000	1.11E-001	-4.1315E-001
		569.32	15.43	6.8947E-001		4.0059E-001
		604.70	97.60	1.3659E-001		-6.1248E-002
		795.84	85.40	1.1087E-001		-4.0258E-002
		801.93	8.73	1.0617E+000		-5.4000E-002
	Cs-137	661.65	85.12	1.2995E-001	1.30E-001	1.1312E-001
	Eu-152	121.78	28.40	7.3017E-001	3.21E-001	6.6703E-002
		244.69	7.49	1.9752E+000		-2.8462E+000
		344.27	26.50	4.3335E-001		-1.6350E-001
		778.89	12.74	7.2074E-001		-1.1959E+000
		867.32	4.16	2.1062E+000		-2.1126E+000
		964.01	14.40	8.0121E-001		-1.3852E-001
		1085.78	10.00	8.6724E-001		-1.0857E-001
		1112.02	13.30	6.9102E-001		5.3902E-002
		1407.95	20.70	3.2098E-001		2.1068E-002
	Eu-154	123.07	40.50	5.0915E-001	2.43E-001	2.3572E-001
		247.94	6.60	2.0677E+000		-1.8967E+000
		591.81	4.83	2.1346E+000		1.1643E-001
		723.30	19.70	5.6562E-001		4.2380E-001
		756.87	4.33	2.1920E+000		1.2914E+000
		873.19	11.50	7.7765E-001		6.3695E-001
		996.32	10.30	8.8574E-001		-2.8668E-001
		1004.76	17.90	5.0693E-001		-1.4371E-001
		1274.45	35.50	2.4282E-001		-4.7897E-002
	Eu-155	86.54	30.90	1.0534E+000	1.05E+000	4.8522E-001
		105.31	20.70	1.1659E+000		-8.4335E-002
	Am-241	59.54	35.90	1.2855E+000	1.29E+000	-4.1272E-001
	Cm-243	228.19	10.56	1.3477E+000	9.33E-001	-5.8568E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.3254E-001	9.33E-001	-2.1529E-001

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

Report Generated On 5/17/2006 11:10:47 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: RED6264

Spectrum File: RED6264
Sample ID: OOL-08-05-102
Sample Title: OOL-08-05-102-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/17/2006 11:00:44 AM
Live Time: 600.0 seconds
Real Time: 600.9 seconds

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

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

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

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

Filename: RED6264
Log Number: OOL-08-05-102
Title: OOL-08-05-102-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	309	291.47	72.77	1.37	3.15E+002	61.32	1.39E+003
m	2	282-	309	300.21	74.96	1.37	6.42E+002	72.26	1.73E+003
	3	330-	343	339.18	84.70	0.97	1.80E+002	110.45	1.08E+003
	4	944-	961	954.48	238.57	1.30	2.43E+002	72.66	3.47E+002
	5	1401-	1414	1406.69	351.65	1.00	1.04E+002	44.45	1.48E+002
	6	2031-	2051	2043.23	510.83	1.38	1.04E+002	50.55	1.55E+002
	7	2322-	2342	2332.31	583.11	1.42	1.65E+002	42.01	8.13E+001
	8	2428-	2445	2437.37	609.39	1.17	1.42E+002	39.78	8.31E+001
	9	3635-	3655	3644.17	911.17	1.18	1.26E+002	36.42	6.01E+001
	10	3868-	3885	3876.88	969.36	2.12	9.11E+001	29.80	4.29E+001
	11	4472-	4489	4481.90	1120.66	1.49	5.72E+001	25.35	3.38E+001
	12	5831-	5861	5845.68	1461.69	2.19	9.57E+002	64.65	2.69E+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: 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	1.46762E-001	7.38370E-002
K-40	0.976	1460.81*		10.67	1.65605E+001	1.74612E+000
TL-208	0.752	277.35		6.80		
		510.84*		21.60	6.79456E-001	3.46312E-001
		583.14*		84.20	2.87457E-001	8.23276E-002
		860.37		12.46		
Pb-212	0.521	74.81*	@	10.70	9.53320E+000	2.15443E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.09682E-001	2.05881E-001
Bi-214	0.699	609.31*		46.30	4.57113E-001	1.39939E-001
		1120.29*		15.10	6.57979E-001	2.99784E-001
		1764.49		15.80		
Ac-228	0.633	338.32		11.40		
		911.07*		27.70	7.44741E-001	2.31758E-001
		969.11*		16.60	9.15018E-001	3.14174E-001

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

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

I N T E R 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	8.467163E-002	7.592123E-002
K-40	0.976	1.656048E+001	1.746121E+000
TL-208	0.752	2.874575E-001	8.179284E-002
Pb-212 @	0.521	6.096819E-001	2.058813E-001
Bi-214	0.699	4.930509E-001	1.268042E-001
Ac-228	0.633	8.047465E-001	1.865042E-001

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

Errors quoted at 1.960 sigma

U N I D E N T I 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	5.2559E-001	19.45
3	84.70	3.0048E-001	61.26
5	351.65	1.7319E-001	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: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	1.1275E-001	8.88E-002	1.2513E-001
	1332.49	100.00	8.8816E-002		5.0761E-002
Nb-94	702.63	100.00	9.8860E-002	9.43E-002	-1.8521E-002
	871.10	100.00	9.4265E-002		2.3192E-002
Ag-108m	79.20	7.10	5.0492E+000	1.12E-001	-3.5316E+000
	433.93	89.90	1.1986E-001		8.4021E-003
	614.37	90.40	1.4171E-001		-2.3857E-002
	722.95	90.50	1.1170E-001		6.2963E-004
Sb-125	176.33	6.89	2.2774E+000	3.61E-001	1.4194E+000
	427.89	29.33	3.6128E-001		-1.4658E-001
	463.38	10.35	1.0621E+000		5.6089E-001
	600.56	17.80	5.5446E-001		1.5850E-001
	606.64	5.02	2.6548E+000		6.4308E+000
	635.90	11.32	8.2245E-001		1.9343E-001
Cs-134	563.23	8.38	1.1906E+000	1.13E-001	-2.3042E-001
	569.32	15.43	6.5663E-001		4.0264E-001
	604.70	97.60	1.3235E-001		-1.5817E-002
	795.84	85.40	1.1298E-001		3.7762E-002
	801.93	8.73	1.1172E+000		-2.4116E-001
Cs-137	661.65	85.12	1.2967E-001	1.30E-001	2.1038E-001
Eu-152	121.78	28.40	7.0766E-001	3.27E-001	-1.7990E-002
	244.69	7.49	1.8522E+000		-1.0704E+000
	344.27	26.50	4.2479E-001		-7.4969E-001
	778.89	12.74	7.4938E-001		-1.1096E+000
	867.32	4.16	2.2867E+000		-2.1894E+000
	964.01	14.40	8.2160E-001		1.4989E-001
	1085.78	10.00	9.1287E-001		5.1911E-001
	1112.02	13.30	6.8822E-001		-4.0830E-001
	1407.95	20.70	3.2664E-001		-5.0289E-002
Eu-154	123.07	40.50	4.9129E-001	2.27E-001	-1.5650E-001
	247.94	6.60	1.9972E+000		-1.4429E+000
	591.81	4.83	2.0948E+000		1.7681E+000
	723.30	19.70	5.1455E-001		2.1784E-002
	756.87	4.33	2.1782E+000		-9.1285E-001
	873.19	11.50	8.2285E-001		4.1710E-001
	996.32	10.30	8.5437E-001		1.0837E-001
	1004.76	17.90	4.9688E-001		-2.1548E-001
	1274.45	35.50	2.2657E-001		-1.3751E-001
Eu-155	86.54	30.90	1.0075E+000	1.01E+000	-2.5922E-001
	105.31	20.70	1.1690E+000		8.3556E-001
Am-241	59.54	35.90	1.2064E+000	1.21E+000	-1.5770E-001
Cm-243	228.19	10.56	1.3057E+000	9.15E-001	6.1789E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.1496E-001	9.15E-001	-5.5110E-001

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

Report Generated On 5/17/2006 2:44:50 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-08-05-103
Sample Title: OOL-08-05-103-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/17/2006 2:34:47 PM
Live Time: 600.0 seconds
Real Time: 600.9 seconds

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

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

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

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

Filename: RED6264
Log Number: OOL-08-05-103
Title: OOL-08-05-103-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	294-	309	300.16	74.94	1.41	4.36E+002	144.74	1.65E+003
2	946-	963	953.91	238.42	1.66	2.97E+002	74.16	3.46E+002
3	1150-	1187	1180.04	294.97	0.77	1.55E+002	97.79	4.04E+002
4	1396-	1415	1407.84	351.93	0.71	1.36E+002	54.96	1.85E+002
5	2323-	2344	2331.95	583.02	1.26	1.63E+002	44.75	9.57E+001
6	2426-	2447	2436.91	609.27	1.25	1.44E+002	45.72	1.07E+002
7	2638-	2654	2645.77	661.50	1.50	5.05E+001	35.57	8.75E+001
8	3634-	3654	3645.23	911.43	1.44	1.33E+002	35.74	5.50E+001
9	3866-	3884	3876.00	969.14	0.99	6.14E+001	30.72	5.46E+001
10	5831-	5860	5845.10	1461.54	2.30	9.34E+002	62.74	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
K-40	0.983	1460.81*		10.67	1.61623E+001	1.70027E+000
Cs-137	0.999	661.65*		85.12	9.09339E-002	6.49101E-002
TL-208	0.471	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	2.85004E-001	8.64783E-002
		860.37		12.46		
Pb-212	0.520	74.81*	@	10.70	6.47805E+000	2.49590E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.44573E-001	2.19677E-001
Bi-214	0.398	609.31*		46.30	4.65280E-001	1.58003E-001
		1120.29		15.10		
		1764.49		15.80		
PB-214	0.582	74.82*	@	6.21	1.11619E+001	4.37618E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	9.56780E-001	6.26562E-001
		351.92*		37.20	4.56555E-001	1.99836E-001
Ac-228	0.631	338.32		11.40		
		911.07*		27.70	7.86429E-001	2.29858E-001
		969.11*		16.60	6.16586E-001	3.15149E-001

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

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

I N T E R 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		0.983	1.616228E+001	1.700268E+000
Cs-137		0.999	9.093393E-002	6.491012E-002
TL-208		0.471	2.850040E-001	8.647829E-002
Pb-212	@	0.520	7.445734E-001	2.196770E-001
Bi-214		0.398	4.652800E-001	1.580032E-001
PB-214	@	0.582	5.027414E-001	1.903874E-001
Ac-228		0.631	7.274513E-001	1.857098E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

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

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

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
	Co-60	1173.22	100.00	1.0058E-001	8.40E-002	9.5892E-002
		1332.49	100.00	8.4017E-002		6.8779E-002
	Nb-94	702.63	100.00	8.9296E-002	8.93E-002	-1.2843E-001
		871.10	100.00	9.0053E-002		-2.9358E-002
	Ag-108m	79.20	7.10	5.0212E+000	1.18E-001	-5.7101E+000
		433.93	89.90	1.1758E-001		7.9443E-003
		614.37	90.40	1.3910E-001		-8.1630E-003
		722.95	90.50	1.1897E-001		1.5025E-001
	Sb-125	176.33	6.89	2.2741E+000	3.69E-001	-3.5960E-002
		427.89	29.33	3.6944E-001		1.6749E-001
		463.38	10.35	1.0381E+000		6.3232E-001
		600.56	17.80	5.6427E-001		1.6696E-001
		606.64	5.02	2.6915E+000		5.0598E+000
		635.90	11.32	8.8393E-001		-6.0224E-001
	Cs-134	563.23	8.38	1.2862E+000	1.16E-001	-1.9616E-002
		569.32	15.43	6.9092E-001		-4.3213E-001
		604.70	97.60	1.3391E-001		4.1536E-002
		795.84	85.40	1.1607E-001		7.7333E-002
		801.93	8.73	1.1138E+000		-7.0235E-001
+	Cs-137	661.65*	85.12	1.0375E-001	1.04E-001	9.0934E-002
	Eu-152	121.78	28.40	7.1746E-001	3.12E-001	1.0580E-003
		244.69	7.49	1.8616E+000		-1.1932E-001
		344.27	26.50	4.1129E-001		-8.5537E-001
		778.89	12.74	7.9692E-001		-3.1541E-001
		867.32	4.16	2.2564E+000		-1.8752E+000
		964.01	14.40	8.0869E-001		1.5025E-001
		1085.78	10.00	9.5268E-001		3.7398E-001
		1112.02	13.30	7.2383E-001		-8.1513E-001
		1407.95	20.70	3.1229E-001		4.8691E-002
	Eu-154	123.07	40.50	4.9468E-001	2.58E-001	-9.1230E-002
		247.94	6.60	2.0599E+000		-5.6675E-001
		591.81	4.83	2.0643E+000		-4.6059E-001
		723.30	19.70	5.5300E-001		9.0306E-001
		756.87	4.33	2.1435E+000		1.2435E+000
		873.19	11.50	8.0621E-001		6.7343E-001
		996.32	10.30	8.5437E-001		5.0442E-001
		1004.76	17.90	4.8868E-001		-1.5085E-001
		1274.45	35.50	2.5800E-001		2.4879E-002
	Eu-155	86.54	30.90	1.0065E+000	1.01E+000	1.0758E+000
		105.31	20.70	1.1616E+000		6.3957E-001
	Am-241	59.54	35.90	1.2292E+000	1.23E+000	-7.0806E-001
	Cm-243	228.19	10.56	1.3323E+000	9.28E-001	9.9782E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.2838E-001	9.28E-001	4.9366E-001

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

Report Generated On 5/18/2006 10:12:12 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: RED6264

Spectrum File: RED6264
Sample ID: OOL-08-05-104-F-
Sample Title: OOL-08-05-104-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/18/2006 10:02:08 AM
Live Time: 600.0 seconds
Real Time: 600.9 seconds

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

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

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

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

Filename: RED6264
Log Number: OOL-08-05-104-F-
Title: OOL-08-05-104-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	306	300.74	75.09	1.25	2.98E+002	123.09	1.44E+003
2	944-	964	954.53	238.58	1.28	2.58E+002	87.24	4.72E+002
3	1343-	1357	1352.90	338.20	1.03	4.63E+001	47.36	1.87E+002
4	1396-	1414	1408.20	352.02	0.94	9.25E+001	54.29	1.99E+002
5	2032-	2056	2043.97	511.01	1.98	1.72E+002	52.85	1.35E+002
6	2320-	2343	2332.75	583.22	1.09	1.77E+002	45.90	9.28E+001
7	2427-	2448	2438.13	609.58	0.89	1.70E+002	45.11	9.59E+001
8	2638-	2655	2646.75	661.74	1.02	8.38E+001	34.45	6.82E+001
9	3436-	3450	3443.20	860.91	0.84	4.42E+001	22.37	2.98E+001
10	3634-	3655	3646.02	911.63	1.49	1.51E+002	35.93	4.94E+001
11	4476-	4490	4482.81	1120.88	0.54	4.75E+001	23.98	3.55E+001
12	5833-	5861	5846.51	1461.90	1.97	9.49E+002	65.27	3.53E+001
13	7059-	7073	7065.94	1766.84	0.86	4.98E+001	14.98	3.18E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: 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	2.41296E-001	8.12313E-002
K-40	0.963	1460.81*	10.67	1.64169E+001	1.74423E+000
Cs-137	1.000	661.65*	85.12	1.50844E-001	6.45147E-002
TL-208	0.902	277.35	6.80		
		510.84*	21.60	1.11711E+000	3.86978E-001
		583.14*	84.20	3.09269E-001	8.96674E-002
		860.37*	12.46	5.74230E-001	2.98745E-001
Pb-212	0.521	74.81* @	10.70	4.41340E+000	2.01732E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.47737E-001	2.41365E-001
Bi-214	0.962	609.31*	46.30	5.47866E-001	1.60185E-001
		1120.29*	15.10	5.46511E-001	2.81874E-001
		1764.49*	15.80	6.04561E-001	1.91611E-001
Ac-228	0.535	338.32*	11.40	5.01737E-001	5.19446E-001
		911.07*	27.70	8.90360E-001	2.35840E-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		1.000	1.698011E-001	8.329792E-002
K-40		0.963	1.641691E+001	1.744231E+000
Cs-137		1.000	1.508445E-001	6.451475E-002
TL-208		0.902	3.309930E-001	8.536855E-002
Pb-212	@	0.521	6.477368E-001	2.413647E-001
Bi-214		0.962	5.672472E-001	1.126548E-001
Ac-228		0.535	8.239418E-001	2.147432E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	352.02	1.5409E-001	58.72

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: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	1.1213E-001	9.05E-002	1.1173E-001
		1332.49	100.00	9.0494E-002		7.0839E-002
	Nb-94	702.63	100.00	1.0421E-001	9.52E-002	-2.9398E-002
		871.10	100.00	9.5210E-002		5.9516E-002
	Ag-108m	79.20	7.10	5.0567E+000	1.21E-001	-1.3351E+001
		433.93	89.90	1.2149E-001		1.6456E-002
		614.37	90.40	1.4575E-001		-3.5631E-002
		722.95	90.50	1.2147E-001		6.0629E-002
	Sb-125	176.33	6.89	2.2503E+000	3.73E-001	-4.2105E-002
		427.89	29.33	3.7314E-001		2.6604E-002
		463.38	10.35	1.0802E+000		6.8548E-001
		600.56	17.80	5.4157E-001		-1.0213E-001
		606.64	5.02	2.6988E+000		-5.5443E-001
		635.90	11.32	9.1745E-001		-2.0040E-002
	Cs-134	563.23	8.38	1.2159E+000	1.18E-001	-1.0518E+000
		569.32	15.43	6.8215E-001		1.3620E-001
		604.70	97.60	1.3255E-001		2.0515E-004
		795.84	85.40	1.1809E-001		-1.3206E-002
		801.93	8.73	1.0828E+000		-6.2457E-001
+	Cs-137	661.65*	85.12	9.3749E-002	9.37E-002	1.5084E-001
	Eu-152	121.78	28.40	7.4066E-001	3.43E-001	-8.9894E-002
		244.69	7.49	1.9317E+000		8.6561E-001
		344.27	26.50	4.3729E-001		-7.4691E-001
		778.89	12.74	7.2074E-001		-2.2696E-001
		867.32	4.16	2.3679E+000		-6.6239E-001
		964.01	14.40	8.4147E-001		6.1361E-001
		1085.78	10.00	9.5621E-001		3.9010E-001
		1112.02	13.30	7.3443E-001		-1.3581E-001
		1407.95	20.70	3.4302E-001		-2.8425E-001
	Eu-154	123.07	40.50	5.1214E-001	2.45E-001	-1.1709E-002
		247.94	6.60	2.1021E+000		4.1569E-001
		591.81	4.83	2.0998E+000		1.4496E+000
		723.30	19.70	5.6187E-001		5.8048E-001
		756.87	4.33	2.2191E+000		1.1337E+000
		873.19	11.50	8.4450E-001		3.1830E-001
		996.32	10.30	8.8231E-001		-2.5855E-001
		1004.76	17.90	5.1872E-001		1.0254E-001
		1274.45	35.50	2.4522E-001		1.8023E-001
	Eu-155	86.54	30.90	1.0326E+000	1.03E+000	2.1841E+000
		105.31	20.70	1.1262E+000		-5.4125E-001
	Am-241	59.54	35.90	1.2394E+000	1.24E+000	-8.1487E-001
	Cm-243	228.19	10.56	1.3259E+000	9.56E-001	1.5634E+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	-1.7130E-001

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

Report Generated On 5/17/2006 4:23:14 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-08-05-105
Sample Title: OOL-08-05-105-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/17/2006 4:13:03 PM
Live Time: 600.0 seconds
Real Time: 601.0 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-08-05-105
Title: OOL-08-05-105-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	294-	307	300.50	75.03	1.33	4.16E+002	137.02	1.62E+003
2	330-	344	339.22	84.71	0.95	2.14E+002	122.74	1.28E+003
3	944-	963	954.99	238.69	1.25	2.89E+002	83.89	4.36E+002
4	1346-	1361	1352.26	338.04	0.66	4.88E+001	47.76	1.81E+002
5	1396-	1417	1407.41	351.83	1.45	1.57E+002	62.05	2.26E+002
6	2032-	2053	2043.99	511.01	0.47	1.01E+002	51.11	1.54E+002
7	2321-	2340	2332.42	583.14	1.25	1.39E+002	47.07	1.25E+002
8	2426-	2445	2436.02	609.05	1.38	1.56E+002	40.93	7.84E+001
9	2900-	2912	2906.15	726.61	0.82	2.96E+001	24.35	4.44E+001
10	3636-	3653	3645.10	911.40	1.39	9.28E+001	32.92	5.82E+001
11	3867-	3888	3876.07	969.16	0.50	1.04E+002	34.65	5.58E+001
12	5325-	5338	5331.09	1333.01	1.05	2.18E+001	17.01	1.83E+001
13	5832-	5860	5845.25	1461.58	2.24	9.81E+002	63.78	1.74E+001
14	7055-	7070	7063.25	1766.16	1.27	4.20E+001	18.63	1.60E+001

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: RED6264

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	1.000	511.00*	100.00	1.41878E-001	7.44310E-002
K-40	0.981	1460.81*	10.67	1.69675E+001	1.76209E+000
TL-208	0.752	277.35	6.80		
		510.84*	21.60	6.56843E-001	3.48738E-001
		583.14*	84.20	2.42572E-001	8.80229E-002
		860.37	12.46		
Bi-212	0.990	727.17*	11.80	3.91798E-001	3.25603E-001
Pb-212	0.521	74.81* @	10.70	6.16513E+000	2.36324E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.25317E-001	2.39311E-001
Bi-214	0.679	609.31*	46.30	5.01169E-001	1.45542E-001
		1120.29	15.10		
		1764.49*	15.80	5.09515E-001	2.31716E-001
Ac-228	0.998	338.32*	11.40	5.29234E-001	5.24331E-001
		911.07*	27.70	5.48568E-001	2.04623E-001
		969.11*	16.60	1.04668E+000	3.64832E-001

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

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

I N T E R 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	8.948253E-002	7.680199E-002
K-40	0.981	1.696751E+001	1.762085E+000
TL-208	0.752	2.425723E-001	8.766719E-002
Bi-212	0.990	3.917985E-001	3.256034E-001
Pb-212 @	0.521	7.253167E-001	2.393114E-001
Bi-214	0.679	5.035302E-001	1.232470E-001
Ac-228	0.998	6.533806E-001	1.689499E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	84.71	3.5678E-001	57.34
5	351.83	2.6083E-001	39.65
12	1333.01	3.6250E-002	78.20

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: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	7.89E-002	6.3341E-002
	1332.49	100.00	7.8908E-002		-2.7836E-003
Nb-94	702.63	100.00	1.0050E-001	9.36E-002	-4.4371E-002
	871.10	100.00	9.3630E-002		-7.8854E-002
Ag-108m	79.20	7.10	5.2660E+000	1.21E-001	-6.5127E+000
	433.93	89.90	1.2390E-001		5.3412E-002
	614.37	90.40	1.3553E-001		-9.1939E-003
	722.95	90.50	1.2147E-001		7.4943E-002
Sb-125	176.33	6.89	2.2988E+000	3.71E-001	9.8317E-001
	427.89	29.33	3.7129E-001		-2.8273E-002
	463.38	10.35	1.0511E+000		-1.0385E+000
	600.56	17.80	5.6566E-001		-1.4314E-001
	606.64	5.02	2.6474E+000		3.8970E+000
	635.90	11.32	8.4665E-001		-3.7226E-001
Cs-134	563.23	8.38	1.3044E+000	1.23E-001	7.0817E-001
	569.32	15.43	6.8655E-001		-5.7582E-001
	604.70	97.60	1.3196E-001		-6.6849E-002
	795.84	85.40	1.2265E-001		5.4128E-002
	801.93	8.73	1.1138E+000		-6.5889E-001
Cs-137	661.65	85.12	1.3409E-001	1.34E-001	5.0679E-003
Eu-152	121.78	28.40	7.3240E-001	3.27E-001	-5.8039E-001
	244.69	7.49	1.9173E+000		-5.7688E-001
	344.27	26.50	4.5486E-001		1.4063E-002
	778.89	12.74	7.7013E-001		-3.4718E-001
	867.32	4.16	2.3606E+000		-2.4691E+000
	964.01	14.40	8.5738E-001		4.4224E-001
	1085.78	10.00	9.7367E-001		8.3137E-001
	1112.02	13.30	7.3179E-001		-6.9326E-001
	1407.95	20.70	3.2664E-001		2.0985E-001
Eu-154	123.07	40.50	5.1129E-001	2.56E-001	-1.1874E-001
	247.94	6.60	2.0535E+000		-1.3523E+000
	591.81	4.83	2.1297E+000		-2.2836E+000
	723.30	19.70	5.5935E-001		3.1059E-001
	756.87	4.33	2.3117E+000		-6.2016E-001
	873.19	11.50	8.0901E-001		-3.9136E-001
	996.32	10.30	9.0602E-001		-7.4784E-002
	1004.76	17.90	5.2643E-001		3.9107E-001
	1274.45	35.50	2.5573E-001		-4.5548E-002
Eu-155	86.54	30.90	1.0521E+000	1.05E+000	-4.0454E-001
	105.31	20.70	1.1504E+000		-2.0390E-001
Am-241	59.54	35.90	1.2760E+000	1.28E+000	5.5280E-001
Cm-243	228.19	10.56	1.3432E+000	9.70E-001	4.6631E-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	6.6957E-001

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

Report Generated On 5/18/2006 11:45:18 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: RED6264

Spectrum File: RED6264
Sample ID: OOL-08-05-106-F-
Sample Title: OOL-08-05-106-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/18/2006 11:35:15 AM
Live Time: 600.0 seconds
Real Time: 601.0 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-08-05-106-F-
Title: OOL-08-05-106-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	294-	309	300.82	75.11	1.47	6.17E+002	151.68	1.78E+003
2	331-	347	340.17	84.95	1.07	1.99E+002	139.46	1.54E+003
3	945-	962	954.17	238.49	1.52	2.72E+002	80.08	4.30E+002
4	1176-	1185	1180.08	294.98	0.41	5.65E+001	40.89	1.68E+002
5	1346-	1362	1353.34	338.31	1.12	1.01E+002	50.96	1.83E+002
6	1401-	1415	1407.98	351.97	0.58	1.24E+002	47.88	1.64E+002
7	2031-	2054	2042.04	510.53	1.66	1.40E+002	51.58	1.38E+002
8	2322-	2344	2332.76	583.23	1.24	1.45E+002	50.53	1.33E+002
9	2430-	2449	2437.06	609.31	1.88	1.73E+002	43.73	9.07E+001
10	2640-	2652	2646.44	661.67	0.48	2.48E+001	23.95	4.62E+001
11	3106-	3117	3111.69	778.01	0.86	1.82E+001	20.35	3.58E+001
12	3637-	3658	3645.36	911.46	1.64	1.57E+002	39.17	6.52E+001
13	3868-	3887	3875.85	969.10	1.69	1.10E+002	32.39	4.56E+001
14	5832-	5861	5847.07	1462.04	1.91	1.09E+003	67.79	2.26E+001
15	7056-	7074	7064.95	1766.59	0.40	6.08E+001	17.50	5.16E+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: RED6264

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	0.993	511.00*		100.00	1.97059E-001	7.73169E-002
K-40	0.953	1460.81*		10.67	1.88337E+001	1.92382E+000
Cs-137	1.000	661.65*		85.12	4.46700E-002	4.34319E-002
TL-208	0.751	277.35		6.80		
		510.84*		21.60	9.12309E-001	3.65621E-001
		583.14*		84.20	2.53120E-001	9.41605E-002
		860.37		12.46		
Pb-212	0.520	74.81*	@	10.70	9.12626E+000	2.87038E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.83037E-001	2.27718E-001
Bi-214	0.670	609.31*		46.30	5.58018E-001	1.56709E-001
		1120.29		15.10		
		1764.49*		15.80	7.38267E-001	2.24850E-001
PB-214	0.582	74.82*	@	6.21	1.57248E+001	5.07576E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	3.49765E-001	2.59946E-001
		351.92*		37.20	4.17986E-001	1.75411E-001
Ac-228	0.998	338.32*		11.40	1.09424E+000	5.78588E-001
		911.07*		27.70	9.27244E-001	2.54980E-001
		969.11*		16.60	1.10880E+000	3.45313E-001

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

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

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

Spectrum File:RED6264

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

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
ANN		0.993	1.423847E-001	7.992745E-002
K-40		0.953	1.883371E+001	1.923824E+000
Cs-137		1.000	4.466996E-002	4.343190E-002
TL-208		0.751	2.531200E-001	9.379847E-002
Pb-212	@	0.520	6.830370E-001	2.277180E-001
Bi-214		0.670	6.169474E-001	1.285651E-001
PB-214	@	0.582	3.966410E-001	1.454030E-001
Ac-228		0.998	1.002799E+000	1.933303E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	3.3131E-001	70.16
11	778.01	3.0370E-002	111.70

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	1.0023E-001	8.75E-002	-2.2847E-002
		1332.49	100.00	8.7535E-002		5.5340E-002
	Nb-94	702.63	100.00	1.0473E-001	9.52E-002	-7.0105E-002
		871.10	100.00	9.5210E-002		-1.9341E-002
	Ag-108m	79.20	7.10	5.3122E+000	1.27E-001	-8.2357E+000
		433.93	89.90	1.2665E-001		-2.4446E-003
		614.37	90.40	1.4927E-001		9.7450E-003
		722.95	90.50	1.2869E-001		1.2486E-001
	Sb-125	176.33	6.89	2.3136E+000	3.88E-001	-1.8278E+000
		427.89	29.33	3.8817E-001		-1.5174E-001
		463.38	10.35	1.1207E+000		3.5536E-001
		600.56	17.80	6.2102E-001		2.4760E-001
		606.64	5.02	2.8266E+000		-2.2465E-001
		635.90	11.32	9.0642E-001		6.8533E-001
	Cs-134	563.23	8.38	1.2407E+000	1.28E-001	-4.3189E-001
		569.32	15.43	6.8215E-001		-2.8062E-001
		604.70	97.60	1.3735E-001		-9.4763E-002
		795.84	85.40	1.2796E-001		8.8701E-002
		801.93	8.73	1.1985E+000		-7.2864E-001
+	Cs-137	661.65*	85.12	7.0951E-002	7.10E-002	4.4670E-002
	Eu-152	121.78	28.40	7.6354E-001	3.53E-001	-3.3842E-001
		244.69	7.49	1.9446E+000		-2.4626E+000
		344.27	26.50	4.7536E-001		2.8609E-002
		778.89	12.74	8.4373E-001		5.3517E-001
		867.32	4.16	2.3967E+000		-2.0729E+000
		964.01	14.40	8.5912E-001		1.2654E-001
		1085.78	10.00	9.5268E-001		-2.5847E-001
		1112.02	13.30	7.7280E-001		-6.6127E-001
		1407.95	20.70	3.5348E-001		1.2280E-001
	Eu-154	123.07	40.50	5.3039E-001	2.59E-001	-1.3326E-002
		247.94	6.60	2.1144E+000		-5.0892E-001
		591.81	4.83	2.1977E+000		2.1823E-001
		723.30	19.70	5.9361E-001		4.1984E-001
		756.87	4.33	2.3818E+000		-5.6698E-001
		873.19	11.50	8.0901E-001		-3.2146E-001
		996.32	10.30	9.7971E-001		8.6441E-001
		1004.76	17.90	5.6153E-001		7.9492E-002
		1274.45	35.50	2.5913E-001		9.0676E-002
	Eu-155	86.54	30.90	1.0774E+000	1.08E+000	2.5256E-001
		105.31	20.70	1.1809E+000		-1.3902E-001
	Am-241	59.54	35.90	1.2564E+000	1.26E+000	-8.1338E-001
	Cm-243	228.19	10.56	1.3849E+000	9.98E-001	1.7200E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.9813E-001	9.98E-001	1.9552E-001

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

Report Generated On 5/18/2006 12:50:20 PM

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

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-08-05-107-F-
Sample Title: OOL-08-05-107-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/18/2006 12:40:19 PM
Live Time: 600.0 seconds
Real Time: 600.9 seconds

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

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

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

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

Filename: RED6264
Log Number: OOL-08-05-107-F-
Title: OOL-08-05-107-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	308	291.77	72.85	1.34	3.23E+002	63.38	1.31E+003
m	2	284-	308	300.01	74.90	1.34	6.69E+002	74.78	1.86E+003
	3	946-	961	954.71	238.62	1.32	2.73E+002	68.82	3.19E+002
	4	1397-	1416	1408.26	352.04	1.05	9.09E+001	58.36	2.27E+002
	5	2325-	2345	2332.71	583.21	1.01	1.84E+002	44.22	8.83E+001
	6	2426-	2449	2437.91	609.52	0.82	1.85E+002	44.82	8.46E+001
	7	3637-	3656	3646.51	911.75	0.41	1.10E+002	37.50	7.27E+001
	8	3855-	3887	3877.78	969.58	0.39	4.54E+001	48.51	1.09E+002
	9	4477-	4492	4483.93	1121.16	2.05	4.61E+001	26.67	4.59E+001
	10	5834-	5863	5848.05	1462.28	1.92	1.04E+003	66.76	2.53E+001
	11	6485-	6498	6491.18	1623.11	0.47	1.05E+001	8.82	3.50E+000
	12	7056-	7070	7063.03	1766.11	0.46	3.67E+001	15.03	7.32E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: RED6264

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
K-40	0.934	1460.81*	10.67	1.80437E+001	1.86244E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.20634E-001	8.77472E-002
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	9.93139E+000	2.24126E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.84449E-001	2.03356E-001
Bi-214	0.978	609.31*	46.30	5.97167E-001	1.62025E-001
		1120.29*	15.10	5.30656E-001	3.11917E-001
		1764.49*	15.80	4.45087E-001	1.87672E-001
Ac-228	0.624	338.32	11.40		
		911.07*	27.70	6.52450E-001	2.34137E-001
		969.11*	16.60	4.56073E-001	4.89454E-001

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

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

I N T E R 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	0.934	1.804368E+001	1.862442E+000
TL-208	0.471	3.206341E-001	8.774724E-002
Pb-212 @	0.521	6.844486E-001	2.033557E-001
Bi-214	0.978	5.320117E-001	1.141364E-001
Ac-228	0.624	6.158807E-001	2.112143E-001

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

Errors quoted at 1.960 sigma

U N I D E N T I 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	5.3763E-001	19.65
4	352.04	1.5144E-001	64.22
11	1623.11	1.7500E-002	83.96

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: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	1.0701E-001	7.50E-002	5.5119E-002
	1332.49	100.00	7.4958E-002		-1.7732E-002
Nb-94	702.63	100.00	1.0077E-001	8.74E-002	9.4351E-002
	871.10	100.00	8.7354E-002		-5.0779E-002
Ag-108m	79.20	7.10	5.1869E+000	1.09E-001	-3.9460E+000
	433.93	89.90	1.1525E-001		-3.2432E-002
	614.37	90.40	1.3932E-001		4.5450E-003
	722.95	90.50	1.0926E-001		-6.1883E-002
Sb-125	176.33	6.89	2.2827E+000	3.48E-001	-4.4257E-001
	427.89	29.33	3.4769E-001		-3.0661E-001
	463.38	10.35	1.0621E+000		5.3018E-001
	600.56	17.80	5.4734E-001		-2.0856E-001
	606.64	5.02	2.7097E+000		3.9999E-002
	635.90	11.32	8.6783E-001		2.0906E-001
Cs-134	563.23	8.38	1.2570E+000	1.17E-001	9.8731E-002
	569.32	15.43	6.6575E-001		-5.3033E-002
	604.70	97.60	1.3313E-001		-3.4072E-002
	795.84	85.40	1.1675E-001		3.4850E-002
	801.93	8.73	1.1635E+000		-9.9420E-001
Cs-137	661.65	85.12	1.3327E-001	1.33E-001	1.9030E-001
Eu-152	121.78	28.40	7.4386E-001	3.32E-001	3.3925E-001
	244.69	7.49	1.8870E+000		-2.4197E+000
	344.27	26.50	4.6285E-001		-7.8038E-001
	778.89	12.74	7.7013E-001		-2.5529E-001
	867.32	4.16	2.2791E+000		-3.3291E+000
	964.01	14.40	7.8412E-001		-1.2024E-001
	1085.78	10.00	8.9416E-001		-6.9317E-001
	1112.02	13.30	7.3705E-001		-6.4615E-001
	1407.95	20.70	3.3220E-001		-1.3501E-001
Eu-154	123.07	40.50	5.1271E-001	2.67E-001	-1.5644E-001
	247.94	6.60	2.0567E+000		-9.3369E-001
	591.81	4.83	2.0998E+000		1.5373E+000
	723.30	19.70	5.0761E-001		2.6451E-002
	756.87	4.33	2.1505E+000		1.3146E+000
	873.19	11.50	7.7473E-001		6.6039E-003
	996.32	10.30	9.3235E-001		9.7730E-001
	1004.76	17.90	5.1678E-001		-1.6090E-002
	1274.45	35.50	2.6689E-001		3.4219E-001
Eu-155	86.54	30.90	1.0408E+000	1.04E+000	1.4606E+000
	105.31	20.70	1.1507E+000		5.7241E-001
Am-241	59.54	35.90	1.2836E+000	1.28E+000	-9.8059E-001
Cm-243	228.19	10.56	1.3232E+000	9.25E-001	-2.7398E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.2505E-001	9.25E-001	-3.6726E-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 5/18/2006 3:10:35 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-08-05-108-F-
Sample Title: OOL-08-05-108-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/18/2006 3:00:33 PM
Live Time: 600.0 seconds
Real Time: 601.0 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-08-05-108-F-
Title: OOL-08-05-108-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	297-	309	300.57	75.04	0.91	3.47E+002	130.77	1.52E+003
2	330-	345	339.80	84.85	1.08	2.01E+002	131.44	1.43E+003
3	944-	964	954.49	238.57	1.35	2.55E+002	83.92	4.32E+002
4	1399-	1412	1405.94	351.46	0.55	6.03E+001	46.35	1.81E+002
5	2035-	2053	2041.13	510.30	0.52	9.39E+001	47.51	1.44E+002
6	2320-	2342	2331.39	582.88	1.41	1.52E+002	43.60	8.85E+001
7	2424-	2444	2435.24	608.85	1.14	1.48E+002	42.66	8.93E+001
8	2638-	2653	2643.45	660.92	0.90	7.03E+001	29.11	4.97E+001
9	3633-	3652	3641.94	910.61	1.57	1.17E+002	31.05	3.78E+001
10	4472-	4488	4478.80	1119.88	0.35	5.09E+001	26.29	4.11E+001
11	4947-	4960	4953.91	1238.69	0.80	2.82E+001	18.72	2.28E+001
12	5828-	5856	5842.93	1461.00	2.07	9.70E+002	65.65	3.27E+001
13	7052-	7066	7059.23	1765.16	0.61	5.15E+001	16.76	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: RED6264

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	0.985	511.00*	100.00	1.32067E-001	6.91749E-002
K-40	0.999	1460.81*	10.67	1.67878E+001	1.77130E+000
Cs-137	0.983	661.65*	85.12	1.26427E-001	5.44686E-002
TL-208	0.749	277.35	6.80		
		510.84*	21.60	6.11423E-001	3.24123E-001
		583.14*	84.20	2.64422E-001	8.35172E-002
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	5.14794E+000	2.18469E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.38938E-001	2.33215E-001
Bi-214	0.992	609.31*	46.30	4.75457E-001	1.49339E-001
		1120.29*	15.10	5.84795E-001	3.08691E-001
		1764.49*	15.80	6.24820E-001	2.12663E-001

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

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

I N T E R 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	7.495226E-002	7.146419E-002
K-40	0.999	1.678776E+001	1.771302E+000
Cs-137	0.983	1.264273E-001	5.446855E-002
TL-208	0.749	2.644219E-001	8.307140E-002
Pb-212 @	0.521	6.389375E-001	2.332152E-001
Bi-214	0.992	5.329179E-001	1.136332E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	3.3515E-001	65.36
4	351.46	1.0052E-001	76.84
9	910.61	1.9529E-001	26.50
11	1238.69	4.6961E-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: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	8.75E-002	9.1243E-002
		1332.49	100.00	8.7535E-002		5.7700E-002
	Nb-94	702.63	100.00	1.0130E-001	9.01E-002	-1.0255E-002
		871.10	100.00	9.0053E-002		-4.8946E-003
	Ag-108m	79.20	7.10	5.2580E+000	1.23E-001	-3.3567E+000
		433.93	89.90	1.2390E-001		-1.0714E-001
		614.37	90.40	1.3302E-001		2.9145E-002
		722.95	90.50	1.2284E-001		1.5826E-001
	Sb-125	176.33	6.89	2.3556E+000	3.76E-001	1.5832E+000
		427.89	29.33	3.7558E-001		-2.5289E-001
		463.38	10.35	1.0748E+000		-3.9749E-001
		600.56	17.80	5.5728E-001		-8.6246E-001
		606.64	5.02	2.6100E+000		4.2387E+000
		635.90	11.32	8.7477E-001		4.7928E-001
	Cs-134	563.23	8.38	1.2353E+000	1.11E-001	-7.2928E-001
		569.32	15.43	7.2492E-001		2.1795E-001
		604.70	97.60	1.3391E-001		-2.8796E-002
		795.84	85.40	1.1052E-001		5.8066E-002
		801.93	8.73	1.0688E+000		-8.5254E-001
+	Cs-137	661.65*	85.12	7.7476E-002	7.75E-002	1.2643E-001
	Eu-152	121.78	28.40	7.5769E-001	3.64E-001	-1.4929E-001
		244.69	7.49	1.8830E+000		-1.6268E-001
		344.27	26.50	4.4507E-001		-5.9840E-001
		778.89	12.74	7.7916E-001		-5.7555E-001
		867.32	4.16	2.2564E+000		-3.9397E+000
		964.01	14.40	8.2342E-001		5.3434E-001
		1085.78	10.00	8.7114E-001		-3.8348E-001
		1112.02	13.30	7.2383E-001		-4.5566E-001
		1407.95	20.70	3.6362E-001		2.8837E-001
	Eu-154	123.07	40.50	5.2984E-001	2.34E-001	2.0882E-001
		247.94	6.60	2.0408E+000		-1.9207E+000
		591.81	4.83	2.1833E+000		6.7197E-001
		723.30	19.70	5.6187E-001		6.0467E-001
		756.87	4.33	2.2259E+000		-1.3480E+000
		873.19	11.50	7.9207E-001		-2.0506E-001
		996.32	10.30	9.0268E-001		-1.8935E-001
		1004.76	17.90	5.3590E-001		-8.7727E-002
		1274.45	35.50	2.3422E-001		-1.1117E-001
	Eu-155	86.54	30.90	1.0810E+000	1.08E+000	2.4191E-002
		105.31	20.70	1.2238E+000		5.4139E-001
	Am-241	59.54	35.90	1.4107E+000	1.41E+000	6.1938E-001
	Cm-243	228.19	10.56	1.3584E+000	9.68E-001	5.2956E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.6830E-001	9.68E-001	3.1167E-001

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

Report Generated On 5/18/2006 3:27:50 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-08-05-109-F-
Sample Title: OOL-08-05-109-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/18/2006 3:17:48 PM
Live Time: 600.0 seconds
Real Time: 601.0 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-08-05-109-F-
Title: OOL-08-05-109-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	309	291.31	72.73	1.38	4.08E+002	66.60	1.47E+003
m	2	283-	309	300.24	74.96	1.38	7.31E+002	75.49	1.86E+003
	3	330-	345	338.90	84.63	1.20	2.53E+002	128.23	1.34E+003
	4	944-	960	954.30	238.52	1.00	1.77E+002	77.79	4.47E+002
	5	1395-	1414	1406.19	351.52	1.33	1.54E+002	59.26	2.17E+002
	6	2323-	2340	2330.60	582.69	1.41	1.47E+002	42.80	1.01E+002
	7	2424-	2445	2435.41	608.90	0.67	1.79E+002	47.68	1.10E+002
	8	3174-	3185	3179.20	794.89	1.07	2.81E+001	24.95	5.29E+001
	9	3634-	3654	3642.80	910.82	2.16	1.54E+002	37.72	5.96E+001
	10	3867-	3883	3874.26	968.70	0.78	7.58E+001	32.04	6.02E+001
	11	4472-	4485	4478.94	1119.91	0.69	4.56E+001	23.56	3.54E+001
	12	5827-	5857	5842.88	1460.99	2.25	1.19E+003	70.15	1.94E+001
	13	7051-	7068	7059.53	1765.23	2.04	5.75E+001	16.71	4.55E+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: 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	2.05308E+001	2.05820E+000
TL-208	0.467	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.56462E-001	8.18242E-002
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	1.08414E+001	2.40212E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	4.43717E-001	2.07252E-001
Bi-214	0.992	609.31*	46.30	5.76228E-001	1.69158E-001
		1120.29*	15.10	5.24588E-001	2.76651E-001
		1764.49*	15.80	6.97033E-001	2.14415E-001
Ac-228	0.631	338.32	11.40		
		911.07*	27.70	9.12903E-001	2.46522E-001
		969.11*	16.60	7.60724E-001	3.31368E-001

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

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

I N T E R 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	2.053080E+001	2.058201E+000
TL-208	0.467	2.564616E-001	8.182416E-002
Pb-212 @	0.521	4.437170E-001	2.072521E-001
Bi-214	0.992	6.042219E-001	1.197244E-001
Ac-228	0.631	8.586853E-001	1.977901E-001

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

Errors quoted at 1.960 sigma

U N I D E N T I 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	6.7918E-001	16.34
3	84.63	4.2213E-001	50.63
5	351.52	2.5622E-001	38.55
8	794.89	4.6790E-002	88.88

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

Errors quoted at 1.960 sigma

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

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.1181E-001	9.53E-002	5.8943E-002
	1332.49	100.00	9.5343E-002		2.7641E-002
Nb-94	702.63	100.00	1.1003E-001	1.08E-001	-7.7513E-002
	871.10	100.00	1.0780E-001		1.6948E-002
Ag-108m	79.20	7.10	5.1797E+000	1.22E-001	-2.2361E+000
	433.93	89.90	1.3635E-001		4.7484E-003
	614.37	90.40	1.4825E-001		-1.1592E-002
	722.95	90.50	1.2229E-001		-3.6891E-004
Sb-125	176.33	6.89	2.4141E+000	3.92E-001	1.9731E-001
	427.89	29.33	3.9227E-001		8.3689E-002
	463.38	10.35	1.1614E+000		6.5184E-001
	600.56	17.80	6.6352E-001		4.3543E-001
	606.64	5.02	2.8985E+000		5.5051E+000
	635.90	11.32	9.6858E-001		-2.8791E-001
Cs-134	563.23	8.38	1.3173E+000	1.32E-001	5.6978E-003
	569.32	15.43	7.3861E-001		-1.8795E-001
	604.70	97.60	1.5031E-001		8.3274E-003
	795.84	85.40	1.3217E-001		1.4632E-001
	801.93	8.73	1.1602E+000		-6.4120E-001
Cs-137	661.65	85.12	1.4428E-001	1.44E-001	4.3703E-002
Eu-152	121.78	28.40	7.6256E-001	3.40E-001	-1.7729E-001
	244.69	7.49	1.9676E+000		-3.3849E-001
	344.27	26.50	4.6391E-001		-2.6313E-001
	778.89	12.74	8.3542E-001		-2.8914E-001
	867.32	4.16	2.6927E+000		-8.6656E-001
	964.01	14.40	9.0501E-001		8.4407E-002
	1085.78	10.00	9.4913E-001		-5.6515E-001
	1112.02	13.30	7.8270E-001		-2.8867E-001
	1407.95	20.70	3.4035E-001		-1.2019E-001
Eu-154	123.07	40.50	5.3339E-001	2.60E-001	1.7881E-001
	247.94	6.60	2.1313E+000		-1.3857E+000
	591.81	4.83	2.3546E+000		-1.1266E-001
	723.30	19.70	5.6562E-001		1.1888E-001
	756.87	4.33	2.5039E+000		-2.7796E-001
	873.19	11.50	9.2341E-001		2.1197E-001
	996.32	10.30	9.9800E-001		-2.3161E-001
	1004.76	17.90	5.5794E-001		-1.4314E-001
	1274.45	35.50	2.6025E-001		-1.3896E-001
Eu-155	86.54	30.90	1.0687E+000	1.07E+000	3.4628E-002
	105.31	20.70	1.2068E+000		2.5508E-001
Am-241	59.54	35.90	1.2590E+000	1.26E+000	-1.1789E-001
Cm-243	228.19	10.56	1.4271E+000	1.01E+000	1.0141E+000

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	6.9563E-001

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

Report Generated On 5/18/2006 1:20:43 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-08-05-110-F-
Sample Title: OOL-08-05-110-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/18/2006 1:10:40 PM
Live Time: 600.0 seconds
Real Time: 601.0 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-08-05-110-F-
Title: OOL-08-05-110-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	272-	309	291.45	72.76	1.52	4.69E+002	70.10	1.91E+003
m	2	272-	309	300.30	74.98	1.53	8.31E+002	79.18	2.02E+003
	3	330-	346	339.86	84.87	0.85	1.74E+002	137.04	1.50E+003
	4	947-	963	954.25	238.51	1.42	2.44E+002	76.70	4.09E+002
	5	1399-	1415	1406.50	351.60	0.47	1.45E+002	51.45	1.73E+002
	6	2030-	2051	2042.52	510.65	1.90	1.31E+002	54.46	1.71E+002
	7	2319-	2341	2331.39	582.88	1.35	1.92E+002	52.45	1.35E+002
	8	2427-	2446	2435.65	608.96	0.84	1.78E+002	46.60	1.10E+002
	9	2636-	2653	2645.10	661.33	1.52	9.60E+001	35.61	7.20E+001
	10	3634-	3653	3642.61	910.78	1.71	1.35E+002	36.85	6.23E+001
	11	3865-	3883	3873.24	968.45	0.69	1.04E+002	30.78	4.24E+001
	12	4947-	4960	4953.02	1238.47	0.51	2.45E+001	23.99	4.55E+001
	13	5830-	5858	5843.16	1461.06	1.91	1.17E+003	69.21	1.71E+001
	14	7052-	7065	7058.04	1764.86	0.50	3.01E+001	16.88	1.59E+001

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: RED6264

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	0.996	511.00*	100.00	1.84952E-001	8.05996E-002
K-40	0.998	1460.81*	10.67	2.02595E+001	2.03079E+000
Cs-137	0.997	661.65*	85.12	1.72794E-001	6.72459E-002
TL-208	0.750	277.35	6.80		
		510.84*	21.60	8.56261E-001	3.79642E-001
		583.14*	84.20	3.34768E-001	1.01387E-001
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	1.23302E+001	2.68705E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.11495E-001	2.15046E-001
Bi-214	0.695	609.31*	46.30	5.73177E-001	1.65838E-001
		1120.29	15.10		
		1764.49*	15.80	3.65609E-001	2.08016E-001
Ac-228	0.628	338.32	11.40		
		911.07*	27.70	7.96559E-001	2.36370E-001
		969.11*	16.60	1.03999E+000	3.27684E-001

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

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

I N T E R 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	1.126425E-001	8.348850E-002
K-40		0.998	2.025947E+001	2.030795E+000
Cs-137		0.997	1.727942E-001	6.724594E-002
TL-208		0.750	3.347677E-001	1.007980E-001
Pb-212	@	0.521	6.114954E-001	2.150460E-001
Bi-214		0.695	4.925164E-001	1.296723E-001
Ac-228		0.628	8.798716E-001	1.917011E-001

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

Errors quoted at 1.960 sigma

U N I D E N T I 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	7.8108E-001	14.96
3	84.87	2.9038E-001	78.65
5	351.60	2.4221E-001	35.40
12	1238.47	4.0833E-002	97.92

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: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	1.1213E-001	8.36E-002	5.7986E-002
		1332.49	100.00	8.3566E-002		5.2450E-003
	Nb-94	702.63	100.00	1.0184E-001	1.00E-001	1.0355E-002
		871.10	100.00	1.0039E-001		2.4576E-002
	Ag-108m	79.20	7.10	5.2275E+000	1.32E-001	-3.4247E+000
		433.93	89.90	1.3215E-001		-7.4023E-002
		614.37	90.40	1.5151E-001		-5.3305E-003
		722.95	90.50	1.3252E-001		2.0906E-001
	Sb-125	176.33	6.89	2.3824E+000	3.98E-001	-4.6743E-002
		427.89	29.33	3.9806E-001		-1.2630E-001
		463.38	10.35	1.1548E+000		-9.2910E-001
		600.56	17.80	6.0574E-001		-3.1931E-001
		606.64	5.02	2.9321E+000		6.4338E+000
		635.90	11.32	9.4338E-001		5.6627E-001
	Cs-134	563.23	8.38	1.3774E+000	1.22E-001	-3.5543E-001
		569.32	15.43	7.2768E-001		-2.3865E-001
		604.70	97.60	1.4647E-001		-4.4309E-002
		795.84	85.40	1.2201E-001		4.4292E-002
		801.93	8.73	1.1504E+000		1.1498E-001
+	Cs-137	661.65*	85.12	9.5469E-002	9.55E-002	1.7279E-001
	Eu-152	121.78	28.40	7.5415E-001	3.03E-001	1.8589E-002
		244.69	7.49	1.9689E+000		-8.2070E-001
		344.27	26.50	4.5324E-001		-4.0675E-001
		778.89	12.74	8.4166E-001		-4.6365E-001
		867.32	4.16	2.4742E+000		-2.6112E+000
		964.01	14.40	9.2465E-001		3.9007E-001
		1085.78	10.00	1.0009E+000		6.0779E-001
		1112.02	13.30	7.4486E-001		-1.6424E+000
		1407.95	20.70	3.0332E-001		1.7225E-002
	Eu-154	123.07	40.50	5.2888E-001	2.75E-001	-9.8819E-002
		247.94	6.60	2.1036E+000		-1.0436E+000
		591.81	4.83	2.2960E+000		-1.2509E-002
		723.30	19.70	6.1115E-001		1.1383E+000
		756.87	4.33	2.4920E+000		-4.6398E-001
		873.19	11.50	8.7077E-001		-5.0224E-001
		996.32	10.30	9.4202E-001		-2.8874E-001
		1004.76	17.90	5.0693E-001		-1.2389E-001
		1274.45	35.50	2.7547E-001		-6.7115E-002
	Eu-155	86.54	30.90	1.0645E+000	1.06E+000	-3.4414E-002
		105.31	20.70	1.1790E+000		-5.5360E-001
	Am-241	59.54	35.90	1.2606E+000	1.26E+000	-8.0983E-001
	Cm-243	228.19	10.56	1.3708E+000	1.04E+000	5.0704E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	1.0442E+000	1.04E+000	9.4468E-001

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

Report Generated On 5/17/2006 3:48:37 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: RED6264

Spectrum File: RED6264
Sample ID: OOL-08-05-111
Sample Title: OOL-08-05-111-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/17/2006 3:38:36 PM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

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

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

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

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

Filename: RED6264
Log Number: OOL-08-05-111
Title: OOL-08-05-111-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	291-	309	300.66	75.07	1.30	8.34E+002	172.81	2.05E+003
2	330-	345	339.00	84.66	0.64	2.38E+002	134.20	1.48E+003
3	948-	964	953.85	238.41	1.13	3.16E+002	84.07	4.76E+002
4	1348-	1359	1353.76	338.41	1.33	8.67E+001	42.89	1.56E+002
5	1396-	1418	1407.61	351.88	1.33	1.86E+002	64.65	2.33E+002
6	2324-	2340	2332.05	583.05	1.55	1.81E+002	41.69	8.67E+001
7	2425-	2447	2437.07	609.31	1.68	2.13E+002	47.70	9.60E+001
8	3634-	3654	3644.96	911.36	0.63	1.58E+002	37.62	5.76E+001
9	3867-	3883	3875.54	969.02	1.03	6.94E+001	33.22	6.96E+001
10	5830-	5859	5845.85	1461.73	2.26	1.28E+003	72.98	2.27E+001
11	6350-	6363	6356.83	1589.51	1.33	1.45E+001	13.42	1.15E+001
12	7054-	7071	7062.11	1765.88	1.08	5.30E+001	18.45	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: 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	0.973	1460.81*	10.67	2.21009E+001	2.19004E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.16454E-001	8.36214E-002
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	1.23527E+001	3.52317E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.91973E-001	2.44782E-001
Bi-214	0.686	609.31*	46.30	6.86096E-001	1.75316E-001
		1120.29	15.10		
		1764.49*	15.80	6.43023E-001	2.32914E-001
Ac-228	0.999	338.32*	11.40	9.39930E-001	4.87871E-001
		911.07*	27.70	9.36422E-001	2.47137E-001
		969.11*	16.60	6.96376E-001	3.41433E-001

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

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

I N T E R 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	0.973	2.210093E+001	2.190040E+000
TL-208	0.471	3.164539E-001	8.362141E-002
Pb-212 @	0.520	7.919728E-001	2.447824E-001
Bi-214	0.686	6.705180E-001	1.400708E-001
Ac-228	0.999	8.662939E-001	1.852096E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	3.9667E-001	56.38
5	351.88	3.1061E-001	34.69
11	1589.51	2.4119E-002	92.72

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: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	1.2283E-001	9.05E-002	7.6279E-002
	1332.49	100.00	9.0494E-002		1.9767E-002
Nb-94	702.63	100.00	1.0421E-001	1.04E-001	2.7815E-003
	871.10	100.00	1.0388E-001		-2.5355E-002
Ag-108m	79.20	7.10	5.3842E+000	1.33E-001	-7.0888E+000
	433.93	89.90	1.3707E-001		7.2788E-002
	614.37	90.40	1.5231E-001		7.2779E-002
	722.95	90.50	1.3252E-001		1.1551E-001
Sb-125	176.33	6.89	2.4889E+000	3.94E-001	-7.6492E-001
	427.89	29.33	3.9402E-001		-8.5676E-002
	463.38	10.35	1.1598E+000		5.4072E-001
	600.56	17.80	6.0960E-001		-1.2301E-001
	606.64	5.02	2.8883E+000		6.5389E+000
	635.90	11.32	9.2618E-001		1.9697E-001
Cs-134	563.23	8.38	1.2967E+000	1.29E-001	2.6482E-001
	569.32	15.43	7.1237E-001		4.4730E-001
	604.70	97.60	1.4452E-001		-5.6545E-003
	795.84	85.40	1.2857E-001		1.1291E-001
	801.93	8.73	1.1667E+000		-1.0712E+000
Cs-137	661.65	85.12	1.2911E-001	1.29E-001	8.7278E-002
Eu-152	121.78	28.40	7.8271E-001	3.90E-001	2.6379E-001
	244.69	7.49	1.9866E+000		-1.8953E+000
	344.27	26.50	4.8452E-001		-3.4182E-001
	778.89	12.74	8.6816E-001		-6.8520E-001
	867.32	4.16	2.7491E+000		3.1558E-001
	964.01	14.40	8.9335E-001		1.2590E-001
	1085.78	10.00	1.0533E+000		1.1010E+000
	1112.02	13.30	7.6023E-001		-4.6653E-002
	1407.95	20.70	3.9006E-001		2.0437E-001
Eu-154	123.07	40.50	5.4816E-001	2.73E-001	3.1489E-001
	247.94	6.60	2.0535E+000		-2.8067E+000
	591.81	4.83	2.3051E+000		4.5722E-001
	723.30	19.70	6.0420E-001		4.1309E-001
	756.87	4.33	2.4375E+000		7.5419E-001
	873.19	11.50	8.9373E-001		-4.8200E-001
	996.32	10.30	9.2257E-001		4.9720E-001
	1004.76	17.90	5.4520E-001		-4.8948E-001
	1274.45	35.50	2.7335E-001		2.0206E-001
Eu-155	86.54	30.90	1.1017E+000	1.10E+000	-1.3561E-001
	105.31	20.70	1.2112E+000		-6.3582E-002
Am-241	59.54	35.90	1.3358E+000	1.34E+000	5.5288E-002
Cm-243	228.19	10.56	1.4305E+000	1.02E+000	7.7624E-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	2.9424E-001

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

Report Generated On 5/17/2006 3:30:29 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-08-05-112
Sample Title: OOL-08-05-112-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/17/2006 3:20:29 PM
Live Time: 600.0 seconds
Real Time: 601.0 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-08-05-112
Title: OOL-08-05-112-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	309	300.13	74.94	1.02	4.09E+002	137.30	1.61E+003
2	946-	960	954.77	238.64	1.12	2.26E+002	68.48	3.44E+002
3	1170-	1185	1180.15	295.00	1.14	8.12E+001	53.77	2.24E+002
4	1400-	1415	1407.49	351.85	1.63	1.52E+002	48.87	1.56E+002
5	1784-	1793	1788.54	447.14	0.79	2.94E+001	26.31	6.66E+001
6	2321-	2342	2332.04	583.05	0.88	1.78E+002	47.23	1.07E+002
7	2428-	2447	2436.74	609.23	1.97	2.09E+002	41.76	7.04E+001
8	2639-	2653	2644.95	661.30	0.82	4.02E+001	28.79	6.08E+001
9	3636-	3653	3644.08	911.14	1.04	9.82E+001	32.58	5.48E+001
10	3867-	3885	3876.24	969.20	0.36	7.58E+001	34.86	7.13E+001
11	5832-	5860	5845.48	1461.64	2.20	1.09E+003	66.58	1.45E+001
12	6350-	6363	6356.09	1589.33	0.41	2.11E+001	14.39	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: 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	0.978	1460.81*		10.67	1.87999E+001	1.90887E+000
Cs-137	0.996	661.65*		85.12	7.24151E-002	5.25092E-002
TL-208	0.471	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	3.10112E-001	9.17899E-002
		860.37		12.46		
Pb-212	0.521	74.81*	@	10.70	6.07404E+000	2.36076E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	5.66931E-001	1.93515E-001
Bi-214	0.398	609.31*		46.30	6.71694E-001	1.57894E-001
		1120.29		15.10		
		1764.49		15.80		
PB-214	0.582	74.82*	@	6.21	1.04657E+001	4.13799E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	5.02828E-001	3.43567E-001
		351.92*		37.20	5.12098E-001	1.85180E-001
Ac-228	0.633	338.32		11.40		
		911.07*		27.70	5.80832E-001	2.03891E-001
		969.11*		16.60	7.60613E-001	3.58971E-001

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

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

I N T E R 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		0.978	1.879992E+001	1.908872E+000
Cs-137		0.996	7.241512E-002	5.250916E-002
TL-208		0.471	3.101122E-001	9.178989E-002
Pb-212	@	0.521	5.669313E-001	1.935147E-001
Bi-214		0.398	6.716937E-001	1.578941E-001
PB-214	@	0.582	5.100117E-001	1.630097E-001
Ac-228		0.633	6.246841E-001	1.772890E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	447.14	4.8984E-002	89.52
12	1589.33	3.5104E-002	68.34

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	1.1055E-001	9.09E-002	8.7726E-002
		1332.49	100.00	9.0909E-002		2.0169E-002
	Nb-94	702.63	100.00	1.0104E-001	1.01E-001	-7.4241E-002
		871.10	100.00	1.0186E-001		3.2654E-002
	Ag-108m	79.20	7.10	5.2284E+000	1.24E-001	-6.5496E+000
		433.93	89.90	1.2410E-001		-1.4170E-002
		614.37	90.40	1.4721E-001		-9.8389E-003
		722.95	90.50	1.2998E-001		1.0902E-001
	Sb-125	176.33	6.89	2.3998E+000	3.74E-001	9.8850E-001
		427.89	29.33	3.7436E-001		1.0354E-001
		463.38	10.35	1.1259E+000		3.2712E-001
		600.56	17.80	5.9664E-001		5.1519E-002
		606.64	5.02	2.8370E+000		7.0998E+000
		635.90	11.32	9.1745E-001		5.1146E-001
	Cs-134	563.23	8.38	1.3250E+000	1.31E-001	-1.6114E-001
		569.32	15.43	7.0387E-001		-4.1651E-002
		604.70	97.60	1.4144E-001		-5.0716E-002
		795.84	85.40	1.3128E-001		1.2038E-001
		801.93	8.73	1.2017E+000		-9.8311E-001
+	Cs-137	661.65*	85.12	8.3312E-002	8.33E-002	7.2415E-002
	Eu-152	121.78	28.40	7.5612E-001	3.78E-001	-1.9619E-002
		244.69	7.49	1.9612E+000		-2.0594E+000
		344.27	26.50	4.5754E-001		-2.9581E-001
		778.89	12.74	8.3542E-001		-6.6181E-001
		867.32	4.16	2.5222E+000		-1.9480E+000
		964.01	14.40	9.0501E-001		4.9974E-001
		1085.78	10.00	9.9758E-001		-5.4410E-001
		1112.02	13.30	7.6277E-001		-1.1634E+000
		1407.95	20.70	3.7829E-001		2.7665E-001
	Eu-154	123.07	40.50	5.2530E-001	2.71E-001	2.1647E-002
		247.94	6.60	2.0328E+000		-1.3065E+000
		591.81	4.83	2.2497E+000		3.4894E-002
		723.30	19.70	5.9480E-001		4.3372E-001
		756.87	4.33	2.2856E+000		-4.4262E-001
		873.19	11.50	8.8615E-001		7.5619E-001
		996.32	10.30	9.0602E-001		4.3451E-001
		1004.76	17.90	5.3024E-001		2.9163E-001
		1274.45	35.50	2.7122E-001		-1.8949E-002
	Eu-155	86.54	30.90	1.0625E+000	1.06E+000	1.5692E+000
		105.31	20.70	1.1758E+000		-9.3083E-001
	Am-241	59.54	35.90	1.3518E+000	1.35E+000	-1.0328E+000
	Cm-243	228.19	10.56	1.3866E+000	9.63E-001	-7.2750E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.6270E-001	9.63E-001	-2.4507E-001

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

Report Generated On 5/17/2006 4:02:27 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-08-05-113
Sample Title: OOL-08-05-113-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/17/2006 3:52:26 PM
Live Time: 600.0 seconds
Real Time: 601.0 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-08-05-113
Title: OOL-08-05-113-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	307	292.09	72.93	1.37	3.75E+002	65.40	1.64E+003
m	2	282-	307	300.37	74.99	1.37	5.65E+002	73.29	1.85E+003
	3	331-	345	338.23	84.46	0.97	1.43E+002	124.55	1.35E+003
	4	948-	962	954.19	238.49	1.35	1.81E+002	71.26	3.94E+002
	5	1230-	1239	1234.36	308.55	0.76	2.70E+001	32.60	1.10E+002
	6	1399-	1415	1407.13	351.76	1.09	1.34E+002	50.12	1.66E+002
	7	2036-	2055	2043.13	510.80	1.20	1.02E+002	47.03	1.35E+002
	8	2322-	2343	2331.78	582.98	1.52	1.63E+002	45.17	9.83E+001
	9	2427-	2445	2435.94	609.03	1.48	1.79E+002	41.21	7.80E+001
	10	2637-	2657	2644.99	661.31	1.18	7.67E+001	37.25	7.83E+001
	11	3637-	3655	3645.28	911.44	1.49	1.19E+002	34.24	5.54E+001
	12	3868-	3885	3875.97	969.13	1.51	8.06E+001	29.83	4.64E+001
	13	4472-	4490	4481.49	1120.55	0.59	6.22E+001	28.47	4.38E+001
	14	5324-	5340	5331.47	1333.10	0.59	4.59E+001	21.85	2.51E+001
	15	5627-	5640	5633.16	1408.54	0.57	1.97E+001	11.73	5.34E+000
	16	5832-	5859	5845.52	1461.65	2.30	1.05E+003	66.63	2.37E+001
	17	6479-	6492	6485.53	1621.69	0.31	1.30E+001	7.07	0.00E+000
	18	7056-	7070	7062.62	1766.00	1.03	3.52E+001	18.96	1.88E+001

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: RED6264

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	0.999	511.00*	100.00	1.43233E-001	6.89444E-002
K-40	0.978	1460.81*	10.67	1.81910E+001	1.87036E+000
Cs-137	0.996	661.65*	85.12	1.38048E-001	6.89810E-002
TL-208	0.751	277.35	6.80		
		510.84*	21.60	6.63117E-001	3.23748E-001
		583.14*	84.20	2.83950E-001	8.70745E-002
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	8.38124E+000	1.96980E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	4.54806E-001	1.92524E-001
Bi-214	0.983	609.31*	46.30	5.76410E-001	1.50511E-001
		1120.29*	15.10	7.14972E-001	3.36162E-001
		1764.49*	15.80	4.26698E-001	2.34027E-001
Ac-228	0.631	338.32	11.40		
		911.07*	27.70	7.01171E-001	2.17930E-001
		969.11*	16.60	8.09596E-001	3.11318E-001

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

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

I N T E R 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	8.190010E-002	7.143582E-002
K-40		0.978	1.819101E+001	1.870359E+000
Cs-137		0.996	1.380478E-001	6.898102E-002
TL-208		0.751	2.839499E-001	8.658141E-002
Pb-212	@	0.521	4.548057E-001	1.925237E-001
Bi-214		0.983	5.552539E-001	1.184690E-001
Ac-228		0.631	7.368290E-001	1.785330E-001

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

Errors quoted at 1.960 sigma

U N I D E N T I 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	6.2545E-001	17.43
3	84.46	2.3839E-001	87.08
5	308.55	4.5000E-002	120.76
6	351.76	2.2340E-001	37.39
14	1333.10	7.6508E-002	47.60
15	1408.54	3.2767E-002	59.66
17	1621.69	2.1667E-002	54.36

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	1.1551E-001	9.77E-002	6.9420E-002
		1332.49	100.00	9.7672E-002		1.1553E-001
	Nb-94	702.63	100.00	1.0678E-001	9.58E-002	5.8923E-002
		871.10	100.00	9.5834E-002		1.0942E-002
	Ag-108m	79.20	7.10	5.2383E+000	1.25E-001	-2.8539E+000
		433.93	89.90	1.2489E-001		-2.9942E-002
		614.37	90.40	1.4171E-001		-1.9452E-002
		722.95	90.50	1.2473E-001		1.2116E-001
	Sb-125	176.33	6.89	2.2838E+000	3.85E-001	-1.6938E-001
		427.89	29.33	3.8521E-001		9.4361E-002
		463.38	10.35	1.0658E+000		7.6297E-001
		600.56	17.80	6.1216E-001		7.0782E-001
		606.64	5.02	2.8127E+000		7.1429E+000
		635.90	11.32	8.9750E-001		-2.1136E-001
	Cs-134	563.23	8.38	1.3096E+000	1.12E-001	-7.1990E-001
		569.32	15.43	6.9527E-001		-3.5887E-001
		604.70	97.60	1.4126E-001		-4.6473E-002
		795.84	85.40	1.1193E-001		-4.4483E-002
		801.93	8.73	1.0437E+000		-1.0794E+000
+	Cs-137	661.65*	85.12	1.0474E-001	1.05E-001	1.3805E-001
	Eu-152	121.78	28.40	7.4326E-001	3.27E-001	3.8348E-001
		244.69	7.49	1.9574E+000		-2.6715E+000
		344.27	26.50	4.4064E-001		-6.2348E-001
		778.89	12.74	7.5636E-001		-5.7071E-001
		867.32	4.16	2.2716E+000		-3.9781E+000
		964.01	14.40	8.5387E-001		-8.5822E-002
		1085.78	10.00	9.1287E-001		3.0395E-001
		1112.02	13.30	6.9938E-001		-9.5445E-001
		1407.95	20.70	3.2664E-001		2.2575E-001
	Eu-154	123.07	40.50	5.0830E-001	2.65E-001	-4.5032E-001
		247.94	6.60	2.1052E+000		-2.0415E+000
		591.81	4.83	2.0541E+000		-2.3927E+000
		723.30	19.70	5.7059E-001		4.9041E-001
		756.87	4.33	2.2393E+000		2.3076E-002
		873.19	11.50	8.5247E-001		-6.2686E-002
		996.32	10.30	9.2910E-001		-7.8191E-002
		1004.76	17.90	5.0693E-001		-1.4581E-001
		1274.45	35.50	2.6470E-001		-3.6413E-002
	Eu-155	86.54	30.90	1.0512E+000	1.05E+000	-1.3972E-001
		105.31	20.70	1.1671E+000		7.0396E-002
	Am-241	59.54	35.90	1.2984E+000	1.30E+000	1.5153E+000
	Cm-243	228.19	10.56	1.4288E+000	9.52E-001	1.8540E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.5221E-001	9.52E-001	-3.1150E-001

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

Report Generated On 5/17/2006 11:41:53 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: RED6264

Spectrum File: RED6264
Sample ID: OOL-08-05-114
Sample Title: OOL-08-05-114-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/17/2006 11:31:51 AM
Live Time: 600.0 seconds
Real Time: 600.9 seconds

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

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

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

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

Filename: RED6264
Log Number: OOL-08-05-114
Title: OOL-08-05-114-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	291-	309	300.66	75.07	1.36	7.83E+002	162.26	1.79E+003
2	329-	345	338.99	84.65	1.21	2.56E+002	130.30	1.32E+003
3	946-	963	954.42	238.55	1.25	2.91E+002	76.79	3.81E+002
4	1342-	1361	1352.71	338.15	1.30	1.02E+002	54.04	1.88E+002
5	1400-	1417	1407.35	351.81	1.10	1.14E+002	52.02	1.81E+002
6	2322-	2341	2332.30	583.11	1.92	1.74E+002	43.41	9.00E+001
7	2427-	2445	2436.60	609.19	1.65	1.43E+002	41.43	9.00E+001
8	3634-	3654	3645.46	911.49	1.97	1.23E+002	35.19	5.47E+001
9	3867-	3883	3875.31	968.97	1.01	6.84E+001	28.87	4.56E+001
10	4689-	4702	4695.10	1173.97	0.38	3.95E+001	22.92	3.45E+001
11	5322-	5335	5328.90	1332.46	0.31	2.86E+001	23.56	3.94E+001
12	5831-	5860	5845.72	1461.70	2.27	9.35E+002	63.09	2.17E+001
13	7058-	7072	7064.03	1766.36	0.93	4.07E+001	16.20	9.30E+000

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

Errors quoted at 1.960 sigma

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

N U C L I 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	0.975	1460.81*	10.67	1.61835E+001	1.70546E+000
Co-60	0.991	1173.22*	100.00	6.94564E-002	4.06970E-002
		1332.49*	100.00	5.18042E-002	4.28896E-002
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.03792E-001	8.54653E-002
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	1.15943E+001	3.30755E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.30878E-001	2.24221E-001
Bi-214	0.676	609.31*	46.30	4.60422E-001	1.44985E-001
		1120.29	15.10		
		1764.49*	15.80	4.93856E-001	2.02650E-001
Ac-228	0.997	338.32*	11.40	1.11003E+000	6.11212E-001
		911.07*	27.70	7.29319E-001	2.24376E-001
		969.11*	16.60	6.87042E-001	2.98710E-001

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

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

I N T E R 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		0.975	1.618350E+001	1.705462E+000
Co-60		0.991	6.109305E-002	2.952183E-002
TL-208		0.471	3.037922E-001	8.546533E-002
Pb-212	@	0.521	7.308778E-001	2.242206E-001
Bi-214		0.676	4.717415E-001	1.179144E-001
Ac-228		0.997	7.454768E-001	1.721398E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	84.65	4.2682E-001	50.88
5	351.81	1.8969E-001	45.71

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: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	6.1859E-002	6.19E-002	6.9456E-002
		1332.49*	100.00	6.9093E-002		5.1804E-002
	Nb-94	702.63	100.00	1.0157E-001	9.36E-002	2.7915E-004
		871.10	100.00	9.3630E-002		-2.1751E-002
	Ag-108m	79.20	7.10	5.1029E+000	1.12E-001	-2.9275E+000
		433.93	89.90	1.1674E-001		-2.1992E-002
		614.37	90.40	1.3954E-001		-8.1380E-003
		722.95	90.50	1.1170E-001		2.0702E-002
	Sb-125	176.33	6.89	2.2361E+000	3.63E-001	-7.6884E-001
		427.89	29.33	3.6255E-001		-4.7307E-002
		463.38	10.35	1.1564E+000		-3.5949E-002
		600.56	17.80	6.1976E-001		5.2831E-002
		606.64	5.02	2.7313E+000		2.1386E+000
		635.90	11.32	8.4426E-001		-6.7359E-001
	Cs-134	563.23	8.38	1.2888E+000	1.21E-001	8.0677E-001
		569.32	15.43	6.7920E-001		1.9285E-002
		604.70	97.60	1.4344E-001		2.3559E-002
		795.84	85.40	1.2136E-001		1.8671E-001
		801.93	8.73	1.1339E+000		-1.2990E-001
	Cs-137	661.65	85.12	1.2712E-001	1.27E-001	1.2870E-002
	Eu-152	121.78	28.40	7.2384E-001	3.06E-001	7.1834E-002
		244.69	7.49	1.8643E+000		-6.5648E-001
		344.27	26.50	4.2709E-001		-2.9421E-001
		778.89	12.74	7.6557E-001		-6.9930E-001
		867.32	4.16	2.4533E+000		-1.2556E+000
		964.01	14.40	8.1609E-001		-4.0952E-001
		1085.78	10.00	9.6323E-001		8.8102E-002
		1112.02	13.30	7.0763E-001		-3.8330E-001
		1407.95	20.70	3.0634E-001		-1.0859E-001
	Eu-154	123.07	40.50	5.0370E-001	2.35E-001	-2.5549E-002
		247.94	6.60	2.0200E+000		-2.4166E+000
		591.81	4.83	2.0283E+000		2.0996E-001
		723.30	19.70	5.2003E-001		3.8513E-001
		756.87	4.33	2.0503E+000		-9.3198E-001
		873.19	11.50	8.2285E-001		4.0889E-001
		996.32	10.30	8.8574E-001		-1.0578E-001
		1004.76	17.90	5.3213E-001		-1.8832E-002
		1274.45	35.50	2.3547E-001		-2.8879E-001
	Eu-155	86.54	30.90	1.0292E+000	1.03E+000	1.2318E-001
		105.31	20.70	1.1590E+000		4.9294E-001
	Am-241	59.54	35.90	1.2541E+000	1.25E+000	1.6498E-001
	Cm-243	228.19	10.56	1.3223E+000	9.15E-001	-3.6622E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.1496E-001	9.15E-001	2.9247E-001

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

Report Generated On 5/17/2006 11:24:32 AM

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

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-08-05-115
Sample Title: OOL-08-05-115-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/17/2006 11:14:29 AM
Live Time: 600.0 seconds
Real Time: 601.0 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-08-05-115
Title: OOL-08-05-115-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	309	291.97	72.89	1.40	3.19E+002	65.00	1.55E+003
m	2	282-	309	300.24	74.96	1.41	7.32E+002	76.06	1.86E+003
	3	333-	346	339.12	84.69	1.52	2.06E+002	115.56	1.18E+003
	4	945-	962	954.90	238.67	1.01	2.49E+002	78.12	4.12E+002
	5	1170-	1187	1181.40	295.31	0.85	1.10E+002	56.72	2.24E+002
	6	1397-	1416	1407.21	351.78	1.26	1.70E+002	56.80	1.91E+002
	7	2033-	2070	2041.70	510.44	2.25	1.64E+002	71.55	1.97E+002
	8	2323-	2343	2332.23	583.09	1.27	1.64E+002	46.82	1.11E+002
	9	2426-	2446	2436.98	609.29	0.61	1.83E+002	45.32	9.69E+001
	10	2638-	2656	2646.09	661.58	0.61	9.35E+001	36.25	7.35E+001
	11	3632-	3655	3644.29	911.20	1.38	1.53E+002	39.51	6.31E+001
	12	3869-	3885	3876.84	969.35	0.74	7.36E+001	30.22	5.24E+001
	13	4394-	4405	4399.13	1099.96	0.60	1.25E+001	15.72	2.05E+001
	14	5324-	5340	5331.21	1333.04	1.56	5.94E+001	22.86	2.46E+001
	15	5831-	5861	5845.44	1461.63	1.94	9.95E+002	64.02	1.51E+001
	16	6349-	6362	6355.94	1589.29	0.77	1.43E+001	12.16	8.75E+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: 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	0.990	511.00*		100.00	2.29981E-001	1.05352E-001
K-40	0.979	1460.81*		10.67	1.72154E+001	1.78042E+000
Cs-137	1.000	661.65*		85.12	1.68399E-001	6.81957E-002
TL-208	0.751	277.35		6.80		
		510.84*		21.60	1.06473E+000	4.95430E-001
		583.14*		84.20	2.86203E-001	8.98145E-002
		860.37		12.46		
Pb-212	0.521	74.81*	@	10.70	1.08554E+001	2.40852E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.25172E-001	2.19223E-001
Bi-214	0.398	609.31*		46.30	5.89642E-001	1.63023E-001
		1120.29		15.10		
		1764.49		15.80		
PB-214	0.582	74.82*	@	6.21	1.87041E+001	4.36641E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	6.84001E-001	3.69710E-001
		351.92*		37.20	5.69874E-001	2.13311E-001
Ac-228	0.633	338.32		11.40		
		911.07*		27.70	9.03912E-001	2.55701E-001
		969.11*		16.60	7.38770E-001	3.13157E-001

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

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

I N T E R 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		0.990	1.681608E-001	1.071042E-001
K-40		0.979	1.721540E+001	1.780421E+000
Cs-137		1.000	1.683989E-001	6.819572E-002
TL-208		0.751	2.862027E-001	8.932888E-002
Pb-212	@	0.521	6.251717E-001	2.192227E-001
Bi-214		0.398	5.896422E-001	1.630232E-001
PB-214	@	0.582	5.983775E-001	1.847636E-001
Ac-228		0.633	8.378522E-001	1.980625E-001

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

Errors quoted at 1.960 sigma

U N I D E N T I 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	5.3193E-001	20.37
3	84.69	3.4345E-001	56.08
13	1099.96	2.0909E-002	125.32
14	1333.04	9.9067E-002	38.46
16	1589.29	2.3750E-002	85.30

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

Errors quoted at 1.960 sigma

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

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

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
	Co-60	1173.22	100.00	1.1398E-001	1.01E-001	1.1898E-001
		1332.49	100.00	1.0106E-001		1.5542E-001
	Nb-94	702.63	100.00	9.8031E-002	9.14E-002	6.1665E-002
		871.10	100.00	9.1371E-002		8.7148E-003
	Ag-108m	79.20	7.10	5.0919E+000	1.22E-001	-6.0460E+000
		433.93	89.90	1.2190E-001		3.7505E-002
		614.37	90.40	1.4107E-001		-5.3290E-002
		722.95	90.50	1.2257E-001		9.0827E-002
	Sb-125	176.33	6.89	2.3357E+000	3.65E-001	1.5638E+000
		427.89	29.33	3.6507E-001		-3.8755E-001
		463.38	10.35	1.1207E+000		2.8859E-002
		600.56	17.80	5.4302E-001		-4.7037E-001
		606.64	5.02	2.7847E+000		7.0603E+000
		635.90	11.32	9.2401E-001		5.3194E-001
	Cs-134	563.23	8.38	1.2836E+000	1.15E-001	5.6740E-001
		569.32	15.43	6.8655E-001		1.7885E-001
		604.70	97.60	1.3810E-001		-4.8430E-002
		795.84	85.40	1.1505E-001		9.0327E-002
		801.93	8.73	1.0723E+000		-3.6618E-001
+	Cs-137	661.65*	85.12	9.8225E-002	9.82E-002	1.6840E-001
	Eu-152	121.78	28.40	7.4625E-001	3.32E-001	-3.0582E-001
		244.69	7.49	1.9600E+000		-6.8087E-001
		344.27	26.50	4.4231E-001		-5.8759E-001
		778.89	12.74	7.8587E-001		-3.3526E-001
		867.32	4.16	2.4039E+000		-1.0256E+000
		964.01	14.40	8.6954E-001		-2.1866E-001
		1085.78	10.00	1.0009E+000		3.6396E-001
		1112.02	13.30	6.6237E-001		-1.0589E+000
		1407.95	20.70	3.3220E-001		1.9524E-001
	Eu-154	123.07	40.50	5.2530E-001	2.38E-001	5.9276E-001
		247.94	6.60	2.1129E+000		-3.7998E-001
		591.81	4.83	2.0796E+000		-6.4116E-001
		723.30	19.70	5.6812E-001		6.1552E-001
		756.87	4.33	2.2191E+000		-8.9458E-001
		873.19	11.50	7.9492E-001		2.6136E-001
		996.32	10.30	8.8231E-001		3.8034E-002
		1004.76	17.90	5.4887E-001		3.8074E-001
		1274.45	35.50	2.3795E-001		-2.1614E-002
	Eu-155	86.54	30.90	1.0537E+000	1.05E+000	2.2875E+000
		105.31	20.70	1.1619E+000		9.0178E-001
	Am-241	59.54	35.90	1.3047E+000	1.30E+000	-2.2649E-001
	Cm-243	228.19	10.56	1.3699E+000	9.66E-001	1.2852E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.6590E-001	9.66E-001	-1.6394E-001

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

Report Generated On 5/17/2006 10:54:22 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: RED6264

Spectrum File: RED6264
Sample ID: OOL-08-05-116
Sample Title: OOL-08-05-116-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/17/2006 10:44:19 AM
Live Time: 600.0 seconds
Real Time: 601.0 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-08-05-116
Title: OOL-08-05-116-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	307	291.54	72.79	1.39	3.16E+002	64.12	1.37E+003
m	2	284-	307	300.26	74.97	1.39	7.05E+002	75.05	1.74E+003
	3	948-	961	954.21	238.50	0.77	2.64E+002	66.84	3.26E+002
	4	1169-	1186	1179.78	294.90	0.77	8.26E+001	55.93	2.22E+002
	5	1342-	1359	1353.62	338.38	0.62	7.68E+001	52.12	1.91E+002
	6	1395-	1416	1407.15	351.76	1.89	2.14E+002	60.56	1.97E+002
	7	2033-	2052	2044.23	511.08	1.65	1.17E+002	46.15	1.25E+002
	8	2323-	2342	2332.07	583.05	1.79	1.93E+002	42.93	8.18E+001
	9	2427-	2446	2437.09	609.32	1.16	1.61E+002	47.39	1.20E+002
	10	2639-	2654	2646.00	661.56	0.39	1.14E+002	33.05	5.63E+001
	11	3634-	3653	3644.49	911.24	1.34	1.32E+002	35.25	5.46E+001
	12	3866-	3885	3875.68	969.06	0.45	8.85E+001	29.51	3.95E+001
	13	4472-	4492	4481.85	1120.64	0.57	7.58E+001	26.13	2.82E+001
	14	4687-	4702	4694.40	1173.79	1.11	4.88E+001	26.06	4.22E+001
	15	5323-	5338	5329.92	1332.72	0.72	4.99E+001	22.22	2.61E+001
	16	5832-	5861	5845.53	1461.65	2.21	1.05E+003	65.45	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: RED6264

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	1.000	511.00*	100.00	1.64622E-001	6.86642E-002
K-40	0.978	1460.81*	10.67	1.81644E+001	1.85616E+000
Co-60	0.994	1173.22*	100.00	8.58619E-002	4.63480E-002
		1332.49*	100.00	9.04819E-002	4.08901E-002
Cs-137	1.000	661.65*	85.12	2.04586E-001	6.41905E-002
TL-208	0.751	277.35	6.80		
		510.84*	21.60	7.62141E-001	3.23926E-001
		583.14*	84.20	3.37131E-001	8.68447E-002
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	1.04589E+001	2.33294E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.61244E-001	1.97182E-001
Bi-214	0.699	609.31*	46.30	5.17390E-001	1.65381E-001
		1120.29*	15.10	8.71461E-001	3.14434E-001
		1764.49	15.80		
PB-214	0.582	74.82* @	6.21	1.80210E+001	4.22724E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	5.11482E-001	3.56831E-001
		351.92*	37.20	7.17421E-001	2.36189E-001
Ac-228	0.999	338.32*	11.40	8.33298E-001	5.80056E-001
		911.07*	27.70	7.82794E-001	2.27052E-001
		969.11*	16.60	8.88757E-001	3.10555E-001

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

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

I N T E R 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	9.180219E-002	7.114088E-002
K-40		0.978	1.816442E+001	1.856165E+000
Co-60		0.994	8.845985E-002	3.066263E-002
Cs-137		1.000	2.045864E-001	6.419052E-002
TL-208		0.751	3.371308E-001	8.614692E-002
Pb-212	@	0.521	6.612441E-001	1.971822E-001
Bi-214		0.699	5.941149E-001	1.463700E-001
PB-214	@	0.582	6.546816E-001	1.969529E-001
Ac-228		0.999	8.209382E-001	1.747716E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.79	5.2655E-001	20.30

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

Errors quoted at 1.960 sigma

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

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

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
+	Co-60	1173.22*	100.00	7.0256E-002	5.78E-002	8.5862E-002
		1332.49*	100.00	5.7763E-002		9.0482E-002
	Nb-94	702.63	100.00	1.0704E-001	1.03E-001	6.6122E-002
		871.10	100.00	1.0273E-001		-2.4583E-002
	Ag-108m	79.20	7.10	5.1029E+000	1.16E-001	-9.5879E+000
		433.93	89.90	1.2270E-001		-7.7946E-002
		614.37	90.40	1.4784E-001		-8.4286E-002
		722.95	90.50	1.1554E-001		6.2071E-002
	Sb-125	176.33	6.89	2.3462E+000	3.77E-001	6.6073E-001
		427.89	29.33	3.7741E-001		-3.0761E-001
		463.38	10.35	1.0362E+000		1.4103E-001
		600.56	17.80	5.8605E-001		4.4929E-001
		606.64	5.02	2.8405E+000		4.7985E+000
		635.90	11.32	8.9074E-001		-3.4037E-002
	Cs-134	563.23	8.38	1.3122E+000	1.22E-001	7.5044E-002
		569.32	15.43	7.1937E-001		-5.6998E-001
		604.70	97.60	1.4144E-001		3.4587E-002
		795.84	85.40	1.2169E-001		3.7374E-002
		801.93	8.73	1.1273E+000		-1.2845E+000
+	Cs-137	661.65*	85.12	8.2257E-002	8.23E-002	2.0459E-001
	Eu-152	121.78	28.40	7.4266E-001	3.27E-001	2.2326E-002
		244.69	7.49	1.8589E+000		-2.2460E+000
		344.27	26.50	4.6285E-001		5.0333E-002
		778.89	12.74	7.5867E-001		-6.9183E-001
		867.32	4.16	2.5289E+000		-2.5426E+000
		964.01	14.40	8.4681E-001		2.4281E-001
		1085.78	10.00	9.5268E-001		-3.0553E-001
		1112.02	13.30	7.8024E-001		-5.2919E-001
		1407.95	20.70	3.2664E-001		3.5190E-001
	Eu-154	123.07	40.50	5.1539E-001	2.59E-001	5.7750E-002
		247.94	6.60	2.0328E+000		-1.7289E+000
		591.81	4.83	2.1785E+000		2.1623E+000
		723.30	19.70	5.3081E-001		1.6093E-001
		756.87	4.33	2.3246E+000		2.6604E+000
		873.19	11.50	8.8868E-001		3.1732E-002
		996.32	10.30	8.7887E-001		-7.3892E-001
		1004.76	17.90	5.0494E-001		-2.4106E-002
		1274.45	35.50	2.5913E-001		-6.8053E-002
	Eu-155	86.54	30.90	1.0454E+000	1.05E+000	2.4440E+000
		105.31	20.70	1.1725E+000		1.3288E+000
	Am-241	59.54	35.90	1.2651E+000	1.27E+000	5.4418E-001
	Cm-243	228.19	10.56	1.3513E+000	9.63E-001	-4.2505E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.6270E-001	9.63E-001	3.2616E-001

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

Report Generated On 5/17/2006 3:01:48 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: RED6264

Spectrum File: RED6264
Sample ID: OOL-08-05-117
Sample Title: OOL-08-05-117-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/17/2006 2:51:46 PM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

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

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

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

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

Filename: RED6264
Log Number: OOL-08-05-117
Title: OOL-08-05-117-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	309	291.94	72.89	1.56	4.29E+002	75.37	1.69E+003
m	2	283-	309	300.23	74.96	1.56	8.02E+002	82.28	2.25E+003
	3	948-	960	954.05	238.46	1.41	2.29E+002	64.21	3.19E+002
	4	1173-	1188	1180.53	295.09	0.79	7.90E+001	55.89	2.44E+002
	5	1396-	1414	1407.51	351.85	0.45	1.27E+002	56.24	2.05E+002
	6	2034-	2052	2043.56	510.91	1.28	1.54E+002	48.56	1.36E+002
	7	2325-	2341	2332.18	583.08	1.35	1.87E+002	39.74	7.19E+001
	8	2429-	2447	2437.27	609.36	1.45	1.10E+002	41.94	1.03E+002
	9	2638-	2656	2646.43	661.67	2.27	1.31E+002	39.99	8.24E+001
	10	3635-	3654	3644.87	911.34	1.37	1.41E+002	36.57	5.94E+001
	11	3868-	3883	3875.16	968.93	0.89	7.19E+001	30.58	5.71E+001
	12	4476-	4487	4481.65	1120.59	0.50	1.99E+001	22.18	4.31E+001
	13	5831-	5859	5845.46	1461.63	2.03	1.02E+003	66.61	2.90E+001

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: 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	2.17090E-001	7.43840E-002
K-40	0.979	1460.81*		10.67	1.76668E+001	1.83695E+000
Cs-137	1.000	661.65*		85.12	2.35081E-001	7.71351E-002
TL-208	0.752	277.35		6.80		
		510.84*		21.60	1.00504E+000	3.54017E-001
		583.14*		84.20	3.26582E-001	8.13625E-002
		860.37		12.46		
Pb-212	0.521	74.81*	@	10.70	1.19058E+001	2.63369E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	5.75253E-001	1.84652E-001
Bi-214	0.699	609.31*		46.30	3.55774E-001	1.42014E-001
		1120.29*		15.10	2.28529E-001	2.56217E-001
		1764.49		15.80		
PB-214	0.583	74.82*	@	6.21	2.05141E+001	4.77602E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	4.89229E-001	3.55775E-001
		351.92*		37.20	4.25740E-001	2.01918E-001
Ac-228	0.632	338.32		11.40		
		911.07*		27.70	8.31368E-001	2.36463E-001
		969.11*		16.60	7.21715E-001	3.16195E-001

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

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

I N T E R 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	1.465479E-001	7.639728E-002
K-40		0.979	1.766683E+001	1.836955E+000
Cs-137		1.000	2.350808E-001	7.713508E-002
TL-208		0.752	3.265822E-001	8.066336E-002
Pb-212	@	0.521	5.752527E-001	1.846516E-001
Bi-214		0.699	3.258691E-001	1.242101E-001
PB-214	@	0.583	4.412082E-001	1.756073E-001
Ac-228		0.632	7.920385E-001	1.893667E-001

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

Errors quoted at 1.960 sigma

U N I D E N T I 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	7.1499E-001	17.57

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: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	8.13E-002	1.0833E-001
		1332.49	100.00	8.1272E-002		5.6980E-002
	Nb-94	702.63	100.00	9.9954E-002	9.27E-002	-4.7932E-002
		871.10	100.00	9.2669E-002		1.8193E-003
	Ag-108m	79.20	7.10	5.4129E+000	1.20E-001	-6.2615E+000
		433.93	89.90	1.3103E-001		4.0651E-002
		614.37	90.40	1.3910E-001		7.0826E-002
		722.95	90.50	1.2036E-001		7.5002E-002
	Sb-125	176.33	6.89	2.4987E+000	4.08E-001	-2.4934E+000
		427.89	29.33	4.0825E-001		3.2715E-003
		463.38	10.35	1.1413E+000		1.1913E+000
		600.56	17.80	5.9925E-001		-3.2932E-001
		606.64	5.02	2.6063E+000		3.9300E+000
		635.90	11.32	9.2401E-001		1.8439E-001
	Cs-134	563.23	8.38	1.3552E+000	1.20E-001	-2.2470E-001
		569.32	15.43	7.2076E-001		4.0430E-001
		604.70	97.60	1.3430E-001		-3.0344E-002
		795.84	85.40	1.1974E-001		-4.0594E-002
		801.93	8.73	1.1339E+000		-8.3126E-001
+	Cs-137	661.65*	85.12	1.0500E-001	1.05E-001	2.3508E-001
	Eu-152	121.78	28.40	7.7777E-001	3.43E-001	3.6111E-001
		244.69	7.49	2.0608E+000		-1.7655E+000
		344.27	26.50	4.6601E-001		-3.2887E-001
		778.89	12.74	7.3996E-001		-8.9505E-001
		867.32	4.16	2.3895E+000		-1.5609E+000
		964.01	14.40	8.8153E-001		3.5668E-001
		1085.78	10.00	1.0209E+000		4.1515E-001
		1112.02	13.30	6.7399E-001		-9.0470E-001
		1407.95	20.70	3.4302E-001		7.9860E-002
	Eu-154	123.07	40.50	5.3759E-001	2.38E-001	-8.6510E-002
		247.94	6.60	2.2384E+000		-1.4034E+000
		591.81	4.83	2.3051E+000		9.0774E-001
		723.30	19.70	5.4915E-001		9.6092E-002
		756.87	4.33	2.2593E+000		-9.0344E-001
		873.19	11.50	7.8633E-001		-3.0799E-001
		996.32	10.30	9.0268E-001		3.0128E-001
		1004.76	17.90	5.2451E-001		3.2066E-001
		1274.45	35.50	2.3795E-001		-3.1234E-002
	Eu-155	86.54	30.90	1.1007E+000	1.10E+000	1.6544E+000
		105.31	20.70	1.2115E+000		-3.5955E-001
	Am-241	59.54	35.90	1.3288E+000	1.33E+000	-7.3948E-001
	Cm-243	228.19	10.56	1.3962E+000	1.00E+000	-5.5267E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	1.0035E+000	1.00E+000	1.8040E-001

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

Report Generated On 5/17/2006 10:30:49 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: RED6264
Sample ID: OOL-08-05-118
Sample Title: OOL-08-05-118-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/17/2006 10:20:41 AM
Live Time: 600.0 seconds
Real Time: 601.0 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-08-05-118
Title: OOL-08-05-118-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	309	291.54	72.79	1.53	3.43E+002	72.34	1.49E+003
m	2	285-	309	300.45	75.02	1.54	8.33E+002	81.26	2.31E+003
	3	948-	960	954.85	238.66	1.20	2.44E+002	64.49	3.18E+002
	4	1027-	1036	1031.38	257.80	0.76	3.53E+001	40.16	1.67E+002
	5	1174-	1184	1179.53	294.84	1.01	7.02E+001	41.71	1.61E+002
	6	1346-	1357	1351.82	337.93	1.44	5.08E+001	42.34	1.66E+002
	7	1400-	1414	1407.57	351.87	1.18	1.14E+002	49.73	1.84E+002
	8	2032-	2051	2041.73	510.45	1.43	1.26E+002	47.64	1.33E+002
	9	2321-	2342	2331.61	582.94	1.41	2.05E+002	49.97	1.18E+002
	10	2426-	2448	2437.27	609.36	1.20	2.01E+002	44.42	8.05E+001
	11	3635-	3653	3644.66	911.29	1.70	9.13E+001	38.30	8.57E+001
	12	3867-	3885	3875.80	969.09	2.05	6.71E+001	33.78	6.79E+001
	13	4474-	4491	4481.79	1120.63	0.45	6.40E+001	29.32	4.90E+001
	14	5831-	5860	5845.13	1461.55	2.31	1.10E+003	68.38	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: 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	0.990	511.00*		100.00	1.77819E-001	7.12149E-002
K-40	0.983	1460.81*		10.67	1.90868E+001	1.94627E+000
TL-208	0.750	277.35		6.80		
		510.84*		21.60	8.23238E-001	3.36483E-001
		583.14*		84.20	3.56917E-001	9.88285E-002
		860.37		12.46		
Pb-212	0.521	74.81*	@	10.70	1.23510E+001	2.70398E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.12696E-001	1.88230E-001
Bi-214	0.699	609.31*		46.30	6.45771E-001	1.63687E-001
		1120.29*		15.10	7.35863E-001	3.46128E-001
		1764.49		15.80		
PB-214	0.582	74.82*	@	6.21	2.12811E+001	4.90847E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	4.34717E-001	2.68417E-001
		351.92*		37.20	3.83676E-001	1.78985E-001
Ac-228	0.998	338.32*		11.40	5.51072E-001	4.66966E-001
		911.07*		27.70	5.39624E-001	2.34851E-001
		969.11*		16.60	6.73773E-001	3.46437E-001

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

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

I N T E R 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		0.990	1.007253E-001	7.430302E-002
K-40		0.983	1.908684E+001	1.946274E+000
TL-208		0.750	3.569174E-001	9.814162E-002
Pb-212	@	0.521	6.126960E-001	1.882304E-001
Bi-214		0.699	6.622368E-001	1.479747E-001
PB-214	@	0.582	3.993856E-001	1.489144E-001
Ac-228		0.998	5.773146E-001	1.794643E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.79	5.7158E-001	21.09
4	257.80	5.8804E-002	113.83

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

Errors quoted at 1.960 sigma

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

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.0992E-001	8.84E-002	2.4193E-002
	1332.49	100.00	8.8391E-002		2.2657E-002
Nb-94	702.63	100.00	1.0954E-001	9.83E-002	-7.8385E-002
	871.10	100.00	9.8290E-002		-5.0436E-002
Ag-108m	79.20	7.10	5.3815E+000	1.25E-001	-8.3998E+000
	433.93	89.90	1.2626E-001		-9.7803E-002
	614.37	90.40	1.4763E-001		7.6609E-003
	722.95	90.50	1.2527E-001		1.6682E-001
Sb-125	176.33	6.89	2.4232E+000	4.12E-001	1.0822E+000
	427.89	29.33	4.1215E-001		5.4335E-001
	463.38	10.35	1.1878E+000		3.4302E-001
	600.56	17.80	5.9401E-001		-1.6041E-001
	606.64	5.02	2.8232E+000		3.2316E-001
	635.90	11.32	8.6550E-001		-4.2603E-001
Cs-134	563.23	8.38	1.2757E+000	1.24E-001	-9.7426E-001
	569.32	15.43	7.3589E-001		7.5725E-002
	604.70	97.60	1.4071E-001		-3.5345E-002
	795.84	85.40	1.2392E-001		9.9268E-002
	801.93	8.73	1.1635E+000		-1.5059E+000
Cs-137	661.65	85.12	1.3624E-001	1.36E-001	1.2511E-001
Eu-152	121.78	28.40	7.7030E-001	3.66E-001	1.4460E-001
	244.69	7.49	2.0535E+000		-2.2352E+000
	344.27	26.50	4.7433E-001		-4.8749E-001
	778.89	12.74	8.2280E-001		-1.1584E-001
	867.32	4.16	2.4742E+000		8.4356E-001
	964.01	14.40	8.6261E-001		2.4560E-001
	1085.78	10.00	9.7020E-001		4.6330E-001
	1112.02	13.30	7.8024E-001		-8.7909E-001
	1407.95	20.70	3.6611E-001		1.0623E-001
Eu-154	123.07	40.50	5.3353E-001	2.60E-001	1.1295E-001
	247.94	6.60	2.1826E+000		-3.4890E+000
	591.81	4.83	2.3187E+000		6.2480E-001
	723.30	19.70	5.6812E-001		2.9743E-001
	756.87	4.33	2.3181E+000		9.5028E-001
	873.19	11.50	8.6298E-001		-4.6893E-001
	996.32	10.30	9.4522E-001		7.4657E-001
	1004.76	17.90	5.3024E-001		2.2912E-001
	1274.45	35.50	2.6025E-001		-2.4340E-001
Eu-155	86.54	30.90	1.0788E+000	1.08E+000	2.0964E+000
	105.31	20.70	1.2200E+000		8.4410E-001
Am-241	59.54	35.90	1.3202E+000	1.32E+000	-9.1963E-001
Cm-243	228.19	10.56	1.3735E+000	9.83E-001	4.0330E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.8254E-001	9.83E-001	3.2401E-001

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

Report Generated On 5/18/2006 2:36:29 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-08-05-119-F-
Sample Title: OOL-08-05-119-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/18/2006 2:26:26 PM
Live Time: 600.0 seconds
Real Time: 601.0 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-08-05-119-F-
Title: OOL-08-05-119-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	309	291.79	72.85	1.39	4.13E+002	66.32	1.60E+003
m	2	282-	309	300.21	74.95	1.39	6.80E+002	74.58	1.83E+003
M	3	332-	354	339.73	84.84	1.17	2.21E+002	57.74	1.19E+003
m	4	332-	354	348.47	87.02	1.18	1.07E+002	52.33	1.24E+003
	5	943-	962	953.85	238.41	0.69	2.99E+002	84.50	4.42E+002
	6	1176-	1186	1180.73	295.14	1.61	5.01E+001	41.30	1.65E+002
	7	1398-	1416	1407.25	351.79	1.35	1.20E+002	56.44	2.09E+002
	8	2031-	2053	2041.55	510.41	0.92	1.35E+002	54.66	1.65E+002
	9	2319-	2344	2332.09	583.06	1.60	1.93E+002	50.72	1.09E+002
	10	2425-	2447	2435.63	608.95	1.58	1.98E+002	46.46	9.28E+001
	11	2636-	2653	2644.99	661.30	0.32	5.26E+001	32.30	6.74E+001
	12	3635-	3655	3643.91	911.10	1.81	1.33E+002	34.04	4.65E+001
	13	3867-	3883	3875.34	968.97	0.62	6.56E+001	28.89	4.84E+001
	14	5827-	5857	5843.49	1461.14	2.20	1.13E+003	68.66	1.96E+001
	15	7052-	7068	7059.73	1765.28	1.62	5.75E+001	17.97	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: 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	0.989	511.00*	100.00	1.90359E-001	8.10959E-002
K-40	0.997	1460.81*	10.67	1.95582E+001	1.97953E+000
Cs-137	0.996	661.65*	85.12	9.47506E-002	5.91971E-002
TL-208	0.751	277.35	6.80		
		510.84*	21.60	8.81291E-001	3.82280E-001
		583.14*	84.20	3.36803E-001	9.87953E-002
		860.37	12.46		
Pb-212	0.676	74.81* @	10.70	1.00879E+001	2.26602E+000
		77.11 @	18.00		
		87.30* @	8.00	1.72780E+000	9.09477E-001
		238.63*	44.60	7.49685E-001	2.42425E-001
Bi-214	0.692	609.31*	46.30	6.38202E-001	1.69017E-001
		1120.29	15.10		
		1764.49*	15.80	6.97624E-001	2.28913E-001
PB-214	0.670	74.82* @	6.21	1.73817E+001	4.10324E+000
		77.11 @	10.50		
		87.30* @	4.67	2.95982E+000	1.57395E+000
		241.98	7.49		
		295.21*	19.20	3.09985E-001	2.61018E-001
		351.92*	37.20	4.01549E-001	2.01177E-001
Ac-228	0.633	338.32	11.40		
		911.07*	27.70	7.89120E-001	2.20812E-001
		969.11*	16.60	6.58837E-001	2.98126E-001

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

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

I N T E R 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		0.989	1.176095E-001	8.382313E-002
	K-40		0.997	1.955825E+001	1.979530E+000
	Cs-137		0.996	9.475056E-002	5.919706E-002
X	Eu-155		0.328		
	TL-208		0.751	3.368031E-001	9.818370E-002
	Pb-212	@	0.676	7.496849E-001	2.424255E-001
	Bi-214		0.692	6.591671E-001	1.359704E-001
	PB-214	@	0.670	3.674262E-001	1.593412E-001
	Ac-228		0.633	7.429675E-001	1.774415E-001

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

Errors quoted at 1.960 sigma

U N I D E N T I 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	6.8813E-001	16.06
M 3	84.84	3.6912E-001	26.07

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

Errors quoted at 1.960 sigma

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

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

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
	Co-60	1173.22	100.00	1.1429E-001	8.08E-002	1.4405E-001
		1332.49	100.00	8.0805E-002		1.1580E-003
	Nb-94	702.63	100.00	1.0316E-001	9.36E-002	1.8125E-002
		871.10	100.00	9.3630E-002		5.1802E-002
	Ag-108m	79.20	7.10	5.1469E+000	1.24E-001	-2.5316E+000
		433.93	89.90	1.2684E-001		2.8647E-002
		614.37	90.40	1.4279E-001		2.7402E-003
		722.95	90.50	1.2446E-001		7.1361E-002
	Sb-125	176.33	6.89	2.3305E+000	3.84E-001	6.9776E-001
		427.89	29.33	3.8402E-001		-7.2206E-002
		463.38	10.35	1.0784E+000		-1.5830E-001
		600.56	17.80	5.6842E-001		1.0675E-001
		606.64	5.02	2.8057E+000		5.2465E+000
		635.90	11.32	9.1085E-001		-3.5739E-001
	Cs-134	563.23	8.38	1.2836E+000	1.18E-001	1.0632E+000
		569.32	15.43	6.6876E-001		-5.4279E-001
		604.70	97.60	1.4272E-001		1.7219E-002
		795.84	85.40	1.1842E-001		-2.4530E-002
		801.93	8.73	1.0898E+000		-1.6833E+000
+	Cs-137	661.65*	85.12	9.2489E-002	9.25E-002	9.4751E-002
	Eu-152	121.78	28.40	7.3402E-001	3.46E-001	8.1592E-002
		244.69	7.49	1.9702E+000		-2.9765E-001
		344.27	26.50	4.4507E-001		-6.2017E-001
		778.89	12.74	7.9692E-001		-2.6809E-001
		867.32	4.16	2.3823E+000		-3.4328E+000
		964.01	14.40	8.7298E-001		5.6244E-001
		1085.78	10.00	9.5268E-001		-1.9543E-001
		1112.02	13.30	7.4486E-001		-1.4152E+000
		1407.95	20.70	3.4566E-001		-3.0183E-001
	Eu-154	123.07	40.50	5.1029E-001	2.42E-001	-1.1079E-001
		247.94	6.60	2.0928E+000		-4.9493E-001
		591.81	4.83	2.0592E+000		6.8007E-002
		723.30	19.70	5.7306E-001		3.3523E-001
		756.87	4.33	2.3880E+000		-1.4495E+000
		873.19	11.50	8.2559E-001		1.3861E-001
		996.32	10.30	9.7663E-001		-1.8659E-002
		1004.76	17.90	5.5614E-001		1.3262E-001
		1274.45	35.50	2.4161E-001		-1.7008E-001
	Eu-155	86.54*	30.90	6.9466E-001	6.95E-001	4.4733E-001
		105.31	20.70	1.1832E+000		1.3199E+000
	Am-241	59.54	35.90	1.4093E+000	1.41E+000	9.8389E-001
	Cm-243	228.19	10.56	1.3919E+000	9.86E-001	-2.2402E-002

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	-4.1952E-001

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

Report Generated On 5/18/2006 2:00:22 PM

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

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-08-05-120-F-
Sample Title: OOL-08-05-120-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/18/2006 1:50:20 PM
Live Time: 600.0 seconds
Real Time: 601.0 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-08-05-120-F-
Title: OOL-08-05-120-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	294-	309	300.36	74.99	0.55	3.19E+002	145.77	1.72E+003
2	833-	842	837.47	209.31	0.68	4.22E+001	45.64	2.21E+002
3	946-	961	953.93	238.43	1.44	2.30E+002	70.26	3.51E+002
4	1398-	1414	1406.74	351.66	1.44	1.28E+002	52.59	1.89E+002
5	2035-	2053	2043.92	511.00	0.43	1.03E+002	43.23	1.12E+002
6	2318-	2342	2330.51	582.66	1.45	2.01E+002	47.52	9.37E+001
7	2426-	2447	2435.68	608.96	1.62	1.70E+002	43.84	8.85E+001
8	3633-	3651	3642.69	910.80	0.86	9.24E+001	34.23	6.26E+001
9	4472-	4486	4479.73	1120.11	0.33	5.39E+001	26.60	4.51E+001
10	5829-	5857	5843.48	1461.14	1.76	9.95E+002	65.36	2.54E+001
11	7051-	7066	7059.13	1765.13	1.23	4.72E+001	18.76	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: RED6264

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	1.000	511.00*	100.00	1.44436E-001	6.38969E-002
K-40	0.997	1460.81*	10.67	1.72089E+001	1.79449E+000
TL-208	0.747	277.35	6.80		
		510.84*	21.60	6.68684E-001	3.00817E-001
		583.14*	84.20	3.51290E-001	9.47053E-002
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	4.73846E+000	2.35310E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.78035E-001	1.98240E-001
Bi-214	0.995	609.31*	46.30	5.45920E-001	1.56355E-001
		1120.29*	15.10	6.19479E-001	3.12886E-001
		1764.49*	15.80	5.73007E-001	2.34678E-001

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

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

I N T E R 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	6.855713E-002	6.704594E-002
K-40	0.997	1.720890E+001	1.794491E+000
TL-208	0.747	3.512901E-001	9.401080E-002
Pb-212 @	0.520	5.780354E-001	1.982405E-001
Bi-214	0.995	5.638657E-001	1.201448E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	209.31	7.0296E-002	108.20
4	351.66	2.1286E-001	41.18
8	910.80	1.5396E-001	37.06

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	1.1760E-001	9.09E-002	8.0293E-002
	1332.49	100.00	9.0909E-002		1.1233E-001
Nb-94	702.63	100.00	1.0447E-001	9.65E-002	1.5415E-002
	871.10	100.00	9.6454E-002		-7.9220E-002
Ag-108m	79.20	7.10	5.0502E+000	1.17E-001	-6.1127E+000
	433.93	89.90	1.2190E-001		-3.0101E-002
	614.37	90.40	1.3733E-001		-2.1098E-002
	722.95	90.50	1.1726E-001		1.0594E-001
Sb-125	176.33	6.89	2.3094E+000	3.78E-001	9.1769E-001
	427.89	29.33	3.7801E-001		-1.0179E-001
	463.38	10.35	1.1051E+000		5.0044E-001
	600.56	17.80	5.9533E-001		1.4348E-001
	606.64	5.02	2.7097E+000		6.2346E+000
	635.90	11.32	8.9300E-001		-1.6700E-002
Cs-134	563.23	8.38	1.2862E+000	1.16E-001	5.7378E-001
	569.32	15.43	6.6424E-001		2.6702E-001
	604.70	97.60	1.3829E-001		-9.7305E-003
	795.84	85.40	1.1574E-001		-6.6721E-002
	801.93	8.73	1.0617E+000		-1.2939E+000
Cs-137	661.65	85.12	1.3889E-001	1.39E-001	1.2442E-001
Eu-152	121.78	28.40	7.2996E-001	3.21E-001	9.1734E-002
	244.69	7.49	1.9003E+000		-2.3097E-001
	344.27	26.50	4.2881E-001		-6.3433E-001
	778.89	12.74	7.2074E-001		-1.3918E-001
	867.32	4.16	2.2942E+000		-1.2653E+000
	964.01	14.40	8.2888E-001		4.0777E-001
	1085.78	10.00	9.3841E-001		1.4502E+000
	1112.02	13.30	7.2383E-001		-8.6366E-001
	1407.95	20.70	3.2098E-001		-2.6912E-001
Eu-154	123.07	40.50	5.0356E-001	2.56E-001	-2.5034E-001
	247.94	6.60	2.0328E+000		-1.3399E+000
	591.81	4.83	2.0592E+000		-1.3380E+000
	723.30	19.70	5.4006E-001		5.8854E-001
	756.87	4.33	2.1988E+000		-5.7937E-001
	873.19	11.50	8.6037E-001		-3.9121E-002
	996.32	10.30	8.5081E-001		-6.9385E-001
	1004.76	17.90	5.0293E-001		2.2554E-001
	1274.45	35.50	2.5573E-001		1.3083E-001
Eu-155	86.54	30.90	1.0199E+000	1.02E+000	1.0818E+000
	105.31	20.70	1.1397E+000		6.3870E-001
Am-241	59.54	35.90	1.2699E+000	1.27E+000	1.7732E-001
Cm-243	228.19	10.56	1.3075E+000	9.37E-001	-1.3718E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.3749E-001	9.37E-001	-9.5255E-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 5/18/2006 10:28:57 AM

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

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-08-05-121-F-
Sample Title: OOL-08-05-121-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/18/2006 10:18:55 AM
Live Time: 600.0 seconds
Real Time: 600.9 seconds

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

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

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

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

Filename: RED6264
Log Number: OOL-08-05-121-F-
Title: OOL-08-05-121-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	309	291.93	72.88	1.42	4.02E+002	66.68	1.49E+003
m	2	283-	309	300.47	75.02	1.43	6.60E+002	73.58	1.94E+003
	3	944-	964	954.45	238.56	0.81	2.01E+002	83.21	4.41E+002
	4	1396-	1415	1407.83	351.93	0.37	1.68E+002	54.63	1.74E+002
	5	2033-	2054	2042.77	510.71	0.36	1.22E+002	47.54	1.24E+002
	6	2323-	2342	2332.28	583.11	1.32	1.66E+002	43.30	9.17E+001
	7	2428-	2448	2437.41	609.40	1.31	1.76E+002	44.73	9.54E+001
	8	3637-	3656	3645.87	911.59	1.52	1.33E+002	36.26	5.97E+001
	9	3872-	3883	3877.65	969.55	1.29	3.31E+001	24.74	4.99E+001
	10	4477-	4494	4484.31	1121.26	0.37	4.59E+001	26.64	4.11E+001
	11	5327-	5343	5334.44	1333.85	0.53	4.99E+001	23.30	2.91E+001
	12	5832-	5861	5847.24	1462.08	1.85	9.76E+002	62.88	1.13E+001
	13	7059-	7075	7066.04	1766.86	0.98	5.91E+001	16.74	4.86E+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: RED6264

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	0.997	511.00*		100.00	1.71613E-001	7.08068E-002
K-40	0.950	1460.81*		10.67	1.68843E+001	1.74720E+000
TL-208	0.752	277.35		6.80		
		510.84*		21.60	7.94504E-001	3.34169E-001
		583.14*		84.20	2.90251E-001	8.45060E-002
		860.37		12.46		
Pb-212	0.521	74.81*	@	10.70	9.78780E+000	2.20687E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	5.03935E-001	2.23282E-001
Bi-214	0.959	609.31*		46.30	5.65549E-001	1.60014E-001
		1120.29*		15.10	5.28375E-001	3.11572E-001
		1764.49*		15.80	7.17609E-001	2.15434E-001
Ac-228	0.627	338.32		11.40		
		911.07*		27.70	7.88339E-001	2.32784E-001
		969.11*		16.60	3.32509E-001	2.50850E-001

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

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

I N T E R 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	1.089187E-001	7.309321E-002
K-40	0.950	1.688430E+001	1.747202E+000
TL-208	0.752	2.902505E-001	8.397497E-002
Pb-212 @	0.521	5.039352E-001	2.232823E-001
Bi-214	0.959	6.063568E-001	1.187593E-001
Ac-228	0.627	5.774274E-001	1.706330E-001

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

Errors quoted at 1.960 sigma

U N I D E N T I 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	6.6922E-001	16.61
4	351.93	2.8001E-001	32.51
11	1333.85	8.3143E-002	46.70

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	1.1490E-001	1.01E-001	1.4872E-001
	1332.49	100.00	1.0143E-001		1.5782E-001
Nb-94	702.63	100.00	1.0157E-001	9.07E-002	1.0306E-001
	871.10	100.00	9.0714E-002		-9.8731E-002
Ag-108m	79.20	7.10	5.0909E+000	1.19E-001	-6.2509E+000
	433.93	89.90	1.2310E-001		4.0413E-002
	614.37	90.40	1.4596E-001		-3.3618E-002
	722.95	90.50	1.1925E-001		2.9673E-002
Sb-125	176.33	6.89	2.3221E+000	3.52E-001	1.1139E+000
	427.89	29.33	3.5228E-001		-2.8980E-002
	463.38	10.35	1.1345E+000		5.2230E-001
	600.56	17.80	5.7934E-001		-4.1868E-001
	606.64	5.02	2.7385E+000		-7.6602E-001
	635.90	11.32	9.2618E-001		1.8980E-001
Cs-134	563.23	8.38	1.2967E+000	1.15E-001	3.2365E-001
	569.32	15.43	6.4892E-001		-5.3549E-001
	604.70	97.60	1.3621E-001		-5.7853E-002
	795.84	85.40	1.1540E-001		1.0278E-002
	801.93	8.73	1.0217E+000		-1.4839E+000
Cs-137	661.65	85.12	1.4019E-001	1.40E-001	9.9335E-002
Eu-152	121.78	28.40	7.3462E-001	3.43E-001	8.1899E-002
	244.69	7.49	1.9212E+000		1.0887E+000
	344.27	26.50	4.4175E-001		-1.1946E-001
	778.89	12.74	7.6785E-001		-5.1083E-001
	867.32	4.16	2.4039E+000		8.6657E-001
	964.01	14.40	7.8220E-001		-2.8518E-001
	1085.78	10.00	1.0176E+000		3.6253E-001
	1112.02	13.30	7.3443E-001		-2.4199E-001
	1407.95	20.70	3.4302E-001		3.4615E-001
Eu-154	123.07	40.50	5.0729E-001	2.53E-001	-2.6409E-002
	247.94	6.60	2.0456E+000		-1.5105E+000
	591.81	4.83	2.1977E+000		-7.6655E-001
	723.30	19.70	5.4398E-001		2.3233E-001
	756.87	4.33	2.1988E+000		-8.6560E-001
	873.19	11.50	7.7180E-001		-6.4900E-001
	996.32	10.30	8.4723E-001		5.7987E-001
	1004.76	17.90	4.7610E-001		7.8742E-002
	1274.45	35.50	2.5343E-001		2.5391E-001
Eu-155	86.54	30.90	1.0397E+000	1.04E+000	1.2413E+000
	105.31	20.70	1.1622E+000		9.3958E-001
Am-241	59.54	35.90	1.2609E+000	1.26E+000	-9.9417E-002
Cm-243	228.19	10.56	1.3611E+000	9.75E-001	3.5387E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.7545E-001	9.75E-001	-1.0399E-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 5/18/2006 10:49:09 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-08-05-122-F-
Sample Title: OOL-08-05-122-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/18/2006 10:39:07 AM
Live Time: 600.0 seconds
Real Time: 601.0 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-08-05-122-F-
Title: OOL-08-05-122-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	309	291.85	72.86	1.16	2.68E+002	59.01	1.37E+003
m	2	283-	309	300.18	74.95	1.17	5.43E+002	69.07	1.48E+003
	3	333-	343	339.06	84.67	1.02	1.24E+002	93.80	9.11E+002
	4	948-	963	954.59	238.59	0.79	2.20E+002	72.45	3.77E+002
	5	1403-	1415	1407.53	351.86	1.32	1.39E+002	43.71	1.35E+002
	6	2323-	2342	2332.10	583.06	1.53	1.48E+002	43.82	1.00E+002
	7	2430-	2446	2437.43	609.40	1.35	1.51E+002	40.81	8.97E+001
	8	2638-	2653	2646.96	661.80	0.86	6.18E+001	35.15	8.62E+001
	9	3636-	3656	3645.25	911.44	1.36	1.17E+002	39.47	7.96E+001
	10	3870-	3886	3875.87	969.11	1.01	6.10E+001	28.72	4.90E+001
	11	4689-	4707	4695.15	1173.98	1.08	6.62E+001	30.13	4.98E+001
	12	5325-	5342	5333.24	1333.55	0.54	4.25E+001	24.15	3.35E+001
	13	5832-	5860	5847.05	1462.03	2.21	9.68E+002	64.09	2.18E+001
	14	7056-	7069	7062.87	1766.07	0.50	3.93E+001	15.60	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: 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	0.954	1460.81*	10.67	1.67537E+001	1.75212E+000
Co-60	0.973	1173.22*	100.00	1.16432E-001	5.38019E-002
		1332.49*	100.00	7.70280E-002	4.41939E-002
Cs-137	0.999	661.65*	85.12	1.11269E-001	6.46238E-002
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.57919E-001	8.35296E-002
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	8.05984E+000	1.88328E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.51504E-001	2.01344E-001
Bi-214	0.682	609.31*	46.30	4.87294E-001	1.44495E-001
		1120.29	15.10		
		1764.49*	15.80	4.76499E-001	1.95140E-001
Ac-228	0.631	338.32	11.40		
		911.07*	27.70	6.94292E-001	2.46679E-001
		969.11*	16.60	6.12672E-001	2.95420E-001

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

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

I N T E R 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		0.954	1.675368E+001	1.752116E+000
Co-60		0.973	9.290326E-002	3.414994E-002
Cs-137		0.999	1.112694E-001	6.462380E-002
TL-208		0.471	2.579186E-001	8.352961E-002
Pb-212	@	0.521	5.515045E-001	2.013443E-001
Bi-214		0.682	4.834711E-001	1.161252E-001
Ac-228		0.631	6.607620E-001	1.893475E-001

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

Errors quoted at 1.960 sigma

U N I D E N T I 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	4.4692E-001	22.00
3	84.67	2.0679E-001	75.60
5	351.86	2.3218E-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:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
+	Co-60	1173.22*	100.00	8.0283E-002	6.73E-002	1.1643E-001
		1332.49*	100.00	6.7266E-002		7.7028E-002
	Nb-94	702.63	100.00	9.8031E-002	9.80E-002	8.9400E-002
		871.10	100.00	1.0098E-001		5.8151E-002
	Ag-108m	79.20	7.10	5.0259E+000	1.16E-001	-2.8497E+000
		433.93	89.90	1.2703E-001		1.0131E-001
		614.37	90.40	1.4742E-001		5.9857E-002
		722.95	90.50	1.1640E-001		5.0864E-002
	Sb-125	176.33	6.89	2.3618E+000	3.75E-001	-4.1847E-001
		427.89	29.33	3.7497E-001		-4.1422E-002
		463.38	10.35	1.0784E+000		3.6245E-001
		600.56	17.80	5.7527E-001		-1.7585E-001
		606.64	5.02	2.7670E+000		3.7630E+000
		635.90	11.32	8.8621E-001		-1.2778E-001
	Cs-134	563.23	8.38	1.2570E+000	1.21E-001	5.4307E-002
		569.32	15.43	6.7027E-001		1.6823E-001
		604.70	97.60	1.4089E-001		-7.1524E-002
		795.84	85.40	1.2072E-001		7.6307E-002
		801.93	8.73	1.1273E+000		-1.3235E+000
+	Cs-137	661.65*	85.12	1.0035E-001	1.00E-001	1.1127E-001
	Eu-152	121.78	28.40	7.3604E-001	3.43E-001	-2.1769E-001
		244.69	7.49	1.8804E+000		-9.3738E-001
		344.27	26.50	4.3841E-001		-8.7644E-001
		778.89	12.74	7.4703E-001		-5.5212E-001
		867.32	4.16	2.4463E+000		-9.1645E-001
		964.01	14.40	8.0869E-001		-3.1982E-001
		1085.78	10.00	9.7367E-001		1.3263E-001
		1112.02	13.30	7.0489E-001		-7.3203E-001
		1407.95	20.70	3.4302E-001		8.9156E-002
	Eu-154	123.07	40.50	5.1100E-001	2.39E-001	-2.4981E-001
		247.94	6.60	1.9743E+000		-1.3875E+000
		591.81	4.83	2.0386E+000		-9.3189E-001
		723.30	19.70	5.3744E-001		3.8622E-001
		756.87	4.33	2.2725E+000		-1.2249E+000
		873.19	11.50	8.5511E-001		2.8220E-001
		996.32	10.30	9.3235E-001		3.4771E-001
		1004.76	17.90	5.1286E-001		-1.5898E-001
		1274.45	35.50	2.3918E-001		4.8003E-002
	Eu-155	86.54	30.90	1.0265E+000	1.03E+000	9.0922E-001
		105.31	20.70	1.1434E+000		7.3833E-001
	Am-241	59.54	35.90	1.2721E+000	1.27E+000	8.7177E-002
	Cm-243	228.19	10.56	1.3513E+000	9.79E-001	3.1029E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.7861E-001	9.79E-001	5.0364E-001

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

Report Generated On 5/18/2006 11:07:27 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: RED6264

Spectrum File: RED6264
Sample ID: OOL-08-05-123-F-
Sample Title: OOL-08-05-123-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/18/2006 10:57:24 AM
Live Time: 600.0 seconds
Real Time: 601.0 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-08-05-123-F-
Title: OOL-08-05-123-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	309	291.54	72.79	1.47	2.91E+002	65.81	1.32E+003
m	2	286-	309	300.35	74.99	1.47	6.14E+002	73.85	2.12E+003
	3	947-	963	954.43	238.55	1.40	1.78E+002	76.97	4.33E+002
	4	1398-	1415	1407.47	351.84	1.39	1.23E+002	51.82	1.77E+002
	5	2035-	2050	2043.66	510.93	2.19	1.13E+002	41.25	1.10E+002
	6	2195-	2207	2201.77	550.47	0.73	2.22E+001	22.96	4.38E+001
	7	2323-	2341	2332.96	583.28	1.98	1.57E+002	41.77	8.72E+001
	8	2427-	2447	2437.27	609.36	1.53	1.96E+002	42.57	7.60E+001
	9	2638-	2653	2647.05	661.82	0.45	8.80E+001	36.15	8.40E+001
	10	3636-	3655	3645.53	911.51	1.34	1.64E+002	36.48	5.22E+001
	11	3732-	3743	3737.81	934.58	0.41	1.60E+001	17.60	2.40E+001
	12	3868-	3884	3876.30	969.21	0.30	6.73E+001	27.81	4.27E+001
	13	4472-	4491	4482.38	1120.77	1.48	7.39E+001	28.72	4.01E+001
	14	5833-	5861	5847.17	1462.06	2.07	1.01E+003	65.74	2.46E+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
ANN	1.000	511.00*	100.00	1.58988E-001	6.19095E-002
K-40	0.952	1460.81*	10.67	1.75356E+001	1.81928E+000
Cs-137	0.999	661.65*	85.12	1.58381E-001	6.77038E-002
TL-208	0.751	277.35	6.80		
		510.84*	21.60	7.36054E-001	2.92854E-001
		583.14*	84.20	2.73654E-001	8.11569E-002
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	9.11183E+000	2.09508E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	4.45582E-001	2.05414E-001
Bi-214	0.698	609.31*	46.30	6.31218E-001	1.57596E-001
		1120.29*	15.10	8.50158E-001	3.42461E-001
		1764.49	15.80		
Ac-228	0.630	338.32	11.40		
		911.07*	27.70	9.68558E-001	2.42755E-001
		969.11*	16.60	6.76042E-001	2.88132E-001

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

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

I N T E R 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	9.987842E-002	6.431467E-002
K-40		0.952	1.753559E+001	1.819284E+000
Cs-137		0.999	1.583812E-001	6.770383E-002
TL-208		0.751	2.736540E-001	8.066538E-002
Pb-212	@	0.521	4.455818E-001	2.054142E-001
Bi-214		0.698	6.694804E-001	1.431642E-001
Ac-228		0.630	8.471210E-001	1.856487E-001

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

Errors quoted at 1.960 sigma

U N I D E N T I 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	4.8526E-001	22.60
4	351.84	2.0447E-001	42.24
6	550.47	3.6926E-002	103.65
11	934.58	2.6698E-002	109.89

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

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
	Co-60	1173.22	100.00	1.0569E-001	9.17E-002	-1.1964E-001
		1332.49	100.00	9.1732E-002		3.3088E-002
	Nb-94	702.63	100.00	9.6632E-002	9.55E-002	-7.1691E-002
		871.10	100.00	9.5523E-002		7.1138E-002
	Ag-108m	79.20	7.10	5.1851E+000	1.19E-001	-6.8546E+000
		433.93	89.90	1.1862E-001		8.8186E-002
		614.37	90.40	1.4257E-001		-1.8759E-002
		722.95	90.50	1.2580E-001		1.0088E-001
	Sb-125	176.33	6.89	2.2579E+000	3.71E-001	-3.4882E-001
		427.89	29.33	3.7129E-001		1.5872E-001
		463.38	10.35	1.1068E+000		5.1007E-001
		600.56	17.80	5.5446E-001		-2.7097E-002
		606.64	5.02	2.6988E+000		6.1336E+000
		635.90	11.32	8.8848E-001		-3.5220E-001
	Cs-134	563.23	8.38	1.3044E+000	1.09E-001	5.6902E-001
		569.32	15.43	6.7326E-001		-2.2459E-001
		604.70	97.60	1.3391E-001		-6.7572E-003
		795.84	85.40	1.0872E-001		7.0003E-002
		801.93	8.73	1.0142E+000		-3.4498E-001
+	Cs-137	661.65*	85.12	9.8943E-002	9.89E-002	1.5838E-001
	Eu-152	121.78	28.40	7.4126E-001	3.46E-001	1.3664E-001
		244.69	7.49	1.9134E+000		-7.4279E-002
		344.27	26.50	4.3392E-001		-4.8162E-001
		778.89	12.74	7.7013E-001		-4.5408E-002
		867.32	4.16	2.3017E+000		-2.2192E+000
		964.01	14.40	7.8412E-001		8.5447E-002
		1085.78	10.00	9.0169E-001		-1.0079E+000
		1112.02	13.30	7.3705E-001		-4.0959E-002
		1407.95	20.70	3.4566E-001		1.0025E-001
	Eu-154	123.07	40.50	5.1412E-001	2.29E-001	2.7164E-001
		247.94	6.60	2.0183E+000		-8.3632E-001
		591.81	4.83	2.1247E+000		1.1499E+000
		723.30	19.70	5.7552E-001		2.3493E-001
		756.87	4.33	2.3755E+000		-3.6221E-001
		873.19	11.50	8.1458E-001		-1.9598E-001
		996.32	10.30	9.2910E-001		-6.9316E-001
		1004.76	17.90	5.0494E-001		9.6602E-002
		1274.45	35.50	2.2915E-001		-1.3138E-001
	Eu-155	86.54	30.90	1.0478E+000	1.05E+000	1.9135E+000
		105.31	20.70	1.1527E+000		-2.1910E-001
	Am-241	59.54	35.90	1.2583E+000	1.26E+000	-3.2205E-001
	Cm-243	228.19	10.56	1.3112E+000	9.59E-001	-4.8166E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.5949E-001	9.59E-001	5.6600E-001

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

Report Generated On 5/17/2006 10:00:34 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: RED6264

Spectrum File: RED6264
Sample ID: OOL-08-05-124
Sample Title: OOL-08-05-124-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/17/2006 9:50:32 AM
Live Time: 600.0 seconds
Real Time: 601.0 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-08-05-124
Title: OOL-08-05-124-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	309	291.77	72.84	1.47	3.76E+002	67.03	1.59E+003
m	2	282-	309	300.48	75.02	1.47	6.72E+002	74.93	1.98E+003
	3	332-	344	339.14	84.69	0.82	1.42E+002	108.55	1.11E+003
	4	947-	963	954.16	238.49	1.16	3.14E+002	71.28	3.20E+002
	5	1170-	1187	1180.72	295.14	1.66	1.14E+002	52.69	1.87E+002
	6	1399-	1413	1407.38	351.82	1.16	1.37E+002	45.62	1.41E+002
	7	2324-	2343	2332.31	583.11	0.82	1.32E+002	43.01	9.94E+001
	8	2424-	2449	2436.82	609.25	0.93	1.78E+002	45.93	8.74E+001
	9	2638-	2656	2646.05	661.57	0.66	8.80E+001	32.84	5.70E+001
	10	3435-	3449	3442.47	860.73	0.74	3.28E+001	23.18	3.72E+001
	11	3635-	3653	3643.86	911.09	0.94	9.13E+001	33.92	6.17E+001
	12	3869-	3885	3876.19	969.19	0.52	7.43E+001	30.12	5.17E+001
	13	4686-	4699	4692.98	1173.44	1.11	3.70E+001	23.19	3.70E+001
	14	5832-	5859	5845.59	1461.67	2.26	1.04E+003	65.55	1.77E+001
	15	7055-	7069	7061.86	1765.81	0.69	3.58E+001	16.19	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	0.977	1460.81*		10.67	1.79664E+001	1.84459E+000
Cs-137	1.000	661.65*		85.12	1.58414E-001	6.19965E-002
TL-208	0.622	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	2.29633E-001	8.08021E-002
		860.37*		12.46	4.26339E-001	3.05329E-001
Pb-212	0.521	74.81*	@	10.70	9.96322E+000	2.24659E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.86884E-001	2.17306E-001
Bi-214	0.687	609.31*		46.30	5.72022E-001	1.63834E-001
		1120.29		15.10		
		1764.49*		15.80	4.33766E-001	2.01169E-001
PB-214	0.583	74.82*	@	6.21	1.71669E+001	4.06658E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	7.06184E-001	3.47318E-001
		351.92*		37.20	4.61575E-001	1.71600E-001
Ac-228	0.633	338.32		11.40		
		911.07*		27.70	5.40127E-001	2.09950E-001
		969.11*		16.60	7.46525E-001	3.12341E-001

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

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

I N T E R 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		0.977	1.796638E+001	1.844588E+000
Cs-137		1.000	1.584136E-001	6.199652E-002
TL-208		0.622	2.425070E-001	7.811308E-002
Pb-212	@	0.521	7.868836E-001	2.173062E-001
Bi-214		0.687	5.168890E-001	1.270350E-001
PB-214	@	0.583	5.095699E-001	1.538470E-001
Ac-228		0.633	6.043609E-001	1.742443E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.84	6.2584E-001	17.85
3	84.69	2.3595E-001	76.68
13	1173.44	6.1593E-002	62.76

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	1.1790E-001	8.80E-002	1.4143E-001
		1332.49	100.00	8.7964E-002		5.4811E-002
	Nb-94	702.63	100.00	1.0077E-001	9.58E-002	-2.3352E-002
		871.10	100.00	9.5834E-002		-3.9725E-002
	Ag-108m	79.20	7.10	5.2212E+000	1.22E-001	-1.2189E+000
		433.93	89.90	1.2509E-001		1.1115E-001
		614.37	90.40	1.3800E-001		1.5985E-002
		722.95	90.50	1.2175E-001		1.3186E-001
	Sb-125	176.33	6.89	2.2622E+000	3.71E-001	-1.8268E+000
		427.89	29.33	3.7067E-001		1.3012E-001
		463.38	10.35	1.0511E+000		-5.6265E-001
		600.56	17.80	5.7798E-001		2.8339E-001
		606.64	5.02	2.6548E+000		-3.3887E-001
		635.90	11.32	8.7936E-001		3.5238E-001
	Cs-134	563.23	8.38	1.2353E+000	1.16E-001	1.0187E+000
		569.32	15.43	6.9959E-001		4.0715E-001
		604.70	97.60	1.3602E-001		4.7832E-002
		795.84	85.40	1.1574E-001		-6.2436E-002
		801.93	8.73	1.0967E+000		-6.5726E-001
+	Cs-137	661.65*	85.12	8.7107E-002	8.71E-002	1.5841E-001
	Eu-152	121.78	28.40	7.3341E-001	3.71E-001	-1.8334E-002
		244.69	7.49	1.8643E+000		-1.8042E+000
		344.27	26.50	4.4726E-001		6.0609E-002
		778.89	12.74	7.5636E-001		-4.6062E-001
		867.32	4.16	2.3895E+000		1.5522E+000
		964.01	14.40	8.4503E-001		-2.1791E-001
		1085.78	10.00	9.2390E-001		5.7858E-001
		1112.02	13.30	7.0214E-001		-3.0087E-001
		1407.95	20.70	3.7103E-001		3.7625E-001
	Eu-154	123.07	40.50	5.0572E-001	2.35E-001	-4.9262E-001
		247.94	6.60	2.0183E+000		5.5086E-002
		591.81	4.83	2.1048E+000		6.7157E-001
		723.30	19.70	5.5935E-001		5.9025E-001
		756.87	4.33	2.1010E+000		-1.9379E+000
		873.19	11.50	8.1734E-001		-8.8850E-001
		996.32	10.30	8.7542E-001		7.6792E-002
		1004.76	17.90	5.1089E-001		-4.0555E-002
		1274.45	35.50	2.3547E-001		-7.1182E-002
	Eu-155	86.54	30.90	1.0434E+000	1.04E+000	1.8478E+000
		105.31	20.70	1.1588E+000		5.8573E-001
	Am-241	59.54	35.90	1.2865E+000	1.29E+000	-1.3853E-001
	Cm-243	228.19	10.56	1.3620E+000	9.62E-001	5.1593E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.6190E-001	9.62E-001	8.6370E-001

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

Report Generated On 5/18/2006 3:43:35 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-08-05-125-F-
Sample Title: OOL-08-05-125-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/18/2006 3:33:32 PM
Live Time: 600.0 seconds
Real Time: 601.0 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-08-05-125-F-
Title: OOL-08-05-125-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	309	292.03	72.91	1.44	4.83E+002	68.96	1.42E+003
m	2	284-	309	300.60	75.05	1.45	7.08E+002	75.56	1.99E+003
	3	333-	346	339.93	84.89	0.78	1.85E+002	119.85	1.28E+003
	4	945-	960	954.31	238.52	1.14	3.00E+002	74.64	3.82E+002
	5	1173-	1185	1179.81	294.91	1.23	7.58E+001	50.52	2.23E+002
	6	1347-	1359	1353.30	338.30	0.53	3.91E+001	45.63	1.90E+002
	7	1399-	1417	1406.32	351.56	1.89	1.46E+002	57.72	2.11E+002
	8	1843-	1855	1849.32	462.33	0.55	4.99E+001	31.34	7.81E+001
	9	2320-	2344	2331.64	582.95	2.20	2.01E+002	50.93	1.15E+002
	10	2425-	2445	2435.36	608.88	1.91	1.91E+002	47.70	1.10E+002
	11	3066-	3077	3071.35	767.92	0.65	2.16E+001	21.04	3.74E+001
	12	3634-	3656	3642.60	910.77	1.52	1.65E+002	42.09	7.48E+001
	13	3865-	3883	3872.99	968.39	0.74	4.18E+001	37.60	9.52E+001
	14	4319-	4330	4324.42	1081.27	0.51	1.56E+001	17.36	2.44E+001
	15	4473-	4489	4480.85	1120.39	0.88	4.63E+001	26.98	4.58E+001
	16	5829-	5857	5842.75	1460.96	1.90	1.30E+003	75.04	3.63E+001
	17	7052-	7067	7059.45	1765.21	1.06	5.35E+001	19.00	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: 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	2.24531E+001	2.23385E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.51125E-001	9.99637E-002
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	1.04862E+001	2.34038E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.53241E-001	2.21436E-001
Bi-214	0.993	609.31*	46.30	6.13505E-001	1.71167E-001
		1120.29*	15.10	5.31928E-001	3.15458E-001
		1764.49*	15.80	6.48726E-001	2.39487E-001
PB-214	0.580	74.82* @	6.21	1.80680E+001	4.24048E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	4.69177E-001	3.22598E-001
		351.92*	37.20	4.90312E-001	2.10518E-001
Ac-228	0.994	338.32*	11.40	4.23649E-001	4.99143E-001
		911.07*	27.70	9.77021E-001	2.73095E-001
		969.11*	16.60	4.19336E-001	3.79966E-001

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

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

I N T E R 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	2.245313E+001	2.233849E+000
TL-208		0.470	3.511255E-001	9.996365E-002
Pb-212	@	0.521	7.532410E-001	2.214363E-001
Bi-214		0.993	6.101674E-001	1.273950E-001
PB-214	@	0.580	4.839997E-001	1.763000E-001
Ac-228		0.994	7.271537E-001	2.026584E-001

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

Errors quoted at 1.960 sigma

U N I D E N T I 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	8.0453E-001	14.29
3	84.89	3.0809E-001	64.84
8	462.33	8.3125E-002	62.83
11	767.92	3.5960E-002	97.51
14	1081.27	2.6042E-002	111.10

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: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	1.1213E-001	7.79E-002	4.8713E-002
	1332.49	100.00	7.7940E-002		-6.8762E-002
Nb-94	702.63	100.00	1.0954E-001	9.61E-002	-4.2563E-002
	871.10	100.00	9.6145E-002		1.2432E-003
Ag-108m	79.20	7.10	5.3219E+000	1.25E-001	-5.7938E+000
	433.93	89.90	1.2548E-001		-3.4665E-002
	614.37	90.40	1.4804E-001		3.9431E-002
	722.95	90.50	1.3023E-001		1.3715E-001
Sb-125	176.33	6.89	2.4070E+000	3.88E-001	2.9439E-002
	427.89	29.33	3.8817E-001		7.2990E-002
	463.38	10.35	1.1293E+000		-2.6017E-001
	600.56	17.80	6.1850E-001		-9.2861E-002
	606.64	5.02	2.9354E+000		7.2631E+000
	635.90	11.32	9.3911E-001		1.7492E-001
Cs-134	563.23	8.38	1.3577E+000	1.29E-001	4.1309E-002
	569.32	15.43	7.1378E-001		-3.6700E-002
	604.70	97.60	1.4927E-001		1.5292E-003
	795.84	85.40	1.2918E-001		1.7320E-001
	801.93	8.73	1.1570E+000		-1.1365E-001
Cs-137	661.65	85.12	1.2654E-001	1.27E-001	-3.2730E-002
Eu-152	121.78	28.40	7.5061E-001	3.71E-001	-3.8363E-001
	244.69	7.49	2.0241E+000		-1.0414E+000
	344.27	26.50	4.7741E-001		-1.4221E-001
	778.89	12.74	8.2491E-001		-2.3747E-001
	867.32	4.16	2.3387E+000		-2.6894E+000
	964.01	14.40	8.9836E-001		1.6437E-001
	1085.78	10.00	1.0110E+000		4.4324E-001
	1112.02	13.30	8.2804E-001		5.7976E-001
	1407.95	20.70	3.7103E-001		3.0733E-001
Eu-154	123.07	40.50	5.2392E-001	2.61E-001	-6.0367E-002
	247.94	6.60	2.1343E+000		-1.0400E+000
	591.81	4.83	2.2404E+000		-1.1014E+000
	723.30	19.70	6.0420E-001		8.0127E-001
	756.87	4.33	2.2922E+000		-1.7934E+000
	873.19	11.50	8.5247E-001		-3.5157E-001
	996.32	10.30	9.2584E-001		-4.9295E-001
	1004.76	17.90	5.3777E-001		2.0317E-001
	1274.45	35.50	2.6137E-001		-2.0338E-001
Eu-155	86.54	30.90	1.0811E+000	1.08E+000	1.6001E+000
	105.31	20.70	1.2068E+000		3.1167E-001
Am-241	59.54	35.90	1.2921E+000	1.29E+000	-6.9592E-002
Cm-243	228.19	10.56	1.3988E+000	1.00E+000	-3.9983E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	1.0035E+000	1.00E+000	8.5483E-001

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

Report Generated On 5/18/2006 3:59:57 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: RED6264

Spectrum File: RED6264
Sample ID: OOL-08-05-126-F-
Sample Title: OOL-08-05-126-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/18/2006 3:49:55 PM
Live Time: 600.0 seconds
Real Time: 601.0 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-08-05-126-F-
Title: OOL-08-05-126-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	309	291.77	72.84	1.45	3.42E+002	67.56	1.60E+003
m	2	282-	309	300.01	74.90	1.46	7.18E+002	76.56	1.96E+003
	3	946-	963	953.64	238.35	1.51	2.50E+002	77.63	4.00E+002
	4	1174-	1183	1178.63	294.62	0.69	4.20E+001	37.60	1.41E+002
	5	1344-	1360	1352.12	338.00	1.47	5.90E+001	50.96	1.97E+002
	6	1395-	1416	1407.03	351.73	1.42	1.70E+002	58.40	1.91E+002
	7	2031-	2051	2041.94	510.50	1.47	1.08E+002	48.28	1.37E+002
	8	2322-	2340	2331.44	582.90	1.95	1.92E+002	42.12	7.97E+001
	9	2427-	2446	2434.89	608.77	1.53	1.45E+002	43.17	9.71E+001
	10	3635-	3652	3643.21	910.93	1.90	1.45E+002	33.38	4.46E+001
	11	3866-	3882	3874.66	968.80	1.32	6.09E+001	29.53	5.31E+001
	12	4471-	4487	4478.72	1119.86	1.61	6.82E+001	26.77	3.78E+001
	13	5827-	5857	5842.70	1460.95	2.44	1.16E+003	68.99	1.56E+001

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: 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	1.51200E-001	7.09331E-002
K-40	0.999	1460.81*		10.67	2.01109E+001	2.01891E+000
TL-208	0.750	277.35		6.80		
		510.84*		21.60	6.99998E-001	3.33333E-001
		583.14*		84.20	3.35546E-001	8.55148E-002
		860.37		12.46		
Pb-212	0.520	74.81*	@	10.70	1.06692E+001	2.38042E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.27866E-001	2.18240E-001
Bi-214	0.693	609.31*		46.30	4.66386E-001	1.50412E-001
		1120.29*		15.10	7.83818E-001	3.18893E-001
		1764.49		15.80		
PB-214	0.580	74.82*	@	6.21	1.83833E+001	4.31316E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.59791E-001	2.36837E-001
		351.92*		37.20	5.69607E-001	2.18101E-001
Ac-228	0.998	338.32*		11.40	6.40009E-001	5.61443E-001
		911.07*		27.70	8.59436E-001	2.20778E-001
		969.11*		16.60	6.11093E-001	3.03307E-001

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

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

I N T E R 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	7.872151E-002	7.326058E-002
K-40		0.999	2.011089E+001	2.018913E+000
TL-208		0.750	3.355464E-001	8.481281E-002
Pb-212	@	0.520	6.278660E-001	2.182400E-001
Bi-214		0.693	5.241544E-001	1.360392E-001
PB-214	@	0.580	4.274371E-001	1.604363E-001
Ac-228		0.998	7.611777E-001	1.701076E-001

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

Errors quoted at 1.960 sigma

U N I D E N T I 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	5.6961E-001	19.77

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.0831E-001	8.97E-002	8.9734E-002
	1332.49	100.00	8.9659E-002		4.5283E-002
Nb-94	702.63	100.00	1.0395E-001	9.17E-002	9.5702E-002
	871.10	100.00	9.1697E-002		1.2412E-002
Ag-108m	79.20	7.10	5.0946E+000	1.16E-001	-5.8610E+000
	433.93	89.90	1.2210E-001		-1.4388E-002
	614.37	90.40	1.3866E-001		2.3361E-002
	722.95	90.50	1.1611E-001		-6.4427E-002
Sb-125	176.33	6.89	2.3649E+000	3.48E-001	1.0602E+000
	427.89	29.33	3.4835E-001		-1.4618E-001
	463.38	10.35	1.0530E+000		-1.4478E-001
	600.56	17.80	5.9005E-001		-1.4817E-001
	606.64	5.02	2.7242E+000		5.6667E+000
	635.90	11.32	8.9525E-001		5.6613E-001
Cs-134	563.23	8.38	1.2270E+000	1.18E-001	2.9325E-001
	569.32	15.43	6.9092E-001		2.3579E-001
	604.70	97.60	1.3792E-001		-6.1624E-002
	795.84	85.40	1.1775E-001		7.7729E-002
	801.93	8.73	1.1406E+000		-2.3624E-001
Cs-137	661.65	85.12	1.3300E-001	1.33E-001	1.9352E-002
Eu-152	121.78	28.40	7.2650E-001	3.27E-001	-7.8029E-002
	244.69	7.49	1.9082E+000		-1.0596E+000
	344.27	26.50	4.4396E-001		-1.1365E-001
	778.89	12.74	7.7916E-001		-3.0911E-001
	867.32	4.16	2.2101E+000		-3.6193E+000
	964.01	14.40	8.1977E-001		2.0134E-001
	1085.78	10.00	9.3480E-001		-8.4774E-001
	1112.02	13.30	7.8516E-001		-7.2401E-001
	1407.95	20.70	3.2664E-001		8.3611E-002
Eu-154	123.07	40.50	5.0844E-001	2.52E-001	-2.1964E-001
	247.94	6.60	2.0646E+000		-6.7348E-001
	591.81	4.83	2.0897E+000		1.1274E+000
	723.30	19.70	5.3480E-001		-2.5484E-001
	756.87	4.33	2.3117E+000		-2.1140E+000
	873.19	11.50	8.0901E-001		2.3702E-001
	996.32	10.30	9.4522E-001		4.2813E-001
	1004.76	17.90	5.3402E-001		-7.2280E-002
	1274.45	35.50	2.5228E-001		8.5852E-003
Eu-155	86.54	30.90	1.0380E+000	1.04E+000	1.7098E+000
	105.31	20.70	1.1599E+000		7.0702E-001
Am-241	59.54	35.90	1.2410E+000	1.24E+000	-1.9266E-001
Cm-243	228.19	10.56	1.3441E+000	9.76E-001	1.8974E-001

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	-4.5477E-001

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

Report Generated On 5/17/2006 8:55:37 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: RED6264
Sample ID: OOL-08-05-127
Sample Title: OOL-08-05-127-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/17/2006 8:45:32 AM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

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

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

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

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

Filename: RED6264
Log Number: OOL-08-05-127
Title: OOL-08-05-127-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	309	291.62	72.81	1.41	2.66E+002	67.97	1.95E+003
m	2	282-	309	300.27	74.97	1.42	7.11E+002	79.60	2.27E+003
	3	331-	345	339.01	84.66	0.99	2.40E+002	126.63	1.36E+003
	4	946-	964	954.23	238.50	1.05	2.59E+002	88.43	5.25E+002
	5	1176-	1189	1180.21	295.01	0.61	9.84E+001	51.29	2.12E+002
	6	1400-	1415	1407.10	351.75	1.44	1.66E+002	50.41	1.65E+002
	7	2037-	2052	2042.80	510.72	0.72	1.63E+002	42.54	1.02E+002
	8	2322-	2343	2332.36	583.13	1.15	1.80E+002	47.43	1.08E+002
	9	2428-	2447	2436.06	609.06	1.64	2.05E+002	44.98	9.15E+001
	10	2638-	2652	2644.98	661.30	0.50	3.82E+001	32.36	8.08E+001
	11	2903-	2916	2909.25	727.39	0.86	3.32E+001	26.93	5.58E+001
	12	3632-	3654	3644.63	911.28	2.39	1.52E+002	38.13	5.86E+001
	13	3867-	3886	3875.34	968.97	1.55	8.63E+001	35.64	6.97E+001
	14	4475-	4486	4480.27	1120.25	1.14	2.84E+001	23.73	4.46E+001
	15	5832-	5858	5845.55	1461.66	2.31	1.17E+003	71.87	4.04E+001
	16	7053-	7072	7061.99	1765.85	0.34	6.21E+001	18.18	6.92E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: 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	2.28688E-001	6.73990E-002
K-40	0.978	1460.81*	10.67	2.02031E+001	2.05471E+000
Cs-137	0.996	661.65*	85.12	6.87257E-002	5.87980E-002
TL-208	0.752	277.35	6.80		
		510.84*	21.60	1.05874E+000	3.23790E-001
		583.14*	84.20	3.14920E-001	9.23789E-002
		860.37	12.46		
Bi-212	0.998	727.17*	11.80	4.39196E-001	3.60295E-001
Pb-212	0.521	74.81* @	10.70	1.05539E+001	2.38203E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.49369E-001	2.44155E-001
Bi-214	0.987	609.31*	46.30	6.58638E-001	1.66027E-001
		1120.29*	15.10	3.27141E-001	2.75098E-001
		1764.49*	15.80	7.53192E-001	2.33055E-001
PB-214	0.582	74.82* @	6.21	1.81847E+001	4.31137E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	6.09143E-001	3.33720E-001
		351.92*	37.20	5.57776E-001	1.93333E-001
Ac-228	0.633	338.32	11.40		
		911.07*	27.70	9.00939E-001	2.48132E-001
		969.11*	16.60	8.66180E-001	3.69152E-001

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

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

I N T E R 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	1.606648E-001	7.025572E-002
K-40		0.978	2.020305E+001	2.054709E+000
Cs-137		0.996	6.872570E-002	5.879796E-002
TL-208		0.752	3.149204E-001	9.180709E-002
Bi-212		0.998	4.391965E-001	3.602952E-001
Pb-212	@	0.521	6.493693E-001	2.441554E-001
Bi-214		0.987	6.197671E-001	1.213547E-001
PB-214	@	0.582	5.706839E-001	1.672879E-001
Ac-228		0.633	8.901222E-001	2.059340E-001

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

Errors quoted at 1.960 sigma

U N I D E N T I 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	4.4322E-001	25.56
3	84.66	4.0033E-001	52.72

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

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
	Co-60	1173.22	100.00	1.1150E-001	7.84E-002	-3.9588E-002
		1332.49	100.00	7.8425E-002		-4.4443E-002
	Nb-94	702.63	100.00	1.0678E-001	9.95E-002	-2.3099E-002
		871.10	100.00	9.9494E-002		-2.1347E-002
	Ag-108m	79.20	7.10	5.4741E+000	1.24E-001	-3.4289E+000
		433.93	89.90	1.3122E-001		8.2497E-002
		614.37	90.40	1.4989E-001		6.2455E-003
		722.95	90.50	1.2419E-001		-2.8449E-002
	Sb-125	176.33	6.89	2.4702E+000	4.10E-001	1.8147E+000
		427.89	29.33	4.0993E-001		3.9983E-001
		463.38	10.35	1.0998E+000		8.9520E-001
		600.56	17.80	6.2102E-001		8.2324E-003
		606.64	5.02	2.9053E+000		7.2957E+000
		635.90	11.32	8.9750E-001		1.0751E-002
	Cs-134	563.23	8.38	1.2914E+000	1.29E-001	-1.0921E+000
		569.32	15.43	7.4401E-001		4.5255E-001
		604.70	97.60	1.4927E-001		-3.3120E-002
		795.84	85.40	1.2948E-001		7.5193E-002
		801.93	8.73	1.1570E+000		-2.2319E+000
+	Cs-137	661.65*	85.12	9.5521E-002	9.55E-002	6.8726E-002
	Eu-152	121.78	28.40	7.7126E-001	3.18E-001	-9.5504E-001
		244.69	7.49	2.0425E+000		-9.3916E-001
		344.27	26.50	4.7587E-001		-6.5769E-001
		778.89	12.74	8.2280E-001		-5.0021E-001
		867.32	4.16	2.4533E+000		-3.0381E+000
		964.01	14.40	9.0831E-001		-1.9503E-001
		1085.78	10.00	9.6323E-001		-3.3901E-002
		1112.02	13.30	7.6023E-001		-2.1005E-001
		1407.95	20.70	3.1811E-001		-4.1917E-001
	Eu-154	123.07	40.50	5.3840E-001	2.57E-001	-1.3447E-001
		247.94	6.60	2.1900E+000		-2.5121E+000
		591.81	4.83	2.2497E+000		-9.8488E-001
		723.30	19.70	5.7183E-001		7.0112E-002
		756.87	4.33	2.2527E+000		-1.4285E+000
		873.19	11.50	8.6559E-001		5.3040E-001
		996.32	10.30	9.0268E-001		-3.0310E-001
		1004.76	17.90	5.5252E-001		4.7248E-002
		1274.45	35.50	2.5687E-001		-1.8768E-001
	Eu-155	86.54	30.90	1.1040E+000	1.10E+000	1.9502E-001
		105.31	20.70	1.2216E+000		2.1394E-001
	Am-241	59.54	35.90	1.3382E+000	1.34E+000	2.9718E-001
	Cm-243	228.19	10.56	1.3831E+000	1.03E+000	-1.6157E-001

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	9.5732E-001

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

Report Generated On 5/17/2006 8:42:28 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: RED6264

Spectrum File: RED6264
Sample ID: OOL-08-05-128
Sample Title: OOL-08-05-128-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/17/2006 8:32:25 AM
Live Time: 600.0 seconds
Real Time: 601.9 seconds

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

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

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

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

Filename: RED6264
Log Number: OOL-08-05-128
Title: OOL-08-05-128-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	309	291.22	72.71	1.40	4.24E+002	73.34	1.69E+003
m	2	285-	309	300.13	74.93	1.40	7.74E+002	82.71	2.55E+003
	3	330-	345	339.52	84.79	1.07	1.49E+002	143.93	1.74E+003
	4	944-	961	954.77	238.64	1.68	2.71E+002	79.43	4.22E+002
	5	1398-	1416	1407.10	351.75	1.12	1.36E+002	57.28	2.12E+002
	6	2035-	2054	2042.64	510.68	0.46	1.48E+002	50.67	1.45E+002
	7	2323-	2342	2331.29	582.86	1.47	1.66E+002	42.73	8.77E+001
	8	2426-	2446	2435.86	609.01	1.32	1.89E+002	44.69	9.14E+001
	9	3634-	3655	3645.28	911.44	0.90	1.71E+002	37.99	5.45E+001
	10	3866-	3885	3875.14	968.92	0.68	8.80E+001	33.03	5.60E+001
	11	4473-	4488	4481.42	1120.53	0.33	4.41E+001	28.61	5.59E+001
	12	5831-	5858	5845.07	1461.54	2.09	1.16E+003	71.13	3.50E+001
	13	7054-	7069	7062.18	1765.89	0.70	4.00E+001	16.42	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: 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	2.08373E-001	7.66747E-002
K-40	0.983	1460.81*		10.67	2.00534E+001	2.03728E+000
TL-208	0.750	277.35		6.80		
		510.84*		21.60	9.64689E-001	3.63613E-001
		583.14*		84.20	2.90214E-001	8.36083E-002
		860.37		12.46		
Pb-212	0.521	74.81*	@	10.70	1.14878E+001	2.56472E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.80610E-001	2.26134E-001
Bi-214	0.985	609.31*		46.30	6.07307E-001	1.62186E-001
		1120.29*		15.10	5.07622E-001	3.33491E-001
		1764.49*		15.80	4.84973E-001	2.05084E-001
Ac-228	0.631	338.32		11.40		
		911.07*		27.70	1.01390E+000	2.53096E-001
		969.11*		16.60	8.83737E-001	3.44314E-001

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

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

I N T E R 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	1.456866E-001	7.874633E-002
K-40		0.983	2.005338E+001	2.037283E+000
TL-208		0.750	2.902142E-001	8.307159E-002
Pb-212	@	0.521	6.806101E-001	2.261338E-001
Bi-214		0.985	5.535533E-001	1.188591E-001
Ac-228		0.631	9.682375E-001	2.039286E-001

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

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.71	7.0590E-001	17.32
	3	84.79	2.4844E-001	96.55
	5	351.75	2.2739E-001	41.98

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

Errors quoted at 1.960 sigma

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

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.1087E-001	9.09E-002	-5.8230E-003
	1332.49	100.00	9.0909E-002		-1.7202E-002
Nb-94	702.63	100.00	1.1198E-001	1.02E-001	7.2319E-002
	871.10	100.00	1.0156E-001		2.1738E-002
Ag-108m	79.20	7.10	5.9022E+000	1.27E-001	-4.2529E+000
	433.93	89.90	1.2723E-001		3.3014E-002
	614.37	90.40	1.4742E-001		1.9114E-002
	722.95	90.50	1.2791E-001		1.3964E-001
Sb-125	176.33	6.89	2.4682E+000	3.71E-001	1.2885E-001
	427.89	29.33	3.7129E-001		2.2696E-001
	463.38	10.35	1.1016E+000		3.5325E-002
	600.56	17.80	5.8338E-001		-2.9401E-002
	606.64	5.02	2.7812E+000		4.7494E+000
	635.90	11.32	9.2183E-001		-2.2146E-001
Cs-134	563.23	8.38	1.3173E+000	1.15E-001	-8.7075E-001
	569.32	15.43	7.2630E-001		1.6310E-001
	604.70	97.60	1.4290E-001		-1.4512E-002
	795.84	85.40	1.1505E-001		6.9746E-002
	801.93	8.73	1.0758E+000		-8.0526E-001
Cs-137	661.65	85.12	1.4148E-001	1.41E-001	1.1944E-001
Eu-152	121.78	28.40	7.9753E-001	3.76E-001	-1.2594E-001
	244.69	7.49	2.0104E+000		-4.7081E-001
	344.27	26.50	4.6391E-001		-5.2387E-001
	778.89	12.74	7.6327E-001		-1.0462E+000
	867.32	4.16	2.4949E+000		-2.1211E+000
	964.01	14.40	8.8492E-001		-4.5468E-002
	1085.78	10.00	1.0307E+000		-2.4452E-001
	1112.02	13.30	7.9972E-001		3.0325E-001
	1407.95	20.70	3.7589E-001		-5.2572E-002
Eu-154	123.07	40.50	5.5682E-001	2.45E-001	6.5856E-002
	247.94	6.60	2.1389E+000		-2.0256E+000
	591.81	4.83	2.0643E+000		-2.1482E+000
	723.30	19.70	5.8645E-001		7.9917E-001
	756.87	4.33	2.3374E+000		-7.4754E-001
	873.19	11.50	8.6559E-001		9.5551E-002
	996.32	10.30	9.1599E-001		4.7768E-001
	1004.76	17.90	5.3590E-001		2.0686E-001
	1274.45	35.50	2.4522E-001		7.2526E-002
Eu-155	86.54	30.90	1.1683E+000	1.17E+000	3.1948E-001
	105.31	20.70	1.2842E+000		-4.2587E-002
Am-241	59.54	35.90	1.7043E+000	1.70E+000	-6.0507E-001
Cm-243	228.19	10.56	1.4211E+000	1.03E+000	-7.2602E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	1.0308E+000	1.03E+000	2.9531E-001

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

Report Generated On 5/17/2006 8:23:27 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: RED6264

Spectrum File: RED6264
Sample ID: OOL-08-05-129
Sample Title: OOL-08-05-129-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/17/2006 8:13:24 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-08-05-129
Title: OOL-08-05-129-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	309	300.86	75.12	0.98	5.02E+002	159.54	2.11E+003
2	936-	959	954.84	238.66	1.25	2.46E+002	112.63	7.62E+002
3	1399-	1413	1406.85	351.69	0.58	1.23E+002	52.70	2.08E+002
4	2031-	2053	2043.11	510.80	1.35	1.53E+002	47.99	1.15E+002
5	2319-	2340	2332.17	583.08	1.77	1.87E+002	40.91	6.60E+001
6	2426-	2447	2436.98	609.29	1.13	1.31E+002	44.36	1.02E+002
7	2634-	2657	2645.35	661.39	1.31	1.23E+002	38.83	6.65E+001
8	2901-	2916	2909.29	727.40	1.22	6.52E+001	26.64	3.98E+001
9	3635-	3653	3644.28	911.19	1.99	8.45E+001	37.35	8.15E+001
10	3868-	3884	3876.01	969.14	1.06	6.85E+001	29.47	4.95E+001
11	4792-	4803	4797.13	1199.48	0.61	2.27E+001	15.06	1.43E+001
12	4865-	4877	4870.62	1217.86	0.54	1.66E+001	18.49	2.74E+001
13	5831-	5858	5844.52	1461.40	2.13	1.00E+003	64.60	1.79E+001
14	7056-	7070	7062.75	1766.04	1.24	6.43E+001	16.27	1.67E+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: RED6264

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	0.999	511.00*	100.00	2.15098E-001	7.35338E-002
K-40	0.989	1460.81*	10.67	1.73734E+001	1.79663E+000
Cs-137	0.998	661.65*	85.12	2.22262E-001	7.46256E-002
TL-208	0.752	277.35	6.80		
		510.84*	21.60	9.95822E-001	3.50013E-001
		583.14*	84.20	3.26398E-001	8.30915E-002
		860.37	12.46		
Bi-212	0.998	727.17*	11.80	8.62699E-001	3.66968E-001
Pb-212	0.521	74.81* @	10.70	7.42381E+000	2.77315E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.17764E-001	2.98821E-001
Bi-214	0.683	609.31*	46.30	4.23477E-001	1.52101E-001
		1120.29	15.10		
		1764.49*	15.80	7.80505E-001	2.12233E-001
Ac-228	0.633	338.32	11.40		
		911.07*	27.70	4.99750E-001	2.28208E-001
		969.11*	16.60	6.87633E-001	3.04567E-001

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

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

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

Spectrum File:RED6264

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

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/gram)	Wt mean Activity Uncertainty
ANN		0.999	1.445956E-001	7.565757E-002
K-40		0.989	1.737340E+001	1.796630E+000
Cs-137		0.998	2.222617E-001	7.462557E-002
TL-208		0.752	3.263980E-001	8.240782E-002
Bi-212		0.998	8.626985E-001	3.669677E-001
Pb-212	@	0.521	6.177642E-001	2.988212E-001
Bi-214		0.683	5.446268E-001	1.236300E-001
Ac-228		0.633	5.673057E-001	1.826292E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.0433E-001	42.99
11	1199.48	3.7883E-002	66.26
12	1217.86	2.7633E-002	111.54

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: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	9.49E-002	1.7180E-002
		1332.49	100.00	9.4949E-002		5.4011E-002
	Nb-94	702.63	100.00	9.8031E-002	9.46E-002	9.8121E-002
		871.10	100.00	9.4581E-002		7.8163E-003
	Ag-108m	79.20	7.10	5.9639E+000	1.24E-001	-2.6485E+000
		433.93	89.90	1.2781E-001		5.2876E-002
		614.37	90.40	1.3553E-001		4.7017E-002
		722.95	90.50	1.2393E-001		-1.4500E-002
	Sb-125	176.33	6.89	2.7456E+000	3.88E-001	7.8661E-001
		427.89	29.33	3.8817E-001		1.7205E-001
		463.38	10.35	1.1531E+000		3.0657E-001
		600.56	17.80	6.1724E-001		3.1450E-001
		606.64	5.02	2.6732E+000		5.7530E+000
		635.90	11.32	8.9525E-001		8.2746E-001
	Cs-134	563.23	8.38	1.2570E+000	1.19E-001	5.2910E-001
		569.32	15.43	6.6575E-001		1.4956E-001
		604.70	97.60	1.3583E-001		-6.9768E-002
		795.84	85.40	1.1908E-001		-3.1999E-002
		801.93	8.73	1.1406E+000		2.7137E-002
+	Cs-137	661.65*	85.12	1.0198E-001	1.02E-001	2.2226E-001
	Eu-152	121.78	28.40	8.6798E-001	3.43E-001	-3.6967E-001
		244.69	7.49	2.4033E+000		-5.2217E+000
		344.27	26.50	5.1764E-001		-3.0244E-001
		778.89	12.74	7.5867E-001		1.3678E-001
		867.32	4.16	2.2179E+000		-5.2621E+000
		964.01	14.40	8.7298E-001		-9.3402E-002
		1085.78	10.00	1.0815E+000		-1.2193E-001
		1112.02	13.30	7.2116E-001		-5.1751E-001
		1407.95	20.70	3.4302E-001		1.5271E-001
	Eu-154	123.07	40.50	6.0152E-001	2.16E-001	-1.1560E-001
		247.94	6.60	2.6030E+000		-2.8207E+000
		591.81	4.83	2.2168E+000		1.0193E-001
		723.30	19.70	5.7183E-001		4.7529E-002
		756.87	4.33	2.2593E+000		-6.8039E-001
		873.19	11.50	8.2559E-001		-3.5992E-002
		996.32	10.30	9.5791E-001		-5.4452E-001
		1004.76	17.90	5.5794E-001		4.5944E-001
		1274.45	35.50	2.1592E-001		-5.1554E-002
	Eu-155	86.54	30.90	1.1958E+000	1.20E+000	2.0840E+000
		105.31	20.70	1.3448E+000		7.0866E-001
	Am-241	59.54	35.90	1.5823E+000	1.58E+000	3.0064E-001
	Cm-243	228.19	10.56	1.6632E+000	1.15E+000	3.6641E-001

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	9.1485E-001

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

Report Generated On 5/17/2006 8:10:16 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: RED6264

Spectrum File: RED6264
Sample ID: OOL-08-05-130
Sample Title: OOL-08-05-130-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/17/2006 8:00:12 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-08-05-130
Title: OOL-08-05-130-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	291-	309	300.57	75.05	1.41	6.19E+002	178.62	2.27E+003
2	331-	346	339.64	84.81	0.74	1.35E+002	143.52	1.73E+003
3	948-	961	954.56	238.59	1.86	2.54E+002	72.95	4.10E+002
4	1174-	1185	1180.33	295.04	0.74	5.36E+001	47.61	2.14E+002
5	1347-	1362	1353.86	338.44	0.54	6.30E+001	51.32	2.07E+002
6	1402-	1418	1407.01	351.73	1.95	1.66E+002	50.71	1.57E+002
7	2030-	2052	2042.90	510.74	1.05	1.25E+002	49.51	1.32E+002
8	2321-	2343	2331.55	582.93	1.08	1.53E+002	47.01	1.09E+002
9	2427-	2446	2435.69	608.97	1.39	1.71E+002	42.55	8.59E+001
10	3434-	3446	3440.49	860.23	1.09	1.82E+001	20.78	3.58E+001
11	3636-	3655	3643.70	911.05	1.35	1.33E+002	34.55	5.13E+001
12	3866-	3885	3874.92	968.87	0.88	1.00E+002	27.68	2.86E+001
13	5831-	5858	5844.25	1461.33	2.29	9.87E+002	63.86	1.69E+001
14	7051-	7068	7060.04	1765.36	0.50	4.29E+001	16.89	9.06E+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: 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	1.75421E-001	7.35939E-002
K-40	0.991	1460.81*		10.67	1.70789E+001	1.76997E+000
TL-208	0.902	277.35		6.80		
		510.84*		21.60	8.12134E-001	3.47108E-001
		583.14*		84.20	2.67063E-001	8.91190E-002
		860.37*		12.46	2.36587E-001	2.71180E-001
Pb-212	0.521	74.81*	@	10.70	9.17530E+000	3.19977E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.38086E-001	2.08644E-001
Bi-214	0.691	609.31*		46.30	5.50830E-001	1.52889E-001
		1120.29		15.10		
		1764.49*		15.80	5.21006E-001	2.11385E-001
PB-214	0.582	74.82*	@	6.21	1.58093E+001	5.63148E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	3.31662E-001	3.00073E-001
		351.92*		37.20	5.56876E-001	1.94143E-001
Ac-228	0.999	338.32*		11.40	6.83294E-001	5.66744E-001
		911.07*		27.70	7.84775E-001	2.23379E-001
		969.11*		16.60	1.00822E+000	2.97368E-001

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

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

I N T E R 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	1.183719E-001	7.581280E-002
K-40		0.991	1.707894E+001	1.769970E+000
TL-208		0.902	2.641156E-001	8.429541E-002
Pb-212	@	0.521	6.380863E-001	2.086438E-001
Bi-214		0.691	5.405867E-001	1.238823E-001
PB-214	@	0.582	4.904210E-001	1.630019E-001
Ac-228		0.999	8.489273E-001	1.703431E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.2569E-001	105.99

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	1.1275E-001	8.88E-002	7.6206E-002
	1332.49	100.00	8.8816E-002		1.0145E-001
Nb-94	702.63	100.00	9.4349E-002	9.04E-002	-5.3476E-002
	871.10	100.00	9.0384E-002		-6.2630E-003
Ag-108m	79.20	7.10	5.7329E+000	1.13E-001	-2.4691E+000
	433.93	89.90	1.1904E-001		1.6619E-002
	614.37	90.40	1.3777E-001		-4.1605E-002
	722.95	90.50	1.1319E-001		2.1684E-002
Sb-125	176.33	6.89	2.7269E+000	3.74E-001	2.5803E+000
	427.89	29.33	3.7436E-001		1.3779E-001
	463.38	10.35	1.0963E+000		1.5289E+000
	600.56	17.80	5.7117E-001		3.5138E-001
	606.64	5.02	2.7205E+000		4.8497E+000
	635.90	11.32	8.3946E-001		5.0883E-001
Cs-134	563.23	8.38	1.2677E+000	1.14E-001	5.4759E-002
	569.32	15.43	6.4737E-001		-9.0128E-002
	604.70	97.60	1.3978E-001		5.3670E-002
	795.84	85.40	1.1402E-001		8.0989E-002
	801.93	8.73	1.0967E+000		-6.0867E-001
Cs-137	661.65	85.12	1.3704E-001	1.37E-001	1.3097E-001
Eu-152	121.78	28.40	8.2242E-001	3.03E-001	3.5417E-002
	244.69	7.49	2.2073E+000		-1.6325E+000
	344.27	26.50	4.8754E-001		1.6712E-001
	778.89	12.74	8.1854E-001		3.1091E-003
	867.32	4.16	2.1866E+000		-3.6095E-001
	964.01	14.40	8.3968E-001		-1.5905E-002
	1085.78	10.00	9.0916E-001		-8.8885E-002
	1112.02	13.30	7.0214E-001		-6.0977E-001
	1407.95	20.70	3.0332E-001		1.4338E-002
Eu-154	123.07	40.50	5.7097E-001	2.61E-001	-1.6198E-001
	247.94	6.60	2.4223E+000		-1.4418E+000
	591.81	4.83	2.1591E+000		1.5154E+000
	723.30	19.70	5.2410E-001		2.1510E-001
	756.87	4.33	2.3310E+000		9.8060E-001
	873.19	11.50	8.0059E-001		8.2504E-001
	996.32	10.30	8.7887E-001		7.3680E-001
	1004.76	17.90	4.7610E-001		-2.0559E-001
	1274.45	35.50	2.6137E-001		3.5439E-002
Eu-155	86.54	30.90	1.1578E+000	1.16E+000	2.4434E-001
	105.31	20.70	1.2983E+000		-5.1138E-001
Am-241	59.54	35.90	1.5203E+000	1.52E+000	-4.2068E-001
Cm-243	228.19	10.56	1.5427E+000	1.07E+000	-6.7533E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	1.0675E+000	1.07E+000	-2.8603E-001

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

Report Generated On 5/16/2006 4:00:50 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-08-05-131
Sample Title: OOL-08-05-131-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/16/2006 3:50:48 PM
Live Time: 600.0 seconds
Real Time: 601.0 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-08-05-131
Title: OOL-08-05-131-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	281-	309	290.99	72.65	1.44	3.80E+002	65.19	1.57E+003
m	2	281-	309	300.21	74.95	1.44	7.04E+002	74.98	1.91E+003
	3	330-	345	339.72	84.84	0.66	1.67E+002	126.53	1.33E+003
M	4	945-	972	955.18	238.74	1.40	2.73E+002	41.25	3.79E+002
m	5	945-	972	967.16	241.74	1.40	6.59E+001	30.01	3.35E+002
	6	1170-	1188	1180.28	295.03	1.74	1.29E+002	57.75	2.19E+002
	7	1349-	1359	1353.33	338.30	1.03	7.54E+001	36.33	1.12E+002
	8	1397-	1416	1407.13	351.76	0.88	1.47E+002	59.48	2.21E+002
M	9	2323-	2355	2332.20	583.09	1.57	1.84E+002	29.79	9.15E+001
m	10	2323-	2355	2348.64	587.20	1.57	2.52E+001	16.17	7.63E+001
	11	2427-	2447	2436.83	609.25	1.55	2.47E+002	49.33	1.07E+002
	12	3635-	3655	3644.76	911.31	1.51	1.48E+002	37.41	5.95E+001
	13	3868-	3887	3876.24	969.20	0.45	7.64E+001	32.06	5.46E+001
	14	4474-	4490	4481.68	1120.60	1.91	6.14E+001	27.91	4.36E+001
	15	4948-	4962	4955.20	1239.01	0.39	3.90E+001	25.07	4.30E+001
	16	5832-	5860	5846.43	1461.88	2.03	9.96E+002	64.91	2.18E+001
	17	7054-	7071	7062.25	1765.91	1.63	6.15E+001	17.11	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: 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	0.965	1460.81*	10.67	1.72389E+001	1.79155E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.21173E-001	6.67214E-002
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	1.04494E+001	2.33090E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.86150E-001	1.49325E-001
Bi-214	0.986	609.31*	46.30	7.96763E-001	1.86735E-001
		1120.29*	15.10	7.05961E-001	3.29679E-001
		1764.49*	15.80	7.46207E-001	2.20560E-001
PB-214	0.732	74.82* @	6.21	1.80045E+001	4.22353E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98*	7.49	9.87936E-001	4.79118E-001
		295.21*	19.20	8.01250E-001	3.82201E-001
		351.92*	37.20	4.95062E-001	2.16309E-001
Ac-228	0.999	338.32*	11.40	8.17923E-001	4.14297E-001
		911.07*	27.70	8.77936E-001	2.43181E-001
		969.11*	16.60	7.67568E-001	3.31839E-001

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

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

I N T E R 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		0.965	1.723886E+001	1.791546E+000
TL-208		0.471	3.211728E-001	6.672140E-002
Pb-212	@	0.521	6.861502E-001	1.493251E-001
Bi-214		0.986	7.646819E-001	1.308168E-001
PB-214	@	0.732	6.253230E-001	1.752116E-001
Ac-228		0.999	8.354459E-001	1.772839E-001

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

Errors quoted at 1.960 sigma

U N I D E N T I 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	6.3288E-001	17.17
3	84.84	2.7877E-001	75.65
m 10	587.20	4.2044E-002	64.09
15	1239.01	6.5020E-002	64.26

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: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	1.1275E-001	8.58E-002	4.0028E-002
	1332.49	100.00	8.5795E-002		-1.6943E-003
Nb-94	702.63	100.00	9.6350E-002	9.46E-002	-1.2992E-001
	871.10	100.00	9.4581E-002		-4.3987E-002
Ag-108m	79.20	7.10	5.1478E+000	1.21E-001	-3.4747E+000
	433.93	89.90	1.2088E-001		-1.1805E-001
	614.37	90.40	1.5859E-001		-1.2546E-002
	722.95	90.50	1.2284E-001		-4.7852E-002
Sb-125	176.33	6.89	2.2317E+000	3.77E-001	1.2124E+000
	427.89	29.33	3.7680E-001		3.0976E-001
	463.38	10.35	1.0998E+000		9.8712E-001
	600.56	17.80	5.7254E-001		-4.3421E-001
	606.64	5.02	3.0595E+000		7.6873E+000
	635.90	11.32	9.0420E-001		-1.7651E-001
Cs-134	563.23	8.38	1.2570E+000	1.15E-001	-1.0855E+000
	569.32	15.43	6.3797E-001		3.9285E-002
	604.70	97.60	1.5421E-001		-5.4975E-002
	795.84	85.40	1.1471E-001		1.0558E-001
	801.93	8.73	1.0217E+000		-2.2923E-001
Cs-137	661.65	85.12	1.3409E-001	1.34E-001	1.3185E-001
Eu-152	121.78	28.40	7.2137E-001	3.24E-001	-7.5308E-001
	244.69	7.49	1.9368E+000		-1.2967E-001
	344.27	26.50	4.2651E-001		-2.0431E-001
	778.89	12.74	7.5636E-001		-1.9177E-001
	867.32	4.16	2.4252E+000		-7.6894E-001
	964.01	14.40	8.3968E-001		5.5737E-001
	1085.78	10.00	9.3841E-001		2.8318E-001
	1112.02	13.30	7.1307E-001		-4.4302E-001
	1407.95	20.70	3.2383E-001		1.5589E-001
Eu-154	123.07	40.50	5.0944E-001	2.50E-001	4.2638E-001
	247.94	6.60	2.0424E+000		5.2032E-001
	591.81	4.83	2.1346E+000		3.2227E-001
	723.30	19.70	5.6936E-001		1.8867E-001
	756.87	4.33	2.2791E+000		-9.7346E-001
	873.19	11.50	8.1458E-001		-1.8334E-001
	996.32	10.30	8.6846E-001		9.8684E-001
	1004.76	17.90	5.1089E-001		4.3465E-001
	1274.45	35.50	2.4995E-001		-1.8443E-001
Eu-155	86.54	30.90	1.0480E+000	1.05E+000	1.7602E-001
	105.31	20.70	1.1547E+000		-5.7419E-001
Am-241	59.54	35.90	1.3047E+000	1.30E+000	1.3444E-001
Cm-243	228.19	10.56	1.3477E+000	9.64E-001	-6.1027E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.6350E-001	9.64E-001	-1.5140E-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 5/16/2006 3:34:55 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: RED6264

Spectrum File: RED6264
Sample ID: OOL-08-05-132
Sample Title: OOL-08-05-132-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/16/2006 3:24:52 PM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

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

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

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

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

Filename: RED6264
Log Number: OOL-08-05-132
Title: OOL-08-05-132-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	309	300.56	75.04	1.28	4.26E+002	143.70	1.78E+003
2	944-	963	954.99	238.69	0.45	3.07E+002	88.76	4.98E+002
3	1175-	1190	1180.20	295.01	0.81	1.15E+002	56.72	2.36E+002
4	1347-	1358	1352.73	338.15	0.71	5.10E+001	42.51	1.67E+002
5	1397-	1415	1407.32	351.81	1.55	1.98E+002	58.91	2.09E+002
6	1849-	1861	1853.10	463.28	1.41	3.91E+001	31.54	8.29E+001
7	2324-	2342	2332.44	583.15	1.13	1.63E+002	47.79	1.27E+002
8	2425-	2447	2437.11	609.32	1.43	2.98E+002	53.48	1.15E+002
9	2639-	2655	2646.63	661.71	1.12	9.56E+001	37.48	8.64E+001
10	2901-	2915	2907.96	727.06	0.73	3.92E+001	29.03	5.98E+001
11	3635-	3653	3645.87	911.59	0.57	1.41E+002	37.35	6.46E+001
12	3870-	3887	3878.41	969.74	1.44	1.00E+002	33.08	5.69E+001
13	4473-	4492	4481.22	1120.48	0.38	7.21E+001	33.11	6.09E+001
14	5830-	5861	5845.95	1461.76	2.46	1.19E+003	69.27	1.19E+001
15	7054-	7072	7063.43	1766.21	1.51	6.73E+001	17.89	4.75E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: 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	2.05936E+001	2.05341E+000
Cs-137	1.000	661.65*	85.12	1.72185E-001	7.04501E-002
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.85380E-001	9.13178E-002
		860.37	12.46		
Bi-212	1.000	727.17*	11.80	5.18729E-001	3.89109E-001
Pb-212	0.521	74.81* @	10.70	6.30670E+000	2.46204E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.71235E-001	2.53488E-001
Bi-214	0.981	609.31*	46.30	9.59424E-001	2.08866E-001
		1120.29*	15.10	8.29767E-001	3.90905E-001
		1764.49*	15.80	8.16002E-001	2.31865E-001
PB-214	0.582	74.82* @	6.21	1.08666E+001	4.31488E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	7.12113E-001	3.71116E-001
		351.92*	37.20	6.65269E-001	2.27038E-001
Ac-228	0.992	338.32*	11.40	5.53361E-001	4.68963E-001
		911.07*	27.70	8.35931E-001	2.40904E-001
		969.11*	16.60	1.00542E+000	3.48474E-001

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

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

I N T E R 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	2.059356E+001	2.053414E+000
Cs-137		1.000	1.721847E-001	7.045006E-002
TL-208		0.471	2.853805E-001	9.131778E-002
Bi-212		1.000	5.187295E-001	3.891086E-001
Pb-212	@	0.521	7.712347E-001	2.534878E-001
Bi-214		0.981	8.862719E-001	1.442360E-001
PB-214	@	0.582	6.780263E-001	1.936707E-001
Ac-228		0.992	8.396260E-001	1.825346E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	463.28	6.5102E-002	80.74

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: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	1.1398E-001	9.17E-002	-3.8227E-002
		1332.49	100.00	9.1732E-002		7.4747E-002
	Nb-94	702.63	100.00	1.0237E-001	1.02E-001	-4.9957E-003
		871.10	100.00	1.0473E-001		1.4231E-001
	Ag-108m	79.20	7.10	5.5372E+000	1.24E-001	-5.1315E+000
		433.93	89.90	1.3215E-001		-1.5064E-001
		614.37	90.40	1.6755E-001		8.9248E-003
		722.95	90.50	1.2419E-001		-4.4983E-002
	Sb-125	176.33	6.89	2.4130E+000	3.93E-001	-2.3413E+000
		427.89	29.33	3.9285E-001		-1.8864E-001
		463.38	10.35	1.1514E+000		6.4250E-001
		600.56	17.80	5.7527E-001		-5.1294E-001
		606.64	5.02	3.1847E+000		7.7860E+000
		635.90	11.32	9.3051E-001		-6.2329E-001
	Cs-134	563.23	8.38	1.3452E+000	1.27E-001	-9.4925E-002
		569.32	15.43	7.1378E-001		6.1161E-001
		604.70	97.60	1.5752E-001		-4.7292E-002
		795.84	85.40	1.2704E-001		1.4013E-001
		801.93	8.73	1.1891E+000		-1.6012E+000
+	Cs-137	661.65*	85.12	1.0219E-001	1.02E-001	1.7218E-001
	Eu-152	121.78	28.40	7.7184E-001	3.51E-001	1.9145E-001
		244.69	7.49	2.0511E+000		-1.2930E+000
		344.27	26.50	4.9549E-001		-8.2316E-002
		778.89	12.74	8.6010E-001		-5.9215E-001
		867.32	4.16	2.5425E+000		-2.9971E+000
		964.01	14.40	9.0666E-001		-1.2457E+000
		1085.78	10.00	1.0043E+000		9.7320E-002
		1112.02	13.30	7.8024E-001		-1.4683E-001
		1407.95	20.70	3.5089E-001		-8.7405E-002
	Eu-154	123.07	40.50	5.3638E-001	2.73E-001	-3.2394E-001
		247.94	6.60	2.2151E+000		-4.3471E-001
		591.81	4.83	2.2591E+000		5.2769E-001
		723.30	19.70	5.6936E-001		-1.7151E-001
		756.87	4.33	2.2856E+000		-2.0957E+000
		873.19	11.50	8.6818E-001		-5.9727E-001
		996.32	10.30	8.8574E-001		2.3397E-001
		1004.76	17.90	5.1089E-001		1.6444E-003
		1274.45	35.50	2.7335E-001		-4.2236E-002
	Eu-155	86.54	30.90	1.0987E+000	1.10E+000	1.0331E+000
		105.31	20.70	1.2211E+000		7.9946E-001
	Am-241	59.54	35.90	1.3677E+000	1.37E+000	8.1876E-001
	Cm-243	228.19	10.56	1.4151E+000	1.03E+000	-8.0044E-003

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	8.7832E-001

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

Report Generated On 5/16/2006 3:11:45 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: RED6264

Spectrum File: RED6264
Sample ID: OOL-08-05-133
Sample Title: OOL-08-05-133-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/16/2006 3:01:43 PM
Live Time: 600.0 seconds
Real Time: 601.0 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-08-05-133
Title: OOL-08-05-133-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	294-	307	301.20	75.20	1.02	5.49E+002	146.11	1.81E+003
2	947-	962	955.32	238.78	1.27	2.50E+002	75.82	4.15E+002
3	1174-	1187	1182.00	295.46	1.04	1.16E+002	52.45	2.18E+002
4	1396-	1415	1407.58	351.87	1.19	2.14E+002	64.80	2.51E+002
5	2322-	2344	2332.61	583.19	1.07	1.54E+002	53.59	1.53E+002
6	2424-	2446	2436.97	609.29	2.03	2.68E+002	52.97	1.20E+002
7	2635-	2655	2646.19	661.61	1.18	1.02E+002	36.04	6.52E+001
8	3633-	3654	3644.67	911.29	1.36	1.64E+002	37.08	5.17E+001
9	3868-	3885	3876.93	969.37	0.48	6.64E+001	34.23	7.26E+001
10	4474-	4491	4482.28	1120.75	0.38	5.46E+001	32.09	6.54E+001
11	4946-	4959	4952.59	1238.36	0.55	2.75E+001	24.22	4.55E+001
12	5832-	5861	5846.32	1461.85	2.36	1.15E+003	69.20	2.12E+001
13	7056-	7072	7063.55	1766.24	1.08	7.35E+001	19.62	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: 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	0.966	1460.81*		10.67	1.98956E+001	2.00709E+000
Cs-137	1.000	661.65*		85.12	1.83309E-001	6.83778E-002
TL-208	0.471	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	2.68207E-001	9.98533E-002
		860.37		12.46		
Pb-212	0.520	74.81*	@	10.70	8.11759E+000	2.68170E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.27096E-001	2.14226E-001
Bi-214	0.979	609.31*		46.30	8.64659E-001	2.01109E-001
		1120.29*		15.10	6.28212E-001	3.75032E-001
		1764.49*		15.80	8.91842E-001	2.54221E-001
PB-214	0.582	74.82*	@	6.21	1.39868E+001	4.73088E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	7.18919E-001	3.46719E-001
		351.92*		37.20	7.18298E-001	2.48636E-001
Ac-228	0.632	338.32		11.40		
		911.07*		27.70	9.71319E-001	2.46103E-001
		969.11*		16.60	6.67008E-001	3.50738E-001

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

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

I N T E R 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		0.966	1.989558E+001	2.007090E+000
Cs-137		1.000	1.833091E-001	6.837777E-002
TL-208		0.471	2.682065E-001	9.985333E-002
Pb-212	@	0.520	6.270957E-001	2.142264E-001
Bi-214		0.979	8.380142E-001	1.453892E-001
PB-214	@	0.582	7.185089E-001	2.020533E-001
Ac-228		0.632	8.709232E-001	2.014571E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	1238.36	4.5833E-002	88.07

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

Errors quoted at 1.960 sigma

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

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

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
	Co-60	1173.22	100.00	1.0058E-001	8.17E-002	2.2751E-002
		1332.49	100.00	8.1737E-002		-1.6668E-002
	Nb-94	702.63	100.00	1.0499E-001	9.30E-002	-3.3256E-002
		871.10	100.00	9.2991E-002		-4.0920E-002
	Ag-108m	79.20	7.10	5.5760E+000	1.28E-001	-9.5992E+000
		433.93	89.90	1.2819E-001		-6.3812E-002
		614.37	90.40	1.6220E-001		-7.7360E-002
		722.95	90.50	1.3201E-001		1.2467E-001
	Sb-125	176.33	6.89	2.4810E+000	4.14E-001	6.8971E-002
		427.89	29.33	4.1436E-001		7.9150E-002
		463.38	10.35	1.1730E+000		3.6098E-001
		600.56	17.80	6.5167E-001		3.7195E-001
		606.64	5.02	3.1601E+000		5.8127E+000
		635.90	11.32	8.8165E-001		-1.1261E+000
	Cs-134	563.23	8.38	1.3798E+000	1.31E-001	5.1759E-001
		569.32	15.43	7.2492E-001		-3.2206E-001
		604.70	97.60	1.5980E-001		-2.2255E-002
		795.84	85.40	1.3098E-001		1.6491E-001
		801.93	8.73	1.2326E+000		-1.4631E+000
+	Cs-137	661.65*	85.12	9.5918E-002	9.59E-002	1.8331E-001
	Eu-152	121.78	28.40	7.8101E-001	3.59E-001	-8.4383E-002
		244.69	7.49	2.0389E+000		-1.1406E-001
		344.27	26.50	4.8653E-001		-2.6054E-001
		778.89	12.74	8.5807E-001		5.1564E-001
		867.32	4.16	2.4880E+000		2.0795E+000
		964.01	14.40	8.6781E-001		-4.1233E-001
		1085.78	10.00	9.7020E-001		-4.5278E-001
		1112.02	13.30	7.8270E-001		4.2853E-001
		1407.95	20.70	3.5859E-001		-1.0563E-001
	Eu-154	123.07	40.50	5.4709E-001	2.61E-001	9.8852E-002
		247.94	6.60	2.2384E+000		-5.3701E-001
		591.81	4.83	2.3944E+000		-1.0632E+000
		723.30	19.70	6.0768E-001		6.7802E-001
		756.87	4.33	2.2856E+000		2.8464E-001
		873.19	11.50	8.0059E-001		-4.2492E-001
		996.32	10.30	9.5159E-001		5.3129E-001
		1004.76	17.90	4.9279E-001		-1.8361E-002
		1274.45	35.50	2.6137E-001		-1.3083E-001
	Eu-155	86.54	30.90	1.0998E+000	1.10E+000	1.3319E+000
		105.31	20.70	1.2488E+000		-1.5757E-001
	Am-241	59.54	35.90	1.4015E+000	1.40E+000	4.8554E-001
	Cm-243	228.19	10.56	1.4448E+000	1.01E+000	-5.4374E-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	-8.0917E-001

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

Report Generated On 5/16/2006 2:52:06 PM

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

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-08-05-134
Sample Title: OOL-08-05-134-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/16/2006 2:42:04 PM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

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

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

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

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

Filename: RED6264
Log Number: OOL-08-05-134
Title: OOL-08-05-134-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	309	291.48	72.77	1.30	4.02E+002	67.60	1.37E+003
m	2	286-	309	300.05	74.91	1.30	8.06E+002	80.28	1.97E+003
	3	330-	346	339.15	84.69	0.77	2.44E+002	146.11	1.69E+003
	4	944-	959	954.32	238.53	1.13	2.54E+002	78.52	4.50E+002
	5	1175-	1189	1181.86	295.43	0.59	9.49E+001	55.90	2.49E+002
	6	1346-	1358	1353.95	338.46	0.95	6.72E+001	43.72	1.64E+002
	7	1396-	1415	1407.68	351.90	1.36	2.18E+002	62.07	2.24E+002
	8	2033-	2053	2042.46	510.63	0.67	1.27E+002	50.76	1.49E+002
	9	2324-	2342	2332.18	583.08	1.73	1.59E+002	46.24	1.17E+002
	10	2425-	2449	2436.70	609.22	1.89	3.43E+002	53.50	9.71E+001
	11	2904-	2918	2909.88	727.55	0.83	4.99E+001	30.05	6.41E+001
	12	3637-	3654	3645.34	911.46	1.71	1.55E+002	36.90	6.09E+001
	13	3869-	3889	3876.05	969.15	0.78	1.07E+002	36.47	6.43E+001
	14	4472-	4492	4482.06	1120.69	0.67	8.28E+001	37.16	7.62E+001
	15	5832-	5860	5846.16	1461.81	2.27	1.14E+003	68.90	2.11E+001
	16	7052-	7073	7063.45	1766.21	0.95	8.30E+001	17.86	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: 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	1.78094E-001	7.53728E-002
K-40	0.969	1460.81*		10.67	1.97243E+001	1.99286E+000
TL-208	0.752	277.35		6.80		
		510.84*		21.60	8.24508E-001	3.55386E-001
		583.14*		84.20	2.78182E-001	8.84673E-002
		860.37		12.46		
Bi-212	0.996	727.17*		11.80	6.60851E-001	4.05426E-001
Pb-212	0.521	74.81*	@	10.70	1.19685E+001	2.63146E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.38216E-001	2.21003E-001
Bi-214	0.980	609.31*		46.30	1.10444E+000	2.19515E-001
		1120.29*		15.10	9.52372E-001	4.39205E-001
		1764.49*		15.80	1.00711E+000	2.38917E-001
PB-214	0.582	74.82*	@	6.21	2.06221E+001	4.77482E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	5.87962E-001	3.60135E-001
		351.92*		37.20	7.31488E-001	2.41758E-001
Ac-228	0.997	338.32*		11.40	7.28453E-001	4.87689E-001
		911.07*		27.70	9.17038E-001	2.42336E-001
		969.11*		16.60	1.07117E+000	3.83022E-001

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

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

I N T E R 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	1.180065E-001	7.773274E-002
K-40		0.969	1.972426E+001	1.992859E+000
TL-208		0.752	2.781821E-001	8.800156E-002
Bi-212		0.996	6.608507E-001	4.054262E-001
Pb-212	@	0.521	6.382159E-001	2.210034E-001
Bi-214		0.980	1.047063E+000	1.516974E-001
PB-214	@	0.582	6.869014E-001	2.007249E-001
Ac-228		0.997	9.262251E-001	1.888175E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.77	6.7052E-001	16.80
3	84.69	4.0738E-001	59.78

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

Errors quoted at 1.960 sigma

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

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.0960E-001	8.71E-002	6.9108E-002
	1332.49	100.00	8.7103E-002		1.0947E-002
Nb-94	702.63	100.00	1.1602E-001	1.01E-001	1.7333E-002
	871.10	100.00	1.0127E-001		-9.4919E-002
Ag-108m	79.20	7.10	5.6355E+000	1.30E-001	-5.2614E+000
	433.93	89.90	1.2952E-001		1.0983E-001
	614.37	90.40	1.7096E-001		3.3993E-002
	722.95	90.50	1.3501E-001		-5.8211E-002
Sb-125	176.33	6.89	2.5919E+000	3.88E-001	-7.6891E-001
	427.89	29.33	3.8817E-001		-1.0139E-001
	463.38	10.35	1.1311E+000		5.6105E-001
	600.56	17.80	6.1850E-001		2.3717E-001
	606.64	5.02	3.3316E+000		1.0087E+000
	635.90	11.32	9.1085E-001		-2.2669E-001
Cs-134	563.23	8.38	1.3477E+000	1.25E-001	8.3550E-001
	569.32	15.43	7.0814E-001		-4.6804E-001
	604.70	97.60	1.6737E-001		1.0252E-001
	795.84	85.40	1.2487E-001		2.4512E-003
	801.93	8.73	1.1763E+000		-1.1128E+000
Cs-137	661.65	85.12	1.3757E-001	1.38E-001	1.7672E-001
Eu-152	121.78	28.40	8.1263E-001	3.88E-001	-4.7976E-002
	244.69	7.49	2.1742E+000		-3.4229E+000
	344.27	26.50	4.7587E-001		-4.4717E-001
	778.89	12.74	8.1854E-001		-7.5469E-001
	867.32	4.16	2.6608E+000		2.4211E-001
	964.01	14.40	9.5801E-001		3.6182E-001
	1085.78	10.00	1.0340E+000		6.1067E-002
	1112.02	13.30	7.7529E-001		-4.0990E-002
	1407.95	20.70	3.8774E-001		-1.3875E-002
Eu-154	123.07	40.50	5.6291E-001	2.72E-001	-1.7913E-001
	247.94	6.60	2.2759E+000		-1.5226E+000
	591.81	4.83	2.1977E+000		-1.6039E-001
	723.30	19.70	6.1688E-001		-4.3797E-001
	756.87	4.33	2.4800E+000		1.4264E+000
	873.19	11.50	8.7593E-001		-1.6076E-001
	996.32	10.30	9.5476E-001		-6.6768E-001
	1004.76	17.90	5.6509E-001		1.1666E-002
	1274.45	35.50	2.7229E-001		-5.4408E-001
Eu-155	86.54	30.90	1.1428E+000	1.14E+000	5.7190E-002
	105.31	20.70	1.2733E+000		-3.9017E-002
Am-241	59.54	35.90	1.3602E+000	1.36E+000	9.6495E-002
Cm-243	228.19	10.56	1.4729E+000	1.06E+000	5.2234E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	1.0552E+000	1.06E+000	8.3432E-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 5/16/2006 2:36:27 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-08-05-135
Sample Title: OOL-08-05-135-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/16/2006 2:26:26 PM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

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

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

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

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

Filename: RED6264
Log Number: OOL-08-05-135
Title: OOL-08-05-135-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	309	300.61	75.05	1.14	4.59E+002	141.45	1.70E+003
2	330-	347	339.94	84.89	1.44	2.37E+002	150.88	1.74E+003
3	944-	960	954.74	238.63	1.20	2.87E+002	78.73	4.24E+002
4	1172-	1188	1180.96	295.20	0.36	9.90E+001	60.04	2.68E+002
5	1344-	1361	1352.74	338.16	0.71	6.96E+001	55.64	2.26E+002
6	1396-	1416	1407.40	351.83	1.75	2.55E+002	61.28	1.99E+002
7	2034-	2055	2042.94	510.75	0.69	1.44E+002	51.83	1.47E+002
8	2321-	2341	2332.33	583.12	1.02	1.93E+002	46.60	1.02E+002
9	2424-	2447	2436.96	609.28	1.64	3.15E+002	50.45	8.69E+001
10	3634-	3658	3644.67	911.29	1.37	1.65E+002	38.43	5.27E+001
11	3869-	3886	3875.34	968.97	0.60	6.06E+001	36.20	8.54E+001
12	4471-	4489	4481.44	1120.54	0.62	7.64E+001	31.64	5.46E+001
13	5831-	5859	5845.76	1461.71	2.46	1.08E+003	67.76	2.52E+001
14	7054-	7073	7062.66	1766.02	2.14	7.97E+001	18.96	4.29E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: 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	2.02529E-001	7.79025E-002
K-40	0.975	1460.81*		10.67	1.86663E+001	1.91272E+000
TL-208	0.752	277.35		6.80		
		510.84*		21.60	9.37634E-001	3.68699E-001
		583.14*		84.20	3.37118E-001	9.24266E-002
		860.37		12.46		
Pb-212	0.521	74.81*	@	10.70	6.80624E+000	2.48412E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.19999E-001	2.27578E-001
Bi-214	0.985	609.31*		46.30	1.01483E+000	2.04997E-001
		1120.29*		15.10	8.78840E-001	3.75721E-001
		1764.49*		15.80	9.67221E-001	2.49581E-001
PB-214	0.583	74.82*	@	6.21	1.17273E+001	4.36406E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	6.13368E-001	3.85928E-001
		351.92*		37.20	8.55631E-001	2.50697E-001
Ac-228	0.999	338.32*		11.40	7.54837E-001	6.14766E-001
		911.07*		27.70	9.77408E-001	2.53523E-001
		969.11*		16.60	6.08890E-001	3.69013E-001

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

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

I N T E R 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	1.297116E-001	8.038494E-002
K-40		0.975	1.866633E+001	1.912716E+000
TL-208		0.752	3.371178E-001	9.177132E-002
Pb-212	@	0.521	7.199990E-001	2.275780E-001
Bi-214		0.985	9.780186E-001	1.459680E-001
PB-214	@	0.583	7.837391E-001	2.102340E-001
Ac-228		0.999	8.484274E-001	1.978432E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
2	84.89	3.9558E-001	63.57

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: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	1.1055E-001	8.58E-002	8.8793E-002
	1332.49	100.00	8.5795E-002		-1.4047E-002
Nb-94	702.63	100.00	1.1052E-001	1.04E-001	5.1265E-002
	871.10	100.00	1.0388E-001		-2.0499E-002
Ag-108m	79.20	7.10	5.4646E+000	1.28E-001	-4.7882E+000
	433.93	89.90	1.2895E-001		3.0396E-002
	614.37	90.40	1.6700E-001		-3.0092E-003
	722.95	90.50	1.2817E-001		1.0081E-001
Sb-125	176.33	6.89	2.4573E+000	3.91E-001	-6.6874E-001
	427.89	29.33	3.9052E-001		-3.4720E-001
	463.38	10.35	1.1564E+000		6.2889E-001
	600.56	17.80	5.9137E-001		-1.5076E-001
	606.64	5.02	3.1415E+000		8.1279E+000
	635.90	11.32	9.3482E-001		-7.0317E-002
Cs-134	563.23	8.38	1.2967E+000	1.29E-001	-2.5185E-001
	569.32	15.43	7.0955E-001		-4.2382E-001
	604.70	97.60	1.5736E-001		-7.5655E-002
	795.84	85.40	1.2918E-001		-3.1406E-002
	801.93	8.73	1.1667E+000		-5.4305E-001
Cs-137	661.65	85.12	1.3810E-001	1.38E-001	1.5944E-001
Eu-152	121.78	28.40	7.8139E-001	3.53E-001	6.5439E-002
	244.69	7.49	1.9979E+000		-3.1761E+000
	344.27	26.50	4.7639E-001		-1.5446E-001
	778.89	12.74	8.1426E-001		-2.0738E-002
	867.32	4.16	2.6089E+000		-3.9015E-001
	964.01	14.40	9.2140E-001		1.7982E-001
	1085.78	10.00	1.0009E+000		9.6069E-001
	1112.02	13.30	7.3443E-001		1.4705E-001
	1407.95	20.70	3.5348E-001		-7.2206E-002
Eu-154	123.07	40.50	5.4577E-001	2.52E-001	6.9827E-002
	247.94	6.60	2.1541E+000		-1.3786E+000
	591.81	4.83	2.1688E+000		-1.4211E+000
	723.30	19.70	5.9242E-001		8.1951E-001
	756.87	4.33	2.2987E+000		1.2345E+000
	873.19	11.50	9.2097E-001		7.4975E-001
	996.32	10.30	8.8574E-001		-4.8846E-001
	1004.76	17.90	5.1872E-001		9.3833E-002
	1274.45	35.50	2.5228E-001		-7.2250E-002
Eu-155	86.54	30.90	1.1200E+000	1.12E+000	1.8223E-002
	105.31	20.70	1.2297E+000		3.9727E-001
Am-241	59.54	35.90	1.3413E+000	1.34E+000	-5.0394E-001
Cm-243	228.19	10.56	1.4194E+000	1.01E+000	-3.4668E-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	7.6165E-001

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

Report Generated On 5/16/2006 2:23:59 PM

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

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-08-05-136
Sample Title: OOL-08-05-136-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/16/2006 2:13:57 PM
Live Time: 600.0 seconds
Real Time: 600.9 seconds

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

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

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

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

Filename: RED6264
Log Number: OOL-08-05-136
Title: OOL-08-05-136-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	309	292.28	72.97	1.40	3.34E+002	68.77	1.56E+003
m	2	285-	309	300.69	75.08	1.40	7.33E+002	79.58	2.23E+003
	3	944-	961	955.34	238.78	1.90	3.36E+002	81.19	4.23E+002
	4	1175-	1188	1181.31	295.29	0.58	1.19E+002	51.96	2.11E+002
	5	1401-	1416	1407.55	351.86	1.42	2.52E+002	54.02	1.68E+002
	6	2320-	2343	2332.89	583.26	2.05	2.04E+002	52.18	1.26E+002
	7	2425-	2449	2436.76	609.23	1.94	3.25E+002	56.56	1.22E+002
	8	3637-	3652	3644.55	911.26	1.13	1.21E+002	34.42	6.22E+001
	9	3867-	3885	3877.49	969.51	1.29	7.19E+001	37.71	8.81E+001
	10	4473-	4490	4482.05	1120.69	0.59	6.15E+001	32.44	6.35E+001
	11	5831-	5861	5846.54	1461.91	2.26	1.07E+003	68.41	3.10E+001
	12	7054-	7074	7062.60	1766.00	2.27	7.97E+001	21.76	1.23E+001

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: RED6264

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
K-40	0.963	1460.81*	10.67	1.84632E+001	1.90681E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.56043E-001	1.02196E-001
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	1.08552E+001	2.43221E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.42552E-001	2.42895E-001
Bi-214	0.984	609.31*	46.30	1.04531E+000	2.23067E-001
		1120.29*	15.10	7.07145E-001	3.80559E-001
		1764.49*	15.80	9.67422E-001	2.81193E-001
PB-214	0.583	74.82* @	6.21	1.87039E+001	4.40523E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	7.35194E-001	3.44834E-001
		351.92*	37.20	8.46675E-001	2.30167E-001
Ac-228	0.631	338.32	11.40		
		911.07*	27.70	7.14052E-001	2.19491E-001
		969.11*	16.60	7.22397E-001	3.86132E-001

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

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

I N T E R 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		0.963	1.846318E+001	1.906813E+000
TL-208		0.471	3.560432E-001	1.021963E-001
Pb-212	@	0.520	8.425524E-001	2.428954E-001
Bi-214		0.984	9.615738E-001	1.588122E-001
PB-214	@	0.583	8.123158E-001	1.914390E-001
Ac-228		0.631	7.160899E-001	1.908169E-001

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

Errors quoted at 1.960 sigma

U N I D E N T I 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	5.5737E-001	20.56

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: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	1.1275E-001	9.09E-002	1.5005E-001
	1332.49	100.00	9.0909E-002		7.2977E-002
Nb-94	702.63	100.00	1.0602E-001	9.89E-002	1.7064E-002
	871.10	100.00	9.8893E-002		-8.6033E-002
Ag-108m	79.20	7.10	5.5482E+000	1.28E-001	-8.1545E+000
	433.93	89.90	1.3252E-001		-1.1469E-002
	614.37	90.40	1.7025E-001		-2.0870E-003
	722.95	90.50	1.2843E-001		-5.2389E-002
Sb-125	176.33	6.89	2.4463E+000	4.12E-001	-1.8895E+000
	427.89	29.33	4.1215E-001		2.9319E-001
	463.38	10.35	1.1813E+000		6.2242E-001
	600.56	17.80	6.1850E-001		4.7596E-002
	606.64	5.02	3.3491E+000		1.3260E-001
	635.90	11.32	8.6317E-001		-8.7559E-002
Cs-134	563.23	8.38	1.3626E+000	1.21E-001	1.1977E-002
	569.32	15.43	7.2215E-001		-4.7614E-001
	604.70	97.60	1.6520E-001		1.4859E-002
	795.84	85.40	1.2104E-001		2.1289E-003
	801.93	8.73	1.1273E+000		-4.8798E-001
Cs-137	661.65	85.12	1.4352E-001	1.44E-001	1.2312E-001
Eu-152	121.78	28.40	7.9156E-001	3.97E-001	-3.4461E-001
	244.69	7.49	2.0802E+000		-2.3798E+000
	344.27	26.50	4.6758E-001		-5.3857E-001
	778.89	12.74	8.2913E-001		-1.2329E+000
	867.32	4.16	2.4322E+000		-2.5877E+000
	964.01	14.40	8.9836E-001		1.6119E-001
	1085.78	10.00	9.8399E-001		-1.5925E-001
	1112.02	13.30	7.0214E-001		-6.0189E-001
	1407.95	20.70	3.9695E-001		2.8985E-001
Eu-154	123.07	40.50	5.5316E-001	2.61E-001	-1.2003E-001
	247.94	6.60	2.2151E+000		1.6888E-001
	591.81	4.83	2.2914E+000		-7.0500E-001
	723.30	19.70	5.9242E-001		-1.7148E-001
	756.87	4.33	2.3052E+000		6.2750E-001
	873.19	11.50	8.7336E-001		5.0275E-001
	996.32	10.30	9.2910E-001		-9.5936E-001
	1004.76	17.90	5.2834E-001		2.8479E-001
	1274.45	35.50	2.6137E-001		-1.3926E-001
Eu-155	86.54	30.90	1.1117E+000	1.11E+000	2.4250E+000
	105.31	20.70	1.2251E+000		-4.3105E-001
Am-241	59.54	35.90	1.3455E+000	1.35E+000	7.5579E-001
Cm-243	228.19	10.56	1.4414E+000	1.05E+000	5.9045E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	1.0515E+000	1.05E+000	4.9653E-001

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

Report Generated On 5/16/2006 2:06:59 PM

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

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-08-05-137
Sample Title: OOL-08-05-137-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/16/2006 1:56:57 PM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

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

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

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

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

Filename: RED6264
Log Number: OOL-08-05-137
Title: OOL-08-05-137-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	305	300.38	75.00	1.20	3.51E+002	123.05	1.50E+003
2	944-	960	954.40	238.55	1.24	2.76E+002	80.33	4.49E+002
3	1172-	1191	1181.54	295.35	0.60	1.30E+002	69.33	3.20E+002
4	1346-	1359	1352.94	338.21	0.46	8.63E+001	48.05	1.84E+002
5	1401-	1415	1407.38	351.82	1.59	2.48E+002	54.89	1.85E+002
6	2320-	2342	2332.18	583.08	0.91	2.23E+002	50.69	1.15E+002
7	2426-	2447	2436.70	609.22	1.85	2.98E+002	55.03	1.31E+002
8	3637-	3656	3645.07	911.39	0.86	1.61E+002	37.54	5.88E+001
9	4010-	4021	4015.56	1004.04	0.63	1.27E+001	16.41	2.23E+001
10	4473-	4491	4482.11	1120.71	1.70	9.15E+001	33.58	5.95E+001
11	5833-	5861	5845.89	1461.74	2.36	1.23E+003	71.81	2.50E+001
12	6917-	6930	6923.65	1731.25	0.53	1.99E+001	11.43	5.14E+000
13	7052-	7073	7063.19	1766.15	2.13	9.74E+001	20.27	2.63E+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: 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	0.973	1460.81*	10.67	2.12317E+001	2.12101E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.89235E-001	1.01966E-001
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	5.21250E+000	2.09138E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.93449E-001	2.29056E-001
Bi-214	0.981	609.31*	46.30	9.59896E-001	2.13045E-001
		1120.29*	15.10	1.05202E+000	4.02039E-001
		1764.49*	15.80	1.18153E+000	2.72871E-001
PB-214	0.582	74.82* @	6.21	8.98128E+000	3.66201E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	8.08337E-001	4.50487E-001
		351.92*	37.20	8.31743E-001	2.30959E-001
Ac-228	0.539	338.32*	11.40	9.35417E-001	5.41198E-001
		911.07*	27.70	9.53043E-001	2.47569E-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
K-40		0.973	2.123172E+001	2.121006E+000
TL-208		0.471	3.892347E-001	1.019661E-001
Pb-212	@	0.521	6.934486E-001	2.290556E-001
Bi-214		0.981	1.045048E+000	1.549517E-001
PB-214	@	0.582	8.268714E-001	2.055221E-001
Ac-228		0.539	9.499930E-001	2.251318E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	1004.04	2.1190E-002	129.08
12	1731.25	3.3100E-002	57.54

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: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	1.1306E-001	8.97E-002	9.1840E-002
	1332.49	100.00	8.9659E-002		2.2567E-003
Nb-94	702.63	100.00	1.1126E-001	1.04E-001	-9.1367E-002
	871.10	100.00	1.0416E-001		-2.6342E-002
Ag-108m	79.20	7.10	5.4869E+000	1.33E-001	-1.4972E+001
	433.93	89.90	1.3436E-001		-6.2776E-002
	614.37	90.40	1.6719E-001		-2.5836E-002
	722.95	90.50	1.3327E-001		1.5157E-001
Sb-125	176.33	6.89	2.5520E+000	4.04E-001	4.3785E-001
	427.89	29.33	4.0432E-001		-1.2441E-001
	463.38	10.35	1.2056E+000		4.4659E-001
	600.56	17.80	6.4807E-001		1.2282E-002
	606.64	5.02	3.3607E+000		9.3424E+000
	635.90	11.32	9.2401E-001		-1.4284E-001
Cs-134	563.23	8.38	1.4064E+000	1.24E-001	8.1770E-001
	569.32	15.43	7.2768E-001		1.9975E-001
	604.70	97.60	1.6798E-001		-1.3149E-002
	795.84	85.40	1.2392E-001		-8.4648E-003
	801.93	8.73	1.1731E+000		-1.6117E+000
Cs-137	661.65	85.12	1.3757E-001	1.38E-001	6.1057E-002
Eu-152	121.78	28.40	8.2547E-001	3.69E-001	2.3538E-001
	244.69	7.49	2.1277E+000		-2.0142E+000
	344.27	26.50	5.2279E-001		-1.4494E-001
	778.89	12.74	8.0129E-001		-7.7914E-001
	867.32	4.16	2.6023E+000		-1.5443E+000
	964.01	14.40	9.5957E-001		1.1295E+000
	1085.78	10.00	1.0307E+000		4.3090E-002
	1112.02	13.30	7.9489E-001		5.0950E-003
	1407.95	20.70	3.6858E-001		1.2413E-001
Eu-154	123.07	40.50	5.7767E-001	2.62E-001	6.0736E-001
	247.94	6.60	2.3239E+000		-1.0556E+000
	591.81	4.83	2.2683E+000		2.1249E-002
	723.30	19.70	6.0303E-001		2.0785E-001
	756.87	4.33	2.3755E+000		-1.1438E+000
	873.19	11.50	9.1853E-001		9.1479E-001
	996.32	10.30	9.5476E-001		3.0988E-001
	1004.76	17.90	5.1678E-001		-3.8820E-001
	1274.45	35.50	2.6248E-001		-2.1069E-002
Eu-155	86.54	30.90	1.1264E+000	1.13E+000	2.4108E+000
	105.31	20.70	1.2662E+000		9.9071E-001
Am-241	59.54	35.90	1.3239E+000	1.32E+000	-1.4162E+000
Cm-243	228.19	10.56	1.4622E+000	1.05E+000	8.0622E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	1.0457E+000	1.05E+000	-2.0898E-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 5/16/2006 1:45:29 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-08-05-138
Sample Title: OOL-08-05-138-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/16/2006 1:35:26 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-08-05-138
Title: OOL-08-05-138-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	309	291.56	72.79	1.42	4.03E+002	71.56	1.78E+003
m	2	284-	309	300.39	75.00	1.43	7.77E+002	81.79	2.38E+003
	3	333-	345	340.18	84.95	1.05	1.84E+002	114.32	1.22E+003
	4	946-	962	954.11	238.47	1.23	2.68E+002	84.79	5.11E+002
	5	1171-	1189	1181.18	295.26	1.14	1.38E+002	66.86	3.04E+002
	6	1400-	1416	1407.71	351.90	1.62	2.32E+002	59.28	2.18E+002
	7	2035-	2054	2042.49	510.64	1.14	1.43E+002	53.42	1.69E+002
	8	2322-	2344	2332.40	583.14	1.89	1.82E+002	51.64	1.32E+002
	9	2425-	2449	2436.55	609.18	1.77	3.81E+002	57.96	1.20E+002
	10	3068-	3079	3073.21	768.39	0.71	2.97E+001	25.64	5.63E+001
	11	3636-	3655	3644.80	911.32	1.25	1.61E+002	39.82	7.18E+001
	12	3867-	3884	3876.03	969.15	1.36	7.21E+001	34.22	7.09E+001
	13	4472-	4492	4480.89	1120.40	1.23	8.88E+001	37.26	7.52E+001
	14	5830-	5860	5846.10	1461.79	2.36	1.27E+003	72.38	1.94E+001
	15	6916-	6929	6922.24	1730.90	0.37	2.10E+001	12.53	7.04E+000
	16	7053-	7073	7063.61	1766.25	2.07	8.73E+001	21.00	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: 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	2.01371E-001	7.99530E-002
K-40	0.970	1460.81*		10.67	2.19506E+001	2.17412E+000
TL-208	0.752	277.35		6.80		
		510.84*		21.60	9.32271E-001	3.77902E-001
		583.14*		84.20	3.16879E-001	9.91244E-002
		860.37		12.46		
Pb-212	0.521	74.81*	@	10.70	1.15193E+001	2.56295E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.71844E-001	2.37428E-001
Bi-214	0.980	609.31*		46.30	1.22650E+000	2.40122E-001
		1120.29*		15.10	1.02101E+000	4.42021E-001
		1764.49*		15.80	1.05974E+000	2.75948E-001
PB-214	0.583	74.82*	@	6.21	1.98480E+001	4.64514E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	8.57527E-001	4.38568E-001
		351.92*		37.20	7.78348E-001	2.37918E-001
Ac-228	0.632	338.32		11.40		
		911.07*		27.70	9.53039E-001	2.59707E-001
		969.11*		16.60	7.23966E-001	3.51826E-001

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

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

I N T E R 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	1.329246E-001	8.274018E-002
K-40		0.970	2.195060E+001	2.174116E+000
TL-208		0.752	3.168794E-001	9.858503E-002
Pb-212	@	0.521	6.718443E-001	2.374280E-001
Bi-214		0.980	1.135425E+000	1.676144E-001
PB-214	@	0.583	7.963516E-001	2.091276E-001
Ac-228		0.632	8.722438E-001	2.089461E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.79	6.7244E-001	17.74
3	84.95	3.0613E-001	62.24
10	768.39	4.9496E-002	86.35
15	1730.90	3.4940E-002	59.78

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

Errors quoted at 1.960 sigma

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

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.0536E-001	8.71E-002	-2.8583E-002
	1332.49	100.00	8.7103E-002		4.5829E-002
Nb-94	702.63	100.00	1.1625E-001	1.04E-001	-9.1183E-002
	871.10	100.00	1.0359E-001		-5.3296E-002
Ag-108m	79.20	7.10	5.5760E+000	1.30E-001	-8.2996E+000
	433.93	89.90	1.2990E-001		-1.3047E-001
	614.37	90.40	1.7448E-001		2.3809E-002
	722.95	90.50	1.3049E-001		7.6933E-002
Sb-125	176.33	6.89	2.5452E+000	4.08E-001	-6.9074E-001
	427.89	29.33	4.0825E-001		9.2327E-003
	463.38	10.35	1.2465E+000		7.2170E-001
	600.56	17.80	6.2102E-001		1.0523E-001
	606.64	5.02	3.4749E+000		2.0029E-001
	635.90	11.32	9.9916E-001		5.6621E-001
Cs-134	563.23	8.38	1.4183E+000	1.32E-001	-5.8833E-001
	569.32	15.43	7.5734E-001		-4.2920E-001
	604.70	97.60	1.7102E-001		1.8649E-002
	795.84	85.40	1.3158E-001		8.0364E-002
	801.93	8.73	1.2862E+000		-6.8040E-001
Cs-137	661.65	85.12	1.3967E-001	1.40E-001	3.8226E-004
Eu-152	121.78	28.40	8.0512E-001	4.08E-001	1.3199E-001
	244.69	7.49	2.1742E+000		-1.5739E+000
	344.27	26.50	4.9450E-001		-6.1278E-001
	778.89	12.74	8.2703E-001		-8.7579E-001
	867.32	4.16	2.7367E+000		-1.2297E+000
	964.01	14.40	9.1488E-001		3.4673E-001
	1085.78	10.00	1.0176E+000		1.1938E-001
	1112.02	13.30	8.1164E-001		-2.3372E-001
	1407.95	20.70	4.0815E-001		4.4621E-001
Eu-154	123.07	40.50	5.5929E-001	2.73E-001	-4.3187E-001
	247.94	6.60	2.2744E+000		-2.6611E+000
	591.81	4.83	2.3322E+000		1.9723E+000
	723.30	19.70	6.0069E-001		6.3142E-001
	756.87	4.33	2.3629E+000		-1.8236E+000
	873.19	11.50	8.7593E-001		-2.8239E-001
	996.32	10.30	9.7971E-001		-1.5033E-001
	1004.76	17.90	5.7911E-001		4.2568E-001
	1274.45	35.50	2.7335E-001		-3.0612E-001
Eu-155	86.54	30.90	1.1103E+000	1.11E+000	1.6443E+000
	105.31	20.70	1.2631E+000		5.2075E-001
Am-241	59.54	35.90	1.3343E+000	1.33E+000	-3.8316E-001
Cm-243	228.19	10.56	1.4860E+000	1.06E+000	-5.9397E-001

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	8.1044E-001

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

Report Generated On 5/16/2006 1:32:26 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: RED6264

Spectrum File: RED6264
Sample ID: OOL-08-05-139
Sample Title: OOL-08-05-139-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/16/2006 1:22:24 PM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

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

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

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

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

Filename: RED6264
Log Number: OOL-08-05-139
Title: OOL-08-05-139-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	281-	309	291.62	72.81	1.49	4.29E+002	72.87	2.14E+003
m	2	281-	309	300.88	75.12	1.49	7.73E+002	82.91	2.58E+003
	3	946-	962	954.61	238.60	1.48	2.56E+002	82.77	4.84E+002
	4	1171-	1192	1181.63	295.37	1.19	1.90E+002	74.04	3.30E+002
	5	1397-	1418	1407.65	351.89	1.35	3.24E+002	72.53	2.78E+002
	6	2031-	2054	2042.70	510.69	2.10	1.76E+002	57.37	1.69E+002
	7	2320-	2345	2333.06	583.30	1.54	2.17E+002	59.60	1.67E+002
	8	2426-	2446	2437.44	609.40	1.62	3.49E+002	53.79	1.11E+002
	9	2903-	2917	2909.84	727.53	0.55	4.55E+001	27.95	5.45E+001
	10	3068-	3082	3074.95	768.82	0.33	4.14E+001	29.21	6.26E+001
	11	3633-	3653	3644.91	911.35	1.52	1.51E+002	41.27	8.07E+001
	12	3869-	3885	3877.14	969.42	1.15	9.18E+001	35.26	7.42E+001
	13	4473-	4491	4483.30	1121.01	1.58	7.53E+001	34.46	6.87E+001
	14	5829-	5861	5845.54	1461.65	2.03	1.25E+003	75.48	4.53E+001
	15	7052-	7073	7064.08	1766.37	0.34	8.66E+001	22.94	1.34E+001

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: RED6264

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	0.997	511.00*	100.00	2.47735E-001	8.74057E-002
K-40	0.978	1460.81*	10.67	2.16406E+001	2.18527E+000
TL-208	0.751	277.35	6.80		
		510.84*	21.60	1.14692E+000	4.15355E-001
		583.14*	84.20	3.79296E-001	1.15154E-001
		860.37	12.46		
Bi-212	0.996	727.17*	11.80	6.02323E-001	3.76794E-001
Pb-212	0.521	74.81* @	10.70	1.14306E+001	2.55430E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.41474E-001	2.30799E-001
Bi-214	0.974	609.31*	46.30	1.12524E+000	2.21837E-001
		1120.29*	15.10	8.65696E-001	4.06860E-001
		1764.49*	15.80	1.05030E+000	2.97485E-001
PB-214	0.582	74.82* @	6.21	1.96952E+001	4.62754E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	1.17999E+000	4.99832E-001
		351.92*	37.20	1.08705E+000	3.03992E-001
Ac-228	0.631	338.32	11.40		
		911.07*	27.70	8.94790E-001	2.64842E-001
		969.11*	16.60	9.22027E-001	3.67013E-001

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

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

I N T E R 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	1.658072E-001	9.083670E-002
K-40		0.978	2.164061E+001	2.185267E+000
TL-208		0.751	3.792957E-001	1.144891E-001
Bi-212		0.996	6.023232E-001	3.767936E-001
Pb-212	@	0.521	6.414744E-001	2.307986E-001
Bi-214		0.974	1.061122E+000	1.629496E-001
PB-214	@	0.582	1.112144E+000	2.597281E-001
Ac-228		0.631	9.041163E-001	2.147640E-001

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

Errors quoted at 1.960 sigma

U N I D E N T I 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	7.1517E-001	16.98
10	768.82	6.8982E-002	70.58

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: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	1.1055E-001	8.27E-002	-6.9136E-002
	1332.49	100.00	8.2657E-002		2.3846E-002
Nb-94	702.63	100.00	1.0754E-001	1.04E-001	-5.6256E-002
	871.10	100.00	1.0416E-001		-6.7680E-002
Ag-108m	79.20	7.10	5.7500E+000	1.32E-001	-9.8219E+000
	433.93	89.90	1.3308E-001		-1.1726E-001
	614.37	90.40	1.7605E-001		-4.5940E-002
	722.95	90.50	1.3176E-001		-5.2498E-002
Sb-125	176.33	6.89	2.5182E+000	4.25E-001	9.8336E-001
	427.89	29.33	4.2469E-001		1.1717E-001
	463.38	10.35	1.1548E+000		-1.0069E-001
	600.56	17.80	6.5167E-001		2.9570E-001
	606.64	5.02	3.4467E+000		1.1226E+001
	635.90	11.32	9.3911E-001		-5.8174E-002
Cs-134	563.23	8.38	1.3527E+000	1.25E-001	-6.2232E-001
	569.32	15.43	7.3861E-001		3.1485E-001
	604.70	97.60	1.7118E-001		-4.9378E-002
	795.84	85.40	1.2487E-001		-7.5928E-003
	801.93	8.73	1.1602E+000		-9.3963E-001
Cs-137	661.65	85.12	1.3731E-001	1.37E-001	5.0190E-003
Eu-152	121.78	28.40	8.0952E-001	3.88E-001	1.6906E-001
	244.69	7.49	2.1580E+000		1.4252E-001
	344.27	26.50	4.9202E-001		-2.7037E-001
	778.89	12.74	8.3124E-001		-3.0366E-001
	867.32	4.16	2.6608E+000		-2.5431E+000
	964.01	14.40	9.0335E-001		-5.8952E-002
	1085.78	10.00	9.4200E-001		-1.6979E+000
	1112.02	13.30	7.8270E-001		-2.0542E-001
	1407.95	20.70	3.8774E-001		3.8428E-001
Eu-154	123.07	40.50	5.5838E-001	2.83E-001	2.0075E-001
	247.94	6.60	2.2787E+000		-2.5609E+000
	591.81	4.83	2.3322E+000		-2.6866E-001
	723.30	19.70	6.0186E-001		-2.4511E-001
	756.87	4.33	2.5335E+000		-5.1692E-001
	873.19	11.50	9.0870E-001		5.3748E-002
	996.32	10.30	1.0277E+000		7.6282E-001
	1004.76	17.90	5.6153E-001		-2.8222E-002
	1274.45	35.50	2.8276E-001		-3.8169E-001
Eu-155	86.54	30.90	1.1206E+000	1.12E+000	1.9936E+000
	105.31	20.70	1.2633E+000		8.2710E-002
Am-241	59.54	35.90	1.3698E+000	1.37E+000	4.0705E-001
Cm-243	228.19	10.56	1.4713E+000	1.04E+000	7.2334E-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	2.3650E-001

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

Report Generated On 5/16/2006 1:17:21 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: RED6264

Spectrum File: RED6264
Sample ID: OOL-08-05-140
Sample Title: OOL-08-05-140-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/16/2006 1:07:17 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-08-05-140
Title: OOL-08-05-140-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	309	301.06	75.17	1.20	4.98E+002	146.73	1.84E+003
2	946-	962	954.50	238.57	1.52	2.30E+002	84.33	5.17E+002
3	1171-	1191	1180.68	295.13	1.12	1.98E+002	68.39	2.81E+002
4	1347-	1363	1353.32	338.30	0.71	9.34E+001	53.39	2.07E+002
5	1397-	1417	1407.58	351.87	1.51	2.78E+002	68.49	2.60E+002
6	2325-	2342	2332.57	583.18	0.97	1.36E+002	45.53	1.22E+002
7	2424-	2448	2436.92	609.27	1.24	3.82E+002	60.03	1.34E+002
8	3064-	3080	3074.19	768.63	1.69	5.11E+001	30.25	5.89E+001
9	3173-	3188	3181.05	795.35	0.26	2.97E+001	29.35	6.43E+001
10	3633-	3654	3645.16	911.41	0.50	1.54E+002	42.67	8.51E+001
11	3868-	3884	3876.70	969.31	1.10	6.95E+001	32.83	6.75E+001
12	4473-	4492	4480.85	1120.39	2.29	1.06E+002	34.80	5.96E+001
13	5829-	5861	5845.69	1461.69	2.53	1.23E+003	76.04	5.38E+001
14	7054-	7073	7063.60	1766.25	0.55	8.03E+001	23.04	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
K-40	0.976	1460.81*	10.67	2.12343E+001	2.16484E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.37181E-001	8.52545E-002
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	7.35905E+000	2.60504E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.77105E-001	2.30167E-001
Bi-214	0.980	609.31*	46.30	1.22918E+000	2.45557E-001
		1120.29*	15.10	1.22338E+000	4.20754E-001
		1764.49*	15.80	9.73841E-001	2.96024E-001
PB-214	0.582	74.82* @	6.21	1.26798E+001	4.58197E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	1.22596E+000	4.71131E-001
		351.92*	37.20	9.33132E-001	2.78026E-001
Ac-228	0.998	338.32*	11.40	1.01245E+000	6.00257E-001
		911.07*	27.70	9.10378E-001	2.73205E-001
		969.11*	16.60	6.98026E-001	3.37634E-001

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

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

I N T E R 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	2.123430E+001	2.164838E+000
TL-208		0.471	2.371805E-001	8.525453E-002
Pb-212	@	0.521	5.771051E-001	2.301667E-001
Bi-214		0.980	1.141602E+000	1.724024E-001
PB-214	@	0.582	1.008767E+000	2.394421E-001
Ac-228		0.998	8.470586E-001	2.002200E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	768.63	8.5189E-002	59.19
9	795.35	4.9486E-002	98.85

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: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	1.1275E-001	8.40E-002	-1.0542E-002
	1332.49	100.00	8.4017E-002		-3.2853E-002
Nb-94	702.63	100.00	1.0954E-001	1.04E-001	3.5014E-003
	871.10	100.00	1.0445E-001		1.8919E-002
Ag-108m	79.20	7.10	5.6984E+000	1.26E-001	-1.0751E+001
	433.93	89.90	1.2567E-001		3.6329E-003
	614.37	90.40	1.8232E-001		-2.7015E-002
	722.95	90.50	1.2791E-001		-3.2546E-002
Sb-125	176.33	6.89	2.5143E+000	3.88E-001	2.9860E-001
	427.89	29.33	3.8817E-001		1.6906E-001
	463.38	10.35	1.1780E+000		-4.3229E-002
	600.56	17.80	6.5406E-001		-4.4277E-001
	606.64	5.02	3.5415E+000		-7.3492E-001
	635.90	11.32	9.6026E-001		-4.2981E-001
Cs-134	563.23	8.38	1.4348E+000	1.32E-001	5.4609E-001
	569.32	15.43	7.6522E-001		9.8238E-002
	604.70	97.60	1.7607E-001		-8.1407E-002
	795.84	85.40	1.3217E-001		-9.8654E-003
	801.93	8.73	1.2627E+000		9.5251E-001
Cs-137	661.65	85.12	1.4327E-001	1.43E-001	2.4120E-002
Eu-152	121.78	28.40	7.9660E-001	3.83E-001	-4.0996E-002
	244.69	7.49	2.1336E+000		-1.3891E+000
	344.27	26.50	4.8804E-001		-1.6390E-001
	778.89	12.74	8.2280E-001		-3.6160E-001
	867.32	4.16	2.5626E+000		-5.4805E+000
	964.01	14.40	9.3909E-001		-8.1522E-002
	1085.78	10.00	1.0405E+000		-1.9351E-001
	1112.02	13.30	7.7529E-001		-2.7363E-001
	1407.95	20.70	3.8305E-001		3.6375E-001
Eu-154	123.07	40.50	5.5500E-001	2.73E-001	-3.0387E-001
	247.94	6.60	2.2915E+000		-1.2602E+000
	591.81	4.83	2.3187E+000		-1.9657E+000
	723.30	19.70	5.9123E-001		1.2476E-001
	756.87	4.33	2.4498E+000		-1.1292E+000
	873.19	11.50	8.9373E-001		-2.1339E-001
	996.32	10.30	1.0130E+000		-7.8172E-001
	1004.76	17.90	6.0116E-001		-3.2507E-001
	1274.45	35.50	2.7335E-001		9.6763E-002
Eu-155	86.54	30.90	1.1351E+000	1.14E+000	1.8409E+000
	105.31	20.70	1.2591E+000		-1.2380E-001
Am-241	59.54	35.90	1.4104E+000	1.41E+000	2.9582E-001
Cm-243	228.19	10.56	1.4696E+000	1.08E+000	-1.1629E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	1.0755E+000	1.08E+000	7.2788E-001

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

Report Generated On 5/16/2006 9:48:40 AM

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

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-08-05-142
Sample Title: OOL-08-05-142-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/16/2006 9:38:37 AM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

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

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

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

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

Filename: RED6264
Log Number: OOL-08-05-142
Title: OOL-08-05-142-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	304	291.55	72.79	1.21	3.43E+002	64.90	1.48E+003
m	2	284-	304	300.02	74.91	1.22	5.93E+002	74.83	1.58E+003
	3	331-	346	340.19	84.95	0.79	1.80E+002	138.75	1.60E+003
	4	734-	749	744.98	186.18	1.12	7.33E+001	78.87	5.14E+002
M	5	950-	974	954.65	238.61	1.19	2.08E+002	40.03	2.61E+002
m	6	950-	974	969.16	242.24	1.19	6.26E+001	29.00	2.88E+002
	7	1172-	1185	1180.77	295.15	0.99	8.50E+001	47.43	1.82E+002
	8	1349-	1360	1353.41	338.32	0.57	7.31E+001	39.28	1.29E+002
	9	1401-	1417	1406.94	351.71	0.99	1.55E+002	52.45	1.77E+002
	10	2323-	2344	2332.78	583.23	1.03	1.80E+002	44.85	9.17E+001
	11	2428-	2449	2437.36	609.38	1.18	1.68E+002	44.62	9.28E+001
	12	3635-	3656	3644.42	911.23	1.70	1.46E+002	36.04	5.14E+001
	13	3867-	3885	3876.72	969.32	0.75	6.18E+001	31.37	5.72E+001
	14	4027-	4039	4032.42	1008.26	0.48	2.11E+001	18.16	2.39E+001
	15	4476-	4490	4481.97	1120.67	0.68	4.93E+001	28.02	5.37E+001
	16	5833-	5861	5846.37	1461.86	1.93	1.05E+003	68.58	3.90E+001
	17	5979-	5992	5985.79	1496.73	0.48	8.30E+000	7.14	1.70E+000
	18	7056-	7071	7064.51	1766.48	0.98	5.88E+001	19.82	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: 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	0.966	1460.81*	10.67	1.80996E+001	1.88563E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.14708E-001	8.83624E-002
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	8.81332E+000	2.05420E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.21342E-001	1.29516E-001
Bi-214	0.974	609.31*	46.30	5.41620E-001	1.58448E-001
		1120.29*	15.10	5.67616E-001	3.27866E-001
		1764.49*	15.80	7.13925E-001	2.50872E-001
PB-214	0.732	74.82* @	6.21	1.51856E+001	3.70714E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98*	7.49	9.40272E-001	4.62429E-001
		295.21*	19.20	5.26267E-001	3.06825E-001
		351.92*	37.20	5.20468E-001	1.96529E-001
Ac-228	0.999	338.32*	11.40	7.92585E-001	4.43698E-001
		911.07*	27.70	8.60868E-001	2.34969E-001
		969.11*	16.60	6.20586E-001	3.21684E-001

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

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

I N T E R 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		0.966	1.809959E+001	1.885627E+000
TL-208		0.471	3.147076E-001	8.836243E-002
Pb-212	@	0.521	5.213424E-001	1.295164E-001
Bi-214		0.974	5.874430E-001	1.240126E-001
PB-214	@	0.732	5.696250E-001	1.558137E-001
Ac-228		0.999	7.796389E-001	1.744593E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.79	5.7190E-001	18.91
3	84.95	2.9943E-001	77.23
4	186.18	1.2222E-001	107.55
14	1008.26	3.5194E-002	86.02
17	1496.73	1.3833E-002	85.99

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	1.1337E-001	8.13E-002	6.0730E-002
	1332.49	100.00	8.1272E-002		6.0234E-003
Nb-94	702.63	100.00	1.0627E-001	9.33E-002	8.7665E-002
	871.10	100.00	9.3311E-002		3.0643E-002
Ag-108m	79.20	7.10	5.5091E+000	1.19E-001	-1.8207E+001
	433.93	89.90	1.1883E-001		-9.4281E-002
	614.37	90.40	1.4322E-001		-1.2068E-002
	722.95	90.50	1.2365E-001		1.1889E-001
Sb-125	176.33	6.89	2.4602E+000	3.85E-001	1.2832E+000
	427.89	29.33	3.8521E-001		5.8394E-002
	463.38	10.35	1.1103E+000		3.9656E-002
	600.56	17.80	5.8338E-001		2.4179E-001
	606.64	5.02	2.7421E+000		-5.4888E-001
	635.90	11.32	8.9525E-001		6.0646E-001
Cs-134	563.23	8.38	1.2836E+000	1.26E-001	4.6167E-001
	569.32	15.43	6.8801E-001		7.5963E-002
	604.70	97.60	1.3904E-001		5.5148E-003
	795.84	85.40	1.2611E-001		-3.9574E-002
	801.93	8.73	1.1602E+000		-5.1048E-001
Cs-137	661.65	85.12	1.3571E-001	1.36E-001	1.3279E-001
Eu-152	121.78	28.40	7.8328E-001	3.59E-001	2.9142E-002
	244.69	7.49	2.0117E+000		7.9846E-001
	344.27	26.50	4.5700E-001		-1.6984E-001
	778.89	12.74	7.5867E-001		-1.1632E+000
	867.32	4.16	2.4039E+000		-4.9114E-001
	964.01	14.40	8.0682E-001		5.8647E-002
	1085.78	10.00	9.6323E-001		7.7850E-001
	1112.02	13.30	7.6529E-001		-1.7939E-001
	1407.95	20.70	3.5859E-001		3.9499E-001
Eu-154	123.07	40.50	5.4683E-001	2.56E-001	-4.9837E-002
	247.94	6.60	2.1206E+000		-6.6762E-001
	591.81	4.83	2.0796E+000		-8.3111E-001
	723.30	19.70	5.6687E-001		3.3865E-001
	756.87	4.33	2.1988E+000		-8.2497E-001
	873.19	11.50	8.2010E-001		1.1124E-001
	996.32	10.30	8.8916E-001		-3.7608E-001
	1004.76	17.90	5.3590E-001		3.7899E-001
	1274.45	35.50	2.5573E-001		1.0325E-001
Eu-155	86.54	30.90	1.1098E+000	1.11E+000	2.4457E-001
	105.31	20.70	1.2472E+000		-1.6647E-001
Am-241	59.54	35.90	1.3608E+000	1.36E+000	9.9872E-002
Cm-243	228.19	10.56	1.4313E+000	9.71E-001	9.1017E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.7148E-001	9.71E-001	3.5829E-001

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

Report Generated On 5/16/2006 11:49:32 AM

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

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-08-05-143
Sample Title: OOL-08-05-143-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/16/2006 11:39:29 AM
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-08-05-143
Title: OOL-08-05-143-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	294-	309	300.29	74.97	1.27	5.94E+002	163.65	2.11E+003
2	944-	961	954.46	238.56	1.65	2.72E+002	83.22	4.68E+002
3	1168-	1190	1179.73	294.89	1.13	2.41E+002	72.20	2.88E+002
4	1346-	1360	1352.68	338.14	0.43	8.00E+001	49.19	1.89E+002
5	1400-	1416	1407.19	351.77	1.46	2.37E+002	59.78	2.20E+002
6	2035-	2052	2043.76	510.96	1.39	1.34E+002	51.40	1.69E+002
7	2325-	2342	2332.37	583.13	1.03	1.69E+002	45.05	1.09E+002
8	2426-	2446	2436.95	609.28	1.44	2.72E+002	50.04	1.05E+002
9	3590-	3601	3595.55	899.01	0.66	2.60E+001	17.40	2.10E+001
10	3633-	3653	3645.17	911.42	0.98	1.46E+002	39.31	7.06E+001
11	4475-	4489	4482.75	1120.87	1.36	7.23E+001	28.98	5.07E+001
12	5831-	5860	5846.08	1461.79	2.45	1.18E+003	70.37	2.25E+001
13	7057-	7073	7064.44	1766.46	0.73	5.10E+001	23.50	2.90E+001

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: RED6264

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	1.000	511.00*		100.00	1.88366E-001	7.66829E-002
K-40	0.970	1460.81*		10.67	2.04621E+001	2.05604E+000
TL-208	0.752	277.35		6.80		
		510.84*		21.60	8.72066E-001	3.62087E-001
		583.14*		84.20	2.95660E-001	8.75573E-002
		860.37		12.46		
Pb-212	0.521	74.81*	@	10.70	8.81110E+000	2.97953E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.83595E-001	2.34757E-001
Bi-214	0.973	609.31*		46.30	8.77038E-001	1.94007E-001
		1120.29*		15.10	8.31269E-001	3.44864E-001
		1764.49*		15.80	6.18769E-001	2.91763E-001
PB-214	0.582	74.82*	@	6.21	1.51818E+001	5.25077E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	1.49414E+000	5.12956E-001
		351.92*		37.20	7.94843E-001	2.40825E-001
Ac-228	0.538	338.32*		11.40	8.67699E-001	5.50385E-001
		911.07*		27.70	8.65519E-001	2.52876E-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		1.000	1.245038E-001	7.895328E-002
K-40		0.970	2.046208E+001	2.056042E+000
TL-208		0.752	2.956602E-001	8.702551E-002
Pb-212	@	0.521	6.835947E-001	2.347573E-001
Bi-214		0.973	8.038673E-001	1.462953E-001
PB-214	@	0.582	9.211410E-001	2.179957E-001
Ac-228		0.538	8.658989E-001	2.297832E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	899.01	4.3333E-002	66.91

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: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	8.84E-002	-1.4367E-001
	1332.49	100.00	8.8391E-002		-3.1720E-003
Nb-94	702.63	100.00	1.0653E-001	9.55E-002	-1.4813E-001
	871.10	100.00	9.5523E-002		-8.9575E-002
Ag-108m	79.20	7.10	5.6246E+000	1.29E-001	-7.3564E+000
	433.93	89.90	1.2914E-001		-5.1816E-002
	614.37	90.40	1.6773E-001		-3.6637E-002
	722.95	90.50	1.3075E-001		4.8422E-002
Sb-125	176.33	6.89	2.5682E+000	3.95E-001	-1.0522E+000
	427.89	29.33	3.9517E-001		-3.0265E-002
	463.38	10.35	1.1497E+000		2.9569E-001
	600.56	17.80	6.0315E-001		-3.4305E-001
	606.64	5.02	3.1755E+000		8.0800E+000
	635.90	11.32	9.8094E-001		-3.9901E-001
Cs-134	563.23	8.38	1.3427E+000	1.26E-001	1.5740E-001
	569.32	15.43	7.0102E-001		-6.5648E-002
	604.70	97.60	1.6141E-001		-2.8942E-003
	795.84	85.40	1.2580E-001		8.7581E-002
	801.93	8.73	1.2567E+000		-1.1411E-001
Cs-137	661.65	85.12	1.3355E-001	1.34E-001	1.6089E-001
Eu-152	121.78	28.40	8.0916E-001	3.76E-001	-7.6706E-001
	244.69	7.49	2.1195E+000		-4.1617E-001
	344.27	26.50	4.8149E-001		-3.4223E-001
	778.89	12.74	8.9190E-001		-5.2472E-001
	867.32	4.16	2.3895E+000		-3.7814E+000
	964.01	14.40	8.5387E-001		3.3591E-001
	1085.78	10.00	1.0659E+000		6.2549E-001
	1112.02	13.30	7.7529E-001		-8.3659E-001
	1407.95	20.70	3.7589E-001		2.0034E-001
Eu-154	123.07	40.50	5.6381E-001	2.57E-001	1.1031E-001
	247.94	6.60	2.2136E+000		-3.6240E+000
	591.81	4.83	2.2025E+000		-6.3772E-002
	723.30	19.70	6.0420E-001		5.2553E-001
	756.87	4.33	2.3052E+000		4.2133E-001
	873.19	11.50	8.4183E-001		-3.1728E-001
	996.32	10.30	9.9800E-001		1.0154E+000
	1004.76	17.90	5.3964E-001		-7.8120E-001
	1274.45	35.50	2.5687E-001		-2.5502E-001
Eu-155	86.54	30.90	1.1262E+000	1.13E+000	2.4442E+000
	105.31	20.70	1.2654E+000		-3.1822E-001
Am-241	59.54	35.90	1.3997E+000	1.40E+000	3.6908E-001
Cm-243	228.19	10.56	1.4696E+000	1.05E+000	1.3059E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	1.0493E+000	1.05E+000	3.2859E-001

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

Report Generated On 5/16/2006 11:32:31 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: RED6264

Spectrum File: RED6264
Sample ID: OOL-08-05-144
Sample Title: OOL-08-05-144-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/16/2006 11:22:29 AM
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-08-05-144
Title: OOL-08-05-144-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	309	291.54	72.79	1.48	3.45E+002	74.07	1.74E+003
m	2	285-	309	300.26	74.97	1.49	7.62E+002	82.93	2.61E+003
	3	332-	348	339.23	84.71	1.06	2.57E+002	149.12	1.75E+003
	4	946-	962	954.59	238.59	1.24	2.08E+002	83.00	5.05E+002
	5	1396-	1416	1407.41	351.83	1.64	2.05E+002	69.78	2.92E+002
	6	2323-	2342	2332.66	583.20	1.52	2.10E+002	47.21	1.06E+002
	7	2424-	2447	2436.80	609.24	1.54	2.76E+002	54.51	1.24E+002
	8	3638-	3654	3644.47	911.24	1.13	1.27E+002	36.08	6.74E+001
	9	3868-	3885	3875.85	969.10	0.38	8.36E+001	35.18	7.34E+001
	10	4473-	4492	4481.93	1120.66	1.80	1.28E+002	34.96	5.44E+001
	11	5832-	5861	5846.16	1461.81	2.14	1.34E+003	74.30	2.14E+001
	12	7055-	7073	7064.33	1766.43	0.76	6.53E+001	20.04	1.17E+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
K-40	0.969	1460.81*	10.67	2.31624E+001	2.27362E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.66772E-001	9.52341E-002
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	1.13104E+001	2.53546E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.22253E-001	2.23828E-001
Bi-214	0.975	609.31*	46.30	8.90400E-001	2.06995E-001
		1120.29*	15.10	1.46757E+000	4.31286E-001
		1764.49*	15.80	7.92660E-001	2.55763E-001
Ac-228	0.633	338.32	11.40		
		911.07*	27.70	7.48589E-001	2.30092E-001
		969.11*	16.60	8.39911E-001	3.64006E-001

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

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

I N T E R 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	0.969	2.316241E+001	2.273624E+000
TL-208	0.471	3.667718E-001	9.523410E-002
Pb-212 @	0.521	5.222531E-001	2.238275E-001
Bi-214	0.975	9.269615E-001	1.507521E-001
Ac-228	0.633	7.746604E-001	1.944938E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.79	5.7449E-001	21.49
3	84.71	4.2905E-001	57.93
5	351.83	3.4169E-001	34.03

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

Errors quoted at 1.960 sigma

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

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.1337E-001	8.54E-002	8.8784E-002
	1332.49	100.00	8.5354E-002		-7.9384E-002
Nb-94	702.63	100.00	1.1174E-001	1.06E-001	-8.4594E-002
	871.10	100.00	1.0586E-001		7.5799E-002
Ag-108m	79.20	7.10	5.6188E+000	1.30E-001	-5.4885E+000
	433.93	89.90	1.3473E-001		5.4302E-002
	614.37	90.40	1.6664E-001		-9.6101E-002
	722.95	90.50	1.2998E-001		8.5558E-002
Sb-125	176.33	6.89	2.6275E+000	4.20E-001	9.1109E-001
	427.89	29.33	4.1983E-001		2.6227E-001
	463.38	10.35	1.1747E+000		3.2350E-001
	600.56	17.80	6.2852E-001		2.6791E-001
	606.64	5.02	3.2334E+000		8.4050E+000
	635.90	11.32	9.6858E-001		4.1684E-001
Cs-134	563.23	8.38	1.4183E+000	1.28E-001	1.0348E+000
	569.32	15.43	7.4401E-001		-2.0251E-001
	604.70	97.60	1.6125E-001		3.8929E-002
	795.84	85.40	1.2827E-001		5.8020E-002
	801.93	8.73	1.1922E+000		-4.6258E-001
Cs-137	661.65	85.12	1.3436E-001	1.34E-001	-5.9470E-002
Eu-152	121.78	28.40	8.2547E-001	3.83E-001	4.4660E-001
	244.69	7.49	2.1868E+000		-1.1621E+000
	344.27	26.50	5.1195E-001		-3.2750E-001
	778.89	12.74	8.2913E-001		-1.0771E+000
	867.32	4.16	2.6800E+000		-8.1278E-001
	964.01	14.40	9.3430E-001		-8.6682E-002
	1085.78	10.00	1.0722E+000		-4.8530E-001
	1112.02	13.30	7.9731E-001		-3.3596E-001
	1407.95	20.70	3.8305E-001		-2.8160E-001
Eu-154	123.07	40.50	5.7540E-001	3.00E-001	8.8344E-002
	247.94	6.60	2.2929E+000		-1.6848E+000
	591.81	4.83	2.3502E+000		1.7517E+000
	723.30	19.70	5.9952E-001		4.8674E-001
	756.87	4.33	2.6202E+000		1.5157E-002
	873.19	11.50	9.1363E-001		8.2113E-001
	996.32	10.30	1.0422E+000		3.2619E-001
	1004.76	17.90	5.6153E-001		-3.1910E-001
	1274.45	35.50	2.9969E-001		-5.2476E-002
Eu-155	86.54	30.90	1.1543E+000	1.15E+000	2.1171E+000
	105.31	20.70	1.2596E+000		-3.8421E-001
Am-241	59.54	35.90	1.3686E+000	1.37E+000	-1.9633E-001
Cm-243	228.19	10.56	1.4933E+000	1.04E+000	-9.4691E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	1.0435E+000	1.04E+000	-5.4399E-001

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

Report Generated On 5/16/2006 11:16:03 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: RED6264

Spectrum File: RED6264
Sample ID: OOL-08-05-145
Sample Title: OOL-08-05-145-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/16/2006 11:06:01 AM
Live Time: 600.0 seconds
Real Time: 601.0 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-08-05-145
Title: OOL-08-05-145-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	309	291.67	72.82	1.50	4.16E+002	72.02	1.67E+003
m	2	284-	309	300.72	75.08	1.51	8.01E+002	81.24	2.39E+003
	3	948-	962	954.72	238.63	1.03	2.50E+002	73.68	4.03E+002
	4	1178-	1190	1182.15	295.50	0.50	7.15E+001	47.52	1.95E+002
	5	1348-	1357	1352.47	338.09	1.30	8.70E+001	36.43	1.14E+002
	6	1396-	1415	1408.05	351.99	0.90	1.76E+002	61.73	2.33E+002
	7	2324-	2344	2333.02	583.29	1.76	1.94E+002	46.07	9.86E+001
	8	2426-	2448	2437.15	609.33	1.74	2.15E+002	50.21	1.14E+002
	9	3639-	3656	3646.39	911.72	1.69	1.19E+002	36.44	6.97E+001
	10	3869-	3886	3878.25	969.70	1.74	7.76E+001	34.05	6.84E+001
	11	4475-	4492	4482.36	1120.77	0.67	7.27E+001	28.81	4.33E+001
	12	5832-	5862	5846.84	1461.98	1.98	1.11E+003	71.86	4.89E+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
K-40	0.958	1460.81*	10.67	1.92095E+001	1.99122E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.39352E-001	9.17524E-002
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	1.18542E+001	2.61638E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.27530E-001	2.09482E-001
Bi-214	0.698	609.31*	46.30	6.92390E-001	1.82804E-001
		1120.29*	15.10	8.35698E-001	3.43101E-001
		1764.49	15.80		
PB-214	0.582	74.82* @	6.21	2.04251E+001	4.74567E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	4.43096E-001	3.03671E-001
		351.92*	37.20	5.90682E-001	2.29734E-001
Ac-228	0.990	338.32*	11.40	9.43289E-001	4.21766E-001
		911.07*	27.70	7.05783E-001	2.30258E-001
		969.11*	16.60	7.79056E-001	3.51527E-001

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

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

I N T E R 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		0.958	1.920949E+001	1.991225E+000
TL-208		0.471	3.393523E-001	9.175235E-002
Pb-212	@	0.521	6.275303E-001	2.094815E-001
Bi-214		0.698	7.240762E-001	1.613336E-001
PB-214	@	0.582	5.369607E-001	1.832119E-001
Ac-228		0.990	7.649725E-001	1.752089E-001

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

Errors quoted at 1.960 sigma

U N I D E N T I 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	6.9307E-001	17.32

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

Errors quoted at 1.960 sigma

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

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.0734E-001	8.58E-002	-4.5335E-002
	1332.49	100.00	8.5795E-002		3.0065E-002
Nb-94	702.63	100.00	1.0551E-001	9.49E-002	4.3035E-003
	871.10	100.00	9.4896E-002		3.4110E-003
Ag-108m	79.20	7.10	5.5329E+000	1.29E-001	-5.6617E+000
	433.93	89.90	1.2895E-001		-1.3664E-001
	614.37	90.40	1.5587E-001		3.6266E-002
	722.95	90.50	1.3151E-001		1.2039E-001
Sb-125	176.33	6.89	2.5221E+000	3.86E-001	-1.0925E+000
	427.89	29.33	3.8640E-001		-1.2950E-001
	463.38	10.35	1.2072E+000		1.5904E+000
	600.56	17.80	6.1597E-001		1.2435E-001
	606.64	5.02	2.9719E+000		-2.4916E-001
	635.90	11.32	9.5817E-001		-2.8981E-001
Cs-134	563.23	8.38	1.3044E+000	1.23E-001	-7.7431E-001
	569.32	15.43	7.2354E-001		-3.7327E-001
	604.70	97.60	1.4735E-001		-6.4456E-002
	795.84	85.40	1.2329E-001		8.5465E-002
	801.93	8.73	1.1731E+000		-1.3230E+000
Cs-137	661.65	85.12	1.3436E-001	1.34E-001	1.3009E-001
Eu-152	121.78	28.40	7.8025E-001	3.46E-001	-2.2879E-001
	244.69	7.49	2.0253E+000		-1.0260E+000
	344.27	26.50	4.6863E-001		-5.2789E-001
	778.89	12.74	8.2280E-001		-1.0147E+000
	867.32	4.16	2.4039E+000		-7.3121E-001
	964.01	14.40	9.4544E-001		3.0636E-001
	1085.78	10.00	9.9081E-001		-1.0371E-001
	1112.02	13.30	7.6023E-001		7.2052E-002
	1407.95	20.70	3.4566E-001		-3.7552E-002
Eu-154	123.07	40.50	5.4603E-001	2.45E-001	9.7199E-002
	247.94	6.60	2.1959E+000		-2.2543E+000
	591.81	4.83	2.1930E+000		-1.3529E+000
	723.30	19.70	6.0186E-001		2.2949E-001
	756.87	4.33	2.3565E+000		6.6096E-001
	873.19	11.50	8.2832E-001		-3.3410E-002
	996.32	10.30	9.7043E-001		-5.3800E-002
	1004.76	17.90	5.6509E-001		-7.0261E-002
	1274.45	35.50	2.4522E-001		-1.2978E-001
Eu-155	86.54	30.90	1.0890E+000	1.09E+000	5.4436E-001
	105.31	20.70	1.2464E+000		-1.6301E-001
Am-241	59.54	35.90	1.3543E+000	1.35E+000	-1.5861E-001
Cm-243	228.19	10.56	1.4389E+000	1.02E+000	-2.8956E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	1.0218E+000	1.02E+000	-1.5354E-001

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

Report Generated On 5/16/2006 10:59:38 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: RED6264

Spectrum File: RED6264
Sample ID: OOL-08-05-146
Sample Title: OOL-08-05-146-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/16/2006 10:49:36 AM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

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

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

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

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

Filename: RED6264
Log Number: OOL-08-05-146
Title: OOL-08-05-146-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	297-	308	300.54	75.04	1.31	3.77E+002	130.25	1.59E+003
	2	831-	843	836.96	209.18	0.60	5.43E+001	61.78	3.57E+002
	3	944-	962	954.53	238.58	1.34	3.99E+002	87.37	4.70E+002
	4	1177-	1192	1181.26	295.28	0.97	8.93E+001	58.17	2.61E+002
	5	1348-	1357	1352.93	338.21	1.11	8.13E+001	35.66	1.11E+002
M	6	1402-	1428	1408.08	351.99	1.25	1.77E+002	32.67	1.42E+002
m	7	1402-	1428	1423.79	355.92	1.25	3.85E+001	20.33	1.18E+002
	8	2032-	2054	2042.88	510.74	1.07	1.83E+002	54.42	1.52E+002
	9	2322-	2344	2332.47	583.15	0.92	2.22E+002	47.90	9.69E+001
	10	2424-	2448	2437.04	609.30	1.56	2.34E+002	51.31	1.09E+002
	11	3083-	3095	3089.42	772.44	0.37	2.53E+001	24.28	4.88E+001
	12	3174-	3185	3179.75	795.03	1.18	2.99E+001	21.55	3.61E+001
	13	3637-	3655	3645.08	911.39	1.52	1.81E+002	39.10	6.39E+001
	14	3870-	3887	3877.80	969.59	1.10	1.08E+002	30.22	3.92E+001
	15	4474-	4490	4482.83	1120.89	0.68	6.10E+001	28.35	4.70E+001
	16	5831-	5860	5846.77	1461.96	2.12	1.20E+003	72.85	3.81E+001
	17	7055-	7074	7064.69	1766.52	1.08	7.29E+001	21.04	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
ANN	0.998	511.00*		100.00	2.57777E-001	8.41575E-002
K-40	0.959	1460.81*		10.67	2.07283E+001	2.09895E+000
TL-208	0.752	277.35		6.80		
		510.84*		21.60	1.19341E+000	4.01623E-001
		583.14*		84.20	3.87643E-001	9.76586E-002
		860.37		12.46		
Pb-212	0.521	74.81*	@	10.70	5.58649E+000	2.21916E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	1.00169E+000	2.69718E-001
Bi-214	0.972	609.31*		46.30	7.52305E-001	1.89453E-001
		1120.29*		15.10	7.01179E-001	3.34524E-001
		1764.49*		15.80	8.84340E-001	2.70178E-001
PB-214	0.583	74.82*	@	6.21	9.62568E+000	3.88699E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	5.53069E-001	3.72140E-001
		351.92*		37.20	5.94194E-001	1.48062E-001
Ac-228	0.996	338.32*		11.40	8.81131E-001	4.10563E-001
		911.07*		27.70	1.07117E+000	2.61982E-001
		969.11*		16.60	1.08279E+000	3.23959E-001

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

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

I N T E R 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	1.740458E-001	8.671794E-002
K-40		0.959	2.072828E+001	2.098946E+000
TL-208		0.752	3.876430E-001	9.683805E-002
Pb-212	@	0.521	1.001693E+000	2.697175E-001
Bi-214		0.972	7.790779E-001	1.407243E-001
PB-214	@	0.583	5.885738E-001	1.375731E-001
Ac-228		0.996	1.037315E+000	1.824805E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	209.18	9.0484E-002	113.79
m 7	355.92	6.4215E-002	52.77
11	772.44	4.2083E-002	96.16
12	795.03	4.9848E-002	72.07

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

Errors quoted at 1.960 sigma

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

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.1055E-001	8.31E-002	2.7712E-002
	1332.49	100.00	8.3113E-002		-1.2925E-002
Nb-94	702.63	100.00	1.1198E-001	9.65E-002	1.5449E-001
	871.10	100.00	9.6454E-002		-2.5752E-002
Ag-108m	79.20	7.10	5.4869E+000	1.26E-001	-6.7249E+000
	433.93	89.90	1.2876E-001		-6.3142E-002
	614.37	90.40	1.5410E-001		7.1656E-003
	722.95	90.50	1.2633E-001		8.6526E-002
Sb-125	176.33	6.89	2.5347E+000	4.00E-001	-1.8481E+000
	427.89	29.33	3.9977E-001		-3.9816E-002
	463.38	10.35	1.1910E+000		9.7476E-001
	600.56	17.80	6.2603E-001		2.4720E-001
	606.64	5.02	2.9850E+000		1.5691E-001
	635.90	11.32	9.4763E-001		6.2464E-001
Cs-134	563.23	8.38	1.2570E+000	1.24E-001	-7.4080E-001
	569.32	15.43	6.8801E-001		2.9084E-001
	604.70	97.60	1.4910E-001		-3.9590E-002
	795.84	85.40	1.2392E-001		1.2205E-001
	801.93	8.73	1.2079E+000		-5.2276E-001
Cs-137	661.65	85.12	1.2967E-001	1.30E-001	-1.1008E-001
Eu-152	121.78	28.40	8.0952E-001	3.56E-001	3.0129E-001
	244.69	7.49	2.0596E+000		-2.3859E+000
	344.27	26.50	4.9202E-001		-4.7790E-001
	778.89	12.74	8.0564E-001		-2.2166E-001
	867.32	4.16	2.5086E+000		-4.9386E-002
	964.01	14.40	9.1815E-001		3.4741E-001
	1085.78	10.00	1.0143E+000		2.1752E-002
	1112.02	13.30	7.9972E-001		-5.2784E-001
	1407.95	20.70	3.5604E-001		7.1266E-002
Eu-154	123.07	40.50	5.6291E-001	2.55E-001	2.5032E-001
	247.94	6.60	2.2195E+000		-8.5908E-001
	591.81	4.83	2.3096E+000		-6.4135E-001
	723.30	19.70	5.7919E-001		2.4446E-001
	756.87	4.33	2.3502E+000		-5.5156E-001
	873.19	11.50	8.0901E-001		-1.0623E-001
	996.32	10.30	1.0130E+000		4.8279E-001
	1004.76	17.90	5.2643E-001		-8.5253E-001
	1274.45	35.50	2.5458E-001		7.9645E-002
Eu-155	86.54	30.90	1.1280E+000	1.13E+000	2.2526E+000
	105.31	20.70	1.2324E+000		6.2478E-002
Am-241	59.54	35.90	1.3087E+000	1.31E+000	-8.9383E-001
Cm-243	228.19	10.56	1.4672E+000	1.01E+000	-2.1773E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	1.0112E+000	1.01E+000	-6.5611E-001

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

Report Generated On 5/16/2006 10:44:41 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: RED6264

Spectrum File: RED6264
Sample ID: OOL-08-05-148
Sample Title: OOL-08-05-148-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/16/2006 10:34:39 AM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

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

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

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

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

Filename: RED6264
Log Number: OOL-08-05-148
Title: OOL-08-05-148-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	309	300.60	75.05	1.32	2.87E+002	139.13	1.70E+003
2	330-	345	338.85	84.62	0.88	1.69E+002	136.28	1.55E+003
3	948-	961	954.67	238.61	0.92	2.32E+002	71.32	3.95E+002
4	1400-	1416	1407.50	351.85	1.70	1.61E+002	52.16	1.75E+002
5	2032-	2053	2044.18	511.06	1.13	1.74E+002	51.85	1.40E+002
6	2322-	2345	2332.68	583.21	1.02	1.98E+002	49.88	1.13E+002
7	2428-	2446	2437.05	609.31	1.37	1.80E+002	43.91	9.38E+001
8	3634-	3658	3645.86	911.59	2.03	1.97E+002	40.67	5.63E+001
9	3869-	3886	3876.67	969.31	0.55	7.46E+001	30.46	5.14E+001
10	5832-	5861	5846.98	1462.01	2.44	1.14E+003	69.28	2.23E+001
11	7058-	7072	7064.60	1766.50	0.94	4.83E+001	18.64	1.47E+001

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: 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	2.44624E-001	8.01269E-002
K-40	0.955	1460.81*		10.67	1.97900E+001	2.00104E+000
TL-208	0.752	277.35		6.80		
		510.84*		21.60	1.13252E+000	3.82314E-001
		583.14*		84.20	3.46239E-001	9.80401E-002
		860.37		12.46		
Pb-212	0.521	74.81*	@	10.70	4.24852E+000	2.22306E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	5.81847E-001	2.00911E-001
Bi-214	0.673	609.31*		46.30	5.80391E-001	1.58455E-001
		1120.29		15.10		
		1764.49*		15.80	5.86441E-001	2.33608E-001
Ac-228	0.629	338.32		11.40		
		911.07*		27.70	1.16355E+000	2.75233E-001
		969.11*		16.60	7.49340E-001	3.15793E-001

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

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

I N T E R 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	1.698364E-001	8.284222E-002
K-40	0.955	1.979001E+001	2.001044E+000
TL-208	0.752	3.462387E-001	9.738866E-002
Pb-212 @	0.521	5.818466E-001	2.009112E-001
Bi-214	0.673	5.822971E-001	1.311346E-001
Ac-228	0.629	9.847399E-001	2.074872E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	84.62	2.8144E-001	80.70
4	351.85	2.6834E-001	32.40

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: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	8.58E-002	-2.5333E-002
	1332.49	100.00	8.5795E-002		4.3974E-002
Nb-94	702.63	100.00	1.0754E-001	9.49E-002	2.5854E-002
	871.10	100.00	9.4896E-002		1.5324E-002
Ag-108m	79.20	7.10	5.3754E+000	1.24E-001	-2.2353E+000
	433.93	89.90	1.2606E-001		-1.4210E-002
	614.37	90.40	1.5331E-001		-7.1952E-002
	722.95	90.50	1.2393E-001		8.6763E-002
Sb-125	176.33	6.89	2.4602E+000	3.85E-001	-6.1407E-002
	427.89	29.33	3.8462E-001		1.4420E-001
	463.38	10.35	1.2056E+000		5.7072E-001
	600.56	17.80	6.0960E-001		-7.8769E-002
	606.64	5.02	2.8197E+000		5.6187E+000
	635.90	11.32	8.6317E-001		-4.8408E-001
Cs-134	563.23	8.38	1.2703E+000	1.22E-001	-9.8443E-001
	569.32	15.43	6.8068E-001		-4.8066E-001
	604.70	97.60	1.4253E-001		-8.4271E-002
	795.84	85.40	1.2169E-001		-2.8489E-002
	801.93	8.73	1.2172E+000		-1.1454E+000
Cs-137	661.65	85.12	1.3915E-001	1.39E-001	1.7364E-001
Eu-152	121.78	28.40	7.8006E-001	3.29E-001	2.7699E-001
	244.69	7.49	1.9967E+000		-9.9629E-001
	344.27	26.50	4.8804E-001		-4.6586E-001
	778.89	12.74	7.8140E-001		-7.5332E-001
	867.32	4.16	2.4533E+000		-3.7219E+000
	964.01	14.40	8.5738E-001		1.1767E-001
	1085.78	10.00	9.6323E-001		1.3133E-001
	1112.02	13.30	7.6529E-001		-1.9210E-001
	1407.95	20.70	3.2943E-001		4.2136E-001
Eu-154	123.07	40.50	5.3867E-001	2.57E-001	-3.5556E-001
	247.94	6.60	2.1826E+000		-1.5773E+000
	591.81	4.83	2.2914E+000		2.7418E+000
	723.30	19.70	5.6936E-001		2.8612E-001
	756.87	4.33	2.3755E+000		-4.9601E-001
	873.19	11.50	8.0901E-001		-3.9044E-001
	996.32	10.30	9.7043E-001		-1.2034E+000
	1004.76	17.90	5.5794E-001		3.7148E-001
	1274.45	35.50	2.5687E-001		-4.4769E-002
Eu-155	86.54	30.90	1.1141E+000	1.11E+000	3.2377E-001
	105.31	20.70	1.2292E+000		6.1651E-001
Am-241	59.54	35.90	1.2975E+000	1.30E+000	9.1277E-002
Cm-243	228.19	10.56	1.4117E+000	1.04E+000	-6.6763E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	1.0420E+000	1.04E+000	-1.6718E-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 5/16/2006 10:25:07 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: RED6264

Spectrum File: RED6264
Sample ID: OOL-08-05-149
Sample Title: OOL-08-05-149-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/16/2006 10:15:03 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-08-05-149
Title: OOL-08-05-149-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	309	291.91	72.88	1.33	3.62E+002	69.50	1.73E+003
m	2	283-	309	300.23	74.96	1.34	9.14E+002	82.96	2.15E+003
	3	332-	346	338.84	84.62	0.91	2.04E+002	130.23	1.46E+003
	4	944-	963	954.87	238.66	1.21	3.06E+002	89.02	5.00E+002
	5	1174-	1188	1181.75	295.40	0.83	9.08E+001	56.85	2.60E+002
	6	1396-	1416	1407.87	351.94	1.70	1.85E+002	63.02	2.34E+002
	7	2033-	2053	2042.71	510.69	2.49	2.03E+002	51.29	1.33E+002
	8	2324-	2342	2333.29	583.36	1.79	1.98E+002	48.36	1.21E+002
	9	2426-	2446	2436.81	609.25	1.08	2.37E+002	47.17	9.43E+001
	10	2904-	2916	2909.51	727.45	0.87	3.43E+001	27.64	6.17E+001
	11	3634-	3658	3645.59	911.52	0.81	1.41E+002	45.16	9.41E+001
	12	3867-	3884	3875.76	969.08	0.66	6.76E+001	36.42	8.54E+001
	13	3972-	3983	3977.92	994.62	0.53	1.60E+001	16.27	2.10E+001
	14	4473-	4492	4483.28	1121.00	1.31	8.87E+001	32.30	5.23E+001
	15	5831-	5862	5847.06	1462.03	2.16	1.33E+003	76.30	3.60E+001
	16	7057-	7072	7064.11	1766.38	0.34	5.62E+001	19.06	1.28E+001

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: RED6264

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
ANN	0.997	511.00*	100.00	2.85579E-001	8.18781E-002
K-40	0.954	1460.81*	10.67	2.31003E+001	2.28931E+000
TL-208	0.751	277.35	6.80		
		510.84*	21.60	1.32212E+000	3.94143E-001
		583.14*	84.20	3.45152E-001	9.56333E-002
		860.37	12.46		
Bi-212	0.997	727.17*	11.80	4.54728E-001	3.69893E-001
Pb-212	0.521	74.81* @	10.70	1.35637E+001	2.92971E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.68996E-001	2.53895E-001
Bi-214	0.974	609.31*	46.30	7.62440E-001	1.78600E-001
		1120.29*	15.10	1.02082E+000	3.87062E-001
		1764.49*	15.80	6.82103E-001	2.41139E-001
PB-214	0.582	74.82* @	6.21	2.33706E+001	5.32544E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	5.62623E-001	3.64662E-001
		351.92*	37.20	6.22559E-001	2.35962E-001
Ac-228	0.630	338.32	11.40		
		911.07*	27.70	8.33424E-001	2.83747E-001
		969.11*	16.60	6.78669E-001	3.72490E-001

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

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

I N T E R 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	2.110257E-001	8.440869E-002
K-40		0.954	2.310032E+001	2.289308E+000
TL-208		0.751	3.451521E-001	9.496946E-002
Bi-212		0.997	4.547276E-001	3.698926E-001
Pb-212	@	0.521	7.689958E-001	2.538948E-001
Bi-214		0.974	7.686526E-001	1.345685E-001
PB-214	@	0.582	6.048697E-001	1.981060E-001
Ac-228		0.630	7.765981E-001	2.257175E-001

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

Errors quoted at 1.960 sigma

U N I D E N T I 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	6.0368E-001	19.19
3	84.62	3.3948E-001	63.94
13	994.62	2.6622E-002	101.83

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

Errors quoted at 1.960 sigma

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

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.1490E-001	9.01E-002	-7.0233E-003
	1332.49	100.00	9.0078E-002		4.5403E-003
Nb-94	702.63	100.00	1.0954E-001	9.68E-002	4.8320E-002
	871.10	100.00	9.6763E-002		5.7143E-002
Ag-108m	79.20	7.10	5.5718E+000	1.29E-001	-4.9683E+000
	433.93	89.90	1.2933E-001		-2.3994E-002
	614.37	90.40	1.6369E-001		1.9435E-002
	722.95	90.50	1.3352E-001		-1.9447E-002
Sb-125	176.33	6.89	2.5404E+000	3.93E-001	-8.3813E-001
	427.89	29.33	3.9343E-001		-1.5957E-001
	463.38	10.35	1.2103E+000		1.0089E+000
	600.56	17.80	6.2852E-001		8.3136E-002
	606.64	5.02	3.0046E+000		6.2531E+000
	635.90	11.32	9.7272E-001		3.3564E-001
Cs-134	563.23	8.38	1.3871E+000	1.34E-001	-9.5957E-002
	569.32	15.43	7.4536E-001		-5.5456E-002
	604.70	97.60	1.5031E-001		-4.9687E-003
	795.84	85.40	1.3364E-001		1.7913E-001
	801.93	8.73	1.3007E+000		-1.6653E+000
Cs-137	661.65	85.12	1.3731E-001	1.37E-001	4.7922E-002
Eu-152	121.78	28.40	8.2726E-001	3.85E-001	1.0432E+000
	244.69	7.49	2.0886E+000		-2.6351E-001
	344.27	26.50	4.5378E-001		-5.4941E-001
	778.89	12.74	8.7813E-001		-8.4174E-001
	867.32	4.16	2.3967E+000		-2.1353E+000
	964.01	14.40	9.1815E-001		2.8378E-001
	1085.78	10.00	9.7712E-001		-2.5479E-001
	1112.02	13.30	7.7777E-001		-3.8445E-001
	1407.95	20.70	3.8540E-001		-7.6802E-002
Eu-154	123.07	40.50	5.6638E-001	2.86E-001	-6.6301E-001
	247.94	6.60	2.2471E+000		-9.2249E-001
	591.81	4.83	2.3900E+000		-2.1404E-001
	723.30	19.70	6.1802E-001		-4.7529E-002
	756.87	4.33	2.5217E+000		8.3147E-001
	873.19	11.50	8.2832E-001		-2.7098E-001
	996.32	10.30	9.2584E-001		7.4239E-001
	1004.76	17.90	5.4887E-001		-1.5744E-001
	1274.45	35.50	2.8583E-001		-2.3114E-001
Eu-155	86.54	30.90	1.1155E+000	1.12E+000	1.2908E+000
	105.31	20.70	1.2709E+000		1.6603E-002
Am-241	59.54	35.90	1.3398E+000	1.34E+000	-3.7404E-001
Cm-243	228.19	10.56	1.4738E+000	1.07E+000	-2.2488E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	1.0719E+000	1.07E+000	-1.4504E-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 5/16/2006 10:09:32 AM

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

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

Detector ID: RED6264

Spectrum File: RED6264
Sample ID: OOL-08-05-150
Sample Title: OOL-08-05-150-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 5/16/2006 9:59:29 AM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

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

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

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

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

Filename: RED6264
Log Number: OOL-08-05-150
Title: OOL-08-05-150-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	307	291.69	72.82	1.40	4.37E+002	70.68	1.91E+003
m	2	282-	307	300.40	75.00	1.40	7.52E+002	80.85	2.12E+003
	3	330-	345	339.56	84.79	1.07	2.63E+002	138.14	1.56E+003
	4	944-	962	954.58	238.59	1.07	2.66E+002	84.22	4.67E+002
	5	1399-	1417	1407.02	351.73	1.27	1.49E+002	57.75	2.13E+002
	6	2031-	2054	2042.53	510.65	1.61	1.80E+002	54.32	1.47E+002
	7	2320-	2341	2332.41	583.14	1.42	2.13E+002	48.94	1.09E+002
	8	2429-	2448	2437.46	609.41	1.26	1.87E+002	46.78	1.09E+002
	9	3636-	3656	3645.14	911.41	1.28	1.60E+002	37.87	5.91E+001
	10	3870-	3885	3877.70	969.56	0.76	7.00E+001	26.43	3.70E+001
	11	4366-	4377	4371.25	1092.98	0.86	1.29E+001	16.82	2.31E+001
	12	5832-	5861	5846.77	1461.96	2.35	1.30E+003	72.20	1.14E+001
	13	7056-	7070	7063.26	1766.17	0.34	5.37E+001	17.59	9.34E+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	0.996	511.00*		100.00	2.53257E-001	8.37647E-002
K-40	0.959	1460.81*		10.67	2.25408E+001	2.21166E+000
TL-208	0.752	277.35		6.80		
		510.84*		21.60	1.17249E+000	3.99446E-001
		583.14*		84.20	3.71226E-001	9.81444E-002
		860.37		12.46		
Pb-212	0.521	74.81*	@	10.70	1.11536E+001	2.49332E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.67033E-001	2.35836E-001
Bi-214	0.680	609.31*		46.30	6.03284E-001	1.67987E-001
		1120.29		15.10		
		1764.49*		15.80	6.51084E-001	2.23114E-001
Ac-228	0.630	338.32		11.40		
		911.07*		27.70	9.45546E-001	2.48948E-001
		969.11*		16.60	7.02599E-001	2.75420E-001

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

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

I N T E R 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	1.730723E-001	8.636605E-002
K-40	0.959	2.254078E+001	2.211662E+000
TL-208	0.752	3.712259E-001	9.739591E-002
Pb-212 @	0.521	6.670331E-001	2.358360E-001
Bi-214	0.680	6.205781E-001	1.342012E-001
Ac-228	0.630	8.363062E-001	1.846844E-001

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

Errors quoted at 1.960 sigma

U N I D E N T I 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	7.2808E-001	16.18
3	84.79	4.3806E-001	52.56
5	351.73	2.4909E-001	38.64
11	1092.98	2.1574E-002	129.97

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Co-60	1173.22	100.00	1.0602E-001	8.22E-002	-2.2790E-001
	1332.49	100.00	8.2198E-002		2.3153E-002
Nb-94	702.63	100.00	1.1077E-001	1.02E-001	1.9137E-002
	871.10	100.00	1.0156E-001		5.2992E-002
Ag-108m	79.20	7.10	5.5903E+000	1.29E-001	-7.5274E+000
	433.93	89.90	1.2914E-001		-6.4763E-002
	614.37	90.40	1.5568E-001		1.5236E-002
	722.95	90.50	1.3277E-001		9.7050E-002
Sb-125	176.33	6.89	2.5240E+000	4.06E-001	1.5293E+000
	427.89	29.33	4.0601E-001		1.7697E-001
	463.38	10.35	1.1829E+000		1.3099E+000
	600.56	17.80	6.0960E-001		6.6118E-002
	606.64	5.02	2.9187E+000		-1.1433E+000
	635.90	11.32	9.1306E-001		1.0697E-001
Cs-134	563.23	8.38	1.3552E+000	1.34E-001	8.5390E-001
	569.32	15.43	7.3589E-001		-2.9895E-001
	604.70	97.60	1.4683E-001		-1.1015E-002
	795.84	85.40	1.3393E-001		3.4280E-002
	801.93	8.73	1.2356E+000		-1.0195E+000
Cs-137	661.65	85.12	1.3463E-001	1.35E-001	-2.2840E-002
Eu-152	121.78	28.40	8.2097E-001	3.59E-001	3.5084E-002
	244.69	7.49	2.0547E+000		3.6139E-002
	344.27	26.50	4.6020E-001		-7.2668E-001
	778.89	12.74	7.9252E-001		-1.7308E+000
	867.32	4.16	2.5626E+000		-2.7250E+000
	964.01	14.40	8.6261E-001		2.0144E-001
	1085.78	10.00	9.7020E-001		7.0004E-001
	1112.02	13.30	7.3705E-001		-7.4359E-001
	1407.95	20.70	3.5859E-001		2.7766E-002
Eu-154	123.07	40.50	5.7452E-001	2.71E-001	4.6304E-001
	247.94	6.60	2.1974E+000		-2.4006E+000
	591.81	4.83	2.1346E+000		-1.1881E+000
	723.30	19.70	6.0768E-001		3.9555E-001
	756.87	4.33	2.4191E+000		5.9915E-001
	873.19	11.50	8.7593E-001		2.4549E-001
	996.32	10.30	9.6419E-001		-4.2328E-002
	1004.76	17.90	5.1482E-001		2.1637E-001
	1274.45	35.50	2.7122E-001		-1.8422E-003
Eu-155	86.54	30.90	1.1286E+000	1.13E+000	2.1732E-001
	105.31	20.70	1.2509E+000		-4.6930E-001
Am-241	59.54	35.90	1.3214E+000	1.32E+000	-2.1776E-001
Cm-243	228.19	10.56	1.4160E+000	1.03E+000	-1.0383E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	1.0316E+000	1.03E+000	-3.4859E-001

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

Report Generated On 5/25/2006 2:17:44 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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-05-151-F-G
Sample ID: OOL-08-05-151
Sample Title: OOL-08-05-151-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 5/24/2006 11:07:24 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-08-05-151-F-G
Log Number: OOL-08-05-151
Title: OOL-08-05-151-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
F	1	289-	306	298.31	74.53	1.09	2.43E+002	125.74	9.74E+002
F	2	944-	960	953.06	238.22	1.28	1.08E+002	33.14	4.00E+002
F	3	1347-	1361	1354.02	338.46	1.37	5.09E+001	31.42	1.23E+002
F	4	2323-	2340	2330.64	582.62	1.53	1.05E+002	64.22	7.44E+001
F	5	3634-	3653	3643.85	910.93	1.71	7.02E+001	46.95	4.13E+001
F	6	3866-	3883	3874.37	968.56	1.73	5.01E+001	17.28	3.81E+001
F	7	5830-	5855	5842.29	1460.54	1.94	6.95E+002	92.71	3.11E+001

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-05-151-F-G

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.998	1460.81*	10.67	1.59109E+001	2.33438E+000
TL-208	0.465	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.40513E-001	1.49475E-001
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	9.29915E+000	5.03412E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	3.49403E-001	1.19686E-001
Ac-228	0.997	338.32*	11.40	7.29208E-001	4.59597E-001
		911.07*	27.70	5.40714E-001	3.63010E-001
		969.11*	16.60	6.52832E-001	2.28151E-001

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

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

I N T E R 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-08-05-151-F-G

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

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.998	1.591085E+001	2.334376E+000
TL-208	0.465	2.405128E-001	1.494755E-001
Pb-212 @	0.593	3.494030E-001	1.196862E-001
Ac-228	0.997	6.373175E-001	1.780782E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

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

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-05-151-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	1.3913E-001	1.11E-001	1.8208E-001
	1332.49	100.00	1.1112E-001		1.9714E-002
Nb-94	702.63	100.00	1.1626E-001	1.12E-001	-3.7365E-002
	871.10	100.00	1.1202E-001		-3.7343E-002
Ag-108m	79.20	7.10	8.7469E+000	1.45E-001	-1.2999E+001
	433.93	89.90	1.4799E-001		-6.3360E-002
	614.37	90.40	1.5883E-001		-1.5091E-001
	722.95	90.50	1.4468E-001		9.1794E-003
Sb-125	176.33	6.89	2.9431E+000	4.61E-001	6.8737E-001
	427.89	29.33	4.6136E-001		1.8814E-001
	463.38	10.35	1.3227E+000		5.0443E-001
	600.56	17.80	6.6792E-001		3.6971E-001
	606.64	5.02	3.1135E+000		5.4141E+000
	635.90	11.32	1.0515E+000		-2.0393E-001
Cs-134	563.23	8.38	1.5375E+000	1.26E-001	1.8179E-002
	569.32	15.43	8.6211E-001		1.5893E-001
	604.70	97.60	1.5430E-001		1.0475E-001
	795.84	85.40	1.2609E-001		1.5171E-002
	801.93	8.73	1.2460E+000		-6.4221E-001
Cs-137	661.65	85.12	1.6004E-001	1.60E-001	1.9961E-001
Eu-152	121.78	28.40	9.4636E-001	3.82E-001	3.7434E-001
	244.69	7.49	2.2521E+000		-3.2774E+000
	344.27	26.50	5.1633E-001		-1.1843E-001
	778.89	12.74	9.0977E-001		-1.3495E+000
	867.32	4.16	2.7336E+000		-4.0504E+000
	964.01	14.40	1.0096E+000		1.1121E-001
	1085.78	10.00	1.0126E+000		-1.0540E-001
	1112.02	13.30	8.1919E-001		-1.0329E+000
	1407.95	20.70	3.8214E-001		7.4554E-002
Eu-154	123.07	40.50	6.5620E-001	2.71E-001	3.8795E-002
	247.94	6.60	2.3175E+000		-1.6915E+000
	591.81	4.83	2.5976E+000		5.6623E-001
	723.30	19.70	6.7537E-001		5.2042E-001
	756.87	4.33	2.6709E+000		-3.2217E-001
	873.19	11.50	9.6265E-001		-2.7033E-001
	996.32	10.30	9.5759E-001		-1.7240E+000
	1004.76	17.90	5.7328E-001		-2.1137E-001
	1274.45	35.50	2.7075E-001		8.3950E-002
Eu-155	86.54	30.90	1.7350E+000	1.59E+000	2.1922E+000
	105.31	20.70	1.5921E+000		-2.0278E-001
Am-241	59.54	35.90	4.5196E+000	4.52E+000	-7.1255E-001
Cm-243	228.19	10.56	1.6009E+000	1.14E+000	-6.9905E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1433E+000	1.14E+000	5.3633E-001

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

Report Generated On 5/25/2006 2:18:02 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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-05-152-F-G
Sample ID: OOL-08-05-152
Sample Title: OOL-08-05-152-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 5/24/2006 11:22:30 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-08-05-152-F-G
Log Number: OOL-08-05-152
Title: OOL-08-05-152-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
F	1	948-	963	953.99	238.46	1.28	1.61E+002	35.24	3.69E+002
F	2	2038-	2052	2043.58	510.85	2.23	6.07E+001	24.03	9.77E+001
F	3	2323-	2341	2331.73	582.89	1.53	1.14E+002	45.03	9.80E+001
F	4	2427-	2447	2435.40	608.81	1.55	1.25E+002	23.82	6.30E+001
F	5	3633-	3655	3644.84	911.17	1.71	9.31E+001	46.47	5.95E+001
F	6	5826-	5857	5842.85	1460.68	1.94	7.59E+002	79.05	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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-05-152-F-G

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.999	511.00*		100.00	1.13489E-001	4.62642E-002
K-40	0.999	1460.81*		10.67	1.73694E+001	2.09759E+000
TL-208	0.749	277.35		6.80		
		510.84*		21.60	5.25411E-001	2.18442E-001
		583.14*		84.20	2.61105E-001	1.06650E-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	5.23758E-001	1.38847E-001
Bi-214	0.397	609.31*		46.30	5.27321E-001	1.11636E-001
		1120.29		15.10		
		1764.49		15.80		

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

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

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

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-05-152-F-G

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

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN	0.999	5.709009E-002	5.164956E-002
K-40	0.999	1.736942E+001	2.097592E+000
TL-208	0.749	2.611046E-001	1.063102E-001
Pb-212 @	0.446	5.237584E-001	1.388467E-001
Bi-214	0.397	5.273212E-001	1.116359E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
F 5	911.17	1.5512E-001	49.93

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:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-05-152-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	1.3574E-001	1.04E-001	2.7886E-002
	1332.49	100.00	1.0397E-001		5.6492E-002
Nb-94	702.63	100.00	1.2359E-001	1.10E-001	6.9547E-002
	871.10	100.00	1.1018E-001		1.9024E-002
Ag-108m	79.20	7.10	8.9995E+000	1.37E-001	-1.7904E+001
	433.93	89.90	1.5296E-001		-3.8324E-002
	614.37	90.40	1.6049E-001		-2.6176E-002
	722.95	90.50	1.3698E-001		-4.2434E-002
Sb-125	176.33	6.89	2.8947E+000	4.53E-001	2.0618E-001
	427.89	29.33	4.5331E-001		-3.5578E-001
	463.38	10.35	1.3460E+000		8.4219E-001
	600.56	17.80	7.2995E-001		1.6925E-001
	606.64	5.02	3.2363E+000		3.1211E+000
	635.90	11.32	1.1090E+000		3.5514E-002
Cs-134	563.23	8.38	1.5413E+000	1.38E-001	-1.8726E+000
	569.32	15.43	8.5395E-001		1.8020E-001
	604.70	97.60	1.6470E-001		-2.7223E-002
	795.84	85.40	1.3827E-001		1.3364E-001
	801.93	8.73	1.2867E+000		-7.5694E-001
Cs-137	661.65	85.12	1.7549E-001	1.75E-001	1.8167E-001
Eu-152	121.78	28.40	9.4454E-001	4.02E-001	3.5559E-001
	244.69	7.49	2.3093E+000		-3.5803E+000
	344.27	26.50	5.5713E-001		-1.4562E-001
	778.89	12.74	8.8986E-001		-7.2221E-001
	867.32	4.16	2.6574E+000		-9.5829E-001
	964.01	14.40	1.0465E+000		8.8802E-001
	1085.78	10.00	1.0983E+000		-1.2009E-001
	1112.02	13.30	8.7630E-001		-2.7189E+000
	1407.95	20.70	4.0243E-001		2.9643E-001
Eu-154	123.07	40.50	6.4855E-001	2.82E-001	-5.0105E-001
	247.94	6.60	2.5165E+000		8.1586E-001
	591.81	4.83	2.7009E+000		2.7490E-001
	723.30	19.70	6.2926E-001		-5.3319E-001
	756.87	4.33	2.7739E+000		9.6943E-001
	873.19	11.50	9.6665E-001		-5.1132E-001
	996.32	10.30	1.1816E+000		1.1422E+000
	1004.76	17.90	6.4824E-001		-2.4147E-001
	1274.45	35.50	2.8153E-001		2.2096E-001
Eu-155	86.54	30.90	1.7565E+000	1.63E+000	3.4189E+000
	105.31	20.70	1.6339E+000		-3.0078E-001
Am-241	59.54	35.90	4.7161E+000	4.72E+000	-1.3812E+000
Cm-243	228.19	10.56	1.6310E+000	1.16E+000	-5.8682E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1648E+000	1.16E+000	-5.2146E-001

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

Report Generated On 5/25/2006 2:18:21 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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-05-153-F-G
Sample ID: OOL-08-05-153
Sample Title: OOL-08-05-153-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 5/24/2006 11:39:18 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-08-05-153-F-G
Log Number: OOL-08-05-153
Title: OOL-08-05-153-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
F	1	944-	964	956.46	239.07	1.28	2.70E+002	83.56	3.22E+002
F	2	2321-	2343	2331.81	582.91	1.53	1.26E+002	55.83	7.60E+001
F	3	2425-	2444	2434.66	608.63	1.55	9.41E+001	23.12	1.00E+002
F	4	2904-	2916	2909.31	727.29	1.61	2.52E+001	13.95	2.74E+001
F	5	3634-	3654	3643.57	910.86	1.71	9.54E+001	44.93	3.72E+001
F	6	5826-	5856	5842.27	1460.54	1.94	7.50E+002	77.06	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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-05-153-F-G

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.998	1460.81*	10.67	1.71793E+001	2.05243E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.89418E-001	1.31429E-001
		860.37	12.46		
Bi-212	1.000	727.17*	11.80	4.34966E-001	2.43212E-001
Pb-212	0.443	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.76364E-001	3.01696E-001
Bi-214	0.393	609.31*	46.30	3.97325E-001	1.04219E-001
		1120.29	15.10		
		1764.49	15.80		

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

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

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

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-05-153-F-G

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

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.998	1.717933E+001	2.052432E+000
TL-208		0.470	2.894177E-001	1.314290E-001
Bi-212		1.000	4.349662E-001	2.432116E-001
Pb-212	@	0.443	8.763635E-001	3.016956E-001
Bi-214		0.393	3.973250E-001	1.042192E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
F 5	910.86	1.5898E-001	47.11

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:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-05-153-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	1.2022E-001	1.00E-001	-3.1490E-002
	1332.49	100.00	1.0019E-001		-1.4789E-003
Nb-94	702.63	100.00	1.2208E-001	1.17E-001	1.6531E-001
	871.10	100.00	1.1734E-001		9.0002E-002
Ag-108m	79.20	7.10	9.0997E+000	1.37E-001	-7.9684E+000
	433.93	89.90	1.5887E-001		6.3323E-002
	614.37	90.40	1.6534E-001		-2.8763E-002
	722.95	90.50	1.3656E-001		-2.9544E-002
Sb-125	176.33	6.89	2.7795E+000	4.72E-001	-2.0993E+000
	427.89	29.33	4.7187E-001		-2.1130E-002
	463.38	10.35	1.3069E+000		2.3757E-001
	600.56	17.80	7.1686E-001		-2.2108E-002
	606.64	5.02	3.2779E+000		5.3273E+000
	635.90	11.32	1.1090E+000		6.2233E-001
Cs-134	563.23	8.38	1.4986E+000	1.36E-001	3.0326E-001
	569.32	15.43	8.4571E-001		-4.7286E-002
	604.70	97.60	1.6551E-001		2.7772E-002
	795.84	85.40	1.3632E-001		6.3974E-002
	801.93	8.73	1.3550E+000		2.9399E-001
Cs-137	661.65	85.12	1.6310E-001	1.63E-001	1.3832E-001
Eu-152	121.78	28.40	9.3868E-001	4.18E-001	-2.1275E-001
	244.69	7.49	2.2763E+000		-6.8678E-001
	344.27	26.50	5.5094E-001		-6.4419E-001
	778.89	12.74	8.6257E-001		1.0159E-002
	867.32	4.16	2.7656E+000		-8.8367E-001
	964.01	14.40	9.2283E-001		6.7834E-001
	1085.78	10.00	1.0181E+000		6.0867E-002
	1112.02	13.30	8.1919E-001		-7.0193E-001
	1407.95	20.70	4.1789E-001		2.6132E-001
Eu-154	123.07	40.50	6.5570E-001	2.82E-001	1.6068E-003
	247.94	6.60	2.4505E+000		-3.2448E-001
	591.81	4.83	2.5117E+000		-5.6435E-001
	723.30	19.70	6.1570E-001		-2.5469E-001
	756.87	4.33	2.6323E+000		-3.9562E-001
	873.19	11.50	9.8246E-001		-5.6644E-001
	996.32	10.30	1.0969E+000		-4.6856E-001
	1004.76	17.90	6.3506E-001		1.3020E-001
	1274.45	35.50	2.8153E-001		3.5684E-001
Eu-155	86.54	30.90	1.6846E+000	1.57E+000	6.3663E-001
	105.31	20.70	1.5676E+000		-1.1096E+000
Am-241	59.54	35.90	4.3753E+000	4.38E+000	7.5110E-002
Cm-243	228.19	10.56	1.6148E+000	1.13E+000	-5.0832E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1271E+000	1.13E+000	2.9013E-001

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

Report Generated On 5/30/2006 4:51:50 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-08-05-154
Sample Title: OOL-08-05-154-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 5/30/2006 4:41:46 PM
Live Time: 600.0 seconds
Real Time: 600.9 seconds

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

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

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

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

Filename: RED6264
Log Number: OOL-08-05-154
Title: OOL-08-05-154-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	294-	308	299.85	74.86	1.43	4.43E+002	141.69	1.65E+003
2	330-	346	339.70	84.83	0.36	1.73E+002	135.98	1.48E+003
3	947-	960	954.07	238.46	1.32	2.64E+002	67.87	3.37E+002
4	1173-	1186	1181.92	295.44	0.42	7.47E+001	46.86	1.80E+002
5	1396-	1416	1407.25	351.79	1.89	1.45E+002	58.46	2.05E+002
6	2321-	2340	2331.65	582.95	0.88	1.83E+002	43.47	8.77E+001
7	2425-	2444	2435.83	609.00	1.73	1.70E+002	43.12	8.97E+001
8	2633-	2656	2644.75	661.25	1.38	1.05E+002	41.13	8.38E+001
9	3635-	3654	3644.27	911.19	0.88	1.02E+002	38.17	7.94E+001
10	3865-	3881	3873.67	968.56	1.35	7.04E+001	33.07	6.66E+001
11	4471-	4485	4479.19	1119.98	1.40	4.58E+001	26.27	4.62E+001
12	4686-	4701	4692.01	1173.19	1.05	5.00E+001	23.76	3.20E+001
13	5323-	5339	5331.50	1333.11	1.10	5.76E+001	22.27	2.24E+001
14	5829-	5860	5844.96	1461.51	2.18	1.08E+003	67.36	1.97E+001
15	7053-	7067	7060.71	1765.53	0.75	3.24E+001	17.58	1.66E+001

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: RED6264

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/gram)	Activity Uncertainty
K-40	0.985	1460.81*	10.67	1.87444E+001	1.91345E+000
Co-60	0.994	1173.22*	100.00	8.79736E-002	4.23666E-002
		1332.49*	100.00	1.04470E-001	4.11953E-002
Cs-137	0.995	661.65*	85.12	1.89357E-001	7.73081E-002
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.19984E-001	8.65500E-002
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	6.59133E+000	2.47115E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.61851E-001	1.99445E-001
Bi-214	0.991	609.31*	46.30	5.48482E-001	1.54418E-001
		1120.29*	15.10	5.26373E-001	3.07209E-001
		1764.49*	15.80	3.92834E-001	2.16854E-001
PB-214	0.582	74.82* @	6.21	1.13570E+001	4.33694E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	4.62489E-001	3.00568E-001
		351.92*	37.20	4.87161E-001	2.12621E-001
Ac-228	0.630	338.32	11.40		
		911.07*	27.70	6.00952E-001	2.36074E-001
		969.11*	16.60	7.07086E-001	3.40222E-001

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

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

I N T E R 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		0.985	1.874436E+001	1.913454E+000
Co-60		0.994	9.645286E-002	2.953490E-002
Cs-137		0.995	1.893570E-001	7.730813E-002
TL-208		0.470	3.199838E-001	8.655003E-002
Pb-212	@	0.521	6.618506E-001	1.994450E-001
Bi-214		0.991	5.004575E-001	1.164065E-001
PB-214	@	0.582	4.789325E-001	1.735804E-001
Ac-228		0.630	6.354452E-001	1.939551E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	84.83	2.8911E-001	78.39

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	6.1752E-002	5.53E-002	8.7974E-002
		1332.49*	100.00	5.5331E-002		1.0447E-001
	Nb-94	702.63	100.00	9.5212E-002	9.39E-002	-4.4988E-002
		871.10	100.00	9.3948E-002		5.6588E-002
	Ag-108m	79.20	7.10	5.2032E+000	1.23E-001	-5.3179E+000
		433.93	89.90	1.2310E-001		3.7142E-002
		614.37	90.40	1.3976E-001		-7.2015E-002
		722.95	90.50	1.2393E-001		1.5058E-001
	Sb-125	176.33	6.89	2.3504E+000	3.59E-001	-1.3884E+000
		427.89	29.33	3.5937E-001		-2.4849E-001
		463.38	10.35	1.0963E+000		4.6776E-001
		600.56	17.80	5.5587E-001		-1.1256E-001
		606.64	5.02	2.7169E+000		4.9557E+000
		635.90	11.32	8.9750E-001		5.6085E-002
	Cs-134	563.23	8.38	1.2914E+000	1.25E-001	3.1985E-001
		569.32	15.43	6.8215E-001		-7.6478E-001
		604.70	97.60	1.3697E-001		-2.6696E-002
		795.84	85.40	1.2487E-001		8.9789E-002
		801.93	8.73	1.1239E+000		-1.0652E+000
+	Cs-137	661.65*	85.12	1.1326E-001	1.13E-001	1.8936E-001
	Eu-152	121.78	28.40	7.2691E-001	3.18E-001	-3.6864E-001
		244.69	7.49	1.9638E+000		-2.6033E+000
		344.27	26.50	4.2014E-001		-1.1139E+000
		778.89	12.74	7.9472E-001		-3.7523E-001
		867.32	4.16	2.3606E+000		-1.3784E+000
		964.01	14.40	8.7641E-001		-1.7394E-001
		1085.78	10.00	9.3841E-001		-4.8224E-001
		1112.02	13.30	7.3179E-001		-7.0789E-001
		1407.95	20.70	3.1811E-001		5.3117E-002
	Eu-154	123.07	40.50	5.0830E-001	2.40E-001	-1.4932E-001
		247.94	6.60	2.0328E+000		-1.7215E+000
		591.81	4.83	2.1048E+000		4.1991E-001
		723.30	19.70	5.6936E-001		7.8905E-001
		756.87	4.33	2.2460E+000		-1.6486E+000
		873.19	11.50	7.8633E-001		-1.3542E-001
		996.32	10.30	8.7194E-001		-2.4310E-001
		1004.76	17.90	5.2643E-001		5.2584E-002
		1274.45	35.50	2.4040E-001		-3.4574E-001
	Eu-155	86.54	30.90	1.0521E+000	1.05E+000	-2.0898E-001
		105.31	20.70	1.1434E+000		-4.9643E-001
	Am-241	59.54	35.90	1.3072E+000	1.31E+000	1.2446E+000
	Cm-243	228.19	10.56	1.3620E+000	9.60E-001	2.2141E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/gram)	Nuclide MDA (pCi/gram)	Activity (pCi/gram)
Cm-243	277.60	14.00	9.6029E-001	9.60E-001	6.7195E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 10:17:00 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: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-08-06 -101-
Sample Title: OOL-08-06 -101-F-G
Description: 100% Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/8/2006 10:06:57 AM
Live Time: 600.0 seconds
Real Time: 601.5 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 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-08-06 -101-
Title: OOL-08-06 -101-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	296-	307	299.20	74.76	0.89	9.18E+001	66.65	4.22E+002
2	5830-	5853	5841.30	1460.30	1.94	3.01E+002	35.23	5.66E+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	0.991	1460.81*	10.67	2.06737E+001	2.94014E+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	0.991	2.067366E+001	2.940144E+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	74.76	1.5300E-001	72.60

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: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	2.3302E-001	1.98E-001	1.7087E-002
	1332.49	100.00	1.9836E-001		-2.2006E-001
Nb-94	702.63	100.00	2.3890E-001	2.36E-001	1.5262E-001
	871.10	100.00	2.3639E-001		-1.3283E-001
Ag-108m	79.20	7.10	1.9563E+001	2.75E-001	-1.3220E+001
	433.93	89.90	2.8866E-001		-1.6250E-002
	614.37	90.40	3.2799E-001		-5.0624E-001
	722.95	90.50	2.7482E-001		2.3569E-001
Sb-125	176.33	6.89	6.1895E+000	8.85E-001	3.8455E+000
	427.89	29.33	8.8505E-001		-7.1647E-001
	463.38	10.35	2.5606E+000		4.3138E-001
	600.56	17.80	1.4659E+000		7.5537E-001
	606.64	5.02	6.2236E+000		4.8824E+000
	635.90	11.32	2.0739E+000		-1.3110E+000
Cs-134	563.23	8.38	3.1326E+000	2.70E-001	-2.6383E+000
	569.32	15.43	1.6624E+000		-1.8548E+000
	604.70	97.60	3.2699E-001		4.5630E-001
	795.84	85.40	2.6972E-001		-2.1700E-002
	801.93	8.73	2.3199E+000		-2.7414E+000
Cs-137	661.65	85.12	3.3467E-001	3.35E-001	2.8417E-001
Eu-152	121.78	28.40	2.1313E+000	9.15E-001	1.2578E-001
	244.69	7.49	4.6709E+000		-4.4780E+000
	344.27	26.50	1.0530E+000		-5.4235E-001
	778.89	12.74	1.9138E+000		-1.0641E+000
	867.32	4.16	5.9002E+000		7.0412E-001
	964.01	14.40	1.9257E+000		1.2680E+000
	1085.78	10.00	2.3343E+000		3.0889E-002
	1112.02	13.30	1.7319E+000		-1.9546E+000
	1407.95	20.70	9.1463E-001		-7.5200E-002
Eu-154	123.07	40.50	1.4774E+000	6.03E-001	1.6973E-001
	247.94	6.60	4.8988E+000		-7.2119E-001
	591.81	4.83	4.9469E+000		-2.1107E+000
	723.30	19.70	1.2541E+000		8.5144E-001
	756.87	4.33	5.8347E+000		4.5172E+000
	873.19	11.50	2.0892E+000		1.5944E+000
	996.32	10.30	1.9893E+000		-1.0652E+000
	1004.76	17.90	1.1854E+000		3.3323E-001
	1274.45	35.50	6.0269E-001		7.3396E-002
Eu-155	86.54	30.90	3.7187E+000	3.67E+000	4.9979E+000
	105.31	20.70	3.6733E+000		-3.2514E-002
Am-241	59.54	35.90	8.4705E+000	8.47E+000	8.7706E-001
Cm-243	228.19	10.56	3.3396E+000	2.33E+000	-3.6768E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.3309E+000	2.33E+000	7.6575E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 10:49:54 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-08-06 -102-
Sample Title: OOL-08-06 -102-F-G
Description: 100% Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/8/2006 10:39:52 AM
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-08-06 -102-
Title: OOL-08-06 -102-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	232-	242	237.93	59.44	0.64	7.25E+001	57.22	3.27E+002
2	2322-	2339	2331.58	582.86	0.80	6.60E+001	24.32	2.70E+001
3	2428-	2441	2435.29	608.78	0.74	3.04E+001	19.45	2.46E+001
4	5827-	5852	5841.03	1460.23	2.01	3.20E+002	36.39	6.09E+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: 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	2.19467E+001	3.06418E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	4.41795E-001	1.72976E-001
		860.37	12.46		
Bi-214	0.401	609.31*	46.30	3.75379E-001	2.44625E-001
		1120.29	15.10		
		1764.49	15.80		
Am-241	1.000	59.54*	35.90	4.70804E+000	3.83021E+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	2.194666E+001	3.064185E+000
TL-208	0.470	4.417946E-001	1.729762E-001
Bi-214	0.401	3.753789E-001	2.446251E-001
Am-241	1.000	4.708037E+000	3.830213E+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	2.4373E-001	2.23E-001	-7.0400E-002
		1332.49	100.00	2.2277E-001		9.0646E-002
	Nb-94	702.63	100.00	2.7386E-001	2.61E-001	1.3031E-001
		871.10	100.00	2.6146E-001		-5.2079E-002
	Ag-108m	79.20	7.10	1.9521E+001	2.78E-001	-1.9012E+001
		433.93	89.90	2.8607E-001		-4.9304E-002
		614.37	90.40	3.0922E-001		-7.3862E-002
		722.95	90.50	2.7846E-001		9.1769E-002
	Sb-125	176.33	6.89	5.7080E+000	9.16E-001	-2.2295E+000
		427.89	29.33	9.1581E-001		3.8636E-001
		463.38	10.35	2.7157E+000		2.4214E+000
		600.56	17.80	1.4739E+000		4.5942E-001
		606.64	5.02	5.9075E+000		2.2867E+000
		635.90	11.32	2.2424E+000		-3.6332E-001
	Cs-134	563.23	8.38	3.2127E+000	3.03E-001	8.2115E-001
		569.32	15.43	1.7160E+000		-1.5490E+000
		604.70	97.60	3.0354E-001		7.3571E-002
		795.84	85.40	3.0269E-001		2.7505E-001
		801.93	8.73	2.8290E+000		-2.2540E-001
	Cs-137	661.65	85.12	2.7334E-001	2.73E-001	7.8814E-002
	Eu-152	121.78	28.40	2.0675E+000	7.38E-001	8.7199E-001
		244.69	7.49	4.5644E+000		-3.2989E+000
		344.27	26.50	1.0530E+000		-2.2439E+000
		778.89	12.74	1.9943E+000		3.3829E-001
		867.32	4.16	6.1560E+000		2.7754E+000
		964.01	14.40	2.1647E+000		2.1544E+000
		1085.78	10.00	2.1578E+000		1.1368E+000
		1112.02	13.30	1.7801E+000		-1.6162E+000
		1407.95	20.70	7.3768E-001		-7.0021E-001
	Eu-154	123.07	40.50	1.4205E+000	6.24E-001	3.0066E-001
		247.94	6.60	4.6764E+000		-7.0881E-001
		591.81	4.83	5.5505E+000		-4.4038E-001
		723.30	19.70	1.2710E+000		-1.5558E-001
		756.87	4.33	5.5990E+000		-1.5967E+000
		873.19	11.50	2.2746E+000		1.6243E+000
		996.32	10.30	1.8958E+000		-9.7765E-001
		1004.76	17.90	1.2824E+000		2.3233E-001
		1274.45	35.50	6.2402E-001		1.6954E-001
	Eu-155	86.54	30.90	3.5152E+000	3.52E+000	1.2185E+000
		105.31	20.70	3.5334E+000		-5.4660E-001
+	Am-241	59.54*	35.90	6.1445E+000	6.14E+000	4.7080E+000
	Cm-243	228.19	10.56	3.2790E+000	2.12E+000	2.8716E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.1249E+000	2.12E+000	-2.1326E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 10:35:56 AM

Y A N K E E R O W E P O R T A B L E I S O C 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-08-06 -103-
Sample Title: OOL-08-06 -103-F-G
Description: 100% Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/8/2006 10:25:54 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-08-06 -103-
Title: OOL-08-06 -103-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	792-	799	795.49	198.83	0.28	2.13E+001	26.15	7.77E+001
2	950-	960	955.05	238.72	1.11	4.28E+001	34.29	1.10E+002
3	2325-	2338	2329.98	582.45	0.45	4.02E+001	20.54	2.38E+001
4	3633-	3650	3641.65	910.38	0.96	4.69E+001	19.69	1.61E+001
5	5829-	5852	5840.42	1460.07	1.90	3.14E+002	37.81	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: 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	2.15647E+001	3.12683E+000
TL-208	0.462	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	2.68872E-001	1.42024E-001
		860.37		12.46		
Pb-212	0.427	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	4.31823E-001	3.52798E-001

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

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

I N T E R 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	2.156467E+001	3.126828E+000
TL-208	0.462	2.688715E-001	1.420240E-001
Pb-212 @	0.427	4.318231E-001	3.527980E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	198.83	3.5471E-002	122.89
4	910.38	7.8194E-002	41.96

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: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	2.5396E-001	2.04E-001	4.8060E-002
	1332.49	100.00	2.0406E-001		-1.3498E-002
Nb-94	702.63	100.00	2.1917E-001	2.10E-001	-3.8545E-001
	871.10	100.00	2.1022E-001		-2.4791E-002
Ag-108m	79.20	7.10	2.1893E+001	2.86E-001	-5.1448E+000
	433.93	89.90	3.0614E-001		1.9523E-002
	614.37	90.40	2.8594E-001		-2.8950E-001
	722.95	90.50	3.2498E-001		3.5690E-001
Sb-125	176.33	6.89	6.5203E+000	9.49E-001	4.6842E-001
	427.89	29.33	9.4916E-001		-3.4343E-001
	463.38	10.35	2.8210E+000		2.9818E+000
	600.56	17.80	1.4416E+000		-3.9355E-001
	606.64	5.02	5.7297E+000		5.6391E+000
	635.90	11.32	2.2153E+000		-3.0248E-001
Cs-134	563.23	8.38	3.1649E+000	2.79E-001	2.0261E-001
	569.32	15.43	1.7594E+000		6.6163E-001
	604.70	97.60	2.7941E-001		-1.0810E-001
	795.84	85.40	2.9681E-001		-2.5542E-001
	801.93	8.73	2.8089E+000		-2.0093E+000
Cs-137	661.65	85.12	2.8519E-001	2.85E-001	-6.7238E-002
Eu-152	121.78	28.40	2.1229E+000	9.15E-001	3.2518E-001
	244.69	7.49	4.9018E+000		4.8673E-001
	344.27	26.50	1.1295E+000		-7.6270E-001
	778.89	12.74	1.9274E+000		1.1247E+000
	867.32	4.16	5.3002E+000		3.6500E+000
	964.01	14.40	1.8788E+000		8.1207E-001
	1085.78	10.00	2.2916E+000		-5.3594E-001
	1112.02	13.30	1.8270E+000		-1.9400E+000
	1407.95	20.70	9.1463E-001		6.8112E-001
Eu-154	123.07	40.50	1.4705E+000	5.88E-001	-5.8036E-001
	247.94	6.60	5.1216E+000		-1.3813E+000
	591.81	4.83	6.1171E+000		5.4128E+000
	723.30	19.70	1.5210E+000		1.9611E+000
	756.87	4.33	5.8730E+000		-3.5674E-001
	873.19	11.50	1.8840E+000		1.6010E+000
	996.32	10.30	2.2043E+000		3.7177E-001
	1004.76	17.90	1.2589E+000		-4.6268E-001
	1274.45	35.50	5.8800E-001		-2.2682E-001
Eu-155	86.54	30.90	3.6887E+000	3.69E+000	2.4008E+000
	105.31	20.70	3.7508E+000		1.0642E+000
Am-241	59.54	35.90	9.0660E+000	9.07E+000	3.3830E+000
Cm-243	228.19	10.56	3.5317E+000	2.44E+000	1.9101E+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	-1.7727E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 11:26:48 AM

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

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

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-08-06 -105-
Sample Title: OOL-08-06 -105-F-G
Description: Vegetation and stones

Sample Type:
Geometry:

Acquisition Started: 8/8/2006 11:16:46 AM
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-08-06 -105-
Title: OOL-08-06 -105-F-G
Description: Vegetation and stones

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2429-	2444	2435.72	608.89	0.63	5.20E+001	21.93	2.40E+001
2	5831-	5855	5841.92	1460.45	1.57	2.76E+002	33.41	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: 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	1.89085E+001	2.75669E+000
Bi-214	0.403	609.31*	46.30	6.41940E-001	2.82322E-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	1.890847E+001	2.756686E+000
Bi-214	0.403	6.419400E-001	2.823221E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.33E-001	1.4043E-001
	1332.49	100.00	2.3273E-001		-4.9750E-002
Nb-94	702.63	100.00	2.6938E-001	2.27E-001	-3.7833E-002
	871.10	100.00	2.2671E-001		-1.1826E-001
Ag-108m	79.20	7.10	1.8918E+001	2.86E-001	-1.3195E+001
	433.93	89.90	3.0125E-001		1.2329E-001
	614.37	90.40	3.2376E-001		-5.9276E-002
	722.95	90.50	2.8560E-001		-2.1674E-001
Sb-125	176.33	6.89	5.6036E+000	8.32E-001	3.8883E-001
	427.89	29.33	8.3250E-001		-1.1988E+000
	463.38	10.35	2.4910E+000		2.5247E-001
	600.56	17.80	1.5055E+000		9.3976E-001
	606.64	5.02	6.4557E+000		6.5071E+000
	635.90	11.32	2.1030E+000		2.7106E-002
Cs-134	563.23	8.38	3.0504E+000	3.01E-001	1.2419E+000
	569.32	15.43	1.6441E+000		-1.4424E+000
	604.70	97.60	3.3404E-001		-1.5586E-001
	795.84	85.40	3.0074E-001		2.0694E-002
	801.93	8.73	2.6208E+000		-1.8203E+000
Cs-137	661.65	85.12	3.0922E-001	3.09E-001	-1.3961E-002
Eu-152	121.78	28.40	1.9150E+000	7.77E-001	-4.3248E-001
	244.69	7.49	4.4553E+000		-4.0369E+000
	344.27	26.50	1.0530E+000		-1.3160E+000
	778.89	12.74	1.8580E+000		-1.9268E-001
	867.32	4.16	5.8122E+000		-1.1799E+000
	964.01	14.40	2.0271E+000		2.3811E+000
	1085.78	10.00	2.3969E+000		-2.0048E+000
	1112.02	13.30	1.7155E+000		4.0555E-001
	1407.95	20.70	7.7675E-001		1.3650E-001
Eu-154	123.07	40.50	1.3222E+000	7.32E-001	-1.0535E+000
	247.94	6.60	4.8880E+000		1.5544E+000
	591.81	4.83	4.8821E+000		-2.2456E+000
	723.30	19.70	1.3441E+000		1.7248E-002
	756.87	4.33	5.8347E+000		3.2770E+000
	873.19	11.50	1.9895E+000		-1.4079E-001
	996.32	10.30	1.8958E+000		-1.8444E+000
	1004.76	17.90	1.2940E+000		-5.1234E-001
	1274.45	35.50	7.3236E-001		-1.0089E-001
Eu-155	86.54	30.90	3.3101E+000	3.31E+000	1.0570E+000
	105.31	20.70	3.4717E+000		-3.0936E+000
Am-241	59.54	35.90	9.2943E+000	9.29E+000	6.0996E+000
Cm-243	228.19	10.56	3.2111E+000	2.11E+000	-3.4041E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.1073E+000	2.11E+000	-2.8012E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 11:08:39 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-08-06 -106-
Sample Title: OOL-08-06 -106-F-G
Description: Vegetation and stones

Sample Type:
Geometry:

Acquisition Started: 8/8/2006 10:58:38 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-08-06 -106-
Title: OOL-08-06 -106-F-G
Description: Vegetation and stones

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2038-	2052	2043.12	510.74	1.41	5.12E+001	24.45	3.58E+001
2	2323-	2337	2329.07	582.23	0.46	5.28E+001	22.33	2.62E+001
3	3868-	3880	3874.32	968.54	0.35	2.29E+001	15.21	1.41E+001
4	4474-	4485	4479.10	1119.74	0.39	1.44E+001	10.06	4.63E+000
5	5829-	5853	5839.85	1459.93	1.99	3.82E+002	42.05	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
ANN	0.998	511.00*	100.00	2.76401E-001	1.37664E-001
K-40	0.975	1460.81*	10.67	2.62205E+001	3.58114E+000
TL-208	0.735	277.35	6.80		
		510.84*	21.60	1.27963E+000	6.45846E-001
		583.14*	84.20	3.53424E-001	1.56560E-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
ANN	0.998	2.000610E-001	1.417353E-001
K-40	0.975	2.622050E+001	3.581144E+000
TL-208	0.735	3.534237E-001	1.561361E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	968.54	3.8153E-002	66.46
4	1119.74	2.3947E-002	70.03

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	2.6945E-001	2.25E-001	4.7645E-002
	1332.49	100.00	2.2530E-001		1.5058E-001
Nb-94	702.63	100.00	2.5860E-001	2.59E-001	5.6643E-002
	871.10	100.00	2.6146E-001		1.8268E-001
Ag-108m	79.20	7.10	1.8800E+001	2.78E-001	-1.6626E+001
	433.93	89.90	3.0493E-001		-7.5645E-002
	614.37	90.40	3.1658E-001		-1.8644E-001
	722.95	90.50	2.7846E-001		7.4167E-002
Sb-125	176.33	6.89	5.7960E+000	9.23E-001	1.4943E+000
	427.89	29.33	9.2333E-001		5.3831E-002
	463.38	10.35	2.4193E+000		8.8704E-001
	600.56	17.80	1.4898E+000		1.0470E+000
	606.64	5.02	5.9573E+000		3.2202E+000
	635.90	11.32	2.0443E+000		-3.2160E-001
Cs-134	563.23	8.38	2.8245E+000	2.93E-001	-2.9915E+000
	569.32	15.43	1.5589E+000		2.7190E-001
	604.70	97.60	3.0354E-001		2.1798E-001
	795.84	85.40	2.9281E-001		1.5359E-001
	801.93	8.73	2.8290E+000		4.5345E-001
Cs-137	661.65	85.12	2.7933E-001	2.79E-001	1.6378E-002
Eu-152	121.78	28.40	1.9943E+000	8.99E-001	1.2027E+000
	244.69	7.49	4.4645E+000		-1.0265E+000
	344.27	26.50	1.0885E+000		4.9447E-001
	778.89	12.74	1.7557E+000		-1.0385E+000
	867.32	4.16	6.1975E+000		3.3759E-001
	964.01	14.40	1.9939E+000		4.5892E-001
	1085.78	10.00	2.3554E+000		8.9323E-001
	1112.02	13.30	1.5224E+000		-1.0380E+000
	1407.95	20.70	8.9869E-001		1.2942E-001
Eu-154	123.07	40.50	1.3461E+000	6.38E-001	-2.4911E-001
	247.94	6.60	4.7330E+000		-8.7176E-001
	591.81	4.83	5.1049E+000		-3.6070E+000
	723.30	19.70	1.2793E+000		-1.0751E-001
	756.87	4.33	5.3098E+000		3.2980E+000
	873.19	11.50	2.1840E+000		5.3572E-001
	996.32	10.30	2.3038E+000		2.9294E-001
	1004.76	17.90	1.2589E+000		-9.7725E-001
	1274.45	35.50	6.3780E-001		-6.1657E-001
Eu-155	86.54	30.90	3.3437E+000	3.34E+000	3.4067E+000
	105.31	20.70	3.4089E+000		-9.7592E-001
Am-241	59.54	35.90	8.7840E+000	8.78E+000	3.2500E+000
Cm-243	228.19	10.56	3.3515E+000	2.21E+000	1.6344E+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	-4.4723E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 11:43:27 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-08-06 -107-
Sample Title: OOL-08-06 -107-F-G
Description: Vegetation, large rock and phon

Sample Type:
Geometry:

Acquisition Started: 8/8/2006 11:33:25 AM
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-08-06 -107-
Title: OOL-08-06 -107-F-G
Description: Vegetation, large rock and phone pole

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2429-	2442	2437.14	609.24	0.75	4.17E+001	23.81	3.83E+001
2	5831-	5854	5842.62	1460.62	1.94	3.45E+002	38.79	1.18E+001

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: 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	2.36891E+001	3.28061E+000
Bi-214	0.406	609.31*	46.30	5.14265E-001	3.00917E-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	2.368909E+001	3.280614E+000
Bi-214	0.406	5.142651E-001	3.009173E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.3081E-001	2.31E-001	-8.0645E-002
	1332.49	100.00	2.6229E-001		1.5757E-001
Nb-94	702.63	100.00	2.6938E-001	2.34E-001	3.1186E-002
	871.10	100.00	2.3449E-001		-7.1519E-002
Ag-108m	79.20	7.10	1.9862E+001	2.62E-001	-1.0181E+001
	433.93	89.90	2.8866E-001		-1.7864E-002
	614.37	90.40	3.5094E-001		-1.8915E-001
	722.95	90.50	2.6163E-001		-7.2504E-002
Sb-125	176.33	6.89	5.8754E+000	8.77E-001	-3.7499E+000
	427.89	29.33	8.7718E-001		-5.3101E-001
	463.38	10.35	2.4071E+000		1.0943E+000
	600.56	17.80	1.5132E+000		-6.1471E-001
	606.64	5.02	6.8954E+000		5.9166E+000
	635.90	11.32	2.2424E+000		-3.0671E-001
Cs-134	563.23	8.38	3.0168E+000	3.05E-001	-3.9439E-001
	569.32	15.43	1.7422E+000		6.9359E-002
	604.70	97.60	3.5210E-001		-1.5245E-001
	795.84	85.40	3.0463E-001		1.4251E-001
	801.93	8.73	2.8489E+000		-1.9952E+000
Cs-137	661.65	85.12	3.4272E-001	3.43E-001	1.6034E-001
Eu-152	121.78	28.40	2.1396E+000	8.99E-001	1.4632E+000
	244.69	7.49	4.6445E+000		-3.7708E+000
	344.27	26.50	1.1362E+000		-1.1788E+000
	778.89	12.74	1.8149E+000		-1.6901E+000
	867.32	4.16	5.2510E+000		-1.0875E+001
	964.01	14.40	1.9939E+000		1.0819E+000
	1085.78	10.00	2.4777E+000		2.9502E+000
	1112.02	13.30	1.6822E+000		-5.5847E-001
	1407.95	20.70	8.9869E-001		1.0416E-001
Eu-154	123.07	40.50	1.4744E+000	6.51E-001	-1.9520E-001
	247.94	6.60	4.9313E+000		-2.4021E+000
	591.81	4.83	5.1359E+000		-1.3726E+000
	723.30	19.70	1.1841E+000		-2.8810E-001
	756.87	4.33	5.9863E+000		-2.5551E+000
	873.19	11.50	2.0892E+000		1.2536E+000
	996.32	10.30	2.2246E+000		-1.9371E+000
	1004.76	17.90	1.2470E+000		1.1822E-001
	1274.45	35.50	6.5127E-001		7.2539E-002
Eu-155	86.54	30.90	3.5624E+000	3.56E+000	-1.6011E-001
	105.31	20.70	3.6558E+000		5.7166E-001
Am-241	59.54	35.90	8.1619E+000	8.16E+000	-1.5665E+000
Cm-243	228.19	10.56	3.3275E+000	2.34E+000	-5.7383E-003

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.3415E+000	2.34E+000	-6.2565E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 1:29:59 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-08-06 -108-
Sample Title: OOL-08-06 -108-F-G
Description: Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/8/2006 1:19:57 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-08-06 -108-
Title: OOL-08-06 -108-F-G
Description: Vegetation

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	947-	961	954.76	238.65	1.26	5.64E+001	41.87	1.38E+002
2	2326-	2339	2331.89	582.93	0.75	4.06E+001	21.61	2.94E+001
3	3870-	3882	3875.68	968.88	0.92	3.41E+001	14.51	7.90E+000
4	5832-	5857	5844.11	1461.00	1.08	3.36E+002	39.38	1.60E+001

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: GRN7780

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.999	1460.81*		10.67	2.30550E+001	3.28451E+000
TL-208	0.471	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	2.72021E-001	1.49038E-001
		860.37		12.46		
Pb-212	0.427	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	5.69658E-001	4.32068E-001

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

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

I N T E R 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	2.305499E+001	3.284511E+000
TL-208	0.471	2.720210E-001	1.490378E-001
Pb-212 @	0.427	5.696585E-001	4.320685E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	968.88	5.6835E-002	42.55

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	2.7318E-001	2.28E-001	9.5209E-002
	1332.49	100.00	2.2781E-001		1.0572E-001
Nb-94	702.63	100.00	2.6635E-001	2.36E-001	2.2004E-001
	871.10	100.00	2.3639E-001		-3.2966E-002
Ag-108m	79.20	7.10	2.0937E+001	3.04E-001	-2.2471E+001
	433.93	89.90	3.0371E-001		9.1282E-002
	614.37	90.40	3.2376E-001		-1.0333E-001
	722.95	90.50	3.0922E-001		9.2778E-002
Sb-125	176.33	6.89	6.4360E+000	9.60E-001	7.3350E-001
	427.89	29.33	9.6000E-001		-8.8217E-002
	463.38	10.35	2.3327E+000		-1.2902E+000
	600.56	17.80	1.4169E+000		-1.5953E+000
	606.64	5.02	6.1041E+000		3.0592E+000
	635.90	11.32	2.0591E+000		-2.4546E+000
Cs-134	563.23	8.38	3.2284E+000	3.05E-001	1.6163E+000
	569.32	15.43	1.7248E+000		7.2819E-001
	604.70	97.60	3.1611E-001		6.2145E-002
	795.84	85.40	3.0463E-001		-2.5361E-002
	801.93	8.73	2.8290E+000		-2.1966E+000
Cs-137	661.65	85.12	3.0022E-001	3.00E-001	-8.8173E-002
Eu-152	121.78	28.40	2.2026E+000	9.90E-001	1.9576E+000
	244.69	7.49	4.8851E+000		-5.7047E-002
	344.27	26.50	1.0530E+000		-1.2412E+000
	778.89	12.74	1.9138E+000		-3.6849E+000
	867.32	4.16	5.9867E+000		-1.2653E+000
	964.01	14.40	2.0161E+000		-1.5189E+000
	1085.78	10.00	2.3969E+000		-6.3338E-001
	1112.02	13.30	1.4251E+000		-2.8537E+000
	1407.95	20.70	9.9010E-001		8.5564E-001
Eu-154	123.07	40.50	1.5035E+000	5.57E-001	-2.7628E-001
	247.94	6.60	5.2647E+000		4.8664E-001
	591.81	4.83	4.8821E+000		-3.2101E+000
	723.30	19.70	1.4057E+000		9.0703E-001
	756.87	4.33	5.9110E+000		3.4804E-001
	873.19	11.50	2.0064E+000		1.7541E+000
	996.32	10.30	2.0119E+000		-6.1909E-001
	1004.76	17.90	1.2350E+000		1.4686E+000
	1274.45	35.50	5.5735E-001		3.5043E-001
Eu-155	86.54	30.90	3.7846E+000	3.78E+000	5.0110E+000
	105.31	20.70	3.8600E+000		1.8493E+000
Am-241	59.54	35.90	8.4760E+000	8.48E+000	2.3551E+000
Cm-243	228.19	10.56	3.5989E+000	2.43E+000	-7.8188E-001

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	-7.7302E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 1:13:59 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-08-06 -107-
Sample Title: OOL-08-06 -109-F-G
Description: Vegetation and boulder

Sample Type:
Geometry:

Acquisition Started: 8/8/2006 1:03:57 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-08-06 -107-
Title: OOL-08-06 -109-F-G
Description: Vegetation and boulder

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	297-	306	301.37	75.30	0.43	4.72E+001	55.56	3.34E+002
2	2431-	2445	2436.87	609.18	0.44	6.06E+001	23.39	2.84E+001
3	5832-	5856	5844.04	1460.98	1.76	5.37E+002	47.47	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: 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	3.68355E+001	4.41645E+000
Bi-214	0.406	609.31*	46.30	7.48547E-001	3.03458E-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	3.683551E+001	4.416454E+000
Bi-214	0.406	7.485468E-001	3.034575E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	7.8710E-002	117.64

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:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.9957E-001	2.54E-001	-5.3554E-002
	1332.49	100.00	2.5359E-001		3.1443E-001
Nb-94	702.63	100.00	2.6328E-001	2.63E-001	-2.9257E-001
	871.10	100.00	2.8882E-001		9.0512E-002
Ag-108m	79.20	7.10	1.9322E+001	3.46E-001	5.5783E-001
	433.93	89.90	3.5632E-001		2.6099E-003
	614.37	90.40	3.7969E-001		1.9657E-002
	722.95	90.50	3.4577E-001		1.4664E-002
Sb-125	176.33	6.89	6.5460E+000	1.06E+000	-3.4279E-001
	427.89	29.33	1.0556E+000		-1.6413E-001
	463.38	10.35	2.5027E+000		-3.0754E+000
	600.56	17.80	1.8275E+000		6.0491E-001
	606.64	5.02	7.4068E+000		8.2711E+000
	635.90	11.32	2.3219E+000		-6.0800E-002
Cs-134	563.23	8.38	3.3213E+000	3.16E-001	-4.3812E+000
	569.32	15.43	1.8511E+000		1.8127E-002
	604.70	97.60	3.8259E-001		-1.7854E-001
	795.84	85.40	3.1597E-001		7.2226E-002
	801.93	8.73	2.9655E+000		-4.9639E+000
Cs-137	661.65	85.12	4.0769E-001	4.08E-001	3.8270E-001
Eu-152	121.78	28.40	1.9957E+000	1.05E+000	-1.0691E+000
	244.69	7.49	4.7921E+000		-5.5166E+000
	344.27	26.50	1.2472E+000		-3.1990E-002
	778.89	12.74	2.0333E+000		7.6361E-001
	867.32	4.16	6.9734E+000		3.4957E+000
	964.01	14.40	2.3128E+000		1.6928E+000
	1085.78	10.00	2.7405E+000		1.9685E+000
	1112.02	13.30	2.3120E+000		8.7011E-001
	1407.95	20.70	1.0462E+000		-5.1240E-001
Eu-154	123.07	40.50	1.3989E+000	7.02E-001	3.0072E-001
	247.94	6.60	5.3248E+000		-3.2239E+000
	591.81	4.83	6.3683E+000		5.3341E-001
	723.30	19.70	1.6083E+000		1.3982E+000
	756.87	4.33	7.0456E+000		3.4804E-002
	873.19	11.50	2.4724E+000		5.8622E-002
	996.32	10.30	2.3231E+000		-6.9482E-001
	1004.76	17.90	1.5725E+000		7.7115E-001
	1274.45	35.50	7.0237E-001		2.1575E-001
Eu-155	86.54	30.90	3.6278E+000	3.62E+000	3.6095E+000
	105.31	20.70	3.6163E+000		2.2524E+000
Am-241	59.54	35.90	8.6719E+000	8.67E+000	3.0428E+000
Cm-243	228.19	10.56	3.7932E+000	2.43E+000	-1.8934E-001

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	5.8486E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 1:51:19 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: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-08-06 -110-
Sample Title: OOL-08-06 -110-F-G
Description: Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/8/2006 1:41:17 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-08-06 -110-
Title: OOL-08-06 -110-F-G
Description: Vegetation

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2431-	2442	2436.97	609.20	0.40	4.09E+001	18.31	1.81E+001
2	2639-	2653	2646.88	661.68	0.98	5.37E+001	18.87	1.33E+001
3	3637-	3649	3643.03	910.72	0.63	2.81E+001	17.07	1.79E+001
4	5832-	5855	5844.55	1461.11	2.11	3.27E+002	37.96	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	0.997	1460.81*	10.67	2.24413E+001	3.17596E+000
Cs-137	1.000	661.65*	85.12	3.70185E-001	1.37217E-001
Bi-214	0.406	609.31*	46.30	5.05286E-001	2.34679E-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	2.244133E+001	3.175962E+000
Cs-137	1.000	3.701849E-001	1.372171E-001
Bi-214	0.406	5.052864E-001	2.346787E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	910.72	4.6793E-002	60.79

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	2.4992E-001	2.28E-001	1.1395E-001
		1332.49	100.00	2.2781E-001		1.1092E-001
	Nb-94	702.63	100.00	2.4230E-001	2.42E-001	2.0908E-001
		871.10	100.00	2.4566E-001		-3.2981E-002
	Ag-108m	79.20	7.10	1.9831E+001	2.99E-001	-5.1872E+000
		433.93	89.90	3.1684E-001		-5.7921E-002
		614.37	90.40	3.3628E-001		-2.9734E-002
		722.95	90.50	2.9934E-001		1.0838E-001
	Sb-125	176.33	6.89	6.5203E+000	9.08E-001	1.3154E+000
		427.89	29.33	9.0822E-001		8.9902E-002
		463.38	10.35	2.7264E+000		1.8367E-001
		600.56	17.80	1.4739E+000		2.7561E-004
		606.64	5.02	6.4329E+000		7.7935E+000
		635.90	11.32	2.1599E+000		5.0186E-001
	Cs-134	563.23	8.38	3.2127E+000	3.20E-001	3.0521E+000
		569.32	15.43	1.6256E+000		1.1782E-001
		604.70	97.60	3.2817E-001		-2.4065E-002
		795.84	85.40	3.1965E-001		2.0928E-001
		801.93	8.73	3.0956E+000		2.5493E-001
+	Cs-137	661.65*	85.12	1.6032E-001	1.60E-001	3.7018E-001
	Eu-152	121.78	28.40	2.2080E+000	9.76E-001	7.6625E-001
		244.69	7.49	4.5374E+000		-5.9041E+000
		344.27	26.50	1.1914E+000		-8.0682E-001
		778.89	12.74	2.1458E+000		-1.0242E+000
		867.32	4.16	5.7677E+000		7.3374E-001
		964.01	14.40	1.8906E+000		4.9464E-001
		1085.78	10.00	2.2916E+000		1.5223E+000
		1112.02	13.30	1.9023E+000		-4.5618E-001
		1407.95	20.70	9.7553E-001		8.1322E-001
	Eu-154	123.07	40.50	1.5283E+000	6.31E-001	5.3343E-001
		247.94	6.60	5.2647E+000		8.8099E-001
		591.81	4.83	5.6631E+000		2.0228E+000
		723.30	19.70	1.3676E+000		6.2123E-001
		756.87	4.33	5.7181E+000		-6.3210E-001
		873.19	11.50	2.1213E+000		-9.9338E-001
		996.32	10.30	2.5775E+000		-7.0755E-003
		1004.76	17.90	1.2707E+000		2.2502E-001
		1274.45	35.50	6.3095E-001		-1.6619E-001
	Eu-155	86.54	30.90	3.6021E+000	3.60E+000	-6.3651E-001
		105.31	20.70	3.8142E+000		1.2280E+000
	Am-241	59.54	35.90	8.4097E+000	8.41E+000	-2.8373E-001
	Cm-243	228.19	10.56	3.4457E+000	2.44E+000	-3.1440E-002

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	6.3834E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 2:08:23 PM

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

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

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-08-06 -111-
Sample Title: OOL-08-06 -111-F-G
Description: Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/8/2006 1:58:21 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-08-06 -111-
Title: OOL-08-06 -111-F-G
Description: Vegetation

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	949-	962	955.30	238.78	0.31	4.20E+001	36.69	1.12E+002
2	1403-	1413	1408.31	352.04	0.74	2.51E+001	22.37	4.09E+001
3	2035-	2052	2041.67	510.38	1.18	3.24E+001	32.26	6.96E+001
4	2325-	2340	2332.40	583.06	1.41	4.28E+001	21.65	2.62E+001
5	2430-	2445	2436.76	609.15	1.07	3.86E+001	22.08	2.94E+001
6	3637-	3653	3644.80	911.16	0.60	3.92E+001	20.60	2.28E+001
7	5831-	5856	5844.30	1461.04	1.63	3.37E+002	36.71	3.28E+000

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

Errors quoted at 1.960 sigma

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

N U C L I 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	2.31080E+001	3.13790E+000
TL-208	0.752	277.35		6.80		
		510.84*		21.60	8.11231E-001	8.17420E-001
		583.14*		84.20	2.86801E-001	1.49839E-001
		860.37		12.46		
Pb-212	0.427	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	4.24140E-001	3.76400E-001
Bi-214	0.406	609.31*		46.30	4.76800E-001	2.78980E-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		0.987		
	K-40		0.998	2.310799E+001	3.137899E+000
	TL-208		0.752	3.038498E-001	1.473830E-001
	Pb-212	@	0.427	4.241402E-001	3.763996E-001
	Bi-214		0.406	4.767999E-001	2.789796E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	352.04	4.1818E-002	89.15
6	911.16	6.5323E-002	52.57

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: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	2.5792E-001	2.47E-001	2.2790E-001
	1332.49	100.00	2.4685E-001		3.4664E-001
Nb-94	702.63	100.00	2.3370E-001	2.34E-001	-2.1974E-001
	871.10	100.00	2.4926E-001		1.7750E-001
Ag-108m	79.20	7.10	1.8284E+001	2.78E-001	-1.4124E+001
	433.93	89.90	3.0371E-001		3.0790E-002
	614.37	90.40	3.1658E-001		2.3620E-002
	722.95	90.50	2.7846E-001		8.2051E-002
Sb-125	176.33	6.89	5.9325E+000	9.38E-001	5.6067E+000
	427.89	29.33	9.3818E-001		1.0359E+000
	463.38	10.35	2.8210E+000		1.3976E+000
	600.56	17.80	1.4416E+000		-1.1543E+000
	606.64	5.02	5.8320E+000		-1.1685E+000
	635.90	11.32	2.0591E+000		-2.9223E-001
Cs-134	563.23	8.38	3.1326E+000	2.91E-001	1.2453E+000
	569.32	15.43	1.8017E+000		6.1311E-001
	604.70	97.60	3.0610E-001		-2.7843E-001
	795.84	85.40	2.9080E-001		1.5277E-001
	801.93	8.73	2.5990E+000		-1.9448E+000
Cs-137	661.65	85.12	3.0385E-001	3.04E-001	2.9003E-002
Eu-152	121.78	28.40	2.0531E+000	8.31E-001	5.8406E-001
	244.69	7.49	4.3716E+000		-2.1912E+000
	344.27	26.50	1.0348E+000		-1.2396E+000
	778.89	12.74	1.9545E+000		-6.1825E-001
	867.32	4.16	5.9436E+000		4.0936E-001
	964.01	14.40	2.2450E+000		1.3850E+000
	1085.78	10.00	2.0390E+000		-5.2226E-001
	1112.02	13.30	1.9170E+000		-8.9339E-002
	1407.95	20.70	8.3148E-001		2.3358E-001
Eu-154	123.07	40.50	1.4306E+000	7.02E-001	5.3697E-001
	247.94	6.60	4.7218E+000		-3.8362E+000
	591.81	4.83	5.4355E+000		-1.7456E-001
	723.30	19.70	1.2876E+000		4.3101E-001
	756.87	4.33	5.6787E+000		2.3101E+000
	873.19	11.50	2.1529E+000		1.1195E+000
	996.32	10.30	2.4719E+000		6.2393E-001
	1004.76	17.90	1.4859E+000		1.2619E-001
	1274.45	35.50	7.0237E-001		7.5366E-001
Eu-155	86.54	30.90	3.4079E+000	3.41E+000	1.3753E+000
	105.31	20.70	3.6030E+000		-1.5523E-001
Am-241	59.54	35.90	8.3708E+000	8.37E+000	3.1552E+000
Cm-243	228.19	10.56	3.2912E+000	2.28E+000	1.4120E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.2826E+000	2.28E+000	5.1341E-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 2:24:25 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-08-06 -112-
Sample Title: OOL-08-06 -112-F-G
Description: Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/8/2006 2:14:23 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-08-06 -112-
Title: OOL-08-06 -112-F-G
Description: Vegetation

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	947-	960	955.04	238.72	0.63	4.65E+001	36.09	1.06E+002
2	1371-	1393	1382.55	345.60	1.90	1.46E+003	135.49	8.58E+002
3	2324-	2339	2331.20	582.76	0.43	3.68E+001	21.16	2.62E+001
4	2430-	2442	2436.79	609.16	0.40	3.30E+001	17.58	1.80E+001
5	2640-	2652	2646.20	661.51	0.93	1.62E+001	19.75	3.18E+001
6	5322-	5335	5328.33	1332.05	0.51	1.48E+001	10.60	5.22E+000
7	5833-	5855	5843.39	1460.82	1.38	3.58E+002	38.51	7.72E+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: 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	2.45853E+001	3.30854E+000
Cs-137	0.999	661.65*		85.12	1.11409E-001	1.36797E-001
TL-208	0.469	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	2.46305E-001	1.45336E-001
		860.37		12.46		
Pb-212	0.427	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	4.69226E-001	3.71764E-001
Bi-214	0.406	609.31*		46.30	4.07987E-001	2.22919E-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	2.458531E+001	3.308544E+000
Cs-137	0.999	1.114091E-001	1.367967E-001
TL-208	0.469	2.463049E-001	1.453364E-001
Pb-212 @	0.427	4.692259E-001	3.717639E-001
Bi-214	0.406	4.079870E-001	2.229185E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	345.60	2.4262E+000	9.31
6	1332.05	2.4625E-002	71.77

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	2.6376E-001	2.40E-001	-1.0239E-001
		1332.49	100.00	2.3990E-001		1.3519E-001
	Nb-94	702.63	100.00	2.5702E-001	2.47E-001	2.1429E-001
		871.10	100.00	2.4747E-001		-9.2265E-002
	Ag-108m	79.20	7.10	1.9301E+001	2.81E-001	-1.7538E+001
		433.93	89.90	2.8081E-001		-1.9757E-001
		614.37	90.40	3.1366E-001		-1.9493E-001
		722.95	90.50	3.0922E-001		-6.0874E-003
	Sb-125	176.33	6.89	6.1895E+000	8.97E-001	-1.0643E+000
		427.89	29.33	8.9671E-001		2.1585E-001
		463.38	10.35	2.7157E+000		-1.0954E+000
		600.56	17.80	1.4416E+000		-8.5701E-003
		606.64	5.02	5.7297E+000		4.9521E+000
		635.90	11.32	2.2153E+000		-1.2291E+000
	Cs-134	563.23	8.38	3.0504E+000	2.85E-001	-1.9044E+000
		569.32	15.43	1.7160E+000		1.2854E+000
		604.70	97.60	3.0096E-001		-4.8938E-002
		795.84	85.40	2.8465E-001		-4.5392E-003
		801.93	8.73	2.7887E+000		1.2234E+000
+	Cs-137	661.65*	85.12	2.2825E-001	2.28E-001	1.1141E-001
	Eu-152	121.78	28.40	2.1243E+000	7.77E-001	5.8446E-001
		244.69	7.49	4.5824E+000		2.1421E+000
		344.27	26.50	4.6849E+000		4.0543E+001
		778.89	12.74	1.9943E+000		6.2497E-001
		867.32	4.16	5.9436E+000		-2.3695E+000
		964.01	14.40	1.8427E+000		3.2465E-001
		1085.78	10.00	2.3343E+000		8.2826E-001
		1112.02	13.30	1.9460E+000		5.6714E-001
		1407.95	20.70	7.7675E-001		-2.7011E-001
	Eu-154	123.07	40.50	1.4557E+000	6.38E-001	2.3089E-001
		247.94	6.60	5.0695E+000		-8.3626E-001
		591.81	4.83	5.2277E+000		2.6131E-001
		723.30	19.70	1.4428E+000		9.2348E-001
		756.87	4.33	5.8730E+000		-6.9898E-001
		873.19	11.50	2.1840E+000		-1.0486E+000
		996.32	10.30	2.3423E+000		1.2078E+000
		1004.76	17.90	1.3168E+000		7.4798E-001
		1274.45	35.50	6.3780E-001		1.4669E-001
	Eu-155	86.54	30.90	3.5537E+000	3.55E+000	3.7688E+000
		105.31	20.70	3.7657E+000		-3.1456E-001
	Am-241	59.54	35.90	8.2018E+000	8.20E+000	-4.1213E+000
	Cm-243	228.19	10.56	3.2607E+000	2.25E+000	-6.3561E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.2498E+000	2.25E+000	-7.8798E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 2:42:00 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-08-06 -113-
Sample Title: OOL-08-06 -113-F-G
Description: Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/8/2006 2:31:58 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: 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-08-06 -113-
Title: OOL-08-06 -113-F-G
Description: Vegetation

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	948-	961	953.73	238.39	0.83	6.22E+001	35.67	9.68E+001
2	2325-	2339	2331.71	582.89	0.42	3.70E+001	22.53	3.30E+001
3	2431-	2443	2436.97	609.20	0.67	3.23E+001	18.02	1.97E+001
4	3870-	3883	3875.54	968.85	0.38	3.00E+001	14.86	1.00E+001
5	5833-	5855	5844.06	1460.98	1.16	2.85E+002	33.67	2.67E+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: 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	1.95806E+001	2.80235E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.48012E-001	1.54327E-001
		860.37	12.46		
Pb-212	0.426	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.28333E-001	3.73377E-001
Bi-214	0.406	609.31*	46.30	3.99260E-001	2.28017E-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	1.958056E+001	2.802345E+000
TL-208	0.471	2.480118E-001	1.543272E-001
Pb-212 @	0.426	6.283329E-001	3.733771E-001
Bi-214	0.406	3.992603E-001	2.280168E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	968.85	5.0000E-002	49.52

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	2.7132E-001	2.38E-001	-1.2022E-001
	1332.49	100.00	2.3753E-001		2.7411E-001
Nb-94	702.63	100.00	2.3370E-001	2.34E-001	-1.0247E-001
	871.10	100.00	2.5104E-001		3.0566E-002
Ag-108m	79.20	7.10	1.8951E+001	2.96E-001	-3.2964E+001
	433.93	89.90	3.0248E-001		2.8834E-001
	614.37	90.40	3.3764E-001		8.8577E-002
	722.95	90.50	2.9597E-001		2.7588E-001
Sb-125	176.33	6.89	5.9040E+000	9.78E-001	-1.7403E-002
	427.89	29.33	9.7780E-001		9.9209E-001
	463.38	10.35	2.5376E+000		5.6725E-001
	600.56	17.80	1.4002E+000		-1.6323E-001
	606.64	5.02	5.5991E+000		5.9222E-001
	635.90	11.32	2.2016E+000		-1.3440E+000
Cs-134	563.23	8.38	3.3667E+000	2.83E-001	4.0033E+000
	569.32	15.43	1.6983E+000		1.6910E+000
	604.70	97.60	2.8633E-001		9.6469E-004
	795.84	85.40	2.8257E-001		9.5449E-002
	801.93	8.73	2.6424E+000		-2.1458E+000
Cs-137	661.65	85.12	3.6125E-001	3.61E-001	5.1337E-001
Eu-152	121.78	28.40	2.0047E+000	8.31E-001	1.2191E+000
	244.69	7.49	4.6269E+000		-2.6278E+000
	344.27	26.50	1.1295E+000		-4.5322E-001
	778.89	12.74	1.9679E+000		1.7637E-001
	867.32	4.16	6.4804E+000		4.3531E+000
	964.01	14.40	2.1442E+000		-9.8748E-001
	1085.78	10.00	1.9121E+000		-1.2328E+000
	1112.02	13.30	1.6133E+000		-8.0804E-001
	1407.95	20.70	8.3148E-001		-8.2805E-002
Eu-154	123.07	40.50	1.3801E+000	5.33E-001	-6.1607E-001
	247.94	6.60	4.9743E+000		-2.4254E+000
	591.81	4.83	5.2277E+000		6.2939E-001
	723.30	19.70	1.3676E+000		1.1297E+000
	756.87	4.33	4.9109E+000		-2.9931E+000
	873.19	11.50	2.0729E+000		-7.8183E-001
	996.32	10.30	2.3987E+000		-2.6311E-001
	1004.76	17.90	1.4041E+000		1.3973E-001
	1274.45	35.50	5.3307E-001		-2.3522E-001
Eu-155	86.54	30.90	3.6107E+000	3.50E+000	4.9532E+000
	105.31	20.70	3.5039E+000		-1.9449E+000
Am-241	59.54	35.90	8.6179E+000	8.62E+000	-2.4916E+000
Cm-243	228.19	10.56	3.2790E+000	2.12E+000	1.8987E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.1249E+000	2.12E+000	1.2621E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 3:18:31 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-08-06 -114-
Sample Title: OOL-08-06 -114-F-G
Description: Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/8/2006 3:08:29 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: 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-08-06 -114-
Title: OOL-08-06 -114-F-G
Description: Vegetation

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	948-	960	954.71	238.63	1.28	6.15E+001	36.06	1.05E+002
2	2037-	2046	2041.43	510.32	0.35	3.56E+001	21.52	3.74E+001
3	2325-	2338	2331.46	582.83	0.83	5.83E+001	20.47	1.77E+001
4	2429-	2445	2437.17	609.25	0.42	5.38E+001	23.61	2.92E+001
5	3637-	3650	3643.81	910.92	0.72	4.20E+001	17.59	1.40E+001
6	5833-	5855	5843.99	1460.97	1.93	3.19E+002	35.01	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
ANN	0.985	511.00*		100.00	1.92184E-001	1.19337E-001
K-40	0.999	1460.81*		10.67	2.18911E+001	2.98534E+000
TL-208	0.749	277.35		6.80		
		510.84*		21.60	8.89742E-001	5.57244E-001
		583.14*		84.20	3.90131E-001	1.46448E-001
		860.37		12.46		
Pb-212	0.427	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.21287E-001	3.76916E-001
Bi-214	0.406	609.31*		46.30	6.64711E-001	3.03075E-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	0.985	1.079160E-001	1.234279E-001
K-40	0.999	2.189107E+001	2.985342E+000
TL-208	0.749	3.901309E-001	1.458950E-001
Pb-212 @	0.427	6.212870E-001	3.769158E-001
Bi-214	0.406	6.647114E-001	3.030746E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	910.92	7.0000E-002	41.88

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	2.6567E-001	2.07E-001	1.2818E-001
	1332.49	100.00	2.0685E-001		1.8856E-001
Nb-94	702.63	100.00	2.4398E-001	2.38E-001	-9.7292E-002
	871.10	100.00	2.3827E-001		-1.1119E-001
Ag-108m	79.20	7.10	1.8351E+001	2.80E-001	-3.0385E+001
	433.93	89.90	2.9753E-001		4.7194E-003
	614.37	90.40	3.2939E-001		-1.4966E-001
	722.95	90.50	2.8026E-001		-1.9836E-001
Sb-125	176.33	6.89	5.5734E+000	8.57E-001	-1.9792E+000
	427.89	29.33	8.5717E-001		-5.7454E-002
	463.38	10.35	2.5834E+000		1.0305E+000
	600.56	17.80	1.4002E+000		-2.4438E-001
	606.64	5.02	6.2942E+000		5.8635E+000
	635.90	11.32	2.1174E+000		1.8048E+000
Cs-134	563.23	8.38	2.9311E+000	3.10E-001	1.5134E+000
	569.32	15.43	1.5974E+000		-1.9423E-001
	604.70	97.60	3.2460E-001		-5.1583E-002
	795.84	85.40	3.1035E-001		2.6370E-001
	801.93	8.73	2.8489E+000		-2.0249E-001
Cs-137	661.65	85.12	3.2642E-001	3.26E-001	3.2412E-001
Eu-152	121.78	28.40	1.8978E+000	8.99E-001	-9.5766E-002
	244.69	7.49	4.4553E+000		-1.4936E+000
	344.27	26.50	9.5828E-001		-6.7625E-001
	778.89	12.74	1.8149E+000		-1.4095E+000
	867.32	4.16	5.6318E+000		-3.1103E+000
	964.01	14.40	2.0705E+000		1.4873E+000
	1085.78	10.00	2.3130E+000		-8.8348E-002
	1112.02	13.30	1.6133E+000		-1.0637E+000
	1407.95	20.70	8.9869E-001		1.1870E-001
Eu-154	123.07	40.50	1.3299E+000	6.17E-001	9.7506E-001
	247.94	6.60	4.6878E+000		-2.4203E+000
	591.81	4.83	5.4933E+000		5.2886E+000
	723.30	19.70	1.2710E+000		-8.8597E-001
	756.87	4.33	5.9110E+000		-1.9347E+000
	873.19	11.50	2.2147E+000		4.2105E-001
	996.32	10.30	2.2646E+000		1.6295E-001
	1004.76	17.90	1.3612E+000		1.9721E-001
	1274.45	35.50	6.1700E-001		-5.0788E-001
Eu-155	86.54	30.90	3.3288E+000	3.29E+000	-3.7277E-001
	105.31	20.70	3.2917E+000		-1.7010E+000
Am-241	59.54	35.90	8.2642E+000	8.26E+000	-2.0991E+000
Cm-243	228.19	10.56	3.3455E+000	2.29E+000	1.2348E+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	1.6749E+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 3:01:39 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: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-08-06 -115-
Sample Title: OOL-08-06 -115-F-G
Description: Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/8/2006 2:51:37 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-08-06 -115-
Title: OOL-08-06 -115-F-G
Description: Vegetation

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	297-	306	300.61	75.11	0.65	7.19E+001	58.34	3.59E+002
M	2	335-	354	339.98	84.95	0.79	4.80E+001	29.39	3.06E+002
m	3	335-	354	348.97	87.20	0.79	6.88E+001	31.53	3.25E+002
	4	949-	960	954.95	238.69	1.07	8.28E+001	34.87	9.32E+001
	5	1401-	1414	1407.35	351.79	0.70	4.53E+001	27.64	5.57E+001
	6	2325-	2339	2332.07	582.98	0.33	4.97E+001	21.96	2.63E+001
	7	2638-	2651	2645.86	661.43	0.41	4.98E+001	19.84	1.92E+001
	8	3871-	3883	3876.88	969.18	0.38	3.58E+001	15.83	1.12E+001
	9	5832-	5856	5843.81	1460.92	1.68	3.39E+002	37.33	5.93E+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: 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	2.32681E+001	3.17966E+000
Cs-137	0.998	661.65*	85.12	3.43698E-001	1.42691E-001
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.32822E-001	1.53474E-001
		860.37	12.46		
Pb-212	0.728	74.81* @	10.70	7.62808E+000	6.36971E+000
		77.11 @	18.00		
		87.30* @	8.00	6.14845E+000	3.06584E+000
		238.63*	44.60	8.36398E-001	3.75749E-001
PB-214	0.306	74.82* @	6.21	1.31434E+001	1.10166E+001
		77.11 @	10.50		
		87.30* @	4.67	1.05327E+001	5.31191E+000
		241.98	7.49		
		295.21	19.20		
		351.92*	37.20	5.92669E-001	3.75033E-001

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

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

I N T E R 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	2.326809E+001	3.179664E+000
Cs-137		0.998	3.436978E-001	1.426906E-001
TL-208		0.472	3.328217E-001	1.534738E-001
Pb-212	@	0.728	8.363983E-001	3.757495E-001
PB-214	@	0.306	5.926689E-001	3.735255E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 2	84.95	8.0005E-002	61.23
8	969.18	5.9707E-002	44.18

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	2.7502E-001	2.23E-001	-6.9597E-003
		1332.49	100.00	2.2277E-001		8.6660E-002
	Nb-94	702.63	100.00	2.7088E-001	2.58E-001	1.9772E-001
		871.10	100.00	2.5804E-001		1.3609E-001
	Ag-108m	79.20	7.10	2.0106E+001	2.82E-001	-1.6260E+000
		433.93	89.90	2.8213E-001		-1.0341E-001
		614.37	90.40	3.3628E-001		8.4423E-002
		722.95	90.50	3.1562E-001		3.5335E-001
	Sb-125	176.33	6.89	5.9254E+000	9.34E-001	-4.3594E+000
		427.89	29.33	9.3449E-001		6.2278E-001
		463.38	10.35	2.8822E+000		1.1763E+000
		600.56	17.80	1.4739E+000		6.4021E-001
		606.64	5.02	6.1761E+000		3.8784E+000
		635.90	11.32	2.2016E+000		-2.9286E-001
	Cs-134	563.23	8.38	3.1649E+000	2.80E-001	9.4796E-001
		569.32	15.43	1.6714E+000		-9.3446E-002
		604.70	97.60	3.0225E-001		5.0669E-002
		795.84	85.40	2.8047E-001		-1.8455E-002
		801.93	8.73	2.9464E+000		-1.0186E-001
+	Cs-137	661.65*	85.12	1.8328E-001	1.83E-001	3.4370E-001
	Eu-152	121.78	28.40	2.0618E+000	8.14E-001	9.7577E-001
		244.69	7.49	4.7749E+000		-3.5822E+000
		344.27	26.50	1.0919E+000		-1.6409E+000
		778.89	12.74	1.8437E+000		-3.0157E-001
		867.32	4.16	6.0295E+000		-4.5492E+000
		964.01	14.40	2.1749E+000		-4.3968E-001
		1085.78	10.00	2.5170E+000		2.0192E-001
		1112.02	13.30	1.9023E+000		-4.8687E-001
		1407.95	20.70	8.1370E-001		-2.9414E-001
	Eu-154	123.07	40.50	1.4336E+000	5.57E-001	4.8939E-001
		247.94	6.60	5.0904E+000		-3.2530E+000
		591.81	4.83	5.0108E+000		-1.0894E-001
		723.30	19.70	1.4501E+000		9.2785E-001
		756.87	4.33	5.7572E+000		5.4173E-001
		873.19	11.50	2.1994E+000		-2.8589E-001
		996.32	10.30	2.3038E+000		1.0370E+000
		1004.76	17.90	1.3612E+000		9.2083E-001
		1274.45	35.50	5.5735E-001		-9.8978E-001
	Eu-155	86.54	30.90	3.6261E+000	3.63E+000	-5.1413E-001
		105.31	20.70	3.8517E+000		-1.8474E+000
	Am-241	59.54	35.90	8.8895E+000	8.89E+000	-5.2798E+000
	Cm-243	228.19	10.56	3.5710E+000	2.36E+000	3.6080E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.3625E+000	2.36E+000	-4.7246E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 3:42:56 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-08-06 -116-
Sample Title: OOL-08-06 -116-F-G
Description: Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/8/2006 3:32:54 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: 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-08-06 -116-
Title: OOL-08-06 -116-F-G
Description: Vegetation

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	297-	306	300.86	75.17	0.74	5.86E+001	51.66	2.80E+002
2	948-	960	954.76	238.65	1.22	6.72E+001	35.00	9.58E+001
3	1398-	1413	1407.44	351.82	0.37	4.51E+001	26.07	4.39E+001
4	2325-	2339	2332.56	583.10	1.00	3.85E+001	23.32	3.55E+001
5	3639-	3651	3644.24	911.02	0.53	2.89E+001	17.29	1.81E+001
6	5833-	5854	5844.11	1461.00	1.63	2.81E+002	37.33	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: 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	1.92985E+001	3.00074E+000
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.58042E-001	1.59817E-001
		860.37	12.46		
Pb-212	0.581	74.81* @	10.70	6.20294E+000	5.60314E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.78139E-001	3.69052E-001

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

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

I N T E R 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	1.929853E+001	3.000741E+000
TL-208	0.472	2.580423E-001	1.598175E-001
Pb-212 @	0.581	6.781387E-001	3.690523E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	7.5131E-002	57.83
5	911.02	4.8094E-002	59.91

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: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	2.38E-001	6.0753E-002
	1332.49	100.00	2.3753E-001		1.7264E-001
Nb-94	702.63	100.00	2.4731E-001	2.27E-001	4.7903E-002
	871.10	100.00	2.2671E-001		5.6306E-002
Ag-108m	79.20	7.10	1.8306E+001	2.57E-001	-8.3277E-001
	433.93	89.90	2.5720E-001		-2.0179E-001
	614.37	90.40	3.1947E-001		-2.2873E-002
	722.95	90.50	2.5969E-001		-9.3023E-002
Sb-125	176.33	6.89	5.8969E+000	8.69E-001	-5.5063E-002
	427.89	29.33	8.6923E-001		8.7052E-003
	463.38	10.35	2.6614E+000		3.6627E-001
	600.56	17.80	1.5055E+000		8.6142E-001
	606.64	5.02	6.1041E+000		3.7230E+000
	635.90	11.32	2.2693E+000		2.4368E+000
Cs-134	563.23	8.38	2.8426E+000	2.78E-001	-4.4894E+000
	569.32	15.43	1.5878E+000		6.0899E-001
	604.70	97.60	3.0737E-001		-7.8377E-002
	795.84	85.40	2.7835E-001		-2.3903E-001
	801.93	8.73	2.7062E+000		5.6457E-002
Cs-137	661.65	85.12	3.2975E-001	3.30E-001	-8.0535E-002
Eu-152	121.78	28.40	1.9474E+000	9.90E-001	1.9653E+000
	244.69	7.49	4.1990E+000		-6.5894E+000
	344.27	26.50	1.0566E+000		1.7732E-001
	778.89	12.74	2.0841E+000		-2.0773E-001
	867.32	4.16	5.8122E+000		-5.4839E+000
	964.01	14.40	1.7935E+000		9.2661E-001
	1085.78	10.00	2.3554E+000		-1.7134E+000
	1112.02	13.30	1.3840E+000		-1.9737E+000
	1407.95	20.70	9.9010E-001		1.4791E-002
Eu-154	123.07	40.50	1.3375E+000	6.03E-001	-2.8303E-001
	247.94	6.60	4.6536E+000		-2.0196E+000
	591.81	4.83	5.4063E+000		-2.3379E+000
	723.30	19.70	1.2109E+000		5.1555E-001
	756.87	4.33	5.3098E+000		6.2647E-001
	873.19	11.50	1.9895E+000		5.2996E-001
	996.32	10.30	2.1632E+000		-9.7507E-001
	1004.76	17.90	1.3054E+000		-1.5185E-001
	1274.45	35.50	6.0269E-001		3.3325E-001
Eu-155	86.54	30.90	3.3492E+000	3.35E+000	1.1989E+000
	105.31	20.70	3.4924E+000		-2.6573E+000
Am-241	59.54	35.90	8.3540E+000	8.35E+000	4.9163E+000
Cm-243	228.19	10.56	3.3634E+000	2.30E+000	3.5774E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.3042E+000	2.30E+000	7.1214E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 4:05:18 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-08-06 -117-
Sample Title: OOL-08-06 -117-F-G
Description: Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/8/2006 3:55:16 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: 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-08-06 -117-
Title: OOL-08-06 -117-F-G
Description: Vegetation

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	297-	307	300.31	75.03	0.97	6.90E+001	58.98	3.50E+002
2	945-	960	955.23	238.76	0.79	6.42E+001	35.21	8.58E+001
3	2328-	2338	2332.26	583.02	0.46	2.59E+001	17.15	2.11E+001
4	2640-	2651	2645.64	661.37	0.66	1.74E+001	16.88	2.26E+001
5	5832-	5854	5843.69	1460.89	1.15	2.56E+002	34.03	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: 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	1.75976E+001	2.73580E+000
Cs-137	0.997	661.65*	85.12	1.20064E-001	1.17271E-001
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.73273E-001	1.17106E-001
		860.37	12.46		
Pb-212	0.581	74.81* @	10.70	7.34577E+000	6.44258E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.48184E-001	3.69807E-001

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

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

I N T E R 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	1.759755E+001	2.735804E+000
Cs-137	0.997	1.200637E-001	1.172706E-001
TL-208	0.472	1.732730E-001	1.171064E-001
Pb-212 @	0.581	6.481838E-001	3.698067E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.5195E-001	2.04E-001	2.0711E-001
		1332.49	100.00	2.0406E-001		1.8104E-001
	Nb-94	702.63	100.00	2.3016E-001	2.30E-001	-1.8986E-001
		871.10	100.00	2.3257E-001		4.2776E-002
	Ag-108m	79.20	7.10	1.8505E+001	2.69E-001	-8.1205E+000
		433.93	89.90	2.6859E-001		-1.8296E-001
		614.37	90.40	3.0014E-001		-1.0021E-001
		722.95	90.50	2.6925E-001		2.5881E-001
	Sb-125	176.33	6.89	5.1394E+000	9.20E-001	3.7951E-001
		427.89	29.33	9.1957E-001		2.1703E-001
		463.38	10.35	2.5491E+000		3.1984E-001
		600.56	17.80	1.3832E+000		-6.4580E-001
		606.64	5.02	5.9075E+000		8.0924E+000
		635.90	11.32	2.2153E+000		7.1612E-001
	Cs-134	563.23	8.38	3.2127E+000	2.94E-001	2.1345E+000
		569.32	15.43	1.7160E+000		2.1189E+000
		604.70	97.60	2.9440E-001		2.1662E-001
		795.84	85.40	3.0463E-001		3.4966E-001
		801.93	8.73	2.7062E+000		-3.6921E+000
+	Cs-137	661.65*	85.12	1.8961E-001	1.90E-001	1.2006E-001
	Eu-152	121.78	28.40	1.8468E+000	8.66E-001	5.2324E-001
		244.69	7.49	4.1098E+000		-2.4958E+000
		344.27	26.50	9.9730E-001		-8.2331E-001
		778.89	12.74	1.8003E+000		-1.3115E+000
		867.32	4.16	5.5858E+000		-6.0739E+000
		964.01	14.40	1.8669E+000		-7.1448E-001
		1085.78	10.00	2.2916E+000		7.1988E-001
		1112.02	13.30	1.6989E+000		-5.0663E-001
		1407.95	20.70	8.6582E-001		5.1494E-001
	Eu-154	123.07	40.50	1.2547E+000	6.24E-001	-1.1273E+000
		247.94	6.60	4.3940E+000		-4.3339E+000
		591.81	4.83	4.6479E+000		-1.9628E+000
		723.30	19.70	1.2541E+000		1.2294E+000
		756.87	4.33	5.5180E+000		1.4319E+000
		873.19	11.50	2.0233E+000		-9.5803E-001
		996.32	10.30	2.3801E+000		-6.3247E-001
		1004.76	17.90	1.2824E+000		4.4506E-001
		1274.45	35.50	6.2402E-001		5.2828E-001
	Eu-155	86.54	30.90	3.2286E+000	3.23E+000	1.4268E+000
		105.31	20.70	3.4018E+000		7.3653E-001
	Am-241	59.54	35.90	7.3545E+000	7.35E+000	2.4520E+000
	Cm-243	228.19	10.56	2.9843E+000	2.11E+000	-2.1418E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.1132E+000	2.11E+000	3.3989E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 4:23:11 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-08-06 -118-
Sample Title: OOL-08-06 -118-F-G
Description: Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/8/2006 4:13:09 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: 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-08-06 -118-
Title: OOL-08-06 -118-F-G
Description: Vegetation

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	336-	347	339.42	84.81	0.87	8.83E+001	59.12	3.24E+002
2	950-	960	954.46	238.57	1.16	6.07E+001	31.50	8.03E+001
3	1401-	1415	1406.89	351.68	0.53	4.33E+001	23.35	3.38E+001
4	2328-	2338	2332.58	583.11	0.51	3.12E+001	16.09	1.48E+001
5	2431-	2445	2437.38	609.31	1.31	3.60E+001	17.75	1.60E+001
6	2639-	2653	2645.34	661.30	0.83	3.22E+001	19.15	2.18E+001
7	5832-	5854	5843.64	1460.88	1.93	3.04E+002	35.42	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: 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	2.08781E+001	2.96044E+000
Cs-137	0.996	661.65*		85.12	2.22109E-001	1.34598E-001
TL-208	0.472	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	2.09066E-001	1.11234E-001
		860.37		12.46		
Pb-212	0.427	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.12521E-001	3.32280E-001
Bi-214	0.406	609.31*		46.30	4.44577E-001	2.26066E-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	2.087811E+001	2.960444E+000
Cs-137	0.996	2.221086E-001	1.345975E-001
TL-208	0.472	2.090662E-001	1.112345E-001
Pb-212 @	0.427	6.125208E-001	3.322802E-001
Bi-214	0.406	4.445765E-001	2.260657E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	84.81	1.4715E-001	66.96
3	351.68	7.2083E-002	53.99

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	2.5988E-001	2.42E-001	1.3920E-001
		1332.49	100.00	2.4224E-001		2.3745E-001
	Nb-94	702.63	100.00	2.4565E-001	2.36E-001	-5.7916E-002
		871.10	100.00	2.3639E-001		-1.2465E-001
	Ag-108m	79.20	7.10	1.8713E+001	2.82E-001	-1.2715E+001
		433.93	89.90	3.1332E-001		-3.8907E-002
		614.37	90.40	3.0622E-001		1.7396E-001
		722.95	90.50	2.8205E-001		1.0066E-001
	Sb-125	176.33	6.89	6.0031E+000	9.08E-001	3.8624E+000
		427.89	29.33	9.0822E-001		6.1244E-003
		463.38	10.35	2.4673E+000		2.9092E-001
		600.56	17.80	1.4819E+000		3.2660E-001
		606.64	5.02	5.6255E+000		-1.0376E+000
		635.90	11.32	2.1599E+000		8.0639E-001
	Cs-134	563.23	8.38	3.0504E+000	3.06E-001	-6.7278E-001
		569.32	15.43	1.6162E+000		-1.3932E+000
		604.70	97.60	3.0610E-001		-4.6532E-002
		795.84	85.40	3.1224E-001		2.1730E-001
		801.93	8.73	2.7683E+000		4.4594E-001
+	Cs-137	661.65*	85.12	1.9905E-001	1.99E-001	2.2211E-001
	Eu-152	121.78	28.40	1.9489E+000	7.58E-001	-1.4415E+000
		244.69	7.49	4.4461E+000		-2.6009E+000
		344.27	26.50	1.0779E+000		7.9833E-001
		778.89	12.74	1.7856E+000		3.8578E-001
		867.32	4.16	5.7677E+000		4.3380E+000
		964.01	14.40	1.8183E+000		7.5622E-001
		1085.78	10.00	2.0390E+000		-1.8206E-001
		1112.02	13.30	1.7801E+000		9.8475E-001
		1407.95	20.70	7.5750E-001		9.5164E-002
	Eu-154	123.07	40.50	1.3738E+000	6.38E-001	2.7453E-001
		247.94	6.60	4.7443E+000		9.4300E-001
		591.81	4.83	5.6071E+000		3.0239E+000
		723.30	19.70	1.2710E+000		9.3114E-002
		756.87	4.33	5.4357E+000		8.9749E-001
		873.19	11.50	2.0233E+000		-2.8308E-001
		996.32	10.30	1.8717E+000		2.5913E-001
		1004.76	17.90	1.1468E+000		4.2827E-002
		1274.45	35.50	6.3780E-001		-1.3910E-001
	Eu-155	86.54	30.90	3.4133E+000	3.41E+000	1.2673E+000
		105.31	20.70	3.4416E+000		1.6426E+000
	Am-241	59.54	35.90	7.9296E+000	7.93E+000	4.8034E-001
	Cm-243	228.19	10.56	3.1608E+000	2.24E+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	2.2442E+000	2.24E+000	-4.6544E-001

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

YAEC Chemistry Lab Spectrum name: OOL-08-06-026-F-I.An1

Sample description
OOL-08-06-026-F-I

Spectrum Filename: C:\GammaVision\Spectra\OOL-08-06-026-F-I.An1

Acquisition information

Start time:	19-Sep-2006 08:47:24
Live time:	2000
Real time:	2001
Dead time:	0.06 %
Detector ID:	2

Detector system
Det 107- DSPE- 634

Calibration

Filename:	D7_1LSa.Clb

Detector 107 Calibration for 1 Liter Sand Marinelli

Energy Calibration

Created:	29-Oct-2004 06:48:53
Zero offset:	0.157 keV
Gain:	0.500 keV/channel
Quadratic:	-1.676E-08 keV/channel^2

Efficiency Calibration

Created:	29-Oct-2004 06:51:32
Type:	Polynomial
Uncertainty:	1.174 %
Coefficients:	-0.279532 -4.778179 0.614896
	-0.087174 0.005356 -0.000131

Library Files

Main analysis library:	FSS_Rev_1.Lib
Library Match Width:	1.000
Peak stripping:	Library based

Analysis parameters

Analysis engine:	Env32 G53W4.20
Start channel:	100 (50.16keV)
Stop channel:	4000 (2000.15keV)
Peak rejection level:	41.667%
Peak search sensitivity:	3
Sample Size:	1.1950E+03
Activity scaling factor:	1.0000E+06/(1.0000E+00* 1.1950E+03) = 8.3682E+02
Detection limit method:	Nureg 4.16
Random error:	1.0000000E+00
Systematic error:	1.0000000E+00

Fraction Limit:	0.000%
Background width:	average of five points.

Half lives decay limit: 12.000
Activity range factor: 2.000
Min. step backg. energy 0.000
Multiplet shift channel 2.000

Corrections	Status	Comments
Decay correct to date:	YES	18-Sep-2006 10:15:00
Decay during acquisition:	NO	
Decay during collection:	NO	
True coincidence correction:	NO	
Peaked background correction:	YES	107_150K_28APR05.Pbc 01-May-2005 05:30:33
Absorption (Internal):	NO	
Geometry correction:	NO	
Random summing:	NO	

total peaks alloc. 7 cutoff 20.00000 %
Energy Calibration
Normalized diff: 1.0000

***** S U M M A R Y O F P E A K S I N R A N G E *****

Peak Energy	Area	Uncert	FWHM	Corrctn Factor	Nuclide Energy	Brnch. Ratio	Act. pCi/gm	Nuc
238.86	472.	9.48	2.71	3.188E-02	238.63	43.100	3.753E-01	PB212
295.20	59.	36.70	1.50	2.768E-02	295.22	19.200	PBC<MDA	PB214
352.16	220.	11.34	2.89	2.425E-02	351.99	37.100	2.700E-01	PB214
583.17	47.	25.89	1.54	1.629E-02	583.14	86.000	3.820E-02	TL208
609.15	90.	16.72	1.56	1.574E-02	609.32	46.090	1.399E-01	BI214
661.91	557.	5.49	3.07	1.477E-02	661.62	84.620	5.008E-01	CS137
911.46	38.	27.94	1.76	1.161E-02	911.07	29.000	1.292E-01	AC228
968.96	27.	40.57	1.80	1.109E-02	968.90	17.460	PBC<MDA	AC228
1120.64	29.	36.94	1.90	9.970E-03	1120.28	15.040	PBC<MDA	BI214
1173.70	31.	29.60	1.93	9.637E-03	1173.23	99.860	PBC<MDA	CO60
1332.92	24.	29.39	2.03	8.773E-03	1332.51	99.980	PBC<MDA	CO60
1461.04	624.	4.08	3.15	8.190E-03	1460.75	10.700	7.984E+00	K40
1764.31	15.	35.38	2.29	7.084E-03	1764.51	15.920	PBC<MDA	BI214

********** U N I D E N T I F I E D P E A K S U M M A R Y **********

Peak Channel	Centroid Energy	Background Counts	Net Area Counts	Intensity Cts/Sec	Uncert 3 Sigma %	FWHM keV	Suspected Nuclide	
477.35	238.86	598.	287.	0.144	40.25	2.710	PB-212	s
703.92	352.16	260.	94.	0.047	78.78	2.892	PB-214	s

s - Peak fails shape tests.
D - Peak area deconvoluted.
L - Peak written from unknown list.
C - Area < Critical level.

This section based on library: FSS_Rev_1.Lib

********** I D E N T I F I E D P E A K S U M M A R Y **********

Nuclide	Peak Channel	Centroid Energy	Background Counts	Net Area Counts	Intensity Cts/Sec	Uncert 3 Sigma %	FWHM keV
PB-212	477.52	238.95	498.	186.	0.093	50.73	1.500s
PB-214	590.03	295.20	243.	59.	0.029	110.09	1.500s
PB-214	704.40	352.39	183.	121.	0.060	52.39	1.500s
TL-208	1165.92	583.17	69.	47.	0.024	77.67	1.540s
BI-214	1217.87	609.15	81.	90.	0.045	50.17	1.558s
CS-137	1323.39	661.91	88.	553.	0.277	16.47	3.073s
AC-228	1822.49	911.46	54.	38.	0.019	83.82	1.761s
BI-214	2240.84	1120.64	46.	29.	0.014	110.81	1.897s
CO-60	2346.98	1173.70	40.	31.	0.015	88.79	1.931s
CO-60	2665.41	1332.92	23.	24.	0.012	88.16	2.031s
K-40	2921.67	1461.04	9.	619.	0.309	12.25	3.155s
BI-214	3528.27	1764.31	9.	15.	0.008	106.13	2.291

s - Peak fails shape tests.
D - Peak area deconvoluted.
A Derived peak area.

***** S U M M A R Y O F L I B R A R Y P E A K U S A G E *****

Nuclide Name	Nuclide Code	Average Activity pCi/gm	Peak Energy keV	Peak Activity pCi/gm	Peak Code	Peak MDA Value pCi/gm	COMMENTS
BE-7		3.3488E-02					
			477.56	3.349E-02	%(	2.612E-01 7.58E-02	G
K-40		7.9838E+00					
			1460.75	7.984E+00	*(P	2.176E-01 3.29E-01	G
MN-54		-7.1122E-03					
			834.81	-7.112E-03	&(P	3.186E-02 9.21E-03	G
CO-57		6.3285E-03					
			122.07	6.329E-03	%(P	3.714E-02 1.11E-02	G K
			136.43	-1.201E-01	% P	3.092E-01 9.33E-02	G
CO-60		3.3358E-02					
			1332.51	3.062E-02	*(P	3.211E-02 1.04E-02	G K
			1173.23	3.610E-02	@(P	3.783E-02 1.21E-02	G K

Nuclide	Ave activity	Energy	Activity	Code	Peak	MDA	Comments
Sr-85	-5.4986E-03						
		514.00	-5.499E-03	%(	3.507E-02	1.03E-02	G
Kr-85	-1.6955E+02						
		513.99	-1.695E+02	%(P	8.107E+02	2.35E+02	G
Y-88	-4.4834E-03						
		1836.01	-4.483E-03	%(P	2.456E-02	6.14E-03	G K
		898.02	2.781E-03	% P	3.298E-02	9.23E-03	G
NB-94	4.4393E-04						
		871.10	4.439E-04	&(P	2.522E-02	6.90E-03	G K
		702.50	-1.728E-03	& P	2.773E-02	7.78E-03	G K
Ag-108M	-1.9163E-03						
		722.95	-1.916E-03	&(	3.508E-02	9.99E-03	G K
		614.37	-1.548E-02	%	4.120E-02	1.24E-02	G
		433.93	3.248E-03	% P	2.950E-02	8.53E-03	G
CD-109	4.5649E-04						
		88.04	4.565E-04	%(P	1.243E+00	3.70E-01	G
SN-113	-9.9195E-03						
		391.71	-9.920E-03	&(P	4.270E-02	1.25E-02	G K
		255.04	-1.013E-01	%	1.350E+00	3.97E-01	G
SB-125	9.7612E-03						
		427.95	9.761E-03	%(P	8.004E-02	2.31E-02	G K
		600.77	2.814E-02	% P	1.143E-01	3.29E-02	G
		636.15	-3.967E-03	% P	2.741E-01	7.74E-02	G
		463.51	8.468E-02	& P	2.369E-01	7.00E-02	G
		176.29	2.772E-02	& P	4.392E-01	1.30E-01	G
I-131	1.7854E-03						
		364.48	1.785E-03	%(	3.081E-02	8.89E-03	G K
		636.97	1.713E-01	%	2.888E-01	8.98E-02	G
		284.29	3.987E-02	&	4.955E-01	1.46E-01	G
CS-134	-1.4616E-02						
		604.66	-1.462E-02	%(P	4.072E-02	1.22E-02	G K
		795.76	6.613E-03	& P	2.949E-02	8.48E-03	G
		569.29	-1.854E-03	&	1.766E-01	5.00E-02	G
		801.84	-7.267E-02	% P	3.003E-01	8.66E-02	G
CS-137	5.0076E-01						
		661.62	5.008E-01	*(P	4.190E-02	2.77E-02	G

Nuclide	Ave activity	Energy	Activity	Code	Peak	MDA	Comments
CE-139	5.1366E-03						
		165.85	5.137E-03	&(P	3.398E-02	1.01E-02	G
EU-152	9.4534E-04						
		121.78	9.453E-04	%(P	1.106E-01	3.27E-02	G K
		344.30	-1.944E-02	% P	1.045E-01	3.07E-02	G
		1408.08	2.653E-02	% P	1.232E-01	3.43E-02	G
		964.00	-3.213E-02	& P	2.910E-01	8.38E-02	G
		1112.07	-6.041E-03	% P	2.409E-01	6.58E-02	G
		778.90	-2.874E-03	% P	1.821E-01	4.93E-02	G
EU-154	1.1517E-02						
		123.10	1.152E-02	%(P	7.511E-02	2.24E-02	G K
		1274.80	-6.098E-03	& P	7.701E-02	2.07E-02	G
		723.30	1.505E-02	& P	1.498E-01	4.27E-02	G
		1004.80	-1.214E-03	% P	2.325E-01	6.56E-02	G
EU-155	1.6284E-02						
		86.45	1.628E-02	%(	1.374E-01	4.11E-02	G K
		105.31	-6.760E-03	% P	1.623E-01	4.81E-02	G
HG-203	6.9108E-03						
		279.17	6.911E-03	%(P	3.145E-02	9.31E-03	G K
		72.87	-2.505E-01	& P	9.326E-01	2.80E-01	G
		70.83	-3.742E-01	%	1.618E+00	4.86E-01	G
		82.50	-4.485E-01	%	2.134E+00	6.40E-01	G
TL-208	3.8201E-02						
		583.14	3.820E-02	*(P	3.338E-02	1.08E-02	G
		510.72	-5.757E-03	% P	1.644E-01	4.46E-02	G
PB-212	1.5319E-01						
		238.63	1.532E-01	*(P	8.777E-02	2.81E-02	G K
							Energy duplication
		77.11	1.177E-01	%	2.984E-01	9.02E-02	G
		74.81	2.062E-01	% P	5.821E-01	1.76E-01	G
PB-214	1.4246E-01						
		351.99	1.515E-01	*(P	8.264E-02	2.76E-02	G K
		295.22	1.250E-01	*(P	1.602E-01	4.94E-02	G
							Energy duplication
		77.11	1.755E-01	% P	4.894E-01	1.48E-01	G
		241.92	-1.549E-01	% P	5.498E-01	1.65E-01	G
BI-212	1.2247E-01						
		727.17	1.225E-01	%(P	2.303E-01	7.00E-02	G K
		1620.56	2.135E-01	% P	7.789E-01	2.16E-01	G
		785.42	-3.783E-02	& P	1.379E+00	3.77E-01	G

Nuclide	Ave activity	Energy	Activity	Code	Peak	MDA	Comments
BI-214	1.5789E-01						
		609.32	1.399E-01	*(P	6.965E-02	2.45E-02	G K
		1764.51	1.534E-01	(P	1.690E-01	5.74E-02	G
		1120.28	2.176E-01	(P	2.597E-01	8.28E-02	G
RA-224	-1.7653E-01						
		241.00	-1.765E-01	&(P	1.052E+00	3.13E-01	G
RA-226	6.3502E-01						
		185.99	6.350E-01	%(	8.987E-01	2.76E-01	G
AC-228	1.2918E-01						
		911.07	1.292E-01	*(P	1.242E-01	4.01E-02	G K
		968.90	1.597E-01	% P	2.257E-01	7.01E-02	G
		338.40	8.890E-02	% P	2.564E-01	7.66E-02	G
TH-227	-9.2815E-02						
		236.00	-9.281E-02	&(P	3.537E-01	1.06E-01	G K
		256.25	-5.780E-02	% P	4.219E-01	1.24E-01	G
PA-234	2.8116E-02						
		98.44	2.812E-02	%(	1.477E-01	4.42E-02	G K
		946.00	4.220E-02	%	1.380E-01	4.05E-02	G
		131.28	-2.884E-02	%	1.629E-01	4.87E-02	G
		94.67	-7.257E-02	%	2.727E-01	8.20E-02	G
		883.24	-3.190E-03	&	2.428E-01	6.74E-02	G
		926.70	8.653E-05	%	2.477E-01	6.78E-02	G
		569.26	8.287E-04	&	2.413E-01	6.79E-02	G
TH-234	3.9800E-01						
		63.29	3.980E-01	%(P	1.943E+00	5.80E-01	G K
		92.80	-1.252E-02	% P	1.406E+00	4.15E-01	G
		92.38	2.010E-01	% P	1.671E+00	4.98E-01	G
AM-241	8.3734E-04						
		59.54	8.373E-04	%(P	2.638E-01	7.85E-02	G

(- This peak used in the nuclide activity average.

* - Peak is too wide, but only one peak in library.
! - Peak is part of a multiplet and this area went negative during deconvolution.
? - Peak is too narrow.
@ - Peak is too wide at FW25M, but ok at FWHM.
% - Peak fails sensitivity test.
$ - Peak identified, but first peak of this nuclide failed one or more qualification tests.

+ - Peak activity higher than counting uncertainty range.
- - Peak activity lower than counting uncertainty range.
= - Peak outside analysis energy range.
& - Calculated peak centroid is not close enough to the library energy centroid for positive identification.
P - Peakbackground subtraction
} - Peak is too close to another for the activity to be found directly.

Nuclide Codes:
T - Thermal Neutron Activation
F - Fast Neutron Activation
I - Fission Product
N - Naturally Occurring Isotope
P - Photon Reaction
C - Charged Particle Reaction
M - No MDA Calculation
R - Coincidence Corrected
H - Halflife limit exceeded

Peak Codes:
G - Gamma Ray
X - X-Ray
P - Positron Decay
S - Single-Escape
D - Double-Escape
K - Key Line
A - Not in Average
C - Coincidence Peak

- -

***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

Nuclide		Time of Count Activity pCi/gm	Time Corrected Activity pCi/gm	Uncertainty Counting pCi/gm	3 Sigma Total pCi/gm	MDA pCi/gm
BE-7	#A	3.3082E-02	3.3488E-02	2.2735E-01	2.2736E-01	2.581E-01
K-40	#	7.9838E+00	7.9838E+00	9.8554E-01	1.0925E+00	
MN-54	#A	-7.0974E-03	-7.1122E-03	3.0874E-02	3.0877E-02	3.179E-02
CO-57	#B	6.3133E-03	6.3285E-03	3.3250E-02	3.3252E-02	3.705E-02
CO-60	#	3.3347E-02	3.3358E-02	2.3937E-02	2.4018E-02	3.210E-02
Sr-85	#A	-5.4437E-03	-5.4986E-03	3.0871E-02	3.0873E-02	3.472E-02
Kr-85	#A	-1.6955E+02	-1.6955E+02	1.1962E+03	1.1962E+03	8.107E+02
Y-88	#B	-4.4561E-03	-4.4834E-03	3.4394E-02	3.4395E-02	2.441E-02
NB-94	#B	4.4393E-04	4.4393E-04	2.0699E-02	2.0699E-02	2.522E-02
Ag-108M	#B	-1.9162E-03	-1.9163E-03	2.9971E-02	2.9971E-02	3.508E-02
CD-109	#A	4.5583E-04	4.5649E-04	1.1090E+00	1.1090E+00	1.241E+00
SN-113	#B	-9.8636E-03	-9.9195E-03	5.0177E-02	5.0180E-02	4.246E-02
SB-125	#B	9.7549E-03	9.7612E-03	6.9205E-02	6.9207E-02	7.999E-02
I-131	#B	1.6465E-03	1.7854E-03	2.6670E-02	2.6670E-02	2.842E-02
CS-134	#B	-1.4603E-02	-1.4616E-02	3.8470E-02	3.8480E-02	4.068E-02
CS-137	#	5.0073E-01	5.0076E-01	8.2998E-02	8.8110E-02	
CE-139	#A	5.1123E-03	5.1366E-03	3.0283E-02	3.0285E-02	3.382E-02
EU-152	#B	9.4521E-04	9.4534E-04	9.8213E-02	9.8213E-02	1.106E-01
EU-154	#B	1.1515E-02	1.1517E-02	6.7115E-02	6.7118E-02	7.509E-02
EU-155	#B	1.6279E-02	1.6284E-02	1.2316E-01	1.2317E-01	1.374E-01
HG-203	#B	6.8149E-03	6.9108E-03	2.7923E-02	2.7926E-02	3.101E-02
TL-208	#	3.8201E-02	3.8201E-02	3.2516E-02	3.2594E-02	3.338E-02
PB-212	#	1.5319E-01	1.5319E-01	8.4283E-02	8.4767E-02	8.777E-02
PB-214	#	1.4246E-01	1.4246E-01	7.7802E-02	7.8256E-02	8.264E-02
BI-212	#B	1.2247E-01	1.2247E-01	2.1015E-01	2.1027E-01	2.303E-01

BI-214 #	1.5789E-01	1.5789E-01	8.3035E-02	8.3557E-02	6.965E-02

RA-224	#A	-1.7653E-01	-1.7653E-01	1.1858E+00	1.1859E+00	1.052E+00
RA-226	#A	6.3502E-01	6.3502E-01	8.2829E-01	8.2914E-01	8.987E-01
AC-228	#	1.2918E-01	1.2918E-01	1.2020E-01	1.2044E-01	1.242E-01
TH-227	#B	-9.2815E-02	-9.2815E-02	3.2427E-01	3.2432E-01	3.537E-01
PA-234	#B	2.8116E-02	2.8116E-02	1.3257E-01	1.3257E-01	1.477E-01
TH-234	#B	3.9800E-01	3.9800E-01	1.7405E+00	1.7406E+00	1.943E+00
AM-241	#A	8.3733E-04	8.3734E-04	2.3538E-01	2.3538E-01	2.638E-01

- All peaks for activity calculation had bad shape.
* - Activity omitted from total
& - Activity omitted from total and all peaks had bad shape.
< - MDA value printed.
A - Activity printed, but activity < MDA.
B - Activity < MDA and failed test.
C - Area < Critical level.
F - Failed fraction or key line test.
H - Halflife limit exceeded

---------- S U M M A R Y ----------

Total Activity (50.2 to 2000.1 keV) 8.4845676E+00 pCi/gm
Total Decayed Activity (50.2 to 2000.1 keV) 8.4845972E+00 pCi/gm

The library has energies which are not separable.

Analyzed by: _____
JPK

Reviewed by: _____
Supervisor

Laboratory: YAEC Chemistry Lab

Report Generated On 8/8/2006 6:31:12 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-08-06 -119-
Sample Title: OOL-08-06-119-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/8/2006 6:21:10 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-08-06 -119-
Title: OOL-08-06-119-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-	1413	1406.73	351.64	0.70	3.20E+001	24.38	4.60E+001
2	2428-	2444	2435.31	608.79	1.57	4.50E+001	21.78	2.50E+001
3	3638-	3649	3643.12	910.74	1.06	2.63E+001	16.55	1.78E+001
4	5322-	5335	5328.88	1332.19	0.77	2.60E+001	9.99	0.00E+000
5	5833-	5855	5842.60	1460.62	1.45	2.99E+002	36.53	1.31E+001
6	7052-	7065	7058.79	1764.67	1.00	1.70E+001	8.08	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	0.999	1460.81*	10.67	2.05079E+001	3.00632E+000
Bi-214	0.688	609.31*	46.30	5.55495E-001	2.77679E-001
		1120.29	15.10		
		1764.49*	15.80	8.81312E-001	4.28113E-001

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

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

I N T E R 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	2.050793E+001	3.006318E+000
Bi-214	0.688	6.519763E-001	2.329661E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.64	5.3333E-002	76.19
3	910.74	4.3750E-002	63.06
4	1332.19	4.3333E-002	38.44

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

Errors quoted at 1.960 sigma

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

Spectrum File: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	2.7132E-001	2.25E-001	1.0054E-001
	1332.49	100.00	2.2530E-001		5.1531E-002
Nb-94	702.63	100.00	2.6017E-001	2.21E-001	6.9302E-002
	871.10	100.00	2.2068E-001		-8.5065E-002
Ag-108m	79.20	7.10	1.7603E+001	2.94E-001	-2.8616E+001
	433.93	89.90	2.9376E-001		7.9527E-002
	614.37	90.40	3.1366E-001		-8.3183E-002
	722.95	90.50	2.9427E-001		1.1242E-001
Sb-125	176.33	6.89	5.5124E+000	9.08E-001	-2.5489E+000
	427.89	29.33	9.0822E-001		-6.0123E-001
	463.38	10.35	2.5834E+000		-7.7685E-001
	600.56	17.80	1.3399E+000		-9.6707E-001
	606.64	5.02	5.9325E+000		6.7663E+000
	635.90	11.32	2.2289E+000		-6.6560E-001
Cs-134	563.23	8.38	3.1164E+000	2.87E-001	-1.4620E+000
	569.32	15.43	1.6624E+000		-9.7336E-001
	604.70	97.60	3.0096E-001		-8.3353E-003
	795.84	85.40	2.8671E-001		-9.4130E-002
	801.93	8.73	2.9078E+000		7.0193E-001
Cs-137	661.65	85.12	3.1622E-001	3.16E-001	1.3163E-001
Eu-152	121.78	28.40	1.9088E+000	7.58E-001	1.6451E+000
	244.69	7.49	4.2380E+000		-5.1106E+000
	344.27	26.50	1.0421E+000		-5.4611E-001
	778.89	12.74	1.9410E+000		-2.0309E+000
	867.32	4.16	5.5858E+000		-4.8385E+000
	964.01	14.40	2.0380E+000		2.2399E+000
	1085.78	10.00	2.1346E+000		-2.2969E-001
	1112.02	13.30	1.6652E+000		-1.2211E+000
	1407.95	20.70	7.5750E-001		-1.6895E-001
Eu-154	123.07	40.50	1.3179E+000	6.38E-001	7.1629E-001
	247.94	6.60	4.6878E+000		-1.9347E+000
	591.81	4.83	5.1973E+000		1.4936E+000
	723.30	19.70	1.3598E+000		7.3023E-001
	756.87	4.33	5.9110E+000		3.4804E-001
	873.19	11.50	1.8100E+000		-5.5666E-001
	996.32	10.30	2.1839E+000		-4.9717E-001
	1004.76	17.90	1.4659E+000		8.4288E-001
	1274.45	35.50	6.3780E-001		-4.8931E-001
Eu-155	86.54	30.90	3.2113E+000	3.21E+000	1.7087E-001
	105.31	20.70	3.2575E+000		1.9501E+000
Am-241	59.54	35.90	7.0089E+000	7.01E+000	-2.2173E+000
Cm-243	228.19	10.56	3.0640E+000	2.33E+000	-2.7777E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.3256E+000	2.33E+000	-8.0138E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 6:52:03 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-08-06 -120-
Sample Title: OOL-08-06-120-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/8/2006 6:42:01 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: 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-08-06 -120-
Title: OOL-08-06-120-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-	306	300.86	75.17	1.17	8.13E+001	57.49	3.11E+002
2	947-	959	954.80	238.66	0.53	5.15E+001	34.39	9.75E+001
3	2325-	2340	2332.38	583.06	0.53	5.12E+001	20.06	1.78E+001
4	2428-	2442	2436.04	608.97	0.39	5.65E+001	23.88	3.15E+001
5	3869-	3880	3874.11	968.49	0.37	1.22E+001	10.74	6.79E+000
6	4472-	4483	4477.83	1119.42	0.42	2.00E+001	12.78	9.00E+000
7	5831-	5854	5842.72	1460.65	1.86	2.91E+002	36.09	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	1.99670E+001	2.95745E+000
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.43025E-001	1.41741E-001
		860.37	12.46		
Pb-212	0.581	74.81* @	10.70	8.60409E+000	6.31578E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.19920E-001	3.56661E-001
Bi-214	0.706	609.31*	46.30	6.97802E-001	3.07337E-001
		1120.29*	15.10	8.66112E-001	5.60996E-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	1.996702E+001	2.957452E+000
TL-208		0.472	3.430249E-001	1.417414E-001
Pb-212	@	0.581	5.199203E-001	3.566615E-001
Bi-214		0.706	7.366561E-001	2.695390E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	968.49	2.0351E-002	87.97

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	2.8227E-001	1.92E-001	1.3390E-003
	1332.49	100.00	1.9247E-001		1.1021E-001
Nb-94	702.63	100.00	2.6017E-001	2.44E-001	2.3153E-001
	871.10	100.00	2.4383E-001		9.2267E-002
Ag-108m	79.20	7.10	1.7499E+001	2.91E-001	-5.1368E-001
	433.93	89.90	2.9878E-001		3.6211E-002
	614.37	90.40	3.6748E-001		-1.1170E-001
	722.95	90.50	2.9083E-001		-9.9012E-002
Sb-125	176.33	6.89	5.7006E+000	8.69E-001	5.1585E+000
	427.89	29.33	8.6923E-001		-1.0108E-001
	463.38	10.35	2.4554E+000		1.2349E+000
	600.56	17.80	1.4335E+000		7.9163E-001
	606.64	5.02	6.9166E+000		1.2087E+001
	635.90	11.32	2.3477E+000		1.2356E+000
Cs-134	563.23	8.38	2.9828E+000	3.12E-001	-1.1723E-001
	569.32	15.43	1.5393E+000		-2.4413E+000
	604.70	97.60	3.4206E-001		1.0518E-001
	795.84	85.40	3.1224E-001		5.0360E-002
	801.93	8.73	2.6639E+000		-2.9193E+000
Cs-137	661.65	85.12	3.1448E-001	3.14E-001	8.1192E-002
Eu-152	121.78	28.40	1.7659E+000	9.46E-001	-9.6635E-001
	244.69	7.49	4.3339E+000		-5.6234E-001
	344.27	26.50	1.0421E+000		-7.2259E-001
	778.89	12.74	2.1214E+000		-5.9481E-002
	867.32	4.16	6.0720E+000		-3.5765E+000
	964.01	14.40	1.7298E+000		1.8998E+000
	1085.78	10.00	2.3130E+000		-9.0037E-001
	1112.02	13.30	1.5594E+000		6.6280E-001
	1407.95	20.70	9.4562E-001		2.0763E-001
Eu-154	123.07	40.50	1.2231E+000	6.90E-001	-3.1605E-001
	247.94	6.60	4.8332E+000		-8.4736E-001
	591.81	4.83	5.4063E+000		4.7920E+000
	723.30	19.70	1.3441E+000		1.0889E-001
	756.87	4.33	5.3941E+000		-7.0768E-001
	873.19	11.50	2.0400E+000		7.1018E-001
	996.32	10.30	2.2646E+000		1.2680E+000
	1004.76	17.90	1.2470E+000		2.8737E-001
	1274.45	35.50	6.8998E-001		-4.7759E-001
Eu-155	86.54	30.90	3.1012E+000	3.10E+000	3.4540E+000
	105.31	20.70	3.1928E+000		9.4147E-001
Am-241	59.54	35.90	7.1740E+000	7.17E+000	1.9603E+000
Cm-243	228.19	10.56	3.1608E+000	2.39E+000	-9.8281E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.3937E+000	2.39E+000	1.0287E+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 7:08:57 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-08-06-121-F
Sample Title: OOL-08-06-121-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/8/2006 6:58:55 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: 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-08-06-121-F
Title: OOL-08-06-121-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	288-	312	291.36	72.80	0.83	4.18E+001	27.39	2.32E+002
m	2	288-	312	300.96	75.20	0.83	9.21E+001	31.93	2.90E+002
	3	948-	962	954.85	238.67	0.81	9.76E+001	45.01	1.49E+002
	4	1403-	1413	1407.47	351.83	0.70	3.69E+001	22.84	4.11E+001
	5	2326-	2337	2332.17	583.00	0.84	4.36E+001	20.31	2.54E+001
	6	2428-	2442	2435.47	608.83	1.28	4.70E+001	21.67	2.60E+001
	7	3637-	3652	3644.07	910.98	0.85	5.27E+001	21.71	2.33E+001
	8	5832-	5853	5842.49	1460.59	1.60	3.66E+002	37.99	2.59E+000
	9	7052-	7065	7058.34	1764.56	0.43	1.06E+001	10.02	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: 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	2.51405E+001	3.30735E+000
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.91643E-001	1.41342E-001
		860.37	12.46		
Pb-212	0.581	74.81* @	10.70	9.73753E+000	3.87923E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	9.85968E-001	4.80114E-001
Bi-214	0.689	609.31*	46.30	5.80069E-001	2.77046E-001
		1120.29	15.10		
		1764.49*	15.80	5.48369E-001	5.22355E-001

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

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

I N T E R 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	2.514051E+001	3.307351E+000
TL-208	0.472	2.916429E-001	1.413424E-001
Pb-212 @	0.581	9.859684E-001	4.801143E-001
Bi-214	0.689	5.731094E-001	2.447522E-001

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

Errors quoted at 1.960 sigma

U N I D E N T I 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	6.9591E-002	65.59
4	351.83	6.1426E-002	61.96
7	910.98	8.7807E-002	41.21

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: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	2.4373E-001	2.42E-001	9.0707E-002
	1332.49	100.00	2.4224E-001		1.9119E-001
Nb-94	702.63	100.00	2.3370E-001	2.34E-001	-1.7169E-001
	871.10	100.00	2.7145E-001		2.5566E-001
Ag-108m	79.20	7.10	1.8428E+001	3.01E-001	-4.8758E+000
	433.93	89.90	3.0125E-001		-4.2777E-002
	614.37	90.40	3.3491E-001		3.2713E-002
	722.95	90.50	3.4143E-001		3.6776E-001
Sb-125	176.33	6.89	6.4686E+000	1.01E+000	1.7906E-001
	427.89	29.33	1.0056E+000		9.2946E-001
	463.38	10.35	2.5491E+000		-1.3372E-001
	600.56	17.80	1.5210E+000		6.4661E-001
	606.64	5.02	6.5908E+000		5.9655E+000
	635.90	11.32	2.2289E+000		-1.0107E-001
Cs-134	563.23	8.38	3.2597E+000	2.80E-001	8.9051E-001
	569.32	15.43	1.7594E+000		1.3157E+000
	604.70	97.60	3.3053E-001		1.1801E-001
	795.84	85.40	2.8047E-001		-7.3015E-002
	801.93	8.73	2.5770E+000		-2.4959E+000
Cs-137	661.65	85.12	3.4901E-001	3.49E-001	3.4117E-001
Eu-152	121.78	28.40	1.9687E+000	8.66E-001	-8.1625E-001
	244.69	7.49	4.7232E+000		-1.9793E+000
	344.27	26.50	1.1527E+000		-6.9020E-001
	778.89	12.74	1.9679E+000		-3.9533E-001
	867.32	4.16	6.2388E+000		-3.9798E+000
	964.01	14.40	2.1545E+000		7.4468E-001
	1085.78	10.00	2.4174E+000		-1.6565E-001
	1112.02	13.30	2.0166E+000		-1.1474E+000
	1407.95	20.70	8.6582E-001		-1.9033E-001
Eu-154	123.07	40.50	1.3707E+000	6.03E-001	-4.9979E-001
	247.94	6.60	5.0904E+000		-2.1873E+000
	591.81	4.83	5.6071E+000		1.0654E+000
	723.30	19.70	1.5484E+000		7.2137E-001
	756.87	4.33	5.9863E+000		-1.8288E+000
	873.19	11.50	2.3330E+000		1.4558E+000
	996.32	10.30	2.1212E+000		-7.2474E-001
	1004.76	17.90	1.3612E+000		1.1473E+000
	1274.45	35.50	6.0269E-001		-8.6155E-001
Eu-155	86.54	30.90	3.3805E+000	3.38E+000	9.4938E-002
	105.31	20.70	3.5244E+000		9.2540E-001
Am-241	59.54	35.90	7.1084E+000	7.11E+000	-3.0816E-001
Cm-243	228.19	10.56	3.6320E+000	2.53E+000	2.7547E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.5341E+000	2.53E+000	1.2347E+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 7:26:46 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-08-06-122-F
Sample Title: OOL-08-06-122-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/8/2006 7:16:44 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: 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-08-06-122-F
Title: OOL-08-06-122-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-	305	300.34	75.04	1.00	4.22E+001	49.69	2.80E+002
2	334-	344	339.63	84.86	0.37	7.20E+001	52.68	2.71E+002
3	947-	961	954.41	238.56	1.08	1.29E+002	40.40	1.03E+002
4	2324-	2339	2330.97	582.70	0.98	5.41E+001	24.47	3.39E+001
5	2426-	2443	2435.18	608.76	1.15	6.01E+001	23.89	2.69E+001
6	3637-	3649	3642.81	910.67	0.30	3.29E+001	15.81	1.21E+001
7	5626-	5639	5632.31	1408.05	0.40	1.14E+001	7.79	1.58E+000
8	5831-	5852	5842.56	1460.61	1.56	3.33E+002	39.51	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: 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	2.28155E+001	3.28070E+000
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.62027E-001	1.70630E-001
		860.37	12.46		
Pb-212	0.581	74.81* @	10.70	4.48868E+000	5.36137E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	1.30454E+000	4.56362E-001
Bi-214	0.400	609.31*	46.30	7.41357E-001	3.08978E-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	2.281554E+001	3.280701E+000
TL-208	0.468	3.620271E-001	1.706304E-001
Pb-212 @	0.581	1.304541E+000	4.563620E-001
Bi-214	0.400	7.413567E-001	3.089780E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
2	84.86	1.2007E-001	73.13
6	910.67	5.4759E-002	48.12
7	1408.05	1.9038E-002	68.22

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	2.7867E-001	1.98E-001	1.2551E-001
	1332.49	100.00	1.9836E-001		-2.0625E-001
Nb-94	702.63	100.00	2.6938E-001	2.17E-001	2.3096E-001
	871.10	100.00	2.1656E-001		-9.0837E-002
Ag-108m	79.20	7.10	1.7924E+001	3.10E-001	1.5369E+000
	433.93	89.90	3.0975E-001		-1.7539E-001
	614.37	90.40	3.5094E-001		-1.4958E-002
	722.95	90.50	3.1244E-001		2.5478E-001
Sb-125	176.33	6.89	5.9040E+000	9.53E-001	2.1834E+000
	427.89	29.33	9.5279E-001		-5.6698E-001
	463.38	10.35	2.5834E+000		3.4433E-001
	600.56	17.80	1.4086E+000		-1.7553E-001
	606.64	5.02	6.5908E+000		7.0793E+000
	635.90	11.32	2.3219E+000		-5.6382E-003
Cs-134	563.23	8.38	3.2441E+000	2.85E-001	-9.4049E-001
	569.32	15.43	1.7072E+000		-9.5514E-001
	604.70	97.60	3.3053E-001		-3.5926E-002
	795.84	85.40	2.8465E-001		-4.6338E-002
	801.93	8.73	2.5770E+000		-2.0481E+000
Cs-137	661.65	85.12	3.2975E-001	3.30E-001	1.0803E-001
Eu-152	121.78	28.40	1.8693E+000	9.30E-001	-9.8135E-001
	244.69	7.49	4.6091E+000		-1.3948E+000
	344.27	26.50	1.1428E+000		-1.0817E+000
	778.89	12.74	1.8721E+000		-4.1445E-001
	867.32	4.16	5.3002E+000		1.1715E+000
	964.01	14.40	2.1545E+000		2.2309E+000
	1085.78	10.00	2.4376E+000		-8.9932E-001
	1112.02	13.30	1.7801E+000		-5.7688E-001
	1407.95	20.70	9.3027E-001		2.0443E-001
Eu-154	123.07	40.50	1.3200E+000	5.88E-001	6.5034E-002
	247.94	6.60	5.0274E+000		-4.3524E+000
	591.81	4.83	5.1049E+000		5.0065E-001
	723.30	19.70	1.4207E+000		1.2521E+000
	756.87	4.33	6.2064E+000		6.1014E-001
	873.19	11.50	1.7910E+000		-2.0298E+000
	996.32	10.30	2.3423E+000		1.8782E+000
	1004.76	17.90	1.3168E+000		1.6456E-001
	1274.45	35.50	5.8800E-001		-1.8522E-001
Eu-155	86.54	30.90	3.2857E+000	3.29E+000	4.0660E+000
	105.31	20.70	3.4089E+000		1.3897E+000
Am-241	59.54	35.90	7.1018E+000	7.10E+000	-9.9889E+000
Cm-243	228.19	10.56	3.3753E+000	2.37E+000	2.2003E+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	-6.1065E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 9:23:01 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: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-08-06-123-F
Sample Title: OOL-08-06-123-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/8/2006 9:12:58 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-08-06-123-F
Title: OOL-08-06-123-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	5830-	5857	5843.10	1460.74	2.59	2.97E+002	33.78	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	1.000	1460.81*	10.67	2.03795E+001	2.84508E+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	2.037950E+001	2.845078E+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	2.5792E-001	2.30E-001	2.7216E-001
	1332.49	100.00	2.3028E-001		1.0685E-001
Nb-94	702.63	100.00	2.3544E-001	2.06E-001	-6.1429E-002
	871.10	100.00	2.0587E-001		-2.3112E-001
Ag-108m	79.20	7.10	1.6553E+001	2.89E-001	-1.3862E+001
	433.93	89.90	3.1095E-001		2.6944E-001
	614.37	90.40	2.9860E-001		-6.1336E-002
	722.95	90.50	2.8910E-001		-6.7637E-002
Sb-125	176.33	6.89	5.6036E+000	8.85E-001	-1.5110E+000
	427.89	29.33	8.8505E-001		-1.9062E-001
	463.38	10.35	2.2556E+000		-3.8040E-001
	600.56	17.80	1.4898E+000		6.7073E-001
	606.64	5.02	5.9820E+000		4.1962E+000
	635.90	11.32	2.1458E+000		-5.0172E-001
Cs-134	563.23	8.38	3.1000E+000	2.78E-001	2.9444E+000
	569.32	15.43	1.7072E+000		4.3185E-001
	604.70	97.60	2.9835E-001		4.6814E-002
	795.84	85.40	2.7835E-001		1.6040E-002
	801.93	8.73	2.4868E+000		-2.6258E+000
Cs-137	661.65	85.12	2.7735E-001	2.77E-001	1.0631E-001
Eu-152	121.78	28.40	1.6648E+000	8.14E-001	-1.0330E+000
	244.69	7.49	4.3810E+000		-7.4673E+000
	344.27	26.50	1.0049E+000		-2.2083E-001
	778.89	12.74	1.7099E+000		-3.4359E-001
	867.32	4.16	5.4924E+000		-2.5361E+000
	964.01	14.40	1.8669E+000		-2.3655E-001
	1085.78	10.00	1.9893E+000		1.7774E-001
	1112.02	13.30	1.6308E+000		-6.7336E-001
	1407.95	20.70	8.1370E-001		-9.5597E-002
Eu-154	123.07	40.50	1.1795E+000	5.57E-001	2.7434E-001
	247.94	6.60	5.0062E+000		3.8399E+000
	591.81	4.83	5.2277E+000		2.1694E+000
	723.30	19.70	1.3282E+000		-4.7589E-001
	756.87	4.33	5.9110E+000		1.1037E+000
	873.19	11.50	1.7523E+000		4.7706E-001
	996.32	10.30	2.3038E+000		2.3103E-001
	1004.76	17.90	1.2350E+000		-5.9779E-001
	1274.45	35.50	5.5735E-001		8.6407E-002
Eu-155	86.54	30.90	3.0731E+000	3.07E+000	1.0137E+000
	105.31	20.70	3.1268E+000		1.1151E+000
Am-241	59.54	35.90	7.4556E+000	7.46E+000	-7.9362E+000
Cm-243	228.19	10.56	2.9843E+000	2.25E+000	-2.2763E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.2498E+000	2.25E+000	1.5917E+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 9:50:40 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-08-06-124-F
Sample Title: OOL-08-06-124-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/8/2006 9:40:36 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-08-06-124-F
Title: OOL-08-06-124-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	2323-	2339	2330.60	582.61	0.36	5.20E+001	20.10	1.70E+001
2	2430-	2441	2435.59	608.86	1.11	2.80E+001	19.17	2.70E+001
3	2638-	2654	2645.13	661.24	1.47	5.11E+001	23.18	2.79E+001
4	5829-	5852	5840.81	1460.17	2.05	3.26E+002	37.91	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	0.987	1460.81*	10.67	2.23642E+001	3.16879E+000
Cs-137	0.995	661.65*	85.12	3.52400E-001	1.65094E-001
TL-208	0.466	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.48034E-001	1.42169E-001
		860.37	12.46		
Bi-214	0.402	609.31*	46.30	3.45654E-001	2.40486E-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	0.987	2.236420E+001	3.168787E+000
Cs-137	0.995	3.524003E-001	1.650944E-001
TL-208	0.466	3.480335E-001	1.421688E-001
Bi-214	0.402	3.456543E-001	2.404864E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.4373E-001	2.44E-001	-1.5927E-001
		1332.49	100.00	2.4685E-001		1.4808E-001
	Nb-94	702.63	100.00	2.6017E-001	2.06E-001	1.2920E-001
		871.10	100.00	2.0587E-001		-1.3203E-001
	Ag-108m	79.20	7.10	1.8116E+001	2.59E-001	-3.4461E+001
		433.93	89.90	2.5866E-001		-3.1227E-001
		614.37	90.40	3.0922E-001		-1.7191E-001
		722.95	90.50	3.0596E-001		3.0724E-001
	Sb-125	176.33	6.89	5.9467E+000	8.77E-001	-3.0381E+000
		427.89	29.33	8.7718E-001		4.9694E-001
		463.38	10.35	2.7049E+000		1.7724E+000
		600.56	17.80	1.3747E+000		-3.1948E-001
		606.64	5.02	6.0799E+000		7.8768E+000
		635.90	11.32	2.1739E+000		1.1560E+000
	Cs-134	563.23	8.38	3.1164E+000	2.85E-001	-2.2215E+000
		569.32	15.43	1.7679E+000		1.1057E+000
		604.70	97.60	3.0482E-001		-2.4513E-001
		795.84	85.40	2.8465E-001		-1.2985E-001
		801.93	8.73	2.5770E+000		-7.5470E-001
+	Cs-137	661.65*	85.12	2.3230E-001	2.32E-001	3.5240E-001
	Eu-152	121.78	28.40	1.9228E+000	8.14E-001	1.2505E-001
		244.69	7.49	4.8851E+000		-8.1023E-001
		344.27	26.50	1.1295E+000		2.7193E-001
		778.89	12.74	1.7557E+000		8.9882E-001
		867.32	4.16	4.8914E+000		-4.1671E+000
		964.01	14.40	2.0812E+000		1.6706E+000
		1085.78	10.00	2.5748E+000		1.4145E+000
		1112.02	13.30	1.8115E+000		-2.0364E+000
		1407.95	20.70	8.1370E-001		2.0850E-001
	Eu-154	123.07	40.50	1.3012E+000	6.03E-001	-1.5801E+000
		247.94	6.60	5.3447E+000		1.1102E+000
		591.81	4.83	4.5786E+000		-2.1578E+000
		723.30	19.70	1.3906E+000		9.6753E-001
		756.87	4.33	5.5990E+000		8.7010E-001
		873.19	11.50	1.9550E+000		2.1049E-001
		996.32	10.30	2.5775E+000		2.3320E+000
		1004.76	17.90	1.4041E+000		3.8049E-001
		1274.45	35.50	6.0269E-001		3.3818E-001
	Eu-155	86.54	30.90	3.5240E+000	3.43E+000	2.2315E+000
		105.31	20.70	3.4346E+000		-2.8150E-001
	Am-241	59.54	35.90	7.7146E+000	7.71E+000	-5.2786E+000
	Cm-243	228.19	10.56	3.1860E+000	2.39E+000	-1.0420E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.3886E+000	2.39E+000	-4.5144E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 10:07:41 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: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-08-06-125-F
Sample Title: OOL-08-06-125-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/8/2006 9:57:38 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-08-06-125-F
Title: OOL-08-06-125-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	297-	306	300.53	75.09	0.49	5.55E+001	55.23	3.23E+002
2	947-	960	953.89	238.43	0.42	8.88E+001	37.57	9.92E+001
3	2324-	2338	2330.68	582.63	0.50	4.90E+001	21.80	2.60E+001
4	2430-	2442	2436.20	609.01	0.70	4.24E+001	20.37	2.46E+001
5	5828-	5853	5840.42	1460.07	1.81	3.26E+002	36.19	3.46E+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	0.982	1460.81*	10.67	2.23317E+001	3.07145E+000
TL-208	0.466	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.28181E-001	1.52218E-001
		860.37	12.46		
Pb-212	0.581	74.81* @	10.70	5.89092E+000	5.97987E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.96037E-001	4.04447E-001
Bi-214	0.404	609.31*	46.30	5.23590E-001	2.59849E-001
		1120.29	15.10		
		1764.49	15.80		

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

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

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

Spectrum File:GRN7780

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

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.982	2.233172E+001	3.071445E+000
TL-208		0.466	3.281812E-001	1.522185E-001
Pb-212	@	0.581	8.960368E-001	4.044472E-001
Bi-214		0.404	5.235898E-001	2.598493E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.9278E-001	2.25E-001	1.7836E-001
	1332.49	100.00	2.2530E-001		4.1216E-002
Nb-94	702.63	100.00	1.9519E-001	1.95E-001	-1.4157E-001
	871.10	100.00	2.2271E-001		-5.8120E-002
Ag-108m	79.20	7.10	1.9238E+001	2.79E-001	7.8452E+000
	433.93	89.90	2.7948E-001		-5.6604E-002
	614.37	90.40	3.2091E-001		-9.4937E-002
	722.95	90.50	2.8205E-001		-1.2934E-002
Sb-125	176.33	6.89	5.7887E+000	8.81E-001	-1.1845E+000
	427.89	29.33	8.8112E-001		-1.8724E-001
	463.38	10.35	2.8003E+000		2.0804E+000
	600.56	17.80	1.4739E+000		8.7750E-001
	606.64	5.02	6.2942E+000		1.0386E+000
	635.90	11.32	2.0591E+000		-1.2963E+000
Cs-134	563.23	8.38	2.9311E+000	2.95E-001	-1.4138E+000
	569.32	15.43	1.5393E+000		-1.0242E+000
	604.70	97.60	3.3635E-001		-2.4591E-001
	795.84	85.40	2.9482E-001		-1.4149E-001
	801.93	8.73	2.8290E+000		1.0556E-001
Cs-137	661.65	85.12	3.1622E-001	3.16E-001	3.5924E-002
Eu-152	121.78	28.40	1.9642E+000	8.82E-001	8.7544E-001
	244.69	7.49	4.6621E+000		-2.9236E+000
	344.27	26.50	1.0566E+000		-8.4953E-001
	778.89	12.74	1.7707E+000		-4.6655E-001
	867.32	4.16	5.3972E+000		-6.1905E-001
	964.01	14.40	1.8548E+000		3.9694E-002
	1085.78	10.00	2.3130E+000		-8.2502E-002
	1112.02	13.30	1.7155E+000		-2.3106E+000
	1407.95	20.70	8.8242E-001		1.3013E-001
Eu-154	123.07	40.50	1.3664E+000	5.88E-001	-1.6136E-001
	247.94	6.60	5.0800E+000		-4.0701E+000
	591.81	4.83	4.6134E+000		3.2437E-001
	723.30	19.70	1.3122E+000		7.3451E-001
	756.87	4.33	5.4770E+000		1.3714E+000
	873.19	11.50	2.0400E+000		4.2237E-001
	996.32	10.30	2.2246E+000		1.9623E+000
	1004.76	17.90	1.1066E+000		-4.4611E-002
	1274.45	35.50	5.8800E-001		1.6215E-001
Eu-155	86.54	30.90	3.2074E+000	3.21E+000	1.7286E+000
	105.31	20.70	3.3160E+000		2.3210E-002
Am-241	59.54	35.90	8.0871E+000	8.09E+000	1.5183E+000
Cm-243	228.19	10.56	3.2236E+000	2.21E+000	1.5200E+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	-3.3472E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 10:23:53 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-08-06-126-F
Sample Title: OOL-08-06-126-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/8/2006 10:13:52 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-08-06-126-F
Title: OOL-08-06-126-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	296-	307	300.42	75.06	0.68	8.15E+001	59.05	3.28E+002
2	949-	962	954.76	238.65	0.85	8.93E+001	37.72	1.02E+002
3	1348-	1357	1352.98	338.20	0.55	2.12E+001	19.33	3.38E+001
4	2036-	2048	2041.71	510.39	0.88	4.42E+001	24.74	4.38E+001
5	2326-	2337	2331.09	582.73	0.61	3.97E+001	19.93	2.53E+001
6	2431-	2442	2436.34	609.05	0.83	4.13E+001	19.48	2.27E+001
7	2639-	2650	2644.57	661.10	0.55	2.19E+001	15.32	1.51E+001
8	3172-	3183	3177.49	794.34	0.25	2.04E+001	11.12	4.59E+000
9	3637-	3650	3643.33	910.80	0.41	3.60E+001	15.45	9.00E+000
10	5829-	5852	5839.83	1459.93	1.93	3.27E+002	35.44	0.00E+000
11	7049-	7062	7055.91	1763.95	1.25	2.30E+001	9.40	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
ANN	0.988	511.00*	100.00	2.38842E-001	1.37749E-001
K-40	0.975	1460.81*	10.67	2.24306E+001	3.03459E+000
Cs-137	0.990	661.65*	85.12	1.50744E-001	1.07108E-001
TL-208	0.748	277.35	6.80		
		510.84*	21.60	1.10575E+000	6.44086E-001
		583.14*	84.20	2.65831E-001	1.37989E-001
		860.37	12.46		
Pb-212	0.581	74.81* @	10.70	8.67242E+000	6.50670E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	9.01870E-001	4.06241E-001
Bi-214	0.690	609.31*	46.30	5.10141E-001	2.48803E-001
		1120.29	15.10		
		1764.49*	15.80	1.19207E+000	5.01550E-001
Ac-228	0.537	338.32*	11.40	8.99642E-001	8.31171E-001
		911.07*	27.70	8.12825E-001	3.61068E-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
ANN	0.988	1.814225E-001	1.409239E-001
K-40	0.975	2.243058E+001	3.034590E+000
Cs-137	0.990	1.507444E-001	1.071082E-001
TL-208	0.748	2.658310E-001	1.377172E-001
Pb-212 @	0.581	9.018698E-001	4.062413E-001
Bi-214	0.690	6.448133E-001	2.228859E-001
Ac-228	0.537	8.266076E-001	3.311702E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	794.34	3.4017E-002	54.46

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	2.5792E-001	2.38E-001	1.8307E-001
		1332.49	100.00	2.3753E-001		3.1891E-001
	Nb-94	702.63	100.00	2.4565E-001	2.46E-001	4.7844E-002
		871.10	100.00	2.4747E-001		2.1027E-001
	Ag-108m	79.20	7.10	1.7511E+001	2.91E-001	-3.4046E+000
		433.93	89.90	2.9122E-001		-1.4402E-001
		614.37	90.40	3.2376E-001		-1.6013E-001
		722.95	90.50	3.0760E-001		3.4673E-001
	Sb-125	176.33	6.89	5.8682E+000	9.23E-001	-5.4200E-001
		427.89	29.33	9.2333E-001		2.8214E-001
		463.38	10.35	2.5606E+000		-1.2410E-002
		600.56	17.80	1.3747E+000		-1.6113E-001
		606.64	5.02	6.2472E+000		7.0035E+000
		635.90	11.32	1.9683E+000		4.1849E-001
	Cs-134	563.23	8.38	3.0670E+000	2.70E-001	-6.1305E-001
		569.32	15.43	1.6162E+000		6.8960E-001
		604.70	97.60	3.1856E-001		-2.6495E-001
		795.84	85.40	2.6972E-001		1.1663E-001
		801.93	8.73	2.5324E+000		-1.1282E-001
+	Cs-137	661.65*	85.12	1.6073E-001	1.61E-001	1.5074E-001
	Eu-152	121.78	28.40	1.8899E+000	8.66E-001	-8.1761E-002
		244.69	7.49	4.6971E+000		1.6120E+000
		344.27	26.50	9.7800E-001		-6.8493E-001
		778.89	12.74	1.8294E+000		-5.4723E-001
		867.32	4.16	5.8563E+000		-1.0720E+000
		964.01	14.40	1.8906E+000		1.8247E+000
		1085.78	10.00	1.9893E+000		-5.3594E-001
		1112.02	13.30	1.7319E+000		-1.8672E+000
		1407.95	20.70	8.6582E-001		9.9678E-002
	Eu-154	123.07	40.50	1.2968E+000	5.81E-001	-7.9216E-001
		247.94	6.60	5.0800E+000		1.4014E+000
		591.81	4.83	4.9146E+000		-2.9167E+000
		723.30	19.70	1.4207E+000		1.1415E+000
		756.87	4.33	5.3098E+000		9.3851E-001
		873.19	11.50	2.0729E+000		-9.6507E-001
		996.32	10.30	2.1423E+000		1.0900E-001
		1004.76	17.90	1.2707E+000		-2.6784E-001
		1274.45	35.50	5.8051E-001		2.7061E-001
	Eu-155	86.54	30.90	3.3251E+000	3.29E+000	6.9652E-001
		105.31	20.70	3.2869E+000		-2.4958E+000
	Am-241	59.54	35.90	7.7629E+000	7.76E+000	-2.9646E+000
	Cm-243	228.19	10.56	3.3694E+000	2.14E+000	-5.1060E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.1366E+000	2.14E+000	2.6158E+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 4:32:55 PM

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

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

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-08-06-127-F-
Sample Title: OOL-08-06-127-F-G
Description: 100% Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/8/2006 4:22:54 PM
Live Time: 600.0 seconds
Real Time: 600.5 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-08-06-127-F-
Title: OOL-08-06-127-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	948-	959	953.02	238.35	0.91	7.37E+001	34.34	9.13E+001
2	2428-	2443	2434.07	608.64	1.02	5.30E+001	21.98	2.40E+001
3	3636-	3649	3642.32	910.72	1.42	3.50E+001	18.34	1.90E+001
4	4472-	4483	4477.90	1119.63	0.77	3.40E+001	13.72	6.00E+000
5	5828-	5851	5840.35	1460.26	1.68	3.79E+002	39.93	9.00E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: 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	2.49194E+001	3.31100E+000
Pb-212	0.402	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.20689E-001	3.54418E-001
Bi-214	0.697	609.31*		46.30	6.33485E-001	2.74327E-001
		1120.29*		15.10	1.43355E+000	5.98230E-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		0.988	2.491944E+001	3.310996E+000
Pb-212	@	0.402	7.206888E-001	3.544176E-001
Bi-214		0.697	7.724940E-001	2.493596E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	910.72	5.8272E-002	52.45

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

Errors quoted at 1.960 sigma

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

Spectrum File: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	2.3086E-001	2.09E-001	1.2802E-001
	1332.49	100.00	2.0927E-001		4.2811E-002
Nb-94	702.63	100.00	2.5507E-001	2.42E-001	-4.3252E-002
	871.10	100.00	2.4183E-001		7.9304E-002
Ag-108m	79.20	7.10	1.3727E+001	2.56E-001	-1.1230E+001
	433.93	89.90	2.7405E-001		-6.2481E-002
	614.37	90.40	2.5558E-001		-7.2739E-002
	722.95	90.50	2.9196E-001		3.1013E-001
Sb-125	176.33	6.89	4.8867E+000	8.52E-001	-1.1762E-001
	427.89	29.33	8.5222E-001		2.3776E-001
	463.38	10.35	2.6040E+000		-5.4785E-001
	600.56	17.80	1.3563E+000		8.1407E-001
	606.64	5.02	5.7451E+000		4.7435E+000
	635.90	11.32	2.2080E+000		8.7363E-001
Cs-134	563.23	8.38	2.9265E+000	2.69E-001	7.2061E-001
	569.32	15.43	1.6034E+000		7.7455E-002
	604.70	97.60	2.9273E-001		-2.8518E-002
	795.84	85.40	2.6895E-001		-1.0354E-002
	801.93	8.73	2.6152E+000		5.2460E-001
Cs-137	661.65	85.12	3.4914E-001	3.49E-001	1.4496E-001
Eu-152	121.78	28.40	1.6543E+000	7.81E-001	4.4548E-001
	244.69	7.49	4.3104E+000		1.3113E+000
	344.27	26.50	1.0118E+000		2.6387E-001
	778.89	12.74	1.6784E+000		-2.0030E-001
	867.32	4.16	5.5026E+000		2.5663E+000
	964.01	14.40	1.8237E+000		-1.3244E+000
	1085.78	10.00	2.3551E+000		-1.4614E-001
	1112.02	13.30	1.6215E+000		-6.6664E-002
	1407.95	20.70	7.8091E-001		-1.1200E+000
Eu-154	123.07	40.50	1.1513E+000	6.22E-001	2.1514E-001
	247.94	6.60	4.5786E+000		2.3286E-001
	591.81	4.83	4.6024E+000		-5.0361E+000
	723.30	19.70	1.3264E+000		9.0681E-001
	756.87	4.33	5.2820E+000		2.7056E+000
	873.19	11.50	2.0575E+000		-3.2395E-002
	996.32	10.30	2.1116E+000		7.7051E-001
	1004.76	17.90	1.1569E+000		6.0346E-002
	1274.45	35.50	6.2233E-001		4.1502E-002
Eu-155	86.54	30.90	2.5280E+000	2.53E+000	2.1762E+000
	105.31	20.70	2.5489E+000		-1.1105E+000
Am-241	59.54	35.90	4.6582E+000	4.66E+000	4.1375E-001
Cm-243	228.19	10.56	2.9227E+000	1.93E+000	-2.6503E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.9286E+000	1.93E+000	1.2649E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 10:37:05 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-08-06-127-F
Sample Title: OOL-08-06-127-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/8/2006 10:27:04 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-08-06-127-F
Title: OOL-08-06-127-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	949-	958	953.83	238.42	1.05	5.29E+001	28.63	6.91E+001
2	2323-	2339	2330.82	582.66	1.23	4.96E+001	23.36	2.94E+001
3	2429-	2442	2436.00	608.96	0.70	3.12E+001	19.83	2.58E+001
4	2639-	2651	2644.94	661.20	0.81	1.98E+001	19.56	3.02E+001
5	5829-	5853	5840.37	1460.06	1.95	3.33E+002	37.43	8.38E+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
K-40	0.982	1460.81*		10.67	2.28173E+001	3.16330E+000
Cs-137	0.993	661.65*		85.12	1.36825E-001	1.35849E-001
TL-208	0.467	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	3.31798E-001	1.62393E-001
		860.37		12.46		
Pb-212	0.427	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	5.34066E-001	3.00945E-001
Bi-214	0.404	609.31*		46.30	3.84983E-001	2.49477E-001
		1120.29		15.10		
		1764.49		15.80		

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

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

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

Spectrum File:GRN7780

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

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.982	2.281734E+001	3.163295E+000
Cs-137		0.993	1.368249E-001	1.358490E-001
TL-208		0.467	3.317981E-001	1.623934E-001
Pb-212	@	0.427	5.340664E-001	3.009452E-001
Bi-214		0.404	3.849833E-001	2.494774E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.23E-001	1.4099E-001
		1332.49	100.00	2.2277E-001		-3.5530E-003
	Nb-94	702.63	100.00	2.4230E-001	2.42E-001	-2.5135E-002
		871.10	100.00	2.4383E-001		1.1913E-001
	Ag-108m	79.20	7.10	1.7217E+001	2.91E-001	-3.4092E+001
		433.93	89.90	3.0002E-001		-4.4823E-002
		614.37	90.40	3.1512E-001		-7.8180E-002
		722.95	90.50	2.9083E-001		1.0350E-001
	Sb-125	176.33	6.89	5.7228E+000	9.64E-001	-1.4204E+000
		427.89	29.33	9.6359E-001		3.4950E-001
		463.38	10.35	2.4434E+000		9.8477E-001
		600.56	17.80	1.4976E+000		-1.8196E-001
		606.64	5.02	6.1522E+000		8.6817E+000
		635.90	11.32	2.0443E+000		-1.0882E+000
	Cs-134	563.23	8.38	3.2441E+000	2.95E-001	1.0123E+000
		569.32	15.43	1.7849E+000		3.6254E-001
		604.70	97.60	3.1239E-001		-1.9867E-001
		795.84	85.40	2.9482E-001		3.2235E-002
		801.93	8.73	2.8489E+000		1.0549E+000
+	Cs-137	661.65*	85.12	2.2128E-001	2.21E-001	1.3682E-001
	Eu-152	121.78	28.40	1.8371E+000	8.82E-001	-1.0619E+000
		244.69	7.49	4.4828E+000		-1.1089E+000
		344.27	26.50	9.9347E-001		-9.3977E-001
		778.89	12.74	1.9274E+000		5.3353E-002
		867.32	4.16	5.9867E+000		5.5822E-001
		964.01	14.40	1.9715E+000		8.6864E-001
		1085.78	10.00	2.2034E+000		9.2138E-001
		1112.02	13.30	1.7959E+000		-3.4576E-001
		1407.95	20.70	8.8242E-001		5.9622E-001
	Eu-154	123.07	40.50	1.2912E+000	6.10E-001	7.7149E-001
		247.94	6.60	4.8771E+000		-2.0968E+000
		591.81	4.83	5.2277E+000		8.3568E-001
		723.30	19.70	1.3282E+000		-1.5532E-001
		756.87	4.33	5.6390E+000		2.6725E+000
		873.19	11.50	2.0892E+000		-3.7991E-001
		996.32	10.30	2.3423E+000		3.2937E-001
		1004.76	17.90	1.3280E+000		1.0528E+000
		1274.45	35.50	6.0989E-001		9.4285E-002
	Eu-155	86.54	30.90	3.2382E+000	3.24E+000	1.1790E+000
		105.31	20.70	3.4393E+000		1.2041E+000
	Am-241	59.54	35.90	7.0022E+000	7.00E+000	-6.6473E+000
	Cm-243	228.19	10.56	3.3575E+000	2.12E+000	2.2312E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.1249E+000	2.12E+000	-2.6709E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 10:51:14 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-08-06-128-F
Sample Title: OOL-08-06-128-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/8/2006 10:41:12 PM
Live Time: 600.0 seconds
Real Time: 600.8 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780_2M90Soil170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: GRN7780
Log Number: OOL-08-06-128-F
Title: OOL-08-06-128-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	947-	961	954.22	238.51	0.67	7.26E+001	37.77	1.03E+002
2	1399-	1413	1406.82	351.66	0.72	6.24E+001	25.16	3.56E+001
3	2324-	2339	2330.60	582.61	0.63	3.78E+001	23.49	3.52E+001
4	2426-	2440	2434.19	608.51	1.68	5.38E+001	18.19	1.13E+001
5	3868-	3880	3873.15	968.25	1.07	2.67E+001	13.29	7.29E+000
6	5827-	5852	5840.35	1460.06	1.37	3.16E+002	37.77	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: 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	2.16770E+001	3.12958E+000
TL-208	0.466	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	2.53324E-001	1.60739E-001
		860.37		12.46		
Pb-212	0.427	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.32711E-001	3.98233E-001
Bi-214	0.394	609.31*		46.30	6.63410E-001	2.39210E-001
		1120.29		15.10		
		1764.49		15.80		

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

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

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

Spectrum File:GRN7780

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

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.982	2.167696E+001	3.129579E+000
TL-208		0.466	2.533235E-001	1.607387E-001
Pb-212	@	0.427	7.327111E-001	3.982327E-001
Bi-214		0.394	6.634103E-001	2.392099E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.66	1.0400E-001	40.32
5	968.25	4.4522E-002	49.74

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: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	2.5792E-001	2.47E-001	3.1892E-002
	1332.49	100.00	2.4685E-001		1.5599E-001
Nb-94	702.63	100.00	2.3016E-001	2.21E-001	-1.1361E-002
	871.10	100.00	2.2068E-001		1.9963E-001
Ag-108m	79.20	7.10	1.9196E+001	2.81E-001	-2.1977E+000
	433.93	89.90	3.1332E-001		3.9725E-001
	614.37	90.40	2.8104E-001		-2.7583E-001
	722.95	90.50	2.9766E-001		1.6007E-001
Sb-125	176.33	6.89	5.3094E+000	8.89E-001	-2.7706E+000
	427.89	29.33	8.8895E-001		1.3167E-001
	463.38	10.35	2.5027E+000		8.0728E-001
	600.56	17.80	1.4498E+000		-3.9162E-001
	606.64	5.02	5.7811E+000		3.7356E+000
	635.90	11.32	2.2289E+000		5.7267E-001
Cs-134	563.23	8.38	2.8605E+000	2.76E-001	-9.5151E-001
	569.32	15.43	1.5094E+000		-2.1620E+000
	604.70	97.60	3.0354E-001		-6.8877E-002
	795.84	85.40	2.7622E-001		-7.4736E-002
	801.93	8.73	2.6851E+000		-9.8225E-001
Cs-137	661.65	85.12	3.3304E-001	3.33E-001	3.8759E-001
Eu-152	121.78	28.40	1.7810E+000	8.14E-001	-4.8832E-001
	244.69	7.49	4.2862E+000		2.0711E+000
	344.27	26.50	1.1126E+000		1.9595E-001
	778.89	12.74	1.8149E+000		-5.1400E-001
	867.32	4.16	4.6723E+000		-5.9024E+000
	964.01	14.40	1.9141E+000		1.4532E+000
	1085.78	10.00	1.8856E+000		-2.5274E-001
	1112.02	13.30	1.7642E+000		-7.2778E-001
	1407.95	20.70	8.1370E-001		-2.9414E-001
Eu-154	123.07	40.50	1.2396E+000	6.64E-001	1.8396E-001
	247.94	6.60	4.5727E+000		2.2519E+000
	591.81	4.83	5.5505E+000		1.8348E+000
	723.30	19.70	1.3520E+000		1.5397E-001
	756.87	4.33	5.6390E+000		2.9910E+000
	873.19	11.50	1.9723E+000		6.0507E-001
	996.32	10.30	1.9664E+000		8.3578E-001
	1004.76	17.90	1.2707E+000		-3.5689E-002
	1274.45	35.50	6.6445E-001		6.3845E-001
Eu-155	86.54	30.90	3.1607E+000	3.16E+000	2.1553E-001
	105.31	20.70	3.1777E+000		-3.4776E-001
Am-241	59.54	35.90	7.3862E+000	7.39E+000	5.0763E-001
Cm-243	228.19	10.56	3.2851E+000	2.19E+000	1.4172E+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	9.7021E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 6:47:23 PM

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

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

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-08-06-129-F-
Sample Title: OOL-08-06-129-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/8/2006 6:37:21 PM
Live Time: 600.0 seconds
Real Time: 600.4 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-08-06-129-F-
Title: OOL-08-06-129-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	296-	305	300.00	75.09	0.53	5.04E+001	48.77	2.52E+002
2	947-	960	953.21	238.40	1.05	5.91E+001	33.74	8.49E+001
3	1396-	1412	1404.85	351.32	0.88	4.63E+001	31.10	6.57E+001
4	2427-	2440	2433.17	608.41	1.74	5.14E+001	21.99	2.66E+001
5	2901-	2911	2906.72	726.81	0.79	1.44E+001	15.61	2.06E+001
6	3633-	3649	3640.92	910.37	1.62	5.48E+001	19.36	1.32E+001
7	5826-	5850	5838.73	1459.85	1.77	3.26E+002	36.10	3.20E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: BRN7722

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/GRAMS)	Activity Uncertainty
K-40	0.965	1460.81*	10.67	2.14178E+001	2.93939E+000
Bi-212	0.995	727.17*	11.80	7.07262E-001	7.71746E-001
Pb-212	0.565	74.81* @	10.70	4.44825E+000	4.39403E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.78145E-001	3.42295E-001
Bi-214	0.387	609.31*	46.30	6.14225E-001	2.73706E-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	0.965	2.141776E+001	2.939388E+000
Bi-212	0.995	7.072622E-001	7.717460E-001
Pb-212 @	0.565	5.781455E-001	3.422952E-001
Bi-214	0.387	6.142252E-001	2.737055E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.32	7.7188E-002	67.14
6	910.37	9.1360E-002	35.32

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	2.2231E-001	1.88E-001	7.3540E-002
	1332.49	100.00	1.8795E-001		1.4812E-001
Nb-94	702.63	100.00	2.3145E-001	2.29E-001	-1.0047E-001
	871.10	100.00	2.2914E-001		-2.3908E-002
Ag-108m	79.20	7.10	1.1808E+001	2.36E-001	-8.6754E+000
	433.93	89.90	2.3634E-001		-7.8442E-002
	614.37	90.40	2.8149E-001		1.6445E-001
	722.95	90.50	2.7871E-001		-6.7224E-002
Sb-125	176.33	6.89	4.3570E+000	6.88E-001	7.4494E-003
	427.89	29.33	6.8825E-001		-2.9053E-001
	463.38	10.35	2.3810E+000		1.4942E+000
	600.56	17.80	1.2631E+000		-6.0166E-001
	606.64	5.02	6.0041E+000		7.1231E+000
	635.90	11.32	1.8431E+000		-4.2820E-001
Cs-134	563.23	8.38	2.5004E+000	2.45E-001	4.2107E-001
	569.32	15.43	1.2167E+000		2.6370E-001
	604.70	97.60	2.9891E-001		-1.2688E-001
	795.84	85.40	2.4486E-001		1.5749E-001
	801.93	8.73	2.1858E+000		-7.6529E-001
Cs-137	661.65	85.12	2.6997E-001	2.70E-001	6.2182E-002
Eu-152	121.78	28.40	1.4332E+000	6.25E-001	3.5611E-001
	244.69	7.49	3.8359E+000		4.1702E-001
	344.27	26.50	9.1803E-001		4.8243E-001
	778.89	12.74	1.6933E+000		-6.7167E-001
	867.32	4.16	5.7219E+000		3.4384E+000
	964.01	14.40	1.8353E+000		1.1520E+000
	1085.78	10.00	2.1022E+000		5.6004E-001
	1112.02	13.30	1.5880E+000		-1.4556E+000
	1407.95	20.70	6.2515E-001		2.3594E-001
Eu-154	123.07	40.50	9.8850E-001	4.55E-001	-1.0747E-001
	247.94	6.60	4.1653E+000		1.0611E+000
	591.81	4.83	4.8859E+000		-8.8779E-001
	723.30	19.70	1.2960E+000		2.8596E-001
	756.87	4.33	4.9049E+000		-9.8207E-001
	873.19	11.50	1.9443E+000		5.4453E-001
	996.32	10.30	2.0912E+000		1.0039E+000
	1004.76	17.90	1.1569E+000		-9.5845E-001
	1274.45	35.50	4.5475E-001		5.2457E-002
Eu-155	86.54	30.90	2.2784E+000	2.28E+000	4.2376E-001
	105.31	20.70	2.4080E+000		5.6335E-002
Am-241	59.54	35.90	3.9200E+000	3.92E+000	2.1624E+000
Cm-243	228.19	10.56	2.6941E+000	1.87E+000	1.6144E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.8729E+000	1.87E+000	5.0178E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 7:04:44 PM

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

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

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-08-06-130-F-
Sample Title: OOL-08-06-130-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/8/2006 6:54:41 PM
Live Time: 600.0 seconds
Real Time: 600.5 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-08-06-130-F-
Title: OOL-08-06-130-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	948-	958	953.39	238.45	0.73	4.84E+001	33.63	1.02E+002
2	2322-	2335	2328.94	582.35	0.61	6.29E+001	22.75	2.61E+001
3	3634-	3649	3640.96	910.38	1.01	3.82E+001	18.76	1.78E+001
4	3866-	3878	3872.01	968.14	0.62	2.72E+001	13.55	7.84E+000
5	5827-	5849	5838.59	1459.82	1.82	3.56E+002	39.20	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: 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	0.963	1460.81*		10.67	2.33702E+001	3.19717E+000
TL-208	0.457	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	4.07862E-001	1.57167E-001
		860.37		12.46		
Pb-212	0.403	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	4.73200E-001	3.37270E-001
Ac-228	0.617	338.32		11.40		
		911.07*		27.70	8.44050E-001	4.25608E-001
		969.11*		16.60	1.01294E+000	5.16361E-001

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

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

I N T E R 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		0.963	2.337023E+001	3.197167E+000
TL-208		0.457	4.078618E-001	1.571671E-001
Pb-212	@	0.403	4.732001E-001	3.372702E-001
Ac-228		0.617	9.123716E-001	3.284242E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.3907E-001	2.09E-001	-3.2123E-003
	1332.49	100.00	2.0927E-001		-6.2461E-002
Nb-94	702.63	100.00	2.4591E-001	2.05E-001	-1.0907E-002
	871.10	100.00	2.0543E-001		-1.3742E-001
Ag-108m	79.20	7.10	1.2833E+001	2.49E-001	-1.3632E+001
	433.93	89.90	2.7013E-001		-7.0841E-002
	614.37	90.40	2.4865E-001		-6.0267E-001
	722.95	90.50	2.9835E-001		3.0731E-001
Sb-125	176.33	6.89	4.6806E+000	7.66E-001	1.1895E+000
	427.89	29.33	7.6623E-001		7.7691E-002
	463.38	10.35	2.2233E+000		4.0051E-001
	600.56	17.80	1.3481E+000		-7.4380E-001
	606.64	5.02	6.0041E+000		1.0967E+001
	635.90	11.32	2.0758E+000		-1.2993E+000
Cs-134	563.23	8.38	2.6139E+000	2.83E-001	-2.7038E+000
	569.32	15.43	1.4833E+000		-2.0807E+000
	604.70	97.60	3.0255E-001		3.1766E-001
	795.84	85.40	2.8314E-001		-8.4513E-002
	801.93	8.73	2.3539E+000		-6.2019E-001
Cs-137	661.65	85.12	3.1059E-001	3.11E-001	1.6288E-002
Eu-152	121.78	28.40	1.5581E+000	8.47E-001	-2.3853E-001
	244.69	7.49	4.2473E+000		-7.0713E-001
	344.27	26.50	1.0503E+000		-1.7611E-001
	778.89	12.74	1.8348E+000		1.0184E+000
	867.32	4.16	5.0819E+000		2.9323E+000
	964.01	14.40	1.8469E+000		-1.0840E+000
	1085.78	10.00	2.2114E+000		-4.2391E-001
	1112.02	13.30	1.6704E+000		-2.9782E+000
	1407.95	20.70	8.4687E-001		5.8776E-001
Eu-154	123.07	40.50	1.0706E+000	5.68E-001	-1.9408E-001
	247.94	6.60	4.5013E+000		-8.8344E-001
	591.81	4.83	4.6024E+000		-3.5370E+000
	723.30	19.70	1.3635E+000		1.2198E+000
	756.87	4.33	4.5883E+000		-5.9973E+000
	873.19	11.50	1.9106E+000		-5.1505E-001
	996.32	10.30	2.0912E+000		1.8200E+000
	1004.76	17.90	1.2629E+000		5.8341E-001
	1274.45	35.50	5.6771E-001		8.8060E-002
Eu-155	86.54	30.90	2.4888E+000	2.49E+000	9.1905E-001
	105.31	20.70	2.7552E+000		6.7556E-001
Am-241	59.54	35.90	4.5447E+000	4.54E+000	-9.5683E-002
Cm-243	228.19	10.56	2.8772E+000	2.13E+000	-9.3465E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	2.1309E+000	2.13E+000	1.3162E+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 7:19:36 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-08-06-131-F-
Sample Title: OOL-08-06-131-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/8/2006 7:09:40 PM
Live Time: 600.0 seconds
Real Time: 600.5 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-08-06-131-F-
Title: OOL-08-06-131-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	296-	305	299.06	74.85	0.99	5.27E+001	51.49	2.80E+002
2	947-	960	953.60	238.50	0.91	6.18E+001	42.04	1.39E+002
3	2322-	2336	2329.45	582.48	0.43	6.77E+001	23.61	2.63E+001
4	2423-	2441	2434.00	608.62	0.95	6.60E+001	22.36	1.90E+001
5	3633-	3647	3639.77	910.08	0.68	4.13E+001	19.86	2.07E+001
6	5827-	5850	5838.59	1459.82	1.92	3.38E+002	38.51	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	0.963	1460.81*	10.67	2.22198E+001	3.10567E+000
TL-208	0.462	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	4.38987E-001	1.63794E-001
		860.37	12.46		
Pb-212	0.566	74.81* @	10.70	4.68933E+000	4.67527E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.04587E-001	4.22143E-001
Bi-214	0.394	609.31*	46.30	7.88862E-001	2.84809E-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		0.963	2.221980E+001	3.105666E+000
TL-208		0.462	4.389867E-001	1.637937E-001
Pb-212	@	0.566	6.045873E-001	4.221429E-001
Bi-214		0.394	7.888619E-001	2.848090E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	910.08	6.8790E-002	48.12

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	2.4503E-001	2.02E-001	7.0338E-002
	1332.49	100.00	2.0156E-001		2.3335E-001
Nb-94	702.63	100.00	2.3799E-001	2.18E-001	3.9596E-002
	871.10	100.00	2.1763E-001		-9.3966E-002
Ag-108m	79.20	7.10	1.2540E+001	2.56E-001	-5.0195E+000
	433.93	89.90	2.6881E-001		-1.4751E-001
	614.37	90.40	2.5558E-001		-9.3779E-002
	722.95	90.50	3.0304E-001		8.5247E-002
Sb-125	176.33	6.89	4.7392E+000	8.60E-001	-7.4177E-001
	427.89	29.33	8.5993E-001		2.2281E-002
	463.38	10.35	2.5173E+000		7.1009E-001
	600.56	17.80	1.2978E+000		4.3321E-001
	606.64	5.02	5.7691E+000		4.2872E+000
	635.90	11.32	2.0758E+000		7.0125E-001
Cs-134	563.23	8.38	2.8602E+000	2.73E-001	9.3007E-001
	569.32	15.43	1.5024E+000		5.3714E-001
	604.70	97.60	3.0013E-001		7.3569E-003
	795.84	85.40	2.7309E-001		8.5535E-002
	801.93	8.73	2.3307E+000		-3.8301E-001
Cs-137	661.65	85.12	3.3731E-001	3.37E-001	2.5129E-001
Eu-152	121.78	28.40	1.6119E+000	7.08E-001	9.2081E-001
	244.69	7.49	4.2382E+000		-2.2011E+000
	344.27	26.50	1.0807E+000		-2.8404E-001
	778.89	12.74	1.8075E+000		-7.2682E-001
	867.32	4.16	4.8310E+000		-2.6501E+000
	964.01	14.40	2.0537E+000		8.9397E-001
	1085.78	10.00	2.3150E+000		1.9653E+000
	1112.02	13.30	1.3876E+000		-1.4551E+000
	1407.95	20.70	7.0796E-001		2.8281E-001
Eu-154	123.07	40.50	1.1227E+000	5.82E-001	7.4555E-001
	247.94	6.60	4.7080E+000		-3.9512E-001
	591.81	4.83	5.0655E+000		-5.0395E-001
	723.30	19.70	1.3852E+000		2.8922E-001
	756.87	4.33	5.5181E+000		-4.3360E-001
	873.19	11.50	1.9609E+000		2.3450E-001
	996.32	10.30	2.2297E+000		7.6715E-001
	1004.76	17.90	1.2851E+000		2.4381E-001
	1274.45	35.50	5.8189E-001		-4.6347E-003
Eu-155	86.54	30.90	2.4967E+000	2.50E+000	1.9889E+000
	105.31	20.70	2.5968E+000		9.1666E-001
Am-241	59.54	35.90	4.1348E+000	4.13E+000	4.7030E-001
Cm-243	228.19	10.56	2.8242E+000	1.96E+000	-7.3138E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.9649E+000	1.96E+000	3.0926E-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 8:37:06 PM

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

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

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-08-06-132-F-
Sample Title: OOL-08-06-132-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/8/2006 8:27:04 PM
Live Time: 600.0 seconds
Real Time: 600.4 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-08-06-132-F-
Title: OOL-08-06-132-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-	959	953.33	238.43	0.62	7.05E+001	34.95	8.95E+001
2	2324-	2335	2328.75	582.31	0.86	4.75E+001	20.96	2.65E+001
3	2425-	2438	2431.85	608.08	0.97	3.03E+001	19.88	2.57E+001
4	5826-	5849	5836.61	1459.32	1.80	3.11E+002	34.56	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	0.918	1460.81*	10.67	2.04410E+001	2.81071E+000
TL-208	0.455	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.08244E-001	1.41944E-001
		860.37	12.46		
Pb-212	0.402	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.89452E-001	3.58598E-001
Bi-214	0.371	609.31*	46.30	3.62214E-001	2.41798E-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		0.918	2.044098E+001	2.810710E+000
TL-208		0.455	3.082436E-001	1.419442E-001
Pb-212	@	0.402	6.894518E-001	3.585982E-001
Bi-214		0.371	3.622136E-001	2.417983E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	2.2875E-001	1.73E-001	6.4245E-003
	1332.49	100.00	1.7315E-001		-3.3336E-003
Nb-94	702.63	100.00	2.1595E-001	2.01E-001	-2.4664E-003
	871.10	100.00	2.0118E-001		-1.8124E-001
Ag-108m	79.20	7.10	1.1908E+001	2.36E-001	-1.1708E+001
	433.93	89.90	2.3634E-001		-5.5834E-002
	614.37	90.40	2.4865E-001		-1.4585E-001
	722.95	90.50	2.5932E-001		1.9282E-001
Sb-125	176.33	6.89	4.3931E+000	7.92E-001	2.2014E+000
	427.89	29.33	7.9181E-001		1.0505E-001
	463.38	10.35	2.3337E+000		9.6609E-001
	600.56	17.80	1.2274E+000		1.2288E-001
	606.64	5.02	5.4478E+000		3.1104E+000
	635.90	11.32	2.0482E+000		-2.1857E-001
Cs-134	563.23	8.38	2.6139E+000	2.73E-001	-2.2968E+000
	569.32	15.43	1.4833E+000		9.9473E-001
	604.70	97.60	2.7330E-001		1.3475E-004
	795.84	85.40	2.7916E-001		1.2041E-001
	801.93	8.73	2.4883E+000		8.1631E-001
Cs-137	661.65	85.12	2.6805E-001	2.68E-001	1.2784E-001
Eu-152	121.78	28.40	1.4369E+000	8.47E-001	1.9276E-001
	244.69	7.49	3.6599E+000		3.6128E-001
	344.27	26.50	8.8581E-001		8.3748E-002
	778.89	12.74	1.6175E+000		1.0512E-001
	867.32	4.16	5.0819E+000		2.4475E+000
	964.01	14.40	1.9587E+000		2.0666E+000
	1085.78	10.00	2.0797E+000		3.8576E-001
	1112.02	13.30	1.7939E+000		-4.8169E-001
	1407.95	20.70	8.4687E-001		3.5702E-001
Eu-154	123.07	40.50	1.0209E+000	6.02E-001	7.5780E-001
	247.94	6.60	3.8901E+000		-1.1001E+000
	591.81	4.83	4.3337E+000		-2.1863E+000
	723.30	19.70	1.1915E+000		1.0369E+000
	756.87	4.33	4.9049E+000		-2.5625E+000
	873.19	11.50	1.8413E+000		4.6027E-001
	996.32	10.30	2.0912E+000		4.4681E-002
	1004.76	17.90	1.0932E+000		5.0504E-001
	1274.45	35.50	6.0248E-001		-2.9775E-001
Eu-155	86.54	30.90	2.3486E+000	2.34E+000	1.8667E+000
	105.31	20.70	2.3357E+000		-1.9616E+000
Am-241	59.54	35.90	3.8182E+000	3.82E+000	-2.3789E-001
Cm-243	228.19	10.56	2.7081E+000	1.76E+000	2.4416E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.7559E+000	1.76E+000	-1.2540E+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 9:14:06 PM

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

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

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-08-06-133-F-
Sample Title: OOL-08-06-133-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/8/2006 9:04:04 PM
Live Time: 600.0 seconds
Real Time: 600.5 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-08-06-133-F-
Title: OOL-08-06-133-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	948-	960	953.61	238.50	1.19	1.16E+002	40.39	1.14E+002
2	2323-	2338	2330.70	582.79	0.87	6.88E+001	27.04	4.02E+001
3	2428-	2443	2436.05	609.13	0.41	4.89E+001	22.89	2.91E+001
4	2638-	2652	2644.24	661.18	0.80	2.93E+001	20.40	2.67E+001
5	3638-	3651	3644.39	911.23	0.50	3.80E+001	21.06	2.80E+001
6	5832-	5856	5844.02	1461.18	1.57	4.22E+002	41.40	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: 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	2.77558E+001	3.53047E+000
Cs-137	0.992	661.65*		85.12	1.95119E-001	1.37843E-001
TL-208	0.470	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	4.46196E-001	1.85123E-001
		860.37		12.46		
Pb-212	0.403	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	1.13100E+000	4.33197E-001
Bi-214	0.404	609.31*		46.30	5.84667E-001	2.83214E-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	2.775581E+001	3.530470E+000
Cs-137		0.992	1.951190E-001	1.378429E-001
TL-208		0.470	4.461965E-001	1.851232E-001
Pb-212	@	0.403	1.131004E+000	4.331973E-001
Bi-214		0.404	5.846672E-001	2.832135E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	911.23	6.3333E-002	55.42

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	2.3294E-001	2.09E-001	-1.0140E-001
		1332.49	100.00	2.0927E-001		8.3340E-002
	Nb-94	702.63	100.00	2.0679E-001	2.07E-001	-1.7840E-001
		871.10	100.00	2.3648E-001		1.2925E-001
	Ag-108m	79.20	7.10	1.2914E+001	2.85E-001	-1.0640E+001
		433.93	89.90	2.9758E-001		-9.1925E-002
		614.37	90.40	2.8908E-001		-5.6807E-003
		722.95	90.50	2.8542E-001		-8.3941E-002
	Sb-125	176.33	6.89	4.7392E+000	8.97E-001	-2.8365E-001
		427.89	29.33	8.9746E-001		4.6214E-002
		463.38	10.35	2.4388E+000		4.1236E-001
		600.56	17.80	1.5389E+000		2.8978E-001
		606.64	5.02	5.7691E+000		5.8061E-001
		635.90	11.32	2.1029E+000		6.5049E-001
	Cs-134	563.23	8.38	3.0072E+000	3.04E-001	3.7161E-001
		569.32	15.43	1.7392E+000		1.2306E-001
		604.70	97.60	3.0615E-001		-2.4483E-001
		795.84	85.40	3.0402E-001		2.5718E-001
		801.93	8.73	2.6357E+000		3.6280E-001
+	Cs-137	661.65*	85.12	2.1290E-001	2.13E-001	1.9512E-001
	Eu-152	121.78	28.40	1.5633E+000	7.81E-001	2.9616E-001
		244.69	7.49	4.1368E+000		-6.8838E-001
		344.27	26.50	9.7544E-001		-4.6511E-001
		778.89	12.74	1.7936E+000		1.4659E-001
		867.32	4.16	5.5026E+000		7.3869E-001
		964.01	14.40	2.0640E+000		1.6615E-001
		1085.78	10.00	2.2326E+000		-1.7308E-001
		1112.02	13.30	1.6543E+000		-2.0852E-002
		1407.95	20.70	7.8091E-001		1.9096E-002
	Eu-154	123.07	40.50	1.0779E+000	5.96E-001	-5.2944E-002
		247.94	6.60	4.3885E+000		5.1972E-001
		591.81	4.83	5.1815E+000		1.2860E+000
		723.30	19.70	1.3037E+000		-5.4877E-001
		756.87	4.33	5.9604E+000		3.7874E+000
		873.19	11.50	2.0099E+000		-1.5981E+000
		996.32	10.30	2.1715E+000		-4.2895E-001
		1004.76	17.90	1.1569E+000		4.8601E-001
		1274.45	35.50	5.9570E-001		-5.5501E-001
	Eu-155	86.54	30.90	2.4450E+000	2.45E+000	1.5721E+000
		105.31	20.70	2.5836E+000		-1.1358E+000
	Am-241	59.54	35.90	3.9732E+000	3.97E+000	-2.4816E-001
	Cm-243	228.19	10.56	3.0734E+000	2.13E+000	-5.8032E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	2.1254E+000	2.13E+000	1.2770E+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 9:33:00 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-08-06-134-F-
Sample Title: OOL-08-06-134-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/8/2006 9:22:58 PM
Live Time: 600.0 seconds
Real Time: 600.3 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-08-06-134-F-
Title: OOL-08-06-134-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-	5857	5842.82	1460.88	3.24	3.97E+002	42.54	1.53E+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
K-40	1.000	1460.81*	10.67	2.60869E+001	3.50523E+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
K-40	1.000	2.608687E+001	3.505234E+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: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	2.3086E-001	1.67E-001	1.3139E-001
	1332.49	100.00	1.6681E-001		-6.2396E-002
Nb-94	702.63	100.00	2.5205E-001	2.31E-001	6.5351E-002
	871.10	100.00	2.3100E-001		8.6881E-002
Ag-108m	79.20	7.10	1.2457E+001	2.48E-001	-2.3095E+001
	433.93	89.90	2.8044E-001		-1.2007E-002
	614.37	90.40	2.5728E-001		-3.3385E-001
	722.95	90.50	2.4806E-001		1.6006E-001
Sb-125	176.33	6.89	4.6126E+000	8.52E-001	-7.0753E-001
	427.89	29.33	8.5222E-001		-1.6567E-001
	463.38	10.35	2.3575E+000		5.2122E-001
	600.56	17.80	1.2893E+000		6.9078E-001
	606.64	5.02	5.7691E+000		7.2537E+000
	635.90	11.32	1.8117E+000		-9.4104E-001
Cs-134	563.23	8.38	2.7400E+000	2.85E-001	-2.3210E+000
	569.32	15.43	1.4833E+000		1.2941E-001
	604.70	97.60	2.9022E-001		2.8568E-001
	795.84	85.40	2.8511E-001		-1.3592E-001
	801.93	8.73	2.5526E+000		-7.4251E-001
Cs-137	661.65	85.12	3.2659E-001	3.27E-001	2.8562E-001
Eu-152	121.78	28.40	1.5937E+000	9.14E-001	7.6701E-001
	244.69	7.49	3.7953E+000		-4.0414E+000
	344.27	26.50	9.1407E-001		-2.5498E-001
	778.89	12.74	1.6019E+000		1.4801E+000
	867.32	4.16	5.5914E+000		1.2097E+000
	964.01	14.40	1.8119E+000		6.6216E-002
	1085.78	10.00	1.9134E+000		-1.1754E-002
	1112.02	13.30	1.7179E+000		-3.7050E-001
	1407.95	20.70	9.2200E-001		8.1596E-002
Eu-154	123.07	40.50	1.0923E+000	6.29E-001	5.7313E-002
	247.94	6.60	4.2725E+000		-4.6615E-001
	591.81	4.83	4.6348E+000		1.7434E+000
	723.30	19.70	1.1572E+000		9.3083E-001
	756.87	4.33	4.8610E+000		7.5464E-001
	873.19	11.50	1.9276E+000		-1.9498E+000
	996.32	10.30	2.1517E+000		1.2120E+000
	1004.76	17.90	1.1569E+000		-7.5513E-001
	1274.45	35.50	6.2880E-001		4.8603E-001
Eu-155	86.54	30.90	2.4789E+000	2.48E+000	9.4462E-001
	105.31	20.70	2.5783E+000		-1.1703E+000
Am-241	59.54	35.90	3.7558E+000	3.76E+000	-1.8913E+000
Cm-243	228.19	10.56	2.9928E+000	1.99E+000	-4.4409E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.9945E+000	1.99E+000	2.9256E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 9:51:36 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-08-06-135-F-
Sample Title: OOL-08-06-135-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/8/2006 9:41:34 PM
Live Time: 600.0 seconds
Real Time: 600.3 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-08-06-135-F-
Title: OOL-08-06-135-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	3778-	3789	3783.04	945.90	0.83	8.00E+000	9.44	6.00E+000
2	5830-	5858	5843.95	1461.16	2.11	2.65E+002	40.29	3.47E+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: 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	1.74518E+001	3.00310E+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
K-40	0.995	1.745176E+001	3.003095E+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	945.90	1.3333E-002	117.97

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

Errors quoted at 1.960 sigma

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

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAMS)	Nuclide MDA (pCi/GRAMS)	Activity (pCi/GRAMS)
Co-60	1173.22	100.00	2.2231E-001	1.70E-001	1.8969E-001
	1332.49	100.00	1.7001E-001		4.0351E-002
Nb-94	702.63	100.00	2.0679E-001	2.05E-001	-1.3106E-001
	871.10	100.00	2.0543E-001		3.7248E-002
Ag-108m	79.20	7.10	1.1908E+001	2.26E-001	2.9297E+000
	433.93	89.90	2.6881E-001		-1.7438E-002
	614.37	90.40	2.9057E-001		-2.2196E-001
	722.95	90.50	2.2584E-001		-1.1465E-002
Sb-125	176.33	6.89	4.3113E+000	8.37E-001	-1.1557E+000
	427.89	29.33	8.3656E-001		1.4927E-001
	463.38	10.35	2.3337E+000		-4.2604E-001
	600.56	17.80	1.1523E+000		-3.2205E-001
	606.64	5.02	5.5985E+000		6.4152E+000
	635.90	11.32	1.8585E+000		-1.1383E+000
Cs-134	563.23	8.38	2.8769E+000	2.23E-001	1.7374E+000
	569.32	15.43	1.4342E+000		1.1597E-001
	604.70	97.60	2.6511E-001		-2.4023E-001
	795.84	85.40	2.2304E-001		-1.0412E-001
	801.93	8.73	2.4444E+000		1.0164E+000
Cs-137	661.65	85.12	2.8299E-001	2.83E-001	7.5621E-002
Eu-152	121.78	28.40	1.4144E+000	7.08E-001	-2.3461E-001
	244.69	7.49	3.7542E+000		-8.1094E-001
	344.27	26.50	9.2982E-001		-5.9735E-001
	778.89	12.74	1.5861E+000		-1.1920E+000
	867.32	4.16	4.9832E+000		-4.0099E+000
	964.01	14.40	1.4863E+000		-1.2220E+000
	1085.78	10.00	2.0102E+000		-1.4970E-001
	1112.02	13.30	1.5536E+000		8.3661E-001
	1407.95	20.70	7.0796E-001		5.3137E-001
Eu-154	123.07	40.50	9.9244E-001	4.64E-001	2.8829E-001
	247.94	6.60	4.2371E+000		1.5065E+000
	591.81	4.83	4.1562E+000		-4.4796E+000
	723.30	19.70	1.0376E+000		9.5448E-002
	756.87	4.33	4.4452E+000		-3.7636E+000
	873.19	11.50	1.6540E+000		-1.2342E+000
	996.32	10.30	2.0912E+000		1.2954E-001
	1004.76	17.90	1.1692E+000		-2.5509E-001
	1274.45	35.50	4.6384E-001		5.8438E-002
Eu-155	86.54	30.90	2.2081E+000	2.21E+000	3.7407E-001
	105.31	20.70	2.3150E+000		7.0855E-001
Am-241	59.54	35.90	3.8045E+000	3.80E+000	-4.5988E-001
Cm-243	228.19	10.56	2.8706E+000	1.74E+000	1.9216E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.7424E+000	1.74E+000	-6.3400E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 10:11:51 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-08-06-136-F-
Sample Title: OOL-08-06-136-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/8/2006 10:01:50 PM
Live Time: 600.0 seconds
Real Time: 600.4 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-08-06-136-F-
Title: OOL-08-06-136-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	947-	962	953.80	238.55	0.59	7.90E+001	44.32	1.44E+002
2	3636-	3650	3643.03	910.90	0.28	2.31E+001	19.96	2.79E+001
3	5830-	5857	5843.42	1461.03	2.48	3.58E+002	40.77	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
K-40	0.998	1460.81*		10.67	2.35505E+001	3.29035E+000
Pb-212	0.403	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.73001E-001	4.50287E-001

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

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

I N T E R 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	2.355052E+001	3.290350E+000
Pb-212 @	0.403	7.730015E-001	4.502872E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	910.90	3.8480E-002	86.45

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	2.5085E-001	2.21E-001	-5.5109E-002
	1332.49	100.00	2.2146E-001		7.4774E-002
Nb-94	702.63	100.00	2.3475E-001	2.16E-001	-2.3148E-002
	871.10	100.00	2.1565E-001		-3.4462E-002
Ag-108m	79.20	7.10	1.2647E+001	2.73E-001	-1.5993E+001
	433.93	89.90	2.7275E-001		-3.7966E-002
	614.37	90.40	2.7839E-001		-1.3900E-001
	722.95	90.50	2.7357E-001		-5.1218E-002
Sb-125	176.33	6.89	4.6467E+000	8.97E-001	1.5712E+000
	427.89	29.33	8.9746E-001		-6.1192E-002
	463.38	10.35	2.4952E+000		1.7349E+000
	600.56	17.80	1.4043E+000		-8.4421E-002
	606.64	5.02	6.1180E+000		6.5379E+000
	635.90	11.32	2.1693E+000		5.3974E-002
Cs-134	563.23	8.38	3.2366E+000	2.67E-001	1.6816E+000
	569.32	15.43	1.6298E+000		4.0913E-001
	604.70	97.60	2.9521E-001		-6.4980E-002
	795.84	85.40	2.6686E-001		1.2927E-001
	801.93	8.73	2.2836E+000		-2.2019E+000
Cs-137	661.65	85.12	3.1386E-001	3.14E-001	1.6219E-001
Eu-152	121.78	28.40	1.5953E+000	9.26E-001	-4.1463E-001
	244.69	7.49	4.3015E+000		-4.7769E-001
	344.27	26.50	9.2591E-001		-7.8300E-001
	778.89	12.74	1.8075E+000		-1.8688E-001
	867.32	4.16	5.4575E+000		1.7583E+000
	964.01	14.40	2.0121E+000		-4.1757E-003
	1085.78	10.00	1.8629E+000		-4.7227E-001
	1112.02	13.30	1.7939E+000		-4.4776E-001
	1407.95	20.70	9.3622E-001		-3.0997E-001
Eu-154	123.07	40.50	1.1053E+000	6.72E-001	2.3538E-001
	247.94	6.60	4.4902E+000		-3.9304E+000
	591.81	4.83	4.6989E+000		-1.5776E+000
	723.30	19.70	1.2569E+000		-4.2632E-001
	756.87	4.33	5.7805E+000		-1.1691E+000
	873.19	11.50	1.9276E+000		9.9278E-001
	996.32	10.30	1.8968E+000		-9.3113E-001
	1004.76	17.90	1.2402E+000		-1.4542E-001
	1274.45	35.50	6.7217E-001		2.5491E-001
Eu-155	86.54	30.90	2.3922E+000	2.39E+000	1.2293E+000
	105.31	20.70	2.4809E+000		-3.0486E-001
Am-241	59.54	35.90	4.2039E+000	4.20E+000	1.4567E+000
Cm-243	228.19	10.56	2.9801E+000	1.96E+000	-1.0976E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.9649E+000	1.96E+000	-2.2202E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 10:28:06 PM

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

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

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-08-06-137-F-
Sample Title: OOL-08-06-137-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/8/2006 10:18:04 PM
Live Time: 600.0 seconds
Real Time: 600.4 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-08-06-137-F-
Title: OOL-08-06-137-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	5828-	5855	5843.36	1461.01	1.90	3.60E+002	44.35	3.42E+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
K-40	0.998	1460.81*	10.67	2.36618E+001	3.48955E+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
K-40	0.998	2.366176E+001	3.489552E+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: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	1.9921E-001	1.76E-001	3.4901E-002
	1332.49	100.00	1.7622E-001		5.3530E-002
Nb-94	702.63	100.00	2.4746E-001	2.14E-001	1.0516E-001
	871.10	100.00	2.1365E-001		7.1412E-002
Ag-108m	79.20	7.10	1.2325E+001	2.75E-001	-1.1515E+001
	433.93	89.90	2.7534E-001		7.1080E-002
	614.37	90.40	2.9354E-001		-2.2630E-001
	722.95	90.50	2.8871E-001		-8.7877E-002
Sb-125	176.33	6.89	4.6211E+000	8.56E-001	-2.8733E-001
	427.89	29.33	8.5608E-001		-1.3011E-001
	463.38	10.35	2.2607E+000		-1.1725E+000
	600.56	17.80	1.3148E+000		4.4902E-001
	606.64	5.02	5.7691E+000		7.6527E+000
	635.90	11.32	2.0343E+000		3.5744E-001
Cs-134	563.23	8.38	3.1318E+000	2.63E-001	-1.9127E-002
	569.32	15.43	1.6812E+000		7.1067E-003
	604.70	97.60	2.7060E-001		-1.3997E-002
	795.84	85.40	2.6262E-001		4.7311E-002
	801.93	8.73	2.4221E+000		-1.5816E+000
Cs-137	661.65	85.12	3.2503E-001	3.25E-001	1.1242E-001
Eu-152	121.78	28.40	1.5041E+000	6.47E-001	-6.3815E-001
	244.69	7.49	4.1180E+000		1.2064E-001
	344.27	26.50	9.0207E-001		-4.8420E-001
	778.89	12.74	1.7371E+000		-7.4977E-001
	867.32	4.16	5.4121E+000		-1.3387E+000
	964.01	14.40	1.7397E+000		-9.1107E-003
	1085.78	10.00	2.1246E+000		1.4003E+000
	1112.02	13.30	1.6048E+000		-4.3651E-001
	1407.95	20.70	6.4701E-001		-5.0647E-001
Eu-154	123.07	40.50	1.0361E+000	5.89E-001	6.2917E-002
	247.94	6.60	4.5124E+000		7.4753E-001
	591.81	4.83	4.5036E+000		-2.2603E+000
	723.30	19.70	1.3707E+000		7.1289E-001
	756.87	4.33	4.8167E+000		3.1046E+000
	873.19	11.50	1.8589E+000		3.3984E-001
	996.32	10.30	1.9858E+000		-1.0180E-001
	1004.76	17.90	1.1569E+000		2.6994E-001
	1274.45	35.50	5.8884E-001		1.6637E-002
Eu-155	86.54	30.90	2.4065E+000	2.41E+000	1.3984E+000
	105.31	20.70	2.4698E+000		-8.1763E-001
Am-241	59.54	35.90	3.8999E+000	3.90E+000	-4.1666E-001
Cm-243	228.19	10.56	3.1400E+000	2.08E+000	-2.7948E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	2.0809E+000	2.08E+000	-1.8015E-001

+ = Nuclide identified during the nuclide identification
* = Energy 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 10:49:39 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-08-06-138-F-
Sample Title: OOL-08-06-138-F-G
Description: 30% CONCRETE & STEEL

Sample Type:
Geometry:

Acquisition Started: 8/8/2006 10:39:37 PM
Live Time: 600.0 seconds
Real Time: 600.4 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-08-06-138-F-
Title: OOL-08-06-138-F-G
Description: 30% CONCRETE & STEEL

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	946-	959	954.12	238.63	1.16	9.20E+001	34.17	7.70E+001
2	2326-	2337	2331.21	582.92	1.33	4.32E+001	21.53	3.08E+001
3	3637-	3652	3643.27	910.96	1.11	3.22E+001	18.14	1.78E+001
4	5831-	5854	5843.15	1460.96	1.46	3.11E+002	35.83	5.85E+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
K-40	0.999	1460.81*		10.67	2.04633E+001	2.88082E+000
TL-208	0.472	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	2.80238E-001	1.44560E-001
		860.37		12.46		
Pb-212	0.403	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	9.00675E-001	3.62979E-001

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

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

I N T E R 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	2.046326E+001	2.880822E+000
TL-208	0.472	2.802377E-001	1.445597E-001
Pb-212 @	0.403	9.006751E-001	3.629789E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	910.96	5.3650E-002	56.36

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: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	2.2231E-001	1.99E-001	5.8095E-004
	1332.49	100.00	1.9892E-001		1.8786E-001
Nb-94	702.63	100.00	2.2124E-001	2.21E-001	1.7362E-002
	871.10	100.00	2.2154E-001		2.1667E-001
Ag-108m	79.20	7.10	1.1410E+001	2.38E-001	-1.1004E+001
	433.93	89.90	2.3785E-001		-8.9286E-002
	614.37	90.40	2.5214E-001		-5.5213E-001
	722.95	90.50	2.9034E-001		3.3604E-001
Sb-125	176.33	6.89	4.2744E+000	7.53E-001	5.3247E-001
	427.89	29.33	7.5310E-001		-6.6745E-002
	463.38	10.35	2.1594E+000		-5.4802E-001
	600.56	17.80	1.1905E+000		-4.5807E-001
	606.64	5.02	5.6478E+000		5.9825E+000
	635.90	11.32	1.7306E+000		-9.1241E-001
Cs-134	563.23	8.38	2.6867E+000	2.26E-001	-8.4215E-001
	569.32	15.43	1.4540E+000		-6.8536E-001
	604.70	97.60	2.7195E-001		-1.1779E-001
	795.84	85.40	2.2558E-001		-1.8022E-001
	801.93	8.73	2.3073E+000		-4.2516E-001
Cs-137	661.65	85.12	2.6997E-001	2.70E-001	9.5885E-002
Eu-152	121.78	28.40	1.4369E+000	7.63E-001	7.2368E-001
	244.69	7.49	3.5631E+000		-2.3659E-002
	344.27	26.50	8.3936E-001		-3.5502E-002
	778.89	12.74	1.5211E+000		1.1545E-001
	867.32	4.16	5.1305E+000		5.8176E-001
	964.01	14.40	1.6382E+000		-5.4059E-001
	1085.78	10.00	1.9625E+000		-1.0349E+000
	1112.02	13.30	1.6215E+000		-1.5001E+000
	1407.95	20.70	7.6342E-001		4.0771E-001
Eu-154	123.07	40.50	1.0003E+000	3.84E-001	1.8018E-001
	247.94	6.60	4.0922E+000		3.6385E+000
	591.81	4.83	4.2282E+000		-1.5339E+000
	723.30	19.70	1.3414E+000		2.0209E+000
	756.87	4.33	5.1596E+000		9.3878E-002
	873.19	11.50	1.8055E+000		-2.0448E-001
	996.32	10.30	1.9418E+000		9.2914E-001
	1004.76	17.90	1.1319E+000		1.4867E-003
	1274.45	35.50	3.8424E-001		-4.3103E-001
Eu-155	86.54	30.90	2.2762E+000	2.28E+000	1.7267E+000
	105.31	20.70	2.3735E+000		2.0899E-001
Am-241	59.54	35.90	3.6708E+000	3.67E+000	1.4966E+000
Cm-243	228.19	10.56	2.7565E+000	1.74E+000	-1.1343E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.7424E+000	1.74E+000	-2.5212E-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 8/9/2006 12:14:20 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-08-06-139-F-
Sample Title: OOL-08-06-139-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/9/2006 12:04:18 AM
Live Time: 600.0 seconds
Real Time: 600.5 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-08-06-139-F-
Title: OOL-08-06-139-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-	959	953.25	238.41	1.32	1.22E+002	39.26	9.72E+001
2	1402-	1411	1406.23	351.66	0.57	2.96E+001	19.96	3.24E+001
3	2324-	2337	2330.67	582.79	1.32	5.70E+001	19.16	1.40E+001
4	2430-	2442	2435.26	608.94	0.80	4.36E+001	21.20	2.74E+001
5	2639-	2651	2643.68	661.04	0.87	3.88E+001	21.00	2.72E+001
6	3869-	3880	3874.24	968.70	1.14	1.67E+001	14.29	1.43E+001
7	5831-	5854	5842.50	1460.80	1.55	3.63E+002	40.22	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	1.000	1460.81*		10.67	2.38971E+001	3.27702E+000
Cs-137	0.986	661.65*		85.12	2.58350E-001	1.43181E-001
TL-208	0.470	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	3.69825E-001	1.33604E-001
		860.37		12.46		
Pb-212	0.402	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	1.19213E+000	4.27149E-001
Bi-214	0.402	609.31*		46.30	5.21485E-001	2.61593E-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	1.000	2.389708E+001	3.277019E+000
Cs-137	0.986	2.583503E-001	1.431813E-001
TL-208	0.470	3.698252E-001	1.336040E-001
Pb-212 @	0.402	1.192128E+000	4.271485E-001
Bi-214	0.402	5.214852E-001	2.615932E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	351.66	4.9341E-002	67.43
6	968.70	2.7823E-002	85.57

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	2.4893E-001	1.85E-001	2.6373E-001
		1332.49	100.00	1.8509E-001		1.0834E-001
	Nb-94	702.63	100.00	2.2470E-001	2.05E-001	-7.8870E-002
		871.10	100.00	2.0543E-001		-6.8137E-002
	Ag-108m	79.20	7.10	1.2349E+001	2.59E-001	-1.0525E+001
		433.93	89.90	2.6616E-001		-2.5315E-002
		614.37	90.40	2.8302E-001		4.2263E-003
		722.95	90.50	2.5932E-001		-7.8355E-002
	Sb-125	176.33	6.89	4.4557E+000	8.52E-001	1.2890E+000
		427.89	29.33	8.5222E-001		1.5603E-002
		463.38	10.35	2.4840E+000		2.1975E+000
		600.56	17.80	1.3644E+000		1.2668E+000
		606.64	5.02	5.7451E+000		3.2299E+000
		635.90	11.32	2.0062E+000		8.5437E-001
	Cs-134	563.23	8.38	2.9913E+000	2.93E-001	2.8649E+000
		569.32	15.43	1.5024E+000		4.5375E-002
		604.70	97.60	2.9273E-001		-7.2974E-002
		795.84	85.40	2.9848E-001		3.2055E-001
		801.93	8.73	2.3307E+000		3.5935E-001
+	Cs-137	661.65*	85.12	2.0913E-001	2.09E-001	2.5835E-001
	Eu-152	121.78	28.40	1.5427E+000	7.98E-001	7.9885E-001
		244.69	7.49	3.9941E+000		-2.9293E-001
		344.27	26.50	1.0082E+000		7.3206E-001
		778.89	12.74	1.5701E+000		-9.7676E-001
		867.32	4.16	5.2262E+000		-1.4516E+000
		964.01	14.40	1.9036E+000		-9.0021E-001
		1085.78	10.00	2.2742E+000		1.0437E+000
		1112.02	13.30	1.4264E+000		-8.0849E-002
		1407.95	20.70	7.9798E-001		-4.3214E-001
	Eu-154	123.07	40.50	1.0596E+000	6.22E-001	-1.9684E-001
		247.94	6.60	4.3885E+000		3.0497E+000
		591.81	4.83	4.8859E+000		-1.9191E+000
		723.30	19.70	1.1915E+000		1.8451E-001
		756.87	4.33	4.6811E+000		-1.2211E+000
		873.19	11.50	1.8589E+000		7.9689E-001
		996.32	10.30	1.8739E+000		-1.3320E+000
		1004.76	17.90	1.1814E+000		3.2663E-001
		1274.45	35.50	6.2233E-001		-3.6614E-001
	Eu-155	86.54	30.90	2.3402E+000	2.34E+000	7.6748E-001
		105.31	20.70	2.5138E+000		2.5736E+000
	Am-241	59.54	35.90	3.8729E+000	3.87E+000	1.1611E+000
	Cm-243	228.19	10.56	2.7770E+000	1.95E+000	-7.0389E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.9468E+000	1.95E+000	-4.2864E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 8/9/2006 8:54:33 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-08-06-140-F-
Sample Title: OOL-08-06-140-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/9/2006 8:44:28 AM
Live Time: 600.0 seconds
Real Time: 600.4 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-08-06-140-F-
Title: OOL-08-06-140-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	2432-	2442	2437.30	609.44	0.52	2.49E+001	15.34	1.51E+001
2	2641-	2654	2647.97	662.12	0.88	5.33E+001	21.09	2.27E+001
3	3873-	3885	3878.66	969.81	0.49	2.80E+001	12.60	4.96E+000
4	5838-	5860	5849.51	1462.55	1.97	1.98E+002	28.38	2.94E+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: 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	0.890	1460.81*	10.67	1.30336E+001	2.14529E+000
Cs-137	0.992	661.65*	85.12	3.55235E-001	1.46655E-001
Bi-214	0.405	609.31*	46.30	2.97661E-001	1.87115E-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	0.890	1.303363E+001	2.145295E+000
Cs-137	0.992	3.552348E-001	1.466545E-001
Bi-214	0.405	2.976614E-001	1.871148E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	969.81	4.6730E-002	44.94

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	1.9921E-001	1.70E-001	-4.7707E-002
		1332.49	100.00	1.7001E-001		2.3266E-002
	Nb-94	702.63	100.00	1.8279E-001	1.83E-001	1.0647E-001
		871.10	100.00	1.8780E-001		-1.2604E-002
	Ag-108m	79.20	7.10	1.1172E+001	2.14E-001	-1.3417E+001
		433.93	89.90	2.1399E-001		-1.0878E-001
		614.37	90.40	2.5558E-001		-1.2585E-001
		722.95	90.50	2.2796E-001		1.9239E-002
	Sb-125	176.33	6.89	3.8649E+000	7.07E-001	-1.7967E-001
		427.89	29.33	7.0743E-001		-1.3715E-002
		463.38	10.35	1.9542E+000		-1.2977E+000
		600.56	17.80	1.1716E+000		-4.0827E-001
		606.64	5.02	4.8236E+000		2.6580E-001
		635.90	11.32	1.7471E+000		-1.3972E+000
	Cs-134	563.23	8.38	2.5004E+000	2.28E-001	7.2599E-001
		569.32	15.43	1.4242E+000		-5.5017E-001
		604.70	97.60	2.3403E-001		-3.5030E-002
		795.84	85.40	2.2809E-001		1.9667E-002
		801.93	8.73	2.0831E+000		-9.3205E-001
+	Cs-137	661.65*	85.12	1.9136E-001	1.91E-001	3.5523E-001
	Eu-152	121.78	28.40	1.2834E+000	4.68E-001	6.4688E-001
		244.69	7.49	3.2183E+000		-4.8356E-001
		344.27	26.50	7.7596E-001		-5.2755E-001
		778.89	12.74	1.4704E+000		2.9140E-001
		867.32	4.16	4.6196E+000		-2.4483E+000
		964.01	14.40	1.2289E+000		-1.6321E-001
		1085.78	10.00	1.5835E+000		-5.1388E-001
		1112.02	13.30	1.3678E+000		1.4820E+000
		1407.95	20.70	4.6837E-001		-6.9189E-002
	Eu-154	123.07	40.50	8.7953E-001	4.64E-001	-2.7408E-001
		247.94	6.60	3.5645E+000		-5.8985E-001
		591.81	4.83	3.9702E+000		1.5730E+000
		723.30	19.70	1.0665E+000		3.0405E-001
		756.87	4.33	4.2461E+000		-1.1605E+000
		873.19	11.50	1.7125E+000		-6.4266E-004
		996.32	10.30	1.8270E+000		6.9497E-001
		1004.76	17.90	9.9655E-001		-1.7640E-001
		1274.45	35.50	4.6384E-001		-4.0141E-001
	Eu-155	86.54	30.90	2.0650E+000	2.07E+000	5.2747E-002
		105.31	20.70	2.1359E+000		3.9062E-001
	Am-241	59.54	35.90	3.7065E+000	3.71E+000	-7.3290E-001
	Cm-243	228.19	10.56	2.4818E+000	1.73E+000	1.4376E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.7288E+000	1.73E+000	1.0629E+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 8/9/2006 9:36:40 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-08-06-141-F-
Sample Title: OOL-08-06-141-F-G
Description: vegetation

Sample Type:
Geometry:

Acquisition Started: 8/9/2006 9:26:39 AM
Live Time: 600.0 seconds
Real Time: 600.4 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-08-06-141-F-
Title: OOL-08-06-141-F-G
Description: vegetation

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	947-	959	955.17	238.89	1.00	9.53E+001	35.83	9.07E+001
2	2432-	2443	2437.83	609.58	0.99	4.42E+001	19.08	1.98E+001
3	2643-	2653	2647.04	661.88	0.75	1.47E+001	15.16	1.83E+001
4	3872-	3883	3877.72	969.57	0.87	2.13E+001	14.68	1.37E+001
5	5838-	5861	5849.26	1462.49	1.92	3.62E+002	38.51	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
K-40	0.897	1460.81*		10.67	2.38217E+001	3.18464E+000
Cs-137	0.998	661.65*		85.12	9.78628E-002	1.01698E-001
Pb-212	0.402	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	9.32846E-001	3.80013E-001
Bi-214	0.404	609.31*		46.30	5.28210E-001	2.37497E-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	0.897	2.382170E+001	3.184641E+000
Cs-137	0.998	9.786283E-002	1.016976E-001
Pb-212 @	0.402	9.328463E-001	3.800127E-001
Bi-214	0.404	5.282097E-001	2.374968E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	969.57	3.5548E-002	68.84

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BRN7722
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAMS)	Nuclide MDA (pCi/GRAMS)	Activity (pCi/GRAMS)
	Co-60	1173.22	100.00	2.1111E-001	1.57E-001	-1.7277E-001
		1332.49	100.00	1.5677E-001		3.7836E-002
	Nb-94	702.63	100.00	1.8492E-001	1.85E-001	-6.4743E-002
		871.10	100.00	1.9683E-001		-7.3639E-002
	Ag-108m	79.20	7.10	1.1681E+001	2.45E-001	-1.5650E+001
		433.93	89.90	2.4525E-001		-2.3798E-002
		614.37	90.40	2.9937E-001		-1.4426E-001
		722.95	90.50	2.6655E-001		-4.3215E-002
	Sb-125	176.33	6.89	4.0944E+000	7.75E-001	1.4463E+000
		427.89	29.33	7.7486E-001		-1.6307E-001
		463.38	10.35	1.9970E+000		-5.9947E-002
		600.56	17.80	1.1026E+000		-3.3831E-001
		606.64	5.02	5.4732E+000		7.9157E+000
		635.90	11.32	2.0062E+000		1.8202E+000
	Cs-134	563.23	8.38	2.5767E+000	2.36E-001	1.5770E+000
		569.32	15.43	1.5213E+000		1.0275E+000
		604.70	97.60	2.3561E-001		-3.0038E-001
		795.84	85.40	2.7916E-001		2.3774E-001
		801.93	8.73	2.2596E+000		-5.4737E-001
+	Cs-137	661.65*	85.12	1.6537E-001	1.65E-001	9.7863E-002
	Eu-152	121.78	28.40	1.4106E+000	7.08E-001	1.6346E-001
		244.69	7.49	3.5522E+000		-8.8020E-001
		344.27	26.50	9.2982E-001		4.0085E-001
		778.89	12.74	1.6175E+000		-3.8070E-001
		867.32	4.16	5.3663E+000		7.3730E-001
		964.01	14.40	1.6117E+000		-6.5637E-001
		1085.78	10.00	1.8370E+000		-2.5612E-001
		1112.02	13.30	1.3477E+000		6.1192E-001
		1407.95	20.70	7.0796E-001		2.7451E-001
	Eu-154	123.07	40.50	9.9506E-001	5.46E-001	8.4931E-001
		247.94	6.60	3.9160E+000		-1.9140E-001
		591.81	4.83	4.6670E+000		-2.8072E-001
		723.30	19.70	1.2409E+000		1.4299E-002
		756.87	4.33	5.2415E+000		-7.4910E-001
		873.19	11.50	1.7504E+000		-1.0159E+000
		996.32	10.30	1.8270E+000		-2.7302E+000
		1004.76	17.90	1.2053E+000		1.4544E+000
		1274.45	35.50	5.4567E-001		2.2752E-002
	Eu-155	86.54	30.90	2.1992E+000	2.20E+000	1.1635E+000
		105.31	20.70	2.4363E+000		9.7425E-001
	Am-241	59.54	35.90	4.1412E+000	4.14E+000	7.2437E-001
	Cm-243	228.19	10.56	2.5273E+000	1.92E+000	-3.0226E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.9225E+000	1.92E+000	7.7434E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 8/9/2006 10:08:01 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-08-06-142-F-
Sample Title: OOL-08-06-142-F-G
Description: vegetation and satulated soil

Sample Type:
Geometry:

Acquisition Started: 8/9/2006 9:58:00 AM
Live Time: 600.0 seconds
Real Time: 600.4 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-08-06-142-F-
Title: OOL-08-06-142-F-G
Description: vegetation and satulated soil

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	950-	960	955.07	238.87	1.13	8.37E+001	30.93	6.93E+001
2	1401-	1415	1408.17	352.15	0.85	4.32E+001	30.47	6.88E+001
3	2328-	2340	2333.96	583.61	1.05	5.74E+001	21.89	2.56E+001
4	2433-	2444	2438.09	609.64	0.40	3.97E+001	20.41	2.63E+001
5	3639-	3654	3646.97	911.88	0.35	4.09E+001	20.70	2.31E+001
6	5838-	5863	5849.92	1462.65	1.42	3.29E+002	39.43	1.85E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: 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	0.877	1460.81*	10.67	2.16191E+001	3.13029E+000
TL-208	0.467	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.72581E-001	1.50401E-001
		860.37	12.46		
Pb-212	0.402	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.18788E-001	3.28795E-001
Bi-214	0.403	609.31*	46.30	4.74351E-001	2.51106E-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	0.877	2.161912E+001	3.130290E+000
TL-208	0.467	3.725807E-001	1.504014E-001
Pb-212 @	0.402	8.187880E-001	3.287948E-001
Bi-214	0.403	4.743508E-001	2.511058E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	352.15	7.2057E-002	70.48
5	911.88	6.8190E-002	50.59

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: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	2.1791E-001	1.91E-001	-6.4495E-002
	1332.49	100.00	1.9076E-001		-4.9466E-002
Nb-94	702.63	100.00	2.1234E-001	2.03E-001	7.3641E-002
	871.10	100.00	2.0331E-001		6.8137E-002
Ag-108m	79.20	7.10	1.1681E+001	2.22E-001	-1.7645E+001
	433.93	89.90	2.5383E-001		-2.3984E-001
	614.37	90.40	3.2023E-001		2.6908E-002
	722.95	90.50	2.2154E-001		-1.9326E-001
Sb-125	176.33	6.89	4.2837E+000	7.83E-001	-1.9585E-001
	427.89	29.33	7.8338E-001		-8.8913E-002
	463.38	10.35	2.3693E+000		-1.3897E+000
	600.56	17.80	1.2091E+000		2.1156E-001
	606.64	5.02	5.6967E+000		5.4486E+000
	635.90	11.32	1.9631E+000		4.7720E-001
Cs-134	563.23	8.38	2.7224E+000	2.51E-001	2.2627E+000
	569.32	15.43	1.5119E+000		4.3868E-001
	604.70	97.60	2.5082E-001		-8.9426E-002
	795.84	85.40	2.6686E-001		1.6603E-001
	801.93	8.73	2.4221E+000		9.4862E-001
Cs-137	661.65	85.12	3.3580E-001	3.36E-001	2.5989E-001
Eu-152	121.78	28.40	1.4163E+000	6.88E-001	2.5351E-001
	244.69	7.49	3.7748E+000		6.6466E-001
	344.27	26.50	8.9398E-001		-1.9701E-001
	778.89	12.74	1.5377E+000		1.5637E-001
	867.32	4.16	5.1786E+000		-6.4576E-001
	964.01	14.40	1.7762E+000		-1.7465E+000
	1085.78	10.00	1.9381E+000		4.7467E-002
	1112.02	13.30	1.6543E+000		-1.0978E+000
	1407.95	20.70	6.8833E-001		-2.0701E-001
Eu-154	123.07	40.50	9.6718E-001	5.15E-001	-3.4911E-001
	247.94	6.60	4.0177E+000		-1.8669E+000
	591.81	4.83	4.3337E+000		-2.2725E+000
	723.30	19.70	1.0179E+000		-2.8429E-001
	756.87	4.33	4.2968E+000		-2.1142E+000
	873.19	11.50	1.6340E+000		-1.9636E+000
	996.32	10.30	2.1116E+000		2.5180E-002
	1004.76	17.90	1.1569E+000		-1.3932E-001
	1274.45	35.50	5.1467E-001		1.9753E-001
Eu-155	86.54	30.90	2.3839E+000	2.29E+000	3.0849E+000
	105.31	20.70	2.2881E+000		1.1925E-001
Am-241	59.54	35.90	3.6708E+000	3.67E+000	-2.4226E+000
Cm-243	228.19	10.56	2.6229E+000	1.73E+000	-2.8911E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.7288E+000	1.73E+000	-1.0732E+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 8/9/2006 10:36:41 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-08-06-143-F-
Sample Title: OOL-08-06-143-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/9/2006 10:26:26 AM
Live Time: 600.0 seconds
Real Time: 600.4 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-08-06-143-F-
Title: OOL-08-06-143-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	306	299.95	75.07	1.02	8.10E+001	53.85	2.68E+002
2	947-	963	954.84	238.81	1.02	1.16E+002	43.09	1.17E+002
3	1400-	1414	1408.30	352.18	1.03	6.25E+001	28.25	5.05E+001
4	2325-	2340	2334.73	583.80	1.20	6.60E+001	24.69	3.10E+001
5	2432-	2445	2438.31	609.70	0.50	5.64E+001	24.01	3.36E+001
6	3641-	3656	3647.90	912.11	1.17	4.52E+001	19.47	1.78E+001
7	5839-	5862	5850.15	1462.71	1.80	3.70E+002	39.44	8.80E+000
8	7059-	7072	7065.62	1766.59	0.75	1.90E+001	8.54	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	0.870	1460.81*	10.67	2.43634E+001	3.26014E+000
TL-208	0.462	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	4.28675E-001	1.70023E-001
		860.37	12.46		
Pb-212	0.565	74.81* @	10.70	7.15250E+000	4.95958E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	1.13499E+000	4.57775E-001
Bi-214	0.657	609.31*	46.30	6.74374E-001	2.99186E-001
		1120.29	15.10		
		1764.49*	15.80	9.37896E-001	4.32026E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R 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		0.870	2.436339E+001	3.260136E+000
TL-208		0.462	4.286748E-001	1.700226E-001
Pb-212	@	0.565	1.134994E+000	4.577749E-001
Bi-214		0.657	7.597900E-001	2.459644E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	352.18	1.0416E-001	45.21
6	912.11	7.5377E-002	43.04

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	2.1111E-001	1.99E-001	1.1243E-001
	1332.49	100.00	1.9892E-001		5.2553E-002
Nb-94	702.63	100.00	2.1415E-001	1.97E-001	-7.4029E-003
	871.10	100.00	1.9683E-001		-1.1441E-001
Ag-108m	79.20	7.10	1.2045E+001	2.57E-001	3.3981E+000
	433.93	89.90	2.7534E-001		-8.6236E-002
	614.37	90.40	3.3080E-001		-2.6571E-001
	722.95	90.50	2.5748E-001		-7.3306E-002
Sb-125	176.33	6.89	4.2184E+000	8.33E-001	-2.0176E+000
	427.89	29.33	8.3260E-001		3.3117E-001
	463.38	10.35	2.5063E+000		1.8818E+000
	600.56	17.80	1.4043E+000		8.0900E-001
	606.64	5.02	6.4470E+000		-3.2887E+000
	635.90	11.32	1.9339E+000		1.4544E+000
Cs-134	563.23	8.38	2.8264E+000	2.71E-001	6.2919E-001
	569.32	15.43	1.4929E+000		1.6424E-001
	604.70	97.60	2.8641E-001		-7.8191E-002
	795.84	85.40	2.7103E-001		2.5185E-001
	801.93	8.73	2.5737E+000		-5.0333E-001
Cs-137	661.65	85.12	2.9540E-001	2.95E-001	-9.1644E-003
Eu-152	121.78	28.40	1.4220E+000	9.10E-001	-6.0919E-001
	244.69	7.49	3.7021E+000		8.4836E-001
	344.27	26.50	9.1009E-001		-4.8472E-001
	778.89	12.74	1.9273E+000		-1.7427E+000
	867.32	4.16	5.1786E+000		-5.1922E+000
	964.01	14.40	1.6898E+000		-1.5627E+000
	1085.78	10.00	2.0568E+000		2.3116E-001
	1112.02	13.30	1.6215E+000		-3.5111E-001
	1407.95	20.70	9.2200E-001		3.1550E-001
Eu-154	123.07	40.50	9.6177E-001	5.96E-001	-1.0710E+000
	247.94	6.60	4.0177E+000		7.4541E-001
	591.81	4.83	4.7306E+000		-1.6370E+000
	723.30	19.70	1.1998E+000		1.6178E-001
	756.87	4.33	4.9049E+000		-1.2851E+000
	873.19	11.50	1.7316E+000		-1.9008E+000
	996.32	10.30	2.0286E+000		1.1516E+000
	1004.76	17.90	1.0110E+000		9.2246E-002
	1274.45	35.50	5.9570E-001		-2.6592E-001
Eu-155	86.54	30.90	2.3798E+000	2.38E+000	2.1548E+000
	105.31	20.70	2.4165E+000		-3.7224E-001
Am-241	59.54	35.90	3.9467E+000	3.95E+000	5.7378E-001
Cm-243	228.19	10.56	2.8309E+000	1.93E+000	-8.1363E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.9286E+000	1.93E+000	-3.4266E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 8/9/2006 2:19:18 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-08-06-144-F-
Sample Title: OOL-08-06-144-F-G
Description: 50% Light Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/9/2006 2:08:55 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-08-06-144-F-
Title: OOL-08-06-144-F-G
Description: 50% Light Vegetation

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	946-	962	954.49	238.72	0.70	1.01E+002	42.76	1.18E+002
2	1345-	1357	1351.44	337.96	0.61	2.48E+001	23.91	4.72E+001
3	1400-	1412	1406.49	351.73	0.38	4.65E+001	24.72	4.25E+001
4	2324-	2339	2330.61	582.77	0.54	7.64E+001	25.65	3.16E+001
5	2429-	2441	2435.73	609.05	1.29	2.73E+001	21.62	3.57E+001
6	3635-	3651	3643.99	911.14	1.16	5.03E+001	18.61	1.28E+001
7	5832-	5855	5844.05	1461.18	1.66	3.83E+002	40.14	9.05E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I 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	2.51877E+001	3.33583E+000
TL-208	0.469	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	4.95710E-001	1.78868E-001
		860.37		12.46		
Pb-212	0.403	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	9.86915E-001	4.46188E-001
Bi-214	0.404	609.31*		46.30	3.26437E-001	2.61675E-001
		1120.29		15.10		
		1764.49		15.80		
Ac-228	0.537	338.32*		11.40	1.02513E+000	9.99585E-001
		911.07*		27.70	1.10981E+000	4.30414E-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	0.995	2.518770E+001	3.335828E+000
TL-208	0.469	4.957100E-001	1.788676E-001
Pb-212 @	0.403	9.869145E-001	4.461881E-001
Bi-214	0.404	3.264374E-001	2.616751E-001
Ac-228	0.537	1.096561E+000	3.953231E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	7.7533E-002	53.14

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	2.6023E-001	1.91E-001	1.9274E-001
	1332.49	100.00	1.9076E-001		1.6625E-001
Nb-94	702.63	100.00	2.5205E-001	2.25E-001	1.2661E-001
	871.10	100.00	2.2538E-001		-4.7049E-002
Ag-108m	79.20	7.10	1.1757E+001	2.62E-001	-1.6661E+001
	433.93	89.90	2.6347E-001		3.1461E-003
	614.37	90.40	2.6232E-001		-1.6310E-001
	722.95	90.50	2.7871E-001		9.4558E-002
Sb-125	176.33	6.89	4.4823E+000	8.64E-001	2.6704E+000
	427.89	29.33	8.6376E-001		1.8326E-001
	463.38	10.35	2.4158E+000		8.1349E-001
	600.56	17.80	1.3148E+000		-5.2643E-001
	606.64	5.02	5.9579E+000		1.0545E+001
	635.90	11.32	2.0203E+000		2.5947E-001
Cs-134	563.23	8.38	2.8769E+000	2.49E-001	4.0691E-001
	569.32	15.43	1.4736E+000		-7.0567E-002
	604.70	97.60	2.9022E-001		-7.9228E-002
	795.84	85.40	2.4943E-001		6.8801E-002
	801.93	8.73	2.2596E+000		-1.6140E+000
Cs-137	661.65	85.12	2.7187E-001	2.72E-001	-1.8901E-002
Eu-152	121.78	28.40	1.4809E+000	9.22E-001	-8.4057E-001
	244.69	7.49	4.0708E+000		2.7096E+000
	344.27	26.50	9.6049E-001		4.9809E-001
	778.89	12.74	1.8348E+000		-3.4719E-002
	867.32	4.16	5.4575E+000		-2.2498E+000
	964.01	14.40	1.9036E+000		1.3691E-001
	1085.78	10.00	1.9625E+000		-5.6319E-001
	1112.02	13.30	1.5880E+000		-1.9123E-001
	1407.95	20.70	9.2200E-001		7.7158E-001
Eu-154	123.07	40.50	1.0310E+000	5.53E-001	7.4860E-005
	247.94	6.60	4.1774E+000		-3.1698E+000
	591.81	4.83	4.4702E+000		-1.8097E+000
	723.30	19.70	1.2727E+000		5.8675E-001
	756.87	4.33	4.8167E+000		1.3108E+000
	873.19	11.50	1.8936E+000		-1.4512E+000
	996.32	10.30	2.0706E+000		6.4964E-001
	1004.76	17.90	1.1692E+000		1.5515E-001
	1274.45	35.50	5.5313E-001		-7.8790E-002
Eu-155	86.54	30.90	2.2215E+000	2.22E+000	-9.0637E-001
	105.31	20.70	2.3994E+000		2.5540E-001
Am-241	59.54	35.90	3.8114E+000	3.81E+000	1.2011E+000
Cm-243	228.19	10.56	2.7220E+000	2.00E+000	3.2659E-003

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	2.0004E+000	2.00E+000	7.4829E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 8/9/2006 10:37:10 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: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-08-06-145-F-
Sample Title: OOL-08-06-145-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/9/2006 10:27:08 AM
Live Time: 600.0 seconds
Real Time: 600.4 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-08-06-145-F-
Title: OOL-08-06-145-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	5830-	5857	5841.96	1460.46	0.67	3.23E+002	38.22	1.32E+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	0.996	1460.81*	10.67	2.21458E+001	3.17692E+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	2.214576E+001	3.176919E+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	2.5195E-001	1.83E-001	1.2073E-001
	1332.49	100.00	1.8324E-001		-1.0572E-001
Nb-94	702.63	100.00	2.3193E-001	1.97E-001	-3.2866E-003
	871.10	100.00	1.9686E-001		-6.1978E-002
Ag-108m	79.20	7.10	1.4919E+001	2.67E-001	-2.0401E+001
	433.93	89.90	2.6719E-001		-9.9497E-002
	614.37	90.40	3.1512E-001		-1.2127E-001
	722.95	90.50	2.7664E-001		-6.6101E-002
Sb-125	176.33	6.89	5.0396E+000	7.94E-001	-4.6661E+000
	427.89	29.33	7.9395E-001		-1.8865E-001
	463.38	10.35	2.7583E+000		3.4012E+000
	600.56	17.80	1.2857E+000		-1.4175E+000
	606.64	5.02	6.2708E+000		6.9842E+000
	635.90	11.32	2.1878E+000		-2.0314E+000
Cs-134	563.23	8.38	2.9657E+000	2.65E-001	-9.1778E-001
	569.32	15.43	1.6162E+000		-5.2142E-001
	604.70	97.60	3.1115E-001		2.3047E-001
	795.84	85.40	2.6528E-001		-5.0000E-002
	801.93	8.73	2.3689E+000		-2.1081E+000
Cs-137	661.65	85.12	2.8903E-001	2.89E-001	-2.4836E-001
Eu-152	121.78	28.40	1.6340E+000	8.31E-001	-6.7262E-002
	244.69	7.49	4.3528E+000		-1.1667E+001
	344.27	26.50	1.0237E+000		-6.2983E-001
	778.89	12.74	1.9545E+000		7.1027E-001
	867.32	4.16	4.8914E+000		5.5822E-002
	964.01	14.40	2.0597E+000		2.5258E+000
	1085.78	10.00	1.9893E+000		-4.6015E-001
	1112.02	13.30	1.4843E+000		-1.5904E+000
	1407.95	20.70	8.3148E-001		-2.8549E-001
Eu-154	123.07	40.50	1.1407E+000	6.17E-001	5.7434E-001
	247.94	6.60	4.8112E+000		-3.8846E-001
	591.81	4.83	5.2579E+000		1.0064E+000
	723.30	19.70	1.2793E+000		-7.4320E-001
	756.87	4.33	5.3098E+000		-1.8206E+000
	873.19	11.50	1.5651E+000		-2.5793E+000
	996.32	10.30	2.1839E+000		9.6402E-001
	1004.76	17.90	1.2105E+000		5.2938E-001
	1274.45	35.50	6.1700E-001		1.0465E-001
Eu-155	86.54	30.90	2.8984E+000	2.90E+000	1.3085E+000
	105.31	20.70	3.0776E+000		2.0701E+000
Am-241	59.54	35.90	6.5881E+000	6.59E+000	-6.1797E+000
Cm-243	228.19	10.56	3.0640E+000	2.07E+000	-6.0663E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.0656E+000	2.07E+000	-2.3576E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 8/9/2006 10:08:50 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: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-08-06-146-F-
Sample Title: OOL-08-06-146-F-G
Description: Light Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/9/2006 9:58:49 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-08-06-146-F-
Title: OOL-08-06-146-F-G
Description: Light Vegetation

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5826-	5854	5839.67	1459.89	2.21	3.79E+002	38.92	3.49E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: 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	0.972	1460.81*	10.67	2.59632E+001	3.39774E+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	0.972	2.596319E+001	3.397743E+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	2.3521E-001	1.63E-001	-1.8945E-001
	1332.49	100.00	1.6302E-001		-1.1621E-001
Nb-94	702.63	100.00	2.4061E-001	2.21E-001	1.2474E-001
	871.10	100.00	2.2068E-001		-1.8073E-001
Ag-108m	79.20	7.10	1.6330E+001	2.96E-001	4.0534E+000
	433.93	89.90	3.0248E-001		8.2703E-002
	614.37	90.40	3.1071E-001		-2.6566E-001
	722.95	90.50	2.9597E-001		-5.0331E-002
Sb-125	176.33	6.89	5.3094E+000	9.64E-001	2.7467E-002
	427.89	29.33	9.6359E-001		3.4851E-001
	463.38	10.35	2.4792E+000		-1.7708E-001
	600.56	17.80	1.3131E+000		-1.0630E+000
	606.64	5.02	6.1041E+000		6.5091E+000
	635.90	11.32	2.1599E+000		-3.7013E-001
Cs-134	563.23	8.38	3.2752E+000	2.72E-001	2.5128E+000
	569.32	15.43	1.7508E+000		6.9750E-001
	604.70	97.60	3.1115E-001		1.4071E-001
	795.84	85.40	2.7190E-001		-1.2663E-001
	801.93	8.73	2.3446E+000		-2.6366E+000
Cs-137	661.65	85.12	2.7933E-001	2.79E-001	6.1387E-003
Eu-152	121.78	28.40	1.5781E+000	9.30E-001	-7.4721E-001
	244.69	7.49	4.2185E+000		-5.9784E+000
	344.27	26.50	1.0237E+000		-5.0656E-001
	778.89	12.74	1.7707E+000		-7.3756E-001
	867.32	4.16	5.3972E+000		-5.5249E+000
	964.01	14.40	2.0597E+000		1.5763E+000
	1085.78	10.00	2.3554E+000		8.9323E-001
	1112.02	13.30	1.7319E+000		-3.6459E+000
	1407.95	20.70	9.3027E-001		2.5409E-001
Eu-154	123.07	40.50	1.1083E+000	6.71E-001	2.0852E-001
	247.94	6.60	4.6536E+000		-1.4175E+000
	591.81	4.83	5.0424E+000		-2.3953E+000
	723.30	19.70	1.3829E+000		9.0221E-001
	756.87	4.33	5.7572E+000		2.3006E+000
	873.19	11.50	2.0233E+000		6.3909E-001
	996.32	10.30	2.2043E+000		3.5412E-001
	1004.76	17.90	1.1727E+000		-5.8695E-001
	1274.45	35.50	6.7093E-001		5.3264E-001
Eu-155	86.54	30.90	2.7554E+000	2.76E+000	1.7630E+000
	105.31	20.70	3.1062E+000		9.7116E-001
Am-241	59.54	35.90	7.1018E+000	7.10E+000	-4.3426E+000
Cm-243	228.19	10.56	3.0377E+000	2.20E+000	-1.3065E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.1996E+000	2.20E+000	1.1228E+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 8/9/2006 10:22:35 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: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-08-06-147-F-
Sample Title: OOL-08-06-147-F-G
Description: 50% Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/9/2006 10:12:34 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-08-06-147-F-
Title: OOL-08-06-147-F-G
Description: 50% Vegetation

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	1175-	1185	1180.43	295.07	0.63	2.37E+001	22.47	4.53E+001
2	5828-	5855	5841.06	1460.23	1.32	3.17E+002	37.86	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: 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	2.17448E+001	3.13802E+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	2.174484E+001	3.138015E+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	295.07	3.9565E-002	94.65

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.3951E-001	1.89E-001	1.2446E-001
	1332.49	100.00	1.8945E-001		2.0551E-002
Nb-94	702.63	100.00	2.0148E-001	2.01E-001	-1.0762E-001
	871.10	100.00	2.6315E-001		3.0906E-001
Ag-108m	79.20	7.10	1.6991E+001	2.73E-001	-8.7705E+000
	433.93	89.90	2.7814E-001		1.1882E-001
	614.37	90.40	3.1512E-001		-2.2865E-001
	722.95	90.50	2.7297E-001		1.0425E-001
Sb-125	176.33	6.89	5.2534E+000	8.03E-001	8.7337E-001
	427.89	29.33	8.0269E-001		-5.3492E-001
	463.38	10.35	2.5027E+000		7.0220E-001
	600.56	17.80	1.2765E+000		-2.6849E-001
	606.64	5.02	5.9820E+000		7.7389E+000
	635.90	11.32	2.1739E+000		1.2085E+000
Cs-134	563.23	8.38	3.3213E+000	2.90E-001	2.1112E+000
	569.32	15.43	1.7335E+000		5.5711E-001
	604.70	97.60	2.9039E-001		1.3852E-001
	795.84	85.40	3.0463E-001		3.1411E-001
	801.93	8.73	2.5770E+000		-1.0677E+000
Cs-137	661.65	85.12	3.4272E-001	3.43E-001	2.3792E-001
Eu-152	121.78	28.40	1.6100E+000	7.58E-001	-5.9033E-001
	244.69	7.49	4.0998E+000		-1.0811E+001
	344.27	26.50	1.0421E+000		-1.3881E-001
	778.89	12.74	1.8580E+000		1.2384E-001
	867.32	4.16	6.1141E+000		-3.5764E+000
	964.01	14.40	1.9257E+000		1.4459E+000
	1085.78	10.00	2.2699E+000		1.8149E+000
	1112.02	13.30	1.6652E+000		-4.1257E+000
	1407.95	20.70	7.5750E-001		1.9542E-001
Eu-154	123.07	40.50	1.1278E+000	5.41E-001	-1.4642E-001
	247.94	6.60	4.5021E+000		-2.8175E-001
	591.81	4.83	5.5505E+000		9.4544E-001
	723.30	19.70	1.2541E+000		-4.5489E-002
	756.87	4.33	5.0923E+000		-5.0919E+000
	873.19	11.50	2.1840E+000		1.8463E-001
	996.32	10.30	2.3612E+000		1.6051E+000
	1004.76	17.90	1.2707E+000		5.6067E-001
	1274.45	35.50	5.4130E-001		1.7681E-001
Eu-155	86.54	30.90	2.9325E+000	2.88E+000	1.0028E+000
	105.31	20.70	2.8780E+000		1.0164E+000
Am-241	59.54	35.90	7.2841E+000	7.28E+000	-7.4722E+000
Cm-243	228.19	10.56	3.0443E+000	2.12E+000	1.3649E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.1191E+000	2.12E+000	1.1519E+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 8/9/2006 9:53:42 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-08-06-148-F-
Sample Title: OOL-08-06-148-F-G
Description: Vegetation bundles of hay

Sample Type:
Geometry:

Acquisition Started: 8/9/2006 9:43:40 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-08-06-148-F-
Title: OOL-08-06-148-F-G
Description: Vegetation bundles of hay

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5829-	5854	5840.54	1460.10	2.10	2.52E+002	33.68	9.96E+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: 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	0.984	1460.81*	10.67	1.72901E+001	2.70123E+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	0.984	1.729008E+001	2.701227E+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	2.1468E-001	1.67E-001	1.0231E-002
	1332.49	100.00	1.6658E-001		9.0291E-002
Nb-94	702.63	100.00	2.1345E-001	1.99E-001	-1.6199E-001
	871.10	100.00	1.9915E-001		-1.3170E-001
Ag-108m	79.20	7.10	1.6919E+001	2.48E-001	7.9246E+000
	433.93	89.90	2.5427E-001		3.7514E-002
	614.37	90.40	3.1366E-001		1.8081E-002
	722.95	90.50	2.4769E-001		-1.2901E-001
Sb-125	176.33	6.89	5.0898E+000	8.03E-001	4.7643E+000
	427.89	29.33	8.0269E-001		8.4750E-002
	463.38	10.35	2.2686E+000		-2.0871E+000
	600.56	17.80	1.3747E+000		4.7208E-002
	606.64	5.02	6.0799E+000		1.6707E+000
	635.90	11.32	2.0443E+000		1.1640E-001
Cs-134	563.23	8.38	2.9311E+000	2.42E-001	1.1642E+000
	569.32	15.43	1.5974E+000		-2.0525E-001
	604.70	97.60	3.1856E-001		1.0994E-001
	795.84	85.40	2.4180E-001		7.3983E-002
	801.93	8.73	2.1657E+000		-2.0491E+000
Cs-137	661.65	85.12	3.5519E-001	3.55E-001	4.8902E-001
Eu-152	121.78	28.40	1.5022E+000	8.82E-001	-1.1508E+000
	244.69	7.49	4.1198E+000		-2.3165E+000
	344.27	26.50	1.0125E+000		-5.6638E-001
	778.89	12.74	1.5806E+000		-8.7949E-001
	867.32	4.16	4.9445E+000		1.0472E-001
	964.01	14.40	1.7935E+000		1.2401E+000
	1085.78	10.00	2.1807E+000		1.2018E+000
	1112.02	13.30	1.6481E+000		-9.6965E-001
	1407.95	20.70	8.8242E-001		3.3740E-001
Eu-154	123.07	40.50	1.0640E+000	6.10E-001	6.0840E-002
	247.94	6.60	4.4664E+000		5.6074E-001
	591.81	4.83	5.2880E+000		3.0467E+000
	723.30	19.70	1.1567E+000		-2.2745E-002
	756.87	4.33	4.7699E+000		-4.8287E+000
	873.19	11.50	1.8840E+000		9.5286E-001
	996.32	10.30	2.0119E+000		5.4057E-001
	1004.76	17.90	1.2470E+000		1.9238E-001
	1274.45	35.50	6.0989E-001		1.5509E-002
Eu-155	86.54	30.90	2.8725E+000	2.80E+000	3.3541E+000
	105.31	20.70	2.8044E+000		7.9035E-001
Am-241	59.54	35.90	9.8439E+000	9.84E+000	6.8741E+000
Cm-243	228.19	10.56	2.9092E+000	2.05E+000	-5.1172E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.0535E+000	2.05E+000	-2.6037E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 8/9/2006 8:58:49 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: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-08-06-149-F-
Sample Title: OOL-08-06-149-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/9/2006 8:48:46 AM
Live Time: 600.0 seconds
Real Time: 600.4 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-08-06-149-F-
Title: OOL-08-06-149-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	5831-	5856	5841.64	1460.38	1.88	2.26E+002	31.21	6.50E+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	0.994	1460.81*	10.67	1.54710E+001	2.48059E+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	0.994	1.547103E+001	2.480587E+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	1.9444E-001	1.77E-001	4.1386E-002
	1332.49	100.00	1.7678E-001		2.2604E-002
Nb-94	702.63	100.00	2.0555E-001	2.06E-001	-2.5783E-002
	871.10	100.00	2.1022E-001		-6.3631E-002
Ag-108m	79.20	7.10	1.3999E+001	2.42E-001	-2.6001E+001
	433.93	89.90	2.4217E-001		3.6390E-002
	614.37	90.40	2.8104E-001		-1.8527E-002
	722.95	90.50	2.6356E-001		2.6733E-001
Sb-125	176.33	6.89	4.8947E+000	7.49E-001	-2.4041E+000
	427.89	29.33	7.4865E-001		2.3504E-001
	463.38	10.35	2.3452E+000		2.8713E+000
	600.56	17.80	1.2095E+000		-6.2116E-001
	606.64	5.02	5.2714E+000		6.6606E+000
	635.90	11.32	2.1316E+000		1.2800E+000
Cs-134	563.23	8.38	2.9311E+000	2.47E-001	1.9523E+000
	569.32	15.43	1.5294E+000		3.8847E-001
	604.70	97.60	2.7374E-001		2.2481E-002
	795.84	85.40	2.4669E-001		8.2666E-002
	801.93	8.73	2.4404E+000		-3.3467E-001
Cs-137	661.65	85.12	3.2642E-001	3.26E-001	2.4350E-001
Eu-152	121.78	28.40	1.5781E+000	8.99E-001	4.0517E-001
	244.69	7.49	3.7970E+000		-6.5987E+000
	344.27	26.50	9.8189E-001		-1.9494E-001
	778.89	12.74	1.7856E+000		-9.5764E-001
	867.32	4.16	4.8914E+000		3.4379E+000
	964.01	14.40	1.7298E+000		8.0862E-001
	1085.78	10.00	1.7752E+000		-2.2041E-001
	1112.02	13.30	1.5410E+000		3.3301E-001
	1407.95	20.70	8.9869E-001		1.5053E-001
Eu-154	123.07	40.50	1.0844E+000	4.09E-001	-3.3909E-001
	247.94	6.60	4.3451E+000		1.9564E+000
	591.81	4.83	4.7498E+000		-4.8020E+000
	723.30	19.70	1.1931E+000		8.4057E-001
	756.87	4.33	4.9109E+000		1.4277E-001
	873.19	11.50	1.8840E+000		6.2232E-001
	996.32	10.30	1.8222E+000		-5.3326E-001
	1004.76	17.90	1.1202E+000		4.4611E-001
	1274.45	35.50	4.0932E-001		-9.0278E-001
Eu-155	86.54	30.90	2.6542E+000	2.65E+000	1.0082E+000
	105.31	20.70	2.8414E+000		-2.8476E-001
Am-241	59.54	35.90	6.3188E+000	6.32E+000	-2.2703E+000
Cm-243	228.19	10.56	2.7379E+000	1.99E+000	-2.2462E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.9856E+000	1.99E+000	2.5963E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 8/9/2006 11:10:04 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-08-06-150-F-
Sample Title: OOL-08-06-150-F-G
Description: 100% Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/9/2006 11:00:02 AM
Live Time: 600.0 seconds
Real Time: 600.4 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-08-06-150-F-
Title: OOL-08-06-150-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	5831-	5856	5843.12	1460.75	2.01	2.36E+002	31.68	6.18E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: 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	1.61814E+001	2.53829E+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	1.618136E+001	2.538289E+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	2.0982E-001	1.70E-001	8.4694E-005
	1332.49	100.00	1.7006E-001		1.0202E-001
Nb-94	702.63	100.00	2.1150E-001	1.99E-001	-7.4222E-002
	871.10	100.00	1.9915E-001		1.4588E-001
Ag-108m	79.20	7.10	1.5861E+001	2.56E-001	1.2596E+001
	433.93	89.90	2.5574E-001		-2.8709E-002
	614.37	90.40	2.9860E-001		-3.3570E-001
	722.95	90.50	2.7297E-001		2.3892E-002
Sb-125	176.33	6.89	4.7540E+000	8.32E-001	-9.9843E-001
	427.89	29.33	8.3250E-001		4.6545E-001
	463.38	10.35	2.3949E+000		1.7762E+000
	600.56	17.80	1.1796E+000		-6.3184E-001
	606.64	5.02	5.6778E+000		6.5960E+000
	635.90	11.32	1.8061E+000		-2.3641E-001
Cs-134	563.23	8.38	2.8245E+000	2.49E-001	1.0944E+000
	569.32	15.43	1.4685E+000		-6.2153E-001
	604.70	97.60	2.7800E-001		1.2661E-001
	795.84	85.40	2.4910E-001		2.9942E-001
	801.93	8.73	2.2698E+000		-1.2278E+000
Cs-137	661.65	85.12	3.6424E-001	3.64E-001	4.4972E-001
Eu-152	121.78	28.40	1.5435E+000	5.77E-001	8.5961E-002
	244.69	7.49	4.0391E+000		-5.0739E+000
	344.27	26.50	9.3813E-001		5.7603E-001
	778.89	12.74	1.6140E+000		-8.9354E-001
	867.32	4.16	4.3815E+000		-5.8190E-001
	964.01	14.40	1.7036E+000		-4.6460E-001
	1085.78	10.00	1.8313E+000		-9.8201E-001
	1112.02	13.30	1.4451E+000		-1.2430E+000
	1407.95	20.70	5.7667E-001		-9.8048E-001
Eu-154	123.07	40.50	1.0817E+000	5.57E-001	-3.5802E-002
	247.94	6.60	4.4424E+000		-8.7815E-001
	591.81	4.83	4.6479E+000		-3.2941E+000
	723.30	19.70	1.2626E+000		-3.4225E-002
	756.87	4.33	5.1366E+000		3.4050E+000
	873.19	11.50	1.8100E+000		1.0582E+000
	996.32	10.30	2.2246E+000		3.8268E-001
	1004.76	17.90	1.1066E+000		2.1317E-001
	1274.45	35.50	5.5735E-001		8.6407E-002
Eu-155	86.54	30.90	2.7350E+000	2.68E+000	4.2589E-001
	105.31	20.70	2.6781E+000		1.7544E-001
Am-241	59.54	35.90	7.8467E+000	7.85E+000	6.0337E-001
Cm-243	228.19	10.56	2.9367E+000	2.23E+000	-1.0941E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.2276E+000	2.23E+000	4.3773E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 8/9/2006 2:04:01 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-08-06-151-F-
Sample Title: OOL-08-06-151-F-G
Description: Light Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/9/2006 1:54:00 PM
Live Time: 600.0 seconds
Real Time: 600.4 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-08-06-151-F-
Title: OOL-08-06-151-F-G
Description: Light Vegetation

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	305	300.04	75.10	0.72	4.29E+001	48.83	2.40E+002
2	946-	959	954.52	238.73	0.70	7.32E+001	31.12	6.48E+001
3	1175-	1183	1179.29	294.92	0.36	2.36E+001	20.17	3.84E+001
4	2327-	2338	2331.36	582.96	0.88	3.83E+001	19.18	2.27E+001
5	2429-	2442	2434.83	608.83	1.22	4.51E+001	21.42	2.69E+001
6	5833-	5854	5843.11	1460.95	1.14	1.98E+002	30.84	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	1.29939E+001	2.28495E+000
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.48486E-001	1.28737E-001
		860.37	12.46		
Pb-212	0.565	74.81* @	10.70	3.78894E+000	4.37371E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.16502E-001	3.24606E-001
Bi-214	0.400	609.31*	46.30	5.38745E-001	2.64680E-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	1.299387E+001	2.284947E+000
TL-208		0.472	2.484864E-001	1.287367E-001
Pb-212	@	0.565	7.165020E-001	3.246060E-001
Bi-214		0.400	5.387454E-001	2.646799E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	294.92	3.9315E-002	85.50

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	1.9674E-001	1.50E-001	3.0829E-002
	1332.49	100.00	1.4965E-001		3.5003E-002
Nb-94	702.63	100.00	2.2124E-001	1.88E-001	7.7569E-002
	871.10	100.00	1.8780E-001		-8.0373E-002
Ag-108m	79.20	7.10	1.0498E+001	2.16E-001	-3.0776E+000
	433.93	89.90	2.1567E-001		-7.9064E-002
	614.37	90.40	2.4511E-001		-3.6369E-002
	722.95	90.50	2.3622E-001		-1.0235E-001
Sb-125	176.33	6.89	3.8751E+000	6.27E-001	9.7610E-001
	427.89	29.33	6.2694E-001		-4.5988E-001
	463.38	10.35	2.0250E+000		4.2125E-001
	600.56	17.80	1.2091E+000		7.8978E-001
	606.64	5.02	5.8878E+000		1.0348E+001
	635.90	11.32	1.7471E+000		-1.4674E+000
Cs-134	563.23	8.38	2.5954E+000	2.15E-001	4.6339E-001
	569.32	15.43	1.3084E+000		-6.2888E-001
	604.70	97.60	2.8895E-001		-1.8336E-001
	795.84	85.40	2.1523E-001		4.9246E-003
	801.93	8.73	2.2107E+000		1.0685E+000
Cs-137	661.65	85.12	3.0562E-001	3.06E-001	4.3656E-001
Eu-152	121.78	28.40	1.2834E+000	7.81E-001	-2.3238E-001
	244.69	7.49	3.3021E+000		-8.9089E-001
	344.27	26.50	8.5229E-001		2.2162E-001
	778.89	12.74	1.5377E+000		2.0293E-001
	867.32	4.16	4.6734E+000		-7.7811E-001
	964.01	14.40	1.7024E+000		2.1117E-001
	1085.78	10.00	1.7295E+000		-1.2025E+000
	1112.02	13.30	1.1241E+000		-1.0655E+000
	1407.95	20.70	7.8091E-001		-1.0785E+000
Eu-154	123.07	40.50	8.8398E-001	4.81E-001	-4.1596E-001
	247.94	6.60	3.5929E+000		-4.0172E+000
	591.81	4.83	3.7742E+000		-1.2109E+000
	723.30	19.70	1.0853E+000		2.0046E-001
	756.87	4.33	4.2968E+000		-3.1036E+000
	873.19	11.50	1.6540E+000		9.6760E-001
	996.32	10.30	1.7541E+000		-5.8449E-001
	1004.76	17.90	1.0530E+000		1.9629E-001
	1274.45	35.50	4.8145E-001		-6.9966E-001
Eu-155	86.54	30.90	2.0698E+000	2.07E+000	8.4240E-001
	105.31	20.70	2.2610E+000		-3.8333E-001
Am-241	59.54	35.90	3.6780E+000	3.68E+000	-8.6843E-001
Cm-243	228.19	10.56	2.3882E+000	1.76E+000	4.7637E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.7559E+000	1.76E+000	1.1623E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 8/9/2006 10:21:28 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-08-06-152-F-
Sample Title: OOL-08-06-152-F-G
Description: light vegetation

Sample Type:
Geometry:

Acquisition Started: 8/9/2006 10:11:27 AM
Live Time: 600.0 seconds
Real Time: 600.4 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-08-06-152-F-
Title: OOL-08-06-152-F-G
Description: light vegetation

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	946-	960	955.18	238.89	0.57	6.82E+001	37.83	1.05E+002
2	2038-	2051	2042.69	510.79	0.31	4.77E+001	23.19	3.33E+001
3	2330-	2340	2334.64	583.78	0.97	2.15E+001	18.31	2.75E+001
4	2431-	2445	2438.95	609.86	1.03	4.82E+001	19.26	1.68E+001
5	5838-	5862	5850.46	1462.79	2.13	2.43E+002	32.81	9.14E+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: 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	2.50580E-001	1.26776E-001
K-40	0.860	1460.81*		10.67	1.59836E+001	2.51741E+000
TL-208	0.743	277.35		6.80		
		510.84*		21.60	1.16009E+000	5.94523E-001
		583.14*		84.20	1.39566E-001	1.20299E-001
		860.37		12.46		
Pb-212	0.402	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.67062E-001	3.84744E-001
Bi-214	0.398	609.31*		46.30	5.75905E-001	2.41281E-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		0.998	2.204336E-001	1.294077E-001
K-40		0.860	1.598362E+001	2.517413E+000
TL-208		0.743	1.395660E-001	1.202132E-001
Pb-212	@	0.402	6.670622E-001	3.847438E-001
Bi-214		0.398	5.759048E-001	2.412807E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	2.0879E-001	1.67E-001	1.0600E-001
	1332.49	100.00	1.6681E-001		6.8339E-002
Nb-94	702.63	100.00	1.9914E-001	1.99E-001	1.4785E-002
	871.10	100.00	2.0751E-001		1.0415E-001
Ag-108m	79.20	7.10	1.1488E+001	2.33E-001	-4.2529E+000
	433.93	89.90	2.3329E-001		-4.0179E-002
	614.37	90.40	2.8607E-001		-1.5583E-001
	722.95	90.50	2.4222E-001		-6.4163E-002
Sb-125	176.33	6.89	4.0652E+000	7.17E-001	1.9768E-001
	427.89	29.33	7.1681E-001		-3.2974E-001
	463.38	10.35	2.2358E+000		2.2016E+000
	600.56	17.80	1.1327E+000		-9.3119E-001
	606.64	5.02	5.3448E+000		-2.4728E+000
	635.90	11.32	1.8890E+000		-9.3934E-002
Cs-134	563.23	8.38	2.5954E+000	2.28E-001	-1.1864E+000
	569.32	15.43	1.4140E+000		-6.2409E-001
	604.70	97.60	2.3561E-001		-5.2438E-002
	795.84	85.40	2.2809E-001		1.4610E-001
	801.93	8.73	2.1352E+000		9.1432E-001
Cs-137	661.65	85.12	2.9885E-001	2.99E-001	1.0394E-001
Eu-152	121.78	28.40	1.2644E+000	7.63E-001	-5.4535E-001
	244.69	7.49	3.3257E+000		-3.5705E+000
	344.27	26.50	8.1283E-001		-1.4259E-001
	778.89	12.74	1.5861E+000		-4.2569E-001
	867.32	4.16	5.5914E+000		-6.9824E-001
	964.01	14.40	1.5983E+000		-3.0413E+000
	1085.78	10.00	1.9625E+000		-2.3353E+000
	1112.02	13.30	1.4640E+000		-2.4899E-001
	1407.95	20.70	7.6342E-001		-2.4908E-001
Eu-154	123.07	40.50	9.0299E-001	5.30E-001	-2.4966E-001
	247.94	6.60	3.5787E+000		9.9846E-001
	591.81	4.83	4.1197E+000		-1.8704E+000
	723.30	19.70	1.1219E+000		5.9717E-002
	756.87	4.33	5.2415E+000		1.8775E+000
	873.19	11.50	1.7125E+000		-1.0138E+000
	996.32	10.30	1.9639E+000		-6.0064E-002
	1004.76	17.90	1.1814E+000		5.3252E-001
	1274.45	35.50	5.3042E-001		1.5623E-001
Eu-155	86.54	30.90	2.2237E+000	2.22E+000	1.3719E+000
	105.31	20.70	2.2427E+000		5.5616E-001
Am-241	59.54	35.90	3.6203E+000	3.62E+000	8.8583E-001
Cm-243	228.19	10.56	2.6229E+000	1.77E+000	-4.6754E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.7693E+000	1.77E+000	-2.5115E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 8/9/2006 9:54:18 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: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-08-06-153-F-
Sample Title: OOL-08-06-153-F-G
Description: vegetation

Sample Type:
Geometry:

Acquisition Started: 8/9/2006 9:44:16 AM
Live Time: 600.0 seconds
Real Time: 600.4 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-08-06-153-F-
Title: OOL-08-06-153-F-G
Description: vegetation

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	950-	960	954.67	238.76	0.75	4.53E+001	29.61	7.67E+001
2	1401-	1415	1407.01	351.86	0.97	4.42E+001	24.29	3.78E+001
3	3642-	3654	3647.71	912.07	0.77	3.70E+001	15.63	9.95E+000
4	5837-	5862	5849.72	1462.60	1.67	2.54E+002	32.79	6.28E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I 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	0.883	1460.81*		10.67	1.66967E+001	2.54650E+000
Pb-212	0.403	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	4.42971E-001	2.97980E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R 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	0.883	1.669667E+001	2.546500E+000
Pb-212 @	0.403	4.429710E-001	2.979800E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	351.86	7.3709E-002	54.93
3	912.07	6.1746E-002	42.20

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	2.0406E-001	1.53E-001	-2.7428E-002
	1332.49	100.00	1.5326E-001		1.2668E-001
Nb-94	702.63	100.00	2.1949E-001	1.90E-001	-2.0688E-002
	871.10	100.00	1.9010E-001		5.9251E-002
Ag-108m	79.20	7.10	1.1895E+001	2.03E-001	-2.4176E+000
	433.93	89.90	2.2225E-001		-1.7421E-001
	614.37	90.40	2.6397E-001		2.7420E-002
	722.95	90.50	2.0335E-001		-2.3733E-001
Sb-125	176.33	6.89	4.1041E+000	7.26E-001	4.3968E-001
	427.89	29.33	7.2606E-001		-8.0710E-002
	463.38	10.35	2.1067E+000		1.9721E-001
	600.56	17.80	1.2806E+000		9.2900E-001
	606.64	5.02	5.2396E+000		1.8154E+000
	635.90	11.32	1.7958E+000		1.1634E+000
Cs-134	563.23	8.38	2.4014E+000	2.18E-001	-2.2094E+000
	569.32	15.43	1.4441E+000		3.3402E-001
	604.70	97.60	2.4935E-001		-4.2668E-001
	795.84	85.40	2.1787E-001		-1.6467E-001
	801.93	8.73	2.3539E+000		-2.8911E-001
Cs-137	661.65	85.12	2.9713E-001	2.97E-001	1.6558E-001
Eu-152	121.78	28.40	1.3285E+000	8.26E-001	-1.6968E-001
	244.69	7.49	3.6065E+000		1.2712E+000
	344.27	26.50	8.2621E-001		1.0365E-001
	778.89	12.74	1.3626E+000		1.6272E-001
	867.32	4.16	4.9330E+000		-2.9573E+000
	964.01	14.40	1.5711E+000		-9.5099E-001
	1085.78	10.00	1.8629E+000		-1.3233E-001
	1112.02	13.30	1.5536E+000		3.4106E-001
	1407.95	20.70	9.2200E-001		2.7743E-001
Eu-154	123.07	40.50	9.0588E-001	5.07E-001	-8.6760E-001
	247.94	6.60	3.7982E+000		2.8101E+000
	591.81	4.83	4.2282E+000		2.0452E-001
	723.30	19.70	9.7705E-001		-6.8475E-001
	756.87	4.33	4.8610E+000		6.1472E-001
	873.19	11.50	1.6340E+000		-1.7019E-001
	996.32	10.30	2.0706E+000		-1.1824E-001
	1004.76	17.90	9.5178E-001		-5.2152E-001
	1274.45	35.50	5.0660E-001		-3.4744E-001
Eu-155	86.54	30.90	2.2523E+000	2.25E+000	1.0303E+000
	105.31	20.70	2.3120E+000		-4.8677E-001
Am-241	59.54	35.90	3.8320E+000	3.83E+000	2.7055E-001
Cm-243	228.19	10.56	2.8108E+000	1.84E+000	1.7193E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.8412E+000	1.84E+000	9.1916E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 8/9/2006 9:35:19 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-08-06-154-F-
Sample Title: OOL-08-06-154-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/9/2006 9:25:17 AM
Live Time: 600.0 seconds
Real Time: 600.4 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-08-06-154-F-
Title: OOL-08-06-154-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	3635-	3647	3641.09	910.24	1.29	2.13E+001	16.34	1.77E+001
2	5832-	5855	5842.25	1460.53	1.30	1.65E+002	28.62	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	0.997	1460.81*	10.67	1.13210E+001	2.16712E+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	1.132096E+001	2.167118E+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	910.24	3.5449E-002	76.81

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: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	2.1226E-001	2.10E-001	4.6199E-002
	1332.49	100.00	2.0959E-001		2.4265E-001
Nb-94	702.63	100.00	2.3193E-001	1.99E-001	8.8883E-002
	871.10	100.00	1.9915E-001		-9.6376E-002
Ag-108m	79.20	7.10	1.4960E+001	2.22E-001	-3.8275E+000
	433.93	89.90	2.6438E-001		-1.3553E-001
	614.37	90.40	2.5502E-001		-2.2691E-001
	722.95	90.50	2.2158E-001		-9.7361E-002
Sb-125	176.33	6.89	4.5719E+000	8.07E-001	1.0985E+000
	427.89	29.33	8.0702E-001		3.3159E-001
	463.38	10.35	2.2026E+000		-9.1483E-001
	600.56	17.80	1.2193E+000		-6.6336E-001
	606.64	5.02	5.3830E+000		6.8235E+000
	635.90	11.32	1.9528E+000		6.3955E-001
Cs-134	563.23	8.38	2.7324E+000	2.47E-001	1.8595E+000
	569.32	15.43	1.4155E+000		4.5971E-001
	604.70	97.60	2.6350E-001		-8.3637E-002
	795.84	85.40	2.4669E-001		3.8034E-002
	801.93	8.73	2.2698E+000		-7.2397E-003
Cs-137	661.65	85.12	3.3140E-001	3.31E-001	2.5770E-001
Eu-152	121.78	28.40	1.6720E+000	9.30E-001	-1.6583E-001
	244.69	7.49	3.3693E+000		-3.8015E+000
	344.27	26.50	9.7409E-001		5.5152E-001
	778.89	12.74	1.7406E+000		-6.4509E-001
	867.32	4.16	4.9445E+000		9.4680E-001
	964.01	14.40	1.5363E+000		-6.7509E-001
	1085.78	10.00	1.8856E+000		4.2225E-001
	1112.02	13.30	1.4451E+000		-1.5090E+000
	1407.95	20.70	9.3027E-001		2.5730E-001
Eu-154	123.07	40.50	1.1571E+000	4.41E-001	1.6010E-001
	247.94	6.60	3.7772E+000		-3.6809E-001
	591.81	4.83	4.5435E+000		-1.0261E+000
	723.30	19.70	1.0391E+000		-3.8666E-001
	756.87	4.33	4.5243E+000		-6.7927E+000
	873.19	11.50	1.7126E+000		-1.5564E+000
	996.32	10.30	1.8222E+000		2.9079E-001
	1004.76	17.90	1.1202E+000		3.8929E-001
	1274.45	35.50	4.4139E-001		3.6483E-001
Eu-155	86.54	30.90	2.6868E+000	2.64E+000	-3.1522E-001
	105.31	20.70	2.6356E+000		1.1662E+000
Am-241	59.54	35.90	7.1740E+000	7.17E+000	-1.5660E-001
Cm-243	228.19	10.56	2.7890E+000	1.72E+000	-9.0353E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.7152E+000	1.72E+000	-1.2372E+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 8/9/2006 10:52:14 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-08-06-155-F-
Sample Title: OOL-08-06-155-F-G
Description: 100% Vegetation and silt fence

Sample Type:
Geometry:

Acquisition Started: 8/9/2006 10:42:13 AM
Live Time: 600.0 seconds
Real Time: 600.4 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-08-06-155-F-
Title: OOL-08-06-155-F-G
Description: 100% Vegetation and silt fence

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2639-	2652	2645.08	661.23	0.59	3.00E+001	20.33	2.80E+001
2	5830-	5854	5842.56	1460.61	2.15	2.15E+002	32.05	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	0.999	1460.81*	10.67	1.47848E+001	2.50373E+000
Cs-137	0.994	661.65*	85.12	2.06844E-001	1.42299E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R 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	1.478482E+001	2.503734E+000
Cs-137	0.994	2.068437E-001	1.422989E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	1.7459E-001	1.75E-001	-1.4393E-001
		1332.49	100.00	1.9247E-001		1.0280E-001
	Nb-94	702.63	100.00	2.1917E-001	1.87E-001	-1.6775E-002
		871.10	100.00	1.8737E-001		-1.8438E-001
	Ag-108m	79.20	7.10	1.5364E+001	2.26E-001	1.1477E+000
		433.93	89.90	2.3587E-001		-2.5309E-001
		614.37	90.40	2.5865E-001		-2.5901E-001
		722.95	90.50	2.2616E-001		-6.6008E-003
	Sb-125	176.33	6.89	5.2615E+000	7.72E-001	2.1294E+000
		427.89	29.33	7.7165E-001		-1.2454E-001
		463.38	10.35	2.2556E+000		-7.7221E-001
		600.56	17.80	1.2765E+000		-1.1189E-001
		606.64	5.02	5.6517E+000		6.9330E+000
		635.90	11.32	1.6824E+000		-7.5763E-001
	Cs-134	563.23	8.38	2.9484E+000	2.47E-001	3.8829E+000
		569.32	15.43	1.4788E+000		-2.4011E-001
		604.70	97.60	2.8220E-001		-6.0107E-003
		795.84	85.40	2.4669E-001		-4.2888E-002
		801.93	8.73	2.4637E+000		-1.8769E+000
+	Cs-137	661.65*	85.12	2.1852E-001	2.19E-001	2.0684E-001
	Eu-152	121.78	28.40	1.5181E+000	6.96E-001	-1.5982E-001
		244.69	7.49	3.8830E+000		-2.9343E+000
		344.27	26.50	8.9638E-001		-6.5898E-001
		778.89	12.74	1.6304E+000		2.9404E-001
		867.32	4.16	4.9445E+000		-2.4856E+000
		964.01	14.40	1.8548E+000		2.5315E+000
		1085.78	10.00	2.0390E+000		1.6240E-002
		1112.02	13.30	1.4251E+000		-6.6817E-001
		1407.95	20.70	6.9608E-001		-3.9302E-001
	Eu-154	123.07	40.50	1.0405E+000	5.16E-001	-8.1268E-001
		247.94	6.60	4.1947E+000		-3.6230E-001
		591.81	4.83	4.8821E+000		8.7236E-001
		723.30	19.70	1.0391E+000		3.4183E-001
		756.87	4.33	5.1366E+000		-6.6128E-001
		873.19	11.50	1.6087E+000		2.1449E-001
		996.32	10.30	1.7187E+000		6.1589E-001
		1004.76	17.90	1.0061E+000		1.0290E-001
		1274.45	35.50	5.1619E-001		-7.0939E-002
	Eu-155	86.54	30.90	2.7644E+000	2.76E+000	1.2680E+000
		105.31	20.70	2.9278E+000		8.4913E-001
	Am-241	59.54	35.90	6.9349E+000	6.93E+000	-6.1693E-001
	Cm-243	228.19	10.56	2.8533E+000	1.92E+000	1.4183E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.9153E+000	1.92E+000	-9.6521E-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 8/9/2006 2:35:54 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: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-08-06-156-F-
Sample Title: OOL-08-06-156-F-G
Description: 100% Vegetation and silt fence

Sample Type:
Geometry:

Acquisition Started: 8/9/2006 2:25:50 PM
Live Time: 600.0 seconds
Real Time: 600.4 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-08-06-156-F-
Title: OOL-08-06-156-F-G
Description: 100% Vegetation and silt fence

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	948-	961	954.00	238.60	0.96	4.70E+001	31.29	7.50E+001
2	1400-	1410	1405.98	351.60	0.38	2.83E+001	20.06	3.17E+001
3	2326-	2336	2330.79	582.82	0.61	2.87E+001	16.01	1.53E+001
4	2639-	2652	2645.07	661.39	1.63	7.24E+001	22.28	2.06E+001
5	3639-	3651	3644.96	911.38	0.44	2.30E+001	13.52	9.03E+000
6	5833-	5856	5844.24	1461.23	1.69	1.91E+002	30.31	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	0.993	1460.81*		10.67	1.25629E+001	2.23806E+000
Cs-137	0.997	661.65*		85.12	4.82333E-001	1.58966E-001
TL-208	0.470	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	1.86058E-001	1.06737E-001
		860.37		12.46		
Pb-212	0.403	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	4.59467E-001	3.14515E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R 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	1.256290E+001	2.238057E+000
Cs-137	0.997	4.823334E-001	1.589658E-001
TL-208	0.470	1.860581E-001	1.067367E-001
Pb-212 @	0.403	4.594667E-001	3.145155E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	351.60	4.7118E-002	70.95
5	911.38	3.8281E-002	58.85

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: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	1.6980E-001	1.70E-001	-6.9064E-002
		1332.49	100.00	1.8795E-001		1.1501E-001
	Nb-94	702.63	100.00	1.9718E-001	1.97E-001	6.5431E-002
		871.10	100.00	1.9902E-001		-5.4365E-002
	Ag-108m	79.20	7.10	1.1331E+001	2.17E-001	-1.1138E+001
		433.93	89.90	2.4379E-001		-9.7267E-002
		614.37	90.40	2.6065E-001		-2.2678E-001
		722.95	90.50	2.1715E-001		2.2248E-001
	Sb-125	176.33	6.89	4.0062E+000	7.40E-001	-1.1650E+000
		427.89	29.33	7.3971E-001		1.3803E-001
		463.38	10.35	1.9250E+000		1.1505E+000
		600.56	17.80	1.0610E+000		-3.7699E-001
		606.64	5.02	5.2130E+000		7.4297E+000
		635.90	11.32	1.6970E+000		-3.8708E-001
	Cs-134	563.23	8.38	2.5197E+000	2.18E-001	2.3417E+000
		569.32	15.43	1.2403E+000		-2.5832E-001
		604.70	97.60	2.3718E-001		-1.8962E-001
		795.84	85.40	2.1787E-001		-1.0622E-001
		801.93	8.73	2.1352E+000		-5.6748E-001
+	Cs-137	661.65*	85.12	1.8332E-001	1.83E-001	4.8233E-001
	Eu-152	121.78	28.40	1.3426E+000	6.68E-001	6.9191E-001
		244.69	7.49	3.2784E+000		3.1428E-001
		344.27	26.50	8.1732E-001		-1.1824E-001
		778.89	12.74	1.4875E+000		-7.1724E-001
		867.32	4.16	4.5098E+000		-4.4360E+000
		964.01	14.40	1.5573E+000		9.9406E-001
		1085.78	10.00	1.7295E+000		6.8884E-001
		1112.02	13.30	1.1487E+000		-1.1952E-001
		1407.95	20.70	6.6804E-001		-1.8622E-001
	Eu-154	123.07	40.50	9.4949E-001	4.98E-001	6.3949E-001
		247.94	6.60	3.5503E+000		-3.0512E-001
		591.81	4.83	4.2282E+000		2.9868E+000
		723.30	19.70	9.8742E-001		5.5754E-001
		756.87	4.33	4.5411E+000		-9.8077E-001
		873.19	11.50	1.6738E+000		3.0199E-001
		996.32	10.30	1.7036E+000		-3.4748E-002
		1004.76	17.90	9.5178E-001		2.1396E-001
		1274.45	35.50	4.9837E-001		-1.0402E-001
	Eu-155	86.54	30.90	2.1332E+000	2.13E+000	2.2103E-001
		105.31	20.70	2.1551E+000		-2.0462E-001
	Am-241	59.54	35.90	3.8864E+000	3.89E+000	1.1599E+000
	Cm-243	228.19	10.56	2.3236E+000	1.71E+000	5.9579E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.7081E+000	1.71E+000	4.5112E-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 8/9/2006 10:54:46 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-08-06-157-F-
Sample Title: OOL-08-06-157-F-G
Description: 100% Vegetation silt fence

Sample Type:
Geometry:

Acquisition Started: 8/9/2006 10:44:50 AM
Live Time: 600.0 seconds
Real Time: 600.5 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-08-06-157-F-
Title: OOL-08-06-157-F-G
Description: 100% Vegetation silt fence

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	949-	961	955.20	238.90	0.54	4.10E+001	29.45	7.00E+001
2	2329-	2340	2334.04	583.63	0.58	3.07E+001	17.27	1.83E+001
3	2434-	2445	2438.66	609.78	1.80	4.85E+001	15.73	6.50E+000
4	3873-	3885	3878.95	969.88	0.87	1.89E+001	13.67	1.11E+001
5	5840-	5861	5850.37	1462.76	1.67	1.71E+002	27.10	5.50E+000
6	7060-	7073	7066.90	1766.91	0.74	1.21E+001	8.27	1.88E+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: 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	0.863	1460.81*		10.67	1.12211E+001	2.00162E+000
TL-208	0.467	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	1.98967E-001	1.15162E-001
		860.37		12.46		
Pb-212	0.402	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	4.01239E-001	2.95033E-001
Bi-214	0.644	609.31*		46.30	5.79970E-001	2.01528E-001
		1120.29		15.10		
		1764.49*		15.80	5.98586E-001	4.12600E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R 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	0.863	1.122107E+001	2.001620E+000
TL-208	0.467	1.989674E-001	1.151618E-001
Pb-212 @	0.402	4.012392E-001	2.950328E-001
Bi-214	0.644	5.835554E-001	1.810821E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	969.88	3.1500E-002	72.34

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	1.9168E-001	1.46E-001	1.3973E-001
	1332.49	100.00	1.4594E-001		2.7453E-002
Nb-94	702.63	100.00	1.7170E-001	1.68E-001	1.3524E-001
	871.10	100.00	1.6814E-001		3.6026E-003
Ag-108m	79.20	7.10	1.0889E+001	2.01E-001	-9.7175E+000
	433.93	89.90	2.3019E-001		-5.4170E-002
	614.37	90.40	2.6065E-001		-1.5603E-002
	722.95	90.50	2.0095E-001		4.9702E-002
Sb-125	176.33	6.89	3.8649E+000	6.98E-001	1.8791E-001
	427.89	29.33	6.9791E-001		-5.9246E-001
	463.38	10.35	2.1723E+000		7.2050E-001
	600.56	17.80	1.0503E+000		1.8580E-001
	606.64	5.02	4.8236E+000		-6.8138E+000
	635.90	11.32	1.7797E+000		5.7031E-001
Cs-134	563.23	8.38	2.3810E+000	2.03E-001	-2.3781E-001
	569.32	15.43	1.2047E+000		-7.9109E-002
	604.70	97.60	2.0335E-001		-3.8624E-001
	795.84	85.40	2.2558E-001		-6.7297E-003
	801.93	8.73	2.1093E+000		-1.3513E+000
Cs-137	661.65	85.12	3.0562E-001	3.06E-001	4.0422E-001
Eu-152	121.78	28.40	1.3486E+000	6.68E-001	7.4281E-001
	244.69	7.49	3.3723E+000		7.3232E-002
	344.27	26.50	8.1283E-001		-1.4113E-001
	778.89	12.74	1.4875E+000		-7.5948E-001
	867.32	4.16	3.9098E+000		-5.0339E+000
	964.01	14.40	1.2985E+000		-4.7246E-001
	1085.78	10.00	1.5835E+000		-2.9168E-001
	1112.02	13.30	1.3678E+000		-7.4409E-001
	1407.95	20.70	6.6804E-001		2.4908E-002
Eu-154	123.07	40.50	9.3426E-001	4.36E-001	8.0096E-002
	247.94	6.60	3.6627E+000		8.2246E-001
	591.81	4.83	4.3337E+000		-1.1823E+000
	723.30	19.70	9.5593E-001		7.6442E-001
	756.87	4.33	4.0897E+000		5.7493E-001
	873.19	11.50	1.4629E+000		4.6791E-002
	996.32	10.30	1.6514E+000		-1.9673E+000
	1004.76	17.90	1.0530E+000		-2.2117E-001
	1274.45	35.50	4.3592E-001		-4.5258E-001
Eu-155	86.54	30.90	2.0817E+000	2.08E+000	1.1278E+000
	105.31	20.70	2.0836E+000		-1.5421E+000
Am-241	59.54	35.90	3.8251E+000	3.83E+000	7.2649E-001
Cm-243	228.19	10.56	2.4041E+000	1.62E+000	6.2054E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.6154E+000	1.62E+000	1.2807E+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 8/9/2006 1:45:43 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-08-06-158-F-
Sample Title: OOL-08-06-158-F-G
Description: 100% Vegetation and silt fence

Sample Type:
Geometry:

Acquisition Started: 8/9/2006 1:35:42 PM
Live Time: 600.0 seconds
Real Time: 600.4 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-08-06-158-F-
Title: OOL-08-06-158-F-G
Description: 100% Vegetation and silt fence

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	1402-	1413	1406.30	351.68	1.35	5.52E+001	23.98	3.68E+001
2	2430-	2441	2435.65	609.03	0.99	2.73E+001	19.03	2.68E+001
3	2642-	2651	2646.86	661.84	0.38	2.90E+001	15.00	1.30E+001
4	3869-	3880	3874.54	968.78	0.52	1.53E+001	14.88	1.67E+001
5	5830-	5854	5842.75	1460.86	1.41	2.73E+002	37.39	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: 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	1.79661E+001	2.85686E+000
Cs-137	0.999	661.65*	85.12	1.93061E-001	1.02542E-001
Bi-214	0.403	609.31*	46.30	3.25770E-001	2.31077E-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	1.000	1.796612E+001	2.856857E+000
Cs-137	0.999	1.930605E-001	1.025415E-001
Bi-214	0.403	3.257701E-001	2.310772E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	9.2061E-002	43.42
4	968.78	2.5560E-002	97.03

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File: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	1.8111E-001	1.50E-001	4.7916E-002
		1332.49	100.00	1.4965E-001		-5.0930E-003
	Nb-94	702.63	100.00	2.2810E-001	2.05E-001	1.8580E-001
		871.10	100.00	2.0543E-001		3.4825E-002
	Ag-108m	79.20	7.10	1.1795E+001	2.45E-001	-8.0414E+000
		433.93	89.90	2.6076E-001		-9.1287E-002
		614.37	90.40	2.4511E-001		-1.6667E-001
		722.95	90.50	2.5932E-001		2.2762E-001
	Sb-125	176.33	6.89	4.4021E+000	8.29E-001	1.7800E+000
		427.89	29.33	8.2862E-001		7.0008E-001
		463.38	10.35	2.1200E+000		2.2378E+000
		600.56	17.80	1.0064E+000		-7.5531E-004
		606.64	5.02	5.0500E+000		4.1610E+000
		635.90	11.32	1.7958E+000		3.8909E-001
	Cs-134	563.23	8.38	2.7922E+000	2.23E-001	1.6311E+000
		569.32	15.43	1.3410E+000		4.8436E-001
		604.70	97.60	2.4637E-001		-5.2347E-002
		795.84	85.40	2.2304E-001		-1.5878E-002
		801.93	8.73	2.3307E+000		-7.1575E-001
+	Cs-137	661.65*	85.12	1.3738E-001	1.37E-001	1.9306E-001
	Eu-152	121.78	28.40	1.4030E+000	6.68E-001	3.9795E-001
		244.69	7.49	3.7126E+000		6.4883E-001
		344.27	26.50	8.7340E-001		-1.0037E-001
		778.89	12.74	1.3245E+000		-1.4071E+000
		867.32	4.16	4.5098E+000		-2.4872E+000
		964.01	14.40	1.7762E+000		-1.7180E-001
		1085.78	10.00	1.5835E+000		-1.8361E+000
		1112.02	13.30	1.3876E+000		-7.2233E-001
		1407.95	20.70	6.6804E-001		1.8325E-001
	Eu-154	123.07	40.50	9.8189E-001	5.15E-001	3.2121E-001
		247.94	6.60	3.9544E+000		-1.1177E+000
		591.81	4.83	4.6348E+000		1.9689E+000
		723.30	19.70	1.1745E+000		8.2924E-001
		756.87	4.33	4.1426E+000		2.1419E-001
		873.19	11.50	1.8589E+000		-6.7134E-001
		996.32	10.30	1.5694E+000		4.6956E-001
		1004.76	17.90	1.1192E+000		6.4132E-001
		1274.45	35.50	5.1467E-001		-5.6096E-002
	Eu-155	86.54	30.90	2.2501E+000	2.25E+000	3.4950E-001
		105.31	20.70	2.3386E+000		3.8152E-001
	Am-241	59.54	35.90	3.8114E+000	3.81E+000	4.6233E-001
	Cm-243	228.19	10.56	2.5792E+000	1.76E+000	-1.8670E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.7626E+000	1.76E+000	-5.3124E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 8/9/2006 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: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-08-06-159-F-
Sample Title: OOL-08-06-159-F-G
Description: 100% Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/9/2006 1:03:51 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-08-06-159-F-
Title: OOL-08-06-159-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	998-	1007	1002.02	250.46	0.92	2.25E+001	19.30	3.25E+001
2	2638-	2651	2644.10	660.99	0.99	5.77E+001	21.25	2.13E+001
3	5830-	5853	5842.68	1460.64	1.02	2.39E+002	31.06	3.01E+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	0.999	1460.81*	10.67	1.63985E+001	2.51074E+000
Cs-137	0.986	661.65*	85.12	3.97843E-001	1.53843E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R 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	1.639847E+001	2.510743E+000
Cs-137	0.986	3.978434E-001	1.538432E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	250.46	3.7424E-002	85.93

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: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	1.80E-001	1.2920E-001
		1332.49	100.00	1.8004E-001		-1.8372E-002
	Nb-94	702.63	100.00	2.2656E-001	2.19E-001	-1.8916E-001
		871.10	100.00	2.1863E-001		2.7024E-001
	Ag-108m	79.20	7.10	1.7276E+001	2.75E-001	-1.1917E+001
		433.93	89.90	2.7545E-001		-1.2744E-001
		614.37	90.40	2.9076E-001		-1.5793E-001
		722.95	90.50	2.7846E-001		1.2310E-001
	Sb-125	176.33	6.89	5.0981E+000	8.20E-001	-1.0192E+000
		427.89	29.33	8.1986E-001		-4.4961E-001
		463.38	10.35	2.5606E+000		1.3327E+000
		600.56	17.80	1.4498E+000		1.0633E+000
		606.64	5.02	5.9820E+000		5.4019E+000
		635.90	11.32	1.9838E+000		1.0765E+000
	Cs-134	563.23	8.38	2.9311E+000	2.70E-001	-8.1744E-001
		569.32	15.43	1.5294E+000		-8.5485E-001
		604.70	97.60	3.0225E-001		1.7573E-001
		795.84	85.40	2.6972E-001		2.8985E-002
		801.93	8.73	2.5324E+000		-3.1607E+000
+	Cs-137	661.65*	85.12	1.9418E-001	1.94E-001	3.9784E-001
	Eu-152	121.78	28.40	1.5951E+000	9.61E-001	-5.3845E-001
		244.69	7.49	4.2477E+000		5.7651E-001
		344.27	26.50	9.7800E-001		-4.7048E-001
		778.89	12.74	1.8294E+000		-2.5728E-001
		867.32	4.16	5.2510E+000		3.6470E+000
		964.01	14.40	1.9257E+000		1.3286E+000
		1085.78	10.00	2.1578E+000		1.5851E+000
		1112.02	13.30	1.5410E+000		-2.0317E+000
		1407.95	20.70	9.6070E-001		4.7194E-001
	Eu-154	123.07	40.50	1.1162E+000	5.73E-001	-3.9073E-001
		247.94	6.60	4.4424E+000		-2.7097E-002
		591.81	4.83	5.1049E+000		-1.5111E+000
		723.30	19.70	1.2876E+000		1.5139E+000
		756.87	4.33	5.3098E+000		-1.0441E-001
		873.19	11.50	1.7718E+000		-8.8582E-001
		996.32	10.30	1.8717E+000		-9.9055E-001
		1004.76	17.90	1.1727E+000		1.3383E-001
		1274.45	35.50	5.7290E-001		2.6713E-001
	Eu-155	86.54	30.90	2.9891E+000	2.75E+000	2.0683E-001
		105.31	20.70	2.7522E+000		-3.7064E+000
	Am-241	59.54	35.90	7.2905E+000	7.29E+000	2.3669E+000
	Cm-243	228.19	10.56	2.8249E+000	2.12E+000	-6.7555E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.1249E+000	2.12E+000	1.4108E+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 8/9/2006 11:48:21 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: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-08-06-160-F-
Sample Title: OOL-08-06-160-F-G
Description: 100% Vegetation-Silt Fence

Sample Type:
Geometry:

Acquisition Started: 8/9/2006 11:38:19 AM
Live Time: 600.0 seconds
Real Time: 600.4 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-08-06-160-F-
Title: OOL-08-06-160-F-G
Description: 100% Vegetation-Silt Fence

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5830-	5856	5843.51	1460.85	0.90	2.24E+002	34.67	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	1.000	1460.81*	10.67	1.53502E+001	2.68419E+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	1.535021E+001	2.684187E+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	1.9971E-001	1.63E-001	9.8709E-002
	1332.49	100.00	1.6302E-001		1.4732E-003
Nb-94	702.63	100.00	2.1345E-001	2.13E-001	-2.7022E-002
	871.10	100.00	2.3449E-001		4.9229E-002
Ag-108m	79.20	7.10	1.4767E+001	2.56E-001	-1.2349E+001
	433.93	89.90	2.6579E-001		-3.4323E-001
	614.37	90.40	3.0922E-001		6.8359E-002
	722.95	90.50	2.5575E-001		-2.1040E-002
Sb-125	176.33	6.89	4.9720E+000	8.24E-001	2.3051E+000
	427.89	29.33	8.2410E-001		2.6376E-001
	463.38	10.35	2.4071E+000		-2.2890E+000
	600.56	17.80	1.3221E+000		5.7267E-001
	606.64	5.02	5.3830E+000		2.3004E+000
	635.90	11.32	1.8728E+000		-1.3384E+000
Cs-134	563.23	8.38	2.6172E+000	2.39E-001	1.8793E+000
	569.32	15.43	1.4788E+000		-2.9070E-001
	604.70	97.60	2.7374E-001		1.6232E-003
	795.84	85.40	2.3931E-001		-1.0033E-001
	801.93	8.73	2.3930E+000		-2.5318E+000
Cs-137	661.65	85.12	3.7740E-001	3.77E-001	5.8822E-001
Eu-152	121.78	28.40	1.5875E+000	8.31E-001	5.4662E-001
	244.69	7.49	4.0594E+000		-6.1522E+000
	344.27	26.50	9.2167E-001		-2.2218E-001
	778.89	12.74	1.7099E+000		1.0378E+000
	867.32	4.16	5.3972E+000		-4.1537E+000
	964.01	14.40	1.7809E+000		2.3616E-001
	1085.78	10.00	1.8587E+000		3.5100E-002
	1112.02	13.30	1.4451E+000		1.2497E-001
	1407.95	20.70	8.3148E-001		7.2671E-001
Eu-154	123.07	40.50	1.0977E+000	5.41E-001	-8.1523E-001
	247.94	6.60	4.2328E+000		-1.9258E+000
	591.81	4.83	4.6134E+000		-1.9642E+000
	723.30	19.70	1.1750E+000		-4.6285E-001
	756.87	4.33	5.0476E+000		3.0781E+000
	873.19	11.50	2.0233E+000		1.0856E-001
	996.32	10.30	2.0119E+000		1.8611E+000
	1004.76	17.90	1.1727E+000		-6.6024E-001
	1274.45	35.50	5.4130E-001		-6.2885E-002
Eu-155	86.54	30.90	2.7577E+000	2.76E+000	1.9900E+000
	105.31	20.70	2.7871E+000		1.8556E+000
Am-241	59.54	35.90	6.8121E+000	6.81E+000	2.8122E+000
Cm-243	228.19	10.56	2.7526E+000	1.97E+000	1.5203E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.9667E+000	1.97E+000	-1.2689E+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 8/9/2006 11:28:07 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: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-08-06-161-F-
Sample Title: OOL-08-06-161-F-G
Description: 100% Vegetation-Silt Fence

Sample Type:
Geometry:

Acquisition Started: 8/9/2006 11:18:06 AM
Live Time: 600.0 seconds
Real Time: 600.4 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-08-06-161-F-
Title: OOL-08-06-161-F-G
Description: 100% Vegetation-Silt Fence

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5829-	5855	5843.86	1460.93	0.46	2.11E+002	31.02	9.48E+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: 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	1.44463E+001	2.42864E+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	1.444626E+001	2.428637E+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	2.3081E-001	1.86E-001	5.4498E-002
	1332.49	100.00	1.8637E-001		8.3450E-004
Nb-94	702.63	100.00	2.3193E-001	2.14E-001	1.2898E-001
	871.10	100.00	2.1447E-001		-5.0044E-002
Ag-108m	79.20	7.10	1.5150E+001	2.28E-001	-1.3539E+001
	433.93	89.90	2.4678E-001		8.2703E-002
	614.37	90.40	2.8268E-001		-2.9186E-001
	722.95	90.50	2.2841E-001		-1.7843E-001
Sb-125	176.33	6.89	4.8773E+000	7.44E-001	3.5357E+000
	427.89	29.33	7.4395E-001		-4.7784E-001
	463.38	10.35	2.4910E+000		1.9115E+000
	600.56	17.80	1.1694E+000		-1.1041E+000
	606.64	5.02	5.6255E+000		5.6519E+000
	635.90	11.32	1.8891E+000		-6.9262E-001
Cs-134	563.23	8.38	2.9657E+000	2.39E-001	-9.9457E-001
	569.32	15.43	1.6068E+000		1.2655E+000
	604.70	97.60	2.6647E-001		-1.6243E-001
	795.84	85.40	2.3931E-001		-1.3314E-001
	801.93	8.73	2.2698E+000		-3.6668E-001
Cs-137	661.65	85.12	3.3952E-001	3.40E-001	3.3828E-001
Eu-152	121.78	28.40	1.6969E+000	7.77E-001	-7.7759E-001
	244.69	7.49	3.8723E+000		-1.7754E+000
	344.27	26.50	1.0011E+000		-4.3791E-001
	778.89	12.74	1.6304E+000		4.8412E-001
	867.32	4.16	5.3972E+000		-3.4352E-001
	964.01	14.40	1.8059E+000		1.8090E+000
	1085.78	10.00	2.1111E+000		-6.2664E-001
	1112.02	13.30	1.6308E+000		-7.7069E-002
	1407.95	20.70	7.7675E-001		6.2289E-001
Eu-154	123.07	40.50	1.1930E+000	4.61E-001	6.4372E-001
	247.94	6.60	4.1174E+000		-1.2737E+000
	591.81	4.83	4.2893E+000		-1.8209E+000
	723.30	19.70	1.0698E+000		6.3747E-002
	756.87	4.33	5.3521E+000		-2.6604E-001
	873.19	11.50	1.9020E+000		-2.2283E-002
	996.32	10.30	2.0564E+000		3.5778E-001
	1004.76	17.90	1.1598E+000		-8.3564E-002
	1274.45	35.50	4.6137E-001		-3.8883E-001
Eu-155	86.54	30.90	2.8355E+000	2.84E+000	2.9525E+000
	105.31	20.70	3.1549E+000		1.5902E+000
Am-241	59.54	35.90	6.1453E+000	6.15E+000	-6.7036E+000
Cm-243	228.19	10.56	2.7818E+000	1.91E+000	-3.2594E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.9088E+000	1.91E+000	-7.6615E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 8/9/2006 12:55:05 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-08-06-162-F-
Sample Title: OOL-08-06-162-F-G
Description: 100% Vegetation and silt fence

Sample Type:
Geometry:

Acquisition Started: 8/9/2006 12:45:04 PM
Live Time: 600.0 seconds
Real Time: 600.4 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-08-06-162-F-
Title: OOL-08-06-162-F-G
Description: 100% Vegetation and silt fence

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	948-	958	953.55	238.48	0.83	5.43E+001	27.12	5.78E+001
2	1401-	1412	1406.71	351.78	0.53	2.23E+001	19.83	3.17E+001
3	2428-	2441	2435.15	608.91	1.38	3.30E+001	18.78	2.10E+001
4	2636-	2653	2644.77	661.32	1.03	5.96E+001	19.93	1.34E+001
5	5832-	5854	5843.65	1461.08	1.70	2.23E+002	32.02	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: 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	1.46376E+001	2.41657E+000
Cs-137	0.996	661.65*		85.12	3.96965E-001	1.40799E-001
Pb-212	0.403	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	5.30797E-001	2.78075E-001
Bi-214	0.401	609.31*		46.30	3.94265E-001	2.29854E-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	1.463763E+001	2.416569E+000
Cs-137	0.996	3.969654E-001	1.407990E-001
Pb-212 @	0.403	5.307970E-001	2.780750E-001
Bi-214	0.401	3.942654E-001	2.298545E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	351.78	3.7230E-002	88.77

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	1.8111E-001	1.67E-001	-8.0842E-002
		1332.49	100.00	1.6681E-001		-8.8413E-002
	Nb-94	702.63	100.00	2.0866E-001	1.78E-001	1.2229E-001
		871.10	100.00	1.7827E-001		-6.6577E-002
	Ag-108m	79.20	7.10	1.2313E+001	2.25E-001	-1.7345E+000
		433.93	89.90	2.2546E-001		-1.1765E-002
		614.37	90.40	2.5214E-001		-3.9595E-002
		722.95	90.50	2.4806E-001		1.5285E-001
	Sb-125	176.33	6.89	4.0652E+000	7.40E-001	-1.3045E+000
		427.89	29.33	7.3971E-001		4.8564E-001
		463.38	10.35	2.1067E+000		-1.3467E+000
		600.56	17.80	1.1716E+000		5.7981E-001
		606.64	5.02	5.2396E+000		2.8557E+000
		635.90	11.32	1.7306E+000		-1.4859E+000
	Cs-134	563.23	8.38	2.6323E+000	2.15E-001	1.8069E+000
		569.32	15.43	1.2973E+000		-3.8578E-001
		604.70	97.60	2.7195E-001		7.2530E-002
		795.84	85.40	2.1523E-001		1.1289E-001
		801.93	8.73	2.0023E+000		-1.5780E+000
+	Cs-137	661.65*	85.12	1.6317E-001	1.63E-001	3.9697E-001
	Eu-152	121.78	28.40	1.3819E+000	7.98E-001	3.3642E-001
		244.69	7.49	3.5192E+000		1.9591E+000
		344.27	26.50	8.5229E-001		1.6876E-001
		778.89	12.74	1.6019E+000		9.8198E-001
		867.32	4.16	4.4538E+000		-9.6557E-001
		964.01	14.40	1.5711E+000		-1.0819E-001
		1085.78	10.00	1.9625E+000		8.5441E-001
		1112.02	13.30	1.5005E+000		3.9818E-001
		1407.95	20.70	7.9798E-001		4.1118E-002
	Eu-154	123.07	40.50	9.3146E-001	4.73E-001	-1.3926E-001
		247.94	6.60	3.8247E+000		-2.3691E+000
		591.81	4.83	4.2637E+000		1.9316E+000
		723.30	19.70	1.1308E+000		3.8650E-001
		756.87	4.33	4.3963E+000		2.0094E+000
		873.19	11.50	1.6933E+000		3.2935E-001
		996.32	10.30	1.8968E+000		-2.5206E-001
		1004.76	17.90	1.0392E+000		2.0565E-001
		1274.45	35.50	4.7274E-001		-5.0982E-002
	Eu-155	86.54	30.90	2.2999E+000	2.30E+000	6.5041E-001
		105.31	20.70	2.3120E+000		5.3355E-001
	Am-241	59.54	35.90	3.8388E+000	3.84E+000	-5.6362E-001
	Cm-243	228.19	10.56	2.5719E+000	1.67E+000	-1.5225E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.6731E+000	1.67E+000	-6.8097E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 8/9/2006 1:11:56 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-08-06-163-F-
Sample Title: OOL-08-06-163-F-G
Description: 100% Vegetation and silt fence

Sample Type:
Geometry:

Acquisition Started: 8/9/2006 1:01:55 PM
Live Time: 600.0 seconds
Real Time: 600.5 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-08-06-163-F-
Title: OOL-08-06-163-F-G
Description: 100% Vegetation and silt fence

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	950-	959	953.42	238.45	0.30	3.38E+001	26.83	6.52E+001
2	1402-	1412	1406.14	351.64	0.80	2.93E+001	20.68	3.37E+001
3	2639-	2652	2645.35	661.46	1.08	3.84E+001	18.42	1.76E+001
4	3639-	3650	3644.26	911.20	0.88	2.51E+001	14.40	1.09E+001
5	5833-	5855	5843.62	1461.08	1.15	2.41E+002	32.19	7.82E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/GRAMS)	Activity Uncertainty
K-40	0.997	1460.81*		10.67	1.58626E+001	2.47634E+000
Cs-137	0.999	661.65*		85.12	2.56165E-001	1.26413E-001
Pb-212	0.403	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	3.30680E-001	2.67530E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R 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	1.586258E+001	2.476342E+000
Cs-137	0.999	2.561648E-001	1.264130E-001
Pb-212 @	0.403	3.306797E-001	2.675303E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	4.8829E-002	70.59
4	911.20	4.1771E-002	57.46

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: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	2.2012E-001	1.70E-001	2.7514E-002
		1332.49	100.00	1.7001E-001		-1.9724E-002
	Nb-94	702.63	100.00	1.9914E-001	1.66E-001	-5.5865E-002
		871.10	100.00	1.6550E-001		6.3973E-002
	Ag-108m	79.20	7.10	1.2277E+001	2.39E-001	-7.3801E+000
		433.93	89.90	2.3935E-001		6.4550E-002
		614.37	90.40	2.5558E-001		-3.6829E-001
		722.95	90.50	2.5188E-001		2.2865E-001
	Sb-125	176.33	6.89	4.2558E+000	7.79E-001	2.5052E+000
		427.89	29.33	7.7913E-001		5.7406E-001
		463.38	10.35	1.9397E+000		2.5466E-001
		600.56	17.80	1.2893E+000		4.1517E-001
		606.64	5.02	5.2396E+000		3.0055E+000
		635.90	11.32	1.8117E+000		-7.6326E-001
	Cs-134	563.23	8.38	2.5004E+000	2.18E-001	-2.7434E+000
		569.32	15.43	1.3728E+000		8.7899E-002
		604.70	97.60	2.5807E-001		-6.7694E-002
		795.84	85.40	2.1787E-001		-4.9959E-002
		801.93	8.73	2.0023E+000		-1.4842E-001
+	Cs-137	661.65*	85.12	1.7290E-001	1.73E-001	2.5616E-001
	Eu-152	121.78	28.40	1.4049E+000	8.35E-001	-5.0199E-001
		244.69	7.49	3.3374E+000		-1.5463E+000
		344.27	26.50	8.3500E-001		-8.8230E-001
		778.89	12.74	1.6175E+000		1.5139E+000
		867.32	4.16	3.7771E+000		-4.3632E-001
		964.01	14.40	1.5847E+000		-8.7870E-001
		1085.78	10.00	1.7570E+000		1.5075E+000
		1112.02	13.30	1.2191E+000		-1.0996E+000
		1407.95	20.70	8.7778E-001		1.9990E-001
	Eu-154	123.07	40.50	9.7523E-001	5.15E-001	-1.5408E-001
		247.94	6.60	3.6765E+000		1.2292E+000
		591.81	4.83	4.7934E+000		1.7288E+000
		723.30	19.70	1.1659E+000		9.4863E-001
		756.87	4.33	4.3963E+000		-2.9448E+000
		873.19	11.50	1.3685E+000		-4.7637E-001
		996.32	10.30	1.8270E+000		1.0437E+000
		1004.76	17.90	1.0932E+000		-3.2264E-001
		1274.45	35.50	5.1467E-001		1.9849E-001
	Eu-155	86.54	30.90	2.2784E+000	2.28E+000	-2.0995E-001
		105.31	20.70	2.4447E+000		4.3507E-001
	Am-241	59.54	35.90	4.1094E+000	4.11E+000	4.9991E-001
	Cm-243	228.19	10.56	2.8242E+000	1.78E+000	2.3838E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.7826E+000	1.78E+000	2.7364E-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 8/9/2006 1:29:23 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-08-06-164-F-
Sample Title: OOL-08-06-164-F-G
Description: 100% Vegetation and BIG ROCK

Sample Type:
Geometry:

Acquisition Started: 8/9/2006 1:19:21 PM
Live Time: 600.0 seconds
Real Time: 600.5 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-08-06-164-F-
Title: OOL-08-06-164-F-G
Description: 100% Vegetation and BIG ROCK

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2430-	2443	2435.20	608.92	0.85	4.41E+001	18.76	1.69E+001
2	2639-	2650	2644.84	661.33	0.60	4.34E+001	17.29	1.36E+001
3	5833-	5854	5842.99	1460.92	1.70	3.13E+002	36.90	1.10E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: 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	2.05849E+001	2.94410E+000
Cs-137	0.996	661.65*	85.12	2.89098E-001	1.20123E-001
Bi-214	0.402	609.31*	46.30	5.27210E-001	2.33676E-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	1.000	2.058494E+001	2.944103E+000
Cs-137	0.996	2.890980E-001	1.201232E-001
Bi-214	0.402	5.272097E-001	2.336761E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	2.2012E-001	1.82E-001	1.6445E-002
		1332.49	100.00	1.8219E-001		1.4436E-001
	Nb-94	702.63	100.00	2.4119E-001	2.18E-001	2.3052E-001
		871.10	100.00	2.1763E-001		1.9595E-003
	Ag-108m	79.20	7.10	1.1970E+001	2.40E-001	-9.8858E+000
		433.93	89.90	2.4671E-001		-1.5229E-001
		614.37	90.40	2.3969E-001		6.0467E-002
		722.95	90.50	2.5376E-001		-6.6157E-002
	Sb-125	176.33	6.89	4.0847E+000	7.83E-001	-1.9492E-001
		427.89	29.33	7.8338E-001		-2.8124E-001
		463.38	10.35	2.1723E+000		1.2326E-002
		600.56	17.80	1.2893E+000		3.5346E-001
		606.64	5.02	5.4985E+000		3.5977E+000
		635.90	11.32	1.7958E+000		6.4387E-001
	Cs-134	563.23	8.38	2.6323E+000	2.52E-001	1.8144E+000
		569.32	15.43	1.3302E+000		-7.0119E-001
		604.70	97.60	2.8124E-001		-9.6132E-002
		795.84	85.40	2.5168E-001		1.0412E-002
		801.93	8.73	2.3073E+000		6.2546E-001
+	Cs-137	661.65*	85.12	1.4663E-001	1.47E-001	2.8910E-001
	Eu-152	121.78	28.40	1.3858E+000	5.79E-001	-8.4476E-001
		244.69	7.49	3.4634E+000		-2.2373E+000
		344.27	26.50	7.3712E-001		-6.8992E-001
		778.89	12.74	1.5861E+000		-7.3111E-001
		867.32	4.16	4.8310E+000		-1.9271E+000
		964.01	14.40	1.7024E+000		9.6707E-001
		1085.78	10.00	1.7014E+000		-1.2658E+000
		1112.02	13.30	1.5362E+000		8.9577E-001
		1407.95	20.70	5.7851E-001		-1.0794E-001
	Eu-154	123.07	40.50	9.6448E-001	5.46E-001	1.7057E-001
		247.94	6.60	3.7849E+000		-1.1652E+000
		591.81	4.83	4.4025E+000		5.0658E-002
		723.30	19.70	1.1485E+000		-6.8100E-001
		756.87	4.33	4.7268E+000		-1.1400E+000
		873.19	11.50	1.9106E+000		1.2885E+000
		996.32	10.30	1.8968E+000		4.1984E-001
		1004.76	17.90	1.0932E+000		1.0953E-001
		1274.45	35.50	5.4567E-001		2.4016E-002
	Eu-155	86.54	30.90	2.3339E+000	2.32E+000	2.2084E+000
		105.31	20.70	2.3239E+000		-2.0212E-001
	Am-241	59.54	35.90	4.0061E+000	4.01E+000	4.5808E-001
	Cm-243	228.19	10.56	2.6800E+000	1.77E+000	-1.3134E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.7693E+000	1.77E+000	-8.5058E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 8/9/2006 11:43:25 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: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-08-06-165-F-
Sample Title: OOL-08-06-165-F-G
Description: 100% Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/9/2006 11:33:24 AM
Live Time: 600.0 seconds
Real Time: 600.4 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-08-06-165-F-
Title: OOL-08-06-165-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	947-	960	954.19	238.64	1.04	6.58E+001	36.65	1.03E+002
2	1175-	1184	1179.36	294.94	1.01	2.86E+001	21.55	4.04E+001
3	2036-	2049	2041.48	510.49	0.36	4.90E+001	22.26	2.90E+001
4	2428-	2442	2434.98	608.87	0.78	3.97E+001	20.57	2.43E+001
5	3636-	3649	3643.26	910.95	0.60	4.52E+001	16.37	8.85E+000
6	3867-	3880	3873.47	968.51	1.02	3.22E+001	14.00	6.81E+000
7	5830-	5853	5842.22	1460.73	2.06	3.36E+002	36.59	3.07E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I 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	2.57142E-001	1.22377E-001
K-40	1.000	1460.81*		10.67	2.20912E+001	2.99801E+000
Pb-212	0.403	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.43641E-001	3.72579E-001
Bi-214	0.401	609.31*		46.30	4.74093E-001	2.52881E-001
		1120.29		15.10		
		1764.49		15.80		
Ac-228	0.632	338.32		11.40		
		911.07*		27.70	9.97191E-001	3.79341E-001
		969.11*		16.60	1.20052E+000	5.37004E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R 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	2.571421E-001	1.223771E-001
K-40	1.000	2.209125E+001	2.998010E+000
Pb-212 @	0.403	6.436410E-001	3.725785E-001
Bi-214	0.401	4.740932E-001	2.528808E-001
Ac-228	0.632	1.064876E+000	3.098336E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	294.94	4.7657E-002	75.35

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	2.3294E-001	1.82E-001	8.4878E-002
	1332.49	100.00	1.8219E-001		-9.7627E-003
Nb-94	702.63	100.00	2.2298E-001	2.08E-001	1.8464E-002
	871.10	100.00	2.0751E-001		1.2337E-001
Ag-108m	79.20	7.10	1.2032E+001	2.48E-001	-2.8636E+001
	433.93	89.90	2.5101E-001		8.5170E-003
	614.37	90.40	2.6887E-001		-1.0865E-001
	722.95	90.50	2.4806E-001		2.4048E-001
Sb-125	176.33	6.89	4.1901E+000	8.17E-001	-1.9988E+000
	427.89	29.33	8.1654E-001		-1.0410E-001
	463.38	10.35	2.4388E+000		-8.9770E-001
	600.56	17.80	1.2183E+000		-4.9722E-001
	606.64	5.02	5.1862E+000		4.4525E+000
	635.90	11.32	1.8431E+000		-4.2122E-001
Cs-134	563.23	8.38	2.6687E+000	2.62E-001	1.1817E+000
	569.32	15.43	1.6034E+000		1.9211E+000
	604.70	97.60	2.6232E-001		-8.8574E-002
	795.84	85.40	2.8116E-001		3.5206E-001
	801.93	8.73	2.3307E+000		-6.9911E-001
Cs-137	661.65	85.12	3.3123E-001	3.31E-001	2.0162E-001
Eu-152	121.78	28.40	1.4899E+000	7.98E-001	3.8342E-001
	244.69	7.49	3.4182E+000		-1.7853E+000
	344.27	26.50	8.0378E-001		-6.6116E-001
	778.89	12.74	1.5377E+000		-1.1046E+000
	867.32	4.16	5.3200E+000		-4.7268E-001
	964.01	14.40	1.8001E+000		-7.1789E-001
	1085.78	10.00	2.1022E+000		9.4235E-001
	1112.02	13.30	1.7022E+000		1.6111E-001
	1407.95	20.70	7.9798E-001		2.5738E-001
Eu-154	123.07	40.50	1.0386E+000	5.60E-001	5.5111E-001
	247.94	6.60	3.9417E+000		-1.3044E+000
	591.81	4.83	4.7934E+000		2.1577E+000
	723.30	19.70	1.1485E+000		8.3145E-001
	756.87	4.33	4.2968E+000		-2.3908E+000
	873.19	11.50	1.6340E+000		-4.0590E-002
	996.32	10.30	2.2105E+000		1.4769E+000
	1004.76	17.90	1.1063E+000		4.7557E-002
	1274.45	35.50	5.6047E-001		7.0845E-002
Eu-155	86.54	30.90	2.3423E+000	2.34E+000	-3.8955E-001
	105.31	20.70	2.3386E+000		-1.2630E+000
Am-241	59.54	35.90	4.0903E+000	4.09E+000	-8.1778E-001
Cm-243	228.19	10.56	2.7428E+000	1.87E+000	-4.9119E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.8666E+000	1.87E+000	-2.6023E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 8/9/2006 11:22:18 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: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-08-06-166-F-
Sample Title: OOL-08-06-166-F-G
Description: 100% Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/9/2006 11:12:17 AM
Live Time: 600.0 seconds
Real Time: 600.5 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-08-06-166-F-
Title: OOL-08-06-166-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	947-	958	954.35	238.68	1.14	6.02E+001	32.66	8.68E+001
2	1403-	1414	1407.85	352.07	0.79	3.57E+001	21.18	3.13E+001
3	2324-	2337	2331.42	582.97	1.26	4.56E+001	18.96	1.74E+001
4	2639-	2651	2644.70	661.30	0.83	2.58E+001	19.91	2.93E+001
5	3868-	3881	3875.03	968.90	0.40	3.10E+001	13.08	4.96E+000
6	5831-	5854	5843.40	1461.02	0.94	3.08E+002	35.70	5.94E+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: 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	2.02607E+001	2.86427E+000
Cs-137	0.995	661.65*		85.12	1.71597E-001	1.34240E-001
TL-208	0.472	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	2.95754E-001	1.29098E-001
		860.37		12.46		
Pb-212	0.403	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	5.88960E-001	3.32663E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R 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	2.026065E+001	2.864268E+000
Cs-137	0.995	1.715972E-001	1.342396E-001
TL-208	0.472	2.957545E-001	1.290983E-001
Pb-212 @	0.403	5.889605E-001	3.326633E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	352.07	5.9428E-002	59.41
5	968.90	5.1736E-002	42.14

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	1.9674E-001	1.79E-001	3.1900E-002
		1332.49	100.00	1.7923E-001		1.0001E-002
	Nb-94	702.63	100.00	2.1415E-001	1.78E-001	7.8659E-002
		871.10	100.00	1.7827E-001		6.3594E-002
	Ag-108m	79.20	7.10	1.2540E+001	2.38E-001	-1.2582E+001
		433.93	89.90	2.3785E-001		-4.3270E-002
		614.37	90.40	2.7526E-001		-4.7647E-001
		722.95	90.50	2.4998E-001		1.5365E-001
	Sb-125	176.33	6.89	4.4379E+000	7.07E-001	-7.6402E-002
		427.89	29.33	7.0743E-001		-8.2349E-002
		463.38	10.35	2.1594E+000		-5.8215E-001
		600.56	17.80	1.2091E+000		-1.4068E+000
		606.64	5.02	5.3448E+000		5.5055E+000
		635.90	11.32	1.8431E+000		7.9448E-001
	Cs-134	563.23	8.38	2.6867E+000	2.35E-001	1.7067E+000
		569.32	15.43	1.4441E+000		1.1763E+000
		604.70	97.60	2.5520E-001		-1.6108E-001
		795.84	85.40	2.3543E-001		-4.2959E-002
		801.93	8.73	2.3769E+000		1.8665E+000
+	Cs-137	661.65*	85.12	2.1102E-001	2.11E-001	1.7160E-001
	Eu-152	121.78	28.40	1.4899E+000	7.81E-001	1.7208E-001
		244.69	7.49	3.8359E+000		-1.0268E+000
		344.27	26.50	9.4528E-001		2.9734E-001
		778.89	12.74	1.3812E+000		-3.2268E-001
		867.32	4.16	4.3394E+000		-5.2337E+000
		964.01	14.40	1.8353E+000		-1.3529E-001
		1085.78	10.00	1.9134E+000		3.6166E-002
		1112.02	13.30	1.6864E+000		-2.1403E+000
		1407.95	20.70	7.8091E-001		-2.5406E-001
	Eu-154	123.07	40.50	1.0373E+000	4.98E-001	-1.9699E-001
		247.94	6.60	3.9289E+000		-3.0745E+000
		591.81	4.83	4.6989E+000		2.3009E+000
		723.30	19.70	1.1129E+000		-2.9815E-001
		756.87	4.33	4.8610E+000		-1.2341E+000
		873.19	11.50	1.5722E+000		1.3174E-002
		996.32	10.30	1.7290E+000		8.1973E-001
		1004.76	17.90	1.1569E+000		1.0885E+000
		1274.45	35.50	4.9837E-001		-3.2975E-001
	Eu-155	86.54	30.90	2.3611E+000	2.36E+000	1.6547E+000
		105.31	20.70	2.4670E+000		4.6803E-001
	Am-241	59.54	35.90	4.2226E+000	4.22E+000	3.9739E-001
	Cm-243	228.19	10.56	2.7565E+000	1.81E+000	-1.2996E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.8089E+000	1.81E+000	3.9040E-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 8/9/2006 2:22:18 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-08-06-167-F-
Sample Title: OOL-08-06-167-F-G
Description: 100% Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/9/2006 2:12:16 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-08-06-167-F-
Title: OOL-08-06-167-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	2324-	2339	2331.16	582.75	0.92	3.81E+001	21.09	2.59E+001
2	5829-	5854	5841.79	1460.42	1.15	2.61E+002	35.56	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: 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	1.78980E+001	2.83755E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.54927E-001	1.45167E-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	1.789801E+001	2.837547E+000
TL-208	0.469	2.549271E-001	1.451669E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	1.8900E-001	1.89E-001	-5.1355E-002
	1332.49	100.00	1.9544E-001		-2.7558E-002
Nb-94	702.63	100.00	2.1728E-001	1.95E-001	-2.8328E-002
	871.10	100.00	1.9453E-001		-1.0667E-001
Ag-108m	79.20	7.10	1.6078E+001	2.67E-001	-2.5088E+001
	433.93	89.90	2.8081E-001		1.5925E-001
	614.37	90.40	2.6750E-001		-2.7072E-001
	722.95	90.50	3.0101E-001		-5.4418E-002
Sb-125	176.33	6.89	5.0228E+000	8.49E-001	-1.6117E+000
	427.89	29.33	8.4903E-001		-5.0552E-001
	463.38	10.35	2.4071E+000		3.4002E-002
	600.56	17.80	1.3574E+000		3.5079E-001
	606.64	5.02	5.4922E+000		3.8053E+000
	635.90	11.32	2.0143E+000		8.4562E-001
Cs-134	563.23	8.38	2.7135E+000	2.54E-001	-1.8565E+000
	569.32	15.43	1.4788E+000		-1.4588E+000
	604.70	97.60	2.7800E-001		2.3224E-001
	795.84	85.40	2.5383E-001		-6.4090E-002
	801.93	8.73	2.4168E+000		-1.6985E+000
Cs-137	661.65	85.12	3.6275E-001	3.63E-001	3.1988E-001
Eu-152	121.78	28.40	1.7557E+000	7.38E-001	4.8925E-001
	244.69	7.49	4.2380E+000		-3.9972E+000
	344.27	26.50	1.0530E+000		-1.1852E+000
	778.89	12.74	1.8437E+000		1.1385E+000
	867.32	4.16	4.9970E+000		-2.7234E-001
	964.01	14.40	2.0051E+000		6.0986E-001
	1085.78	10.00	2.1807E+000		1.1612E+000
	1112.02	13.30	1.4843E+000		1.8867E-001
	1407.95	20.70	7.3768E-001		-8.7594E-001
Eu-154	123.07	40.50	1.2159E+000	5.88E-001	7.2113E-001
	247.94	6.60	4.6191E+000		2.3923E-001
	591.81	4.83	5.4645E+000		2.3565E+000
	723.30	19.70	1.4132E+000		1.0836E+000
	756.87	4.33	4.5243E+000		-2.7920E+000
	873.19	11.50	1.7126E+000		-1.5668E+000
	996.32	10.30	2.1632E+000		7.8354E-002
	1004.76	17.90	1.1980E+000		2.0521E-001
	1274.45	35.50	5.8800E-001		8.6674E-003
Eu-155	86.54	30.90	3.0610E+000	3.02E+000	2.5182E+000
	105.31	20.70	3.0170E+000		-1.8317E+000
Am-241	59.54	35.90	6.6377E+000	6.64E+000	-9.1759E+000
Cm-243	228.19	10.56	3.0044E+000	2.10E+000	-2.0822E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.0955E+000	2.10E+000	4.1539E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 8/9/2006 2:03:21 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: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-08-06-168-F-
Sample Title: OOL-08-06-168-F-G
Description: 100% Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/9/2006 1:53:19 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-08-06-168-F-
Title: OOL-08-06-168-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	949-	962	955.03	238.71	0.51	4.71E+001	35.92	1.04E+002
2	5829-	5853	5842.12	1460.50	2.04	2.91E+002	37.66	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	0.997	1460.81*		10.67	1.99821E+001	3.04865E+000
Pb-212	0.427	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	4.75241E-001	3.70302E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R 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	1.998206E+001	3.048646E+000
Pb-212	@	0.427	4.752414E-001	3.703024E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	1.89E-001	-1.1778E-001
	1332.49	100.00	1.8945E-001		-4.3763E-002
Nb-94	702.63	100.00	2.5383E-001	2.12E-001	8.5089E-002
	871.10	100.00	2.1235E-001		-2.0712E-001
Ag-108m	79.20	7.10	1.6442E+001	2.86E-001	-3.7859E+000
	433.93	89.90	2.9376E-001		1.3137E-001
	614.37	90.40	2.8916E-001		-4.1367E-001
	722.95	90.50	2.8560E-001		2.6746E-001
Sb-125	176.33	6.89	5.3174E+000	9.04E-001	5.7157E-001
	427.89	29.33	9.0440E-001		-1.4336E-001
	463.38	10.35	2.6059E+000		4.3581E-002
	600.56	17.80	1.4002E+000		-5.2544E-001
	606.64	5.02	6.4557E+000		8.4586E+000
	635.90	11.32	2.2153E+000		2.7486E+000
Cs-134	563.23	8.38	3.0504E+000	2.83E-001	-8.4469E-001
	569.32	15.43	1.7335E+000		-2.6303E-001
	604.70	97.60	3.3404E-001		3.7537E-001
	795.84	85.40	2.8257E-001		2.8159E-001
	801.93	8.73	2.6208E+000		-1.8334E+000
Cs-137	661.65	85.12	3.5056E-001	3.51E-001	1.5647E-001
Eu-152	121.78	28.40	1.7039E+000	7.95E-001	6.4321E-001
	244.69	7.49	4.6091E+000		1.2778E+000
	344.27	26.50	1.0709E+000		-8.7961E-001
	778.89	12.74	1.6627E+000		-1.7002E+000
	867.32	4.16	5.1510E+000		-4.3319E+000
	964.01	14.40	1.9827E+000		2.6086E+000
	1085.78	10.00	2.0874E+000		-1.1868E+000
	1112.02	13.30	1.7319E+000		-2.8155E-001
	1407.95	20.70	7.9547E-001		1.8122E-001
Eu-154	123.07	40.50	1.1684E+000	5.49E-001	8.9333E-003
	247.94	6.60	5.0904E+000		1.1471E+000
	591.81	4.83	5.1973E+000		-1.5926E+000
	723.30	19.70	1.3040E+000		6.7779E-001
	756.87	4.33	5.1805E+000		-2.9558E+000
	873.19	11.50	1.9550E+000		-3.9895E-001
	996.32	10.30	2.2447E+000		4.9111E-001
	1004.76	17.90	1.3054E+000		6.4930E-001
	1274.45	35.50	5.4939E-001		-4.8608E-001
Eu-155	86.54	30.90	3.0160E+000	2.93E+000	3.1644E+000
	105.31	20.70	2.9333E+000		-2.3691E+000
Am-241	59.54	35.90	8.2472E+000	8.25E+000	-2.6280E+000
Cm-243	228.19	10.56	3.2298E+000	2.17E+000	-3.6248E-001

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	1.7409E+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 8/9/2006 12:58:02 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-08-06-169-F-
Sample Title: OOL-08-06-169-F-G
Description: 100% Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/9/2006 12:48:00 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-08-06-169-F-
Title: OOL-08-06-169-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	2639-	2653	2646.01	661.46	0.66	4.43E+001	19.97	2.06E+001
2	3635-	3652	3643.52	910.84	0.42	5.36E+001	16.15	4.36E+000
3	5832-	5853	5842.42	1460.57	2.17	2.24E+002	33.11	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: 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	1.53350E+001	2.58916E+000
Cs-137	0.999	661.65*	85.12	3.05819E-001	1.42349E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R 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	1.533503E+001	2.589157E+000
Cs-137	0.999	3.058186E-001	1.423488E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	910.84	8.9397E-002	30.11

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	2.3521E-001	1.98E-001	1.1134E-001
		1332.49	100.00	1.9836E-001		1.1959E-001
	Nb-94	702.63	100.00	2.4565E-001	2.19E-001	1.4463E-002
		871.10	100.00	2.1863E-001		0.0000E+000
	Ag-108m	79.20	7.10	1.5404E+001	2.65E-001	-3.8660E+000
		433.93	89.90	2.7135E-001		-2.5988E-002
		614.37	90.40	3.0320E-001		-2.2767E-001
		722.95	90.50	2.6547E-001		4.1255E-002
	Sb-125	176.33	6.89	5.2695E+000	8.07E-001	-2.0745E+000
		427.89	29.33	8.0702E-001		-2.7006E-001
		463.38	10.35	2.4434E+000		4.4864E-001
		600.56	17.80	1.3747E+000		6.1008E-001
		606.64	5.02	5.6778E+000		-5.3633E-001
		635.90	11.32	2.0294E+000		-1.4385E-001
	Cs-134	563.23	8.38	2.8426E+000	2.56E-001	2.6776E+000
		569.32	15.43	1.5878E+000		8.6311E-001
		604.70	97.60	2.9039E-001		4.3825E-003
		795.84	85.40	2.5617E-001		7.0905E-002
		801.93	8.73	2.2443E+000		-1.3096E+000
+	Cs-137	661.65*	85.12	1.9363E-001	1.94E-001	3.0582E-001
	Eu-152	121.78	28.40	1.6230E+000	8.82E-001	2.9428E-001
		244.69	7.49	4.5734E+000		-3.4553E+000
		344.27	26.50	1.0274E+000		-9.3068E-001
		778.89	12.74	1.7856E+000		4.9242E-001
		867.32	4.16	5.3490E+000		-2.4080E-002
		964.01	14.40	1.9487E+000		3.9255E-001
		1085.78	10.00	1.9639E+000		4.7469E-001
		1112.02	13.30	1.5594E+000		-2.0271E+000
		1407.95	20.70	8.8242E-001		8.5431E-002
	Eu-154	123.07	40.50	1.1278E+000	6.45E-001	-7.0981E-001
		247.94	6.60	5.1423E+000		5.6720E-001
		591.81	4.83	5.1359E+000		5.5287E-001
		723.30	19.70	1.2109E+000		1.6679E-001
		756.87	4.33	5.3941E+000		-8.2486E-001
		873.19	11.50	1.8840E+000		2.8982E-001
		996.32	10.30	1.9197E+000		-9.5792E-001
		1004.76	17.90	1.2470E+000		5.8310E-001
		1274.45	35.50	6.4458E-001		1.8394E-001
	Eu-155	86.54	30.90	2.8855E+000	2.82E+000	2.5509E+000
		105.31	20.70	2.8187E+000		-1.4586E+000
	Am-241	59.54	35.90	6.6307E+000	6.63E+000	1.1112E+000
	Cm-243	228.19	10.56	3.1160E+000	2.00E+000	8.0591E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.0044E+000	2.00E+000	-1.2449E+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 8/9/2006 1:33:54 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-08-06-170-F-
Sample Title: OOL-08-06-170-F-G
Description: 100% Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/9/2006 1:23:52 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-08-06-170-F-
Title: OOL-08-06-170-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	1402-	1411	1406.02	351.46	0.79	2.41E+001	18.59	2.89E+001
2	3638-	3651	3643.44	910.82	0.41	2.75E+001	14.26	8.50E+000
3	3868-	3879	3873.71	968.39	0.58	2.85E+001	11.95	3.49E+000
4	5830-	5854	5841.42	1460.32	1.41	2.55E+002	32.00	2.90E+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	0.992	1460.81*	10.67	1.75011E+001	2.61268E+000
Ac-228	0.631	338.32	11.40		
		911.07*	27.70	6.20912E-001	3.29718E-001
		969.11*	16.60	1.08838E+000	4.70115E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R 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	1.750114E+001	2.612678E+000
Ac-228	0.631	7.750437E-001	2.699434E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	351.46	4.0157E-002	77.14

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.9174E-001	1.80E-001	-6.0381E-002
	1332.49	100.00	1.8004E-001		-1.6153E-001
Nb-94	702.63	100.00	2.2474E-001	2.12E-001	5.3070E-002
	871.10	100.00	2.1235E-001		1.1075E-001
Ag-108m	79.20	7.10	1.5562E+001	2.71E-001	-1.0920E+001
	433.93	89.90	2.7409E-001		1.5963E-001
	614.37	90.40	2.7266E-001		-7.4104E-002
	722.95	90.50	2.7112E-001		1.8642E-001
Sb-125	176.33	6.89	4.7361E+000	7.90E-001	1.2412E+000
	427.89	29.33	7.8955E-001		-3.1339E-001
	463.38	10.35	2.3452E+000		6.2957E-002
	600.56	17.80	1.3661E+000		-3.0803E-001
	606.64	5.02	5.5459E+000		4.1213E+000
	635.90	11.32	1.9991E+000		-3.5882E-002
Cs-134	563.23	8.38	2.7511E+000	2.58E-001	1.4339E+000
	569.32	15.43	1.4370E+000		-2.9291E-001
	604.70	97.60	2.8769E-001		2.8504E-001
	795.84	85.40	2.5848E-001		7.7459E-002
	801.93	8.73	2.4868E+000		1.6064E-001
Cs-137	661.65	85.12	3.6721E-001	3.67E-001	3.4405E-001
Eu-152	121.78	28.40	1.6322E+000	6.03E-001	1.6476E-003
	244.69	7.49	3.7422E+000		-2.1811E+000
	344.27	26.50	9.8963E-001		-6.2662E-001
	778.89	12.74	1.6627E+000		1.7250E+000
	867.32	4.16	4.5584E+000		-1.1164E-001
	964.01	14.40	1.8059E+000		2.4292E+000
	1085.78	10.00	1.7463E+000		3.8075E-001
	1112.02	13.30	1.6989E+000		1.3971E-001
	1407.95	20.70	6.0280E-001		-5.4849E-001
Eu-154	123.07	40.50	1.1253E+000	5.08E-001	-2.9601E-003
	247.94	6.60	4.0252E+000		-3.7159E+000
	591.81	4.83	4.9146E+000		3.6430E+000
	723.30	19.70	1.2284E+000		8.0066E-002
	756.87	4.33	4.3697E+000		3.8284E-001
	873.19	11.50	1.9550E+000		1.4273E+000
	996.32	10.30	1.8717E+000		-2.1288E+000
	1004.76	17.90	1.1468E+000		4.0641E-001
	1274.45	35.50	5.0751E-001		-1.8832E-002
Eu-155	86.54	30.90	2.7980E+000	2.80E+000	7.6767E-001
	105.31	20.70	2.8696E+000		1.2480E+000
Am-241	59.54	35.90	6.8465E+000	6.85E+000	-1.1261E+001
Cm-243	228.19	10.56	2.7890E+000	1.87E+000	-1.0114E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.8691E+000	1.87E+000	-1.7312E+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 8/9/2006 3:39:51 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-08-06-171-F-
Sample Title: OOL-08-06-171-F-G
Description: 100% Vegetation and silt fence

Sample Type:
Geometry:

Acquisition Started: 8/9/2006 3:29:52 PM
Live Time: 600.0 seconds
Real Time: 600.5 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-08-06-171-F-
Title: OOL-08-06-171-F-G
Description: 100% Vegetation and silt fence

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	303	300.07	75.10	0.34	4.47E+001	43.05	2.05E+002
2	949-	960	953.38	238.44	1.01	5.04E+001	26.56	5.16E+001
3	1403-	1410	1406.45	351.72	0.54	2.16E+001	17.42	2.84E+001
4	2325-	2338	2332.57	583.26	0.65	3.92E+001	17.88	1.58E+001
5	2431-	2442	2435.68	609.04	1.00	3.20E+001	17.48	1.80E+001
6	2640-	2652	2645.47	661.49	0.77	3.98E+001	19.23	2.12E+001
7	5832-	5854	5843.15	1460.96	1.53	1.92E+002	27.16	0.00E+000
8	7054-	7067	7060.87	1765.41	0.30	1.28E+001	10.21	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: 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	1.26274E+001	2.05804E+000
Cs-137	0.999	661.65*	85.12	2.65325E-001	1.31885E-001
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.54634E-001	1.20802E-001
		860.37	12.46		
Pb-212	0.565	74.81* @	10.70	3.94223E+000	3.87721E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	4.93032E-001	2.71102E-001
Bi-214	0.686	609.31*	46.30	3.82557E-001	2.14375E-001
		1120.29	15.10		
		1764.49*	15.80	6.33254E-001	5.07707E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R 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	1.262737E+001	2.058037E+000
Cs-137		0.999	2.653253E-001	1.318848E-001
TL-208		0.472	2.546336E-001	1.208015E-001
Pb-212	@	0.565	4.930321E-001	2.711020E-001
Bi-214		0.686	4.204901E-001	1.974912E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	3.6000E-002	80.64

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	1.7556E-001	1.53E-001	-6.3901E-002
		1332.49	100.00	1.5326E-001		4.1670E-002
	Nb-94	702.63	100.00	1.8910E-001	1.83E-001	9.7080E-002
		871.10	100.00	1.8310E-001		-9.5867E-002
	Ag-108m	79.20	7.10	1.1706E+001	2.15E-001	-6.8752E+000
		433.93	89.90	2.3634E-001		1.8731E-001
		614.37	90.40	2.3786E-001		-2.1486E-002
		722.95	90.50	2.1492E-001		5.4274E-002
	Sb-125	176.33	6.89	3.7921E+000	6.58E-001	-1.5737E+000
		427.89	29.33	6.5836E-001		-1.7558E-002
		463.38	10.35	2.0933E+000		-1.2309E-001
		600.56	17.80	1.0395E+000		-3.9236E-002
		606.64	5.02	5.2130E+000		7.0862E+000
		635.90	11.32	1.7471E+000		1.2304E+000
	Cs-134	563.23	8.38	2.2331E+000	1.87E-001	1.0744E+000
		569.32	15.43	1.1168E+000		-1.5957E-001
		604.70	97.60	2.5950E-001		-1.7160E-001
		795.84	85.40	1.8660E-001		-3.1300E-001
		801.93	8.73	2.0023E+000		-5.1071E-001
+	Cs-137	661.65*	85.12	1.8271E-001	1.83E-001	2.6533E-001
	Eu-152	121.78	28.40	1.3144E+000	8.47E-001	1.2204E-001
		244.69	7.49	3.1693E+000		1.7726E+000
		344.27	26.50	8.4800E-001		1.9645E-002
		778.89	12.74	1.2852E+000		-7.5943E-001
		867.32	4.16	4.5650E+000		2.2543E+000
		964.01	14.40	1.5151E+000		8.0270E-001
		1085.78	10.00	1.7841E+000		-1.3185E-002
		1112.02	13.30	1.3876E+000		1.3221E-001
		1407.95	20.70	8.4687E-001		5.8776E-001
	Eu-154	123.07	40.50	9.0876E-001	4.73E-001	5.5973E-003
		247.94	6.60	3.3744E+000		-8.0073E-001
		591.81	4.83	3.6511E+000		1.0524E+000
		723.30	19.70	9.9768E-001		3.9089E-001
		756.87	4.33	4.4934E+000		2.7056E-001
		873.19	11.50	1.6137E+000		-4.7427E-001
		996.32	10.30	1.8506E+000		3.4245E-001
		1004.76	17.90	1.0800E+000		4.7021E-001
		1274.45	35.50	4.7274E-001		2.0856E-001
	Eu-155	86.54	30.90	2.0864E+000	2.09E+000	1.5547E+000
		105.31	20.70	2.1899E+000		-2.6130E-001
	Am-241	59.54	35.90	3.6851E+000	3.69E+000	-5.4081E-001
	Cm-243	228.19	10.56	2.2485E+000	1.55E+000	1.1256E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.5478E+000	1.55E+000	-5.3440E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 8/9/2006 3:03:09 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BRN7722

Spectrum File: BRN7722
Sample ID: OOL-08-06-172-F-
Sample Title: OOL-08-06-172-F-G
Description: 100% Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/9/2006 2:53:05 PM
Live Time: 600.0 seconds
Real Time: 600.5 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-08-06-172-F-
Title: OOL-08-06-172-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	949-	959	953.31	238.43	0.83	5.91E+001	25.13	4.39E+001
2	2431-	2443	2435.65	609.03	0.55	3.90E+001	16.87	1.30E+001
3	2640-	2653	2645.64	661.53	0.82	3.75E+001	18.17	1.75E+001
4	3867-	3880	3873.68	968.56	0.42	2.69E+001	11.67	3.13E+000
5	5835-	5855	5843.89	1461.14	1.73	2.34E+002	31.44	6.92E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: 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	1.53961E+001	2.41450E+000
Cs-137	0.999	661.65*		85.12	2.49925E-001	1.24632E-001
Pb-212	0.402	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	5.78643E-001	2.62033E-001
Bi-214	0.403	609.31*		46.30	4.66240E-001	2.09872E-001
		1120.29		15.10		
		1764.49		15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BRN7722

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/GRAMS)	Wt mean Activity Uncertainty
K-40		0.996	1.539608E+001	2.414501E+000
Cs-137		0.999	2.499250E-001	1.246315E-001
Pb-212	@	0.402	5.786430E-001	2.620330E-001
Bi-214		0.403	4.662399E-001	2.098724E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	968.56	4.4778E-002	43.45

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	2.2875E-001	1.76E-001	1.6916E-001
		1332.49	100.00	1.7622E-001		4.7312E-002
	Nb-94	702.63	100.00	1.7623E-001	1.76E-001	-5.4072E-002
		871.10	100.00	1.9237E-001		6.5846E-002
	Ag-108m	79.20	7.10	1.1744E+001	2.23E-001	-3.7804E+000
		433.93	89.90	2.4232E-001		8.9313E-002
		614.37	90.40	2.2258E-001		-1.2628E-001
		722.95	90.50	2.2584E-001		8.2217E-002
	Sb-125	176.33	6.89	4.0555E+000	6.88E-001	-1.3645E+000
		427.89	29.33	6.8825E-001		-6.1402E-002
		463.38	10.35	1.9250E+000		4.1907E-001
		600.56	17.80	1.1026E+000		1.7032E-002
		606.64	5.02	4.9098E+000		3.5518E+000
		635.90	11.32	1.7797E+000		-1.0998E-001
	Cs-134	563.23	8.38	2.3605E+000	2.26E-001	5.5370E-001
		569.32	15.43	1.2285E+000		-1.3624E-001
		604.70	97.60	2.4182E-001		-2.6954E-001
		795.84	85.40	2.2558E-001		2.9035E-002
		801.93	8.73	2.3769E+000		4.4854E-001
+	Cs-137	661.65*	85.12	1.7067E-001	1.71E-001	2.4993E-001
	Eu-152	121.78	28.40	1.3144E+000	7.27E-001	-1.2692E-001
		244.69	7.49	3.3021E+000		8.5367E-001
		344.27	26.50	8.1283E-001		-8.8859E-002
		778.89	12.74	1.2852E+000		-2.6139E-001
		867.32	4.16	4.8310E+000		-1.4197E+000
		964.01	14.40	1.6250E+000		1.0340E-002
		1085.78	10.00	1.5525E+000		-2.7042E-001
		1112.02	13.30	1.2191E+000		2.6841E-001
		1407.95	20.70	7.2698E-001		3.5946E-001
	Eu-154	123.07	40.50	9.1020E-001	4.98E-001	-5.4418E-002
		247.94	6.60	3.6349E+000		-7.0251E-001
		591.81	4.83	4.1197E+000		-2.0922E-001
		723.30	19.70	1.0376E+000		2.5003E-001
		756.87	4.33	4.8610E+000		-3.3156E-003
		873.19	11.50	1.6738E+000		3.3847E-001
		996.32	10.30	1.5972E+000		1.8594E-001
		1004.76	17.90	9.3633E-001		1.2191E-001
		1274.45	35.50	4.9837E-001		-1.9054E-001
	Eu-155	86.54	30.90	2.2325E+000	2.23E+000	1.1417E+000
		105.31	20.70	2.2881E+000		-1.9038E+000
	Am-241	59.54	35.90	3.6348E+000	3.63E+000	-2.4208E+000
	Cm-243	228.19	10.56	2.6445E+000	1.63E+000	2.4109E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.6300E+000	1.63E+000	4.3435E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 8/9/2006 3:24:08 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-08-06-173-F-
Sample Title: OOL-08-06-173-F-G
Description: 100% Vegetation and large rock

Sample Type:
Geometry:

Acquisition Started: 8/9/2006 3:14:20 PM
Live Time: 600.0 seconds
Real Time: 600.5 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-08-06-173-F-
Title: OOL-08-06-173-F-G
Description: 100% Vegetation and large rock

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	305	300.20	75.14	0.68	6.88E+001	52.62	2.72E+002
2	950-	959	954.01	238.60	0.79	4.64E+001	27.24	6.46E+001
3	1400-	1410	1405.52	351.48	0.64	4.34E+001	22.07	3.46E+001
4	2326-	2338	2331.33	582.95	0.79	3.43E+001	19.29	2.37E+001
5	2426-	2441	2436.07	609.14	0.52	5.55E+001	20.91	1.95E+001
6	2638-	2652	2644.49	661.25	0.49	4.77E+001	19.63	1.83E+001
7	5833-	5854	5843.73	1461.10	2.08	2.67E+002	34.35	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: 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	1.75768E+001	2.66996E+000
Cs-137	0.994	661.65*	85.12	3.17540E-001	1.36077E-001
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.22294E-001	1.28545E-001
		860.37	12.46		
Pb-212	0.565	74.81* @	10.70	6.06030E+000	4.78826E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	4.53782E-001	2.75929E-001
Bi-214	0.405	609.31*	46.30	6.63848E-001	2.63258E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File: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	1.757676E+001	2.669964E+000
Cs-137		0.994	3.175405E-001	1.360769E-001
TL-208		0.472	2.222941E-001	1.285449E-001
Pb-212	@	0.565	4.537822E-001	2.759293E-001
Bi-214		0.405	6.638481E-001	2.632581E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	7.2281E-002	50.89

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	2.0879E-001	1.46E-001	-1.5239E-002
		1332.49	100.00	1.4594E-001		-2.4610E-002
	Nb-94	702.63	100.00	1.9718E-001	1.95E-001	2.8774E-002
		871.10	100.00	1.9461E-001		-3.0737E-002
	Ag-108m	79.20	7.10	1.2155E+001	2.55E-001	7.1629E-002
		433.93	89.90	2.5524E-001		4.0355E-002
		614.37	90.40	2.6561E-001		-3.7629E-001
		722.95	90.50	2.7871E-001		-1.9311E-002
	Sb-125	176.33	6.89	4.0847E+000	7.40E-001	9.2919E-001
		427.89	29.33	7.3971E-001		1.7433E-001
		463.38	10.35	2.0663E+000		2.5502E-001
		600.56	17.80	1.2543E+000		-3.2750E-001
		606.64	5.02	5.5737E+000		4.0528E+000
		635.90	11.32	1.8431E+000		-4.3157E-001
	Cs-134	563.23	8.38	2.5578E+000	2.47E-001	3.1352E+000
		569.32	15.43	1.5306E+000		3.4520E-001
		604.70	97.60	2.7598E-001		8.4888E-003
		795.84	85.40	2.4715E-001		5.9695E-003
		801.93	8.73	1.9463E+000		-4.5259E-001
+	Cs-137	661.65*	85.12	1.7718E-001	1.77E-001	3.1754E-001
	Eu-152	121.78	28.40	1.3800E+000	7.98E-001	-1.1115E+000
		244.69	7.49	3.7645E+000		6.5155E-001
		344.27	26.50	8.3062E-001		-4.3610E-001
		778.89	12.74	1.5701E+000		1.8517E-001
		867.32	4.16	4.5098E+000		-3.1329E+000
		964.01	14.40	1.6898E+000		-3.3962E-001
		1085.78	10.00	1.8108E+000		-1.7563E+000
		1112.02	13.30	1.2852E+000		-1.5564E+000
		1407.95	20.70	7.9798E-001		-1.8266E-001
	Eu-154	123.07	40.50	9.6718E-001	4.55E-001	-9.0425E-002
		247.94	6.60	3.9417E+000		-2.0363E+000
		591.81	4.83	4.5368E+000		-2.9507E+000
		723.30	19.70	1.3037E+000		5.4417E-001
		756.87	4.33	4.9049E+000		8.5004E-001
		873.19	11.50	1.6540E+000		-3.8967E-001
		996.32	10.30	2.0912E+000		7.1008E-001
		1004.76	17.90	1.0530E+000		8.4787E-001
		1274.45	35.50	4.5475E-001		-1.1418E-001
	Eu-155	86.54	30.90	2.4248E+000	2.42E+000	1.7846E+000
		105.31	20.70	2.4891E+000		1.4572E+000
	Am-241	59.54	35.90	4.0645E+000	4.06E+000	2.8863E-001
	Cm-243	228.19	10.56	2.6301E+000	1.78E+000	1.5931E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/GRAM)	Nuclide MDA (pCi/GRAM)	Activity (pCi/GRAM)
Cm-243	277.60	14.00	1.7760E+000	1.78E+000	1.0271E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 8/9/2006 3:33:54 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-08-06-174-F-
Sample Title: OOL-08-06-174-F-G
Description: 25% Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/9/2006 3:23:54 PM
Live Time: 600.0 seconds
Real Time: 600.4 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-08-06-174-F-
Title: OOL-08-06-174-F-G
Description: 25% Vegetation

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5830-	5857	5842.52	1460.60	2.43	2.72E+002	36.46	1.68E+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	0.999	1460.81*	10.67	1.86771E+001	2.92320E+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	1.867706E+001	2.923196E+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	2.0734E-001	1.83E-001	2.8987E-002
	1332.49	100.00	1.8324E-001		4.4063E-002
Nb-94	702.63	100.00	2.2290E-001	1.82E-001	-6.1947E-002
	871.10	100.00	1.8243E-001		5.2681E-002
Ag-108m	79.20	7.10	1.4753E+001	2.42E-001	-1.4187E+001
	433.93	89.90	2.7545E-001		-6.2681E-003
	614.37	90.40	2.4184E-001		-1.9916E-001
	722.95	90.50	2.6547E-001		4.6967E-002
Sb-125	176.33	6.89	4.7807E+000	7.94E-001	2.2717E+000
	427.89	29.33	7.9395E-001		-2.2889E-001
	463.38	10.35	2.1892E+000		1.5770E+000
	600.56	17.80	1.3310E+000		1.0322E-001
	606.64	5.02	5.7297E+000		5.5135E+000
	635.90	11.32	2.1174E+000		-8.7485E-001
Cs-134	563.23	8.38	2.8064E+000	2.42E-001	5.0239E-001
	569.32	15.43	1.6162E+000		5.2176E-001
	604.70	97.60	2.9704E-001		3.3633E-001
	795.84	85.40	2.4180E-001		1.5327E-001
	801.93	8.73	2.4168E+000		-1.3006E+000
Cs-137	661.65	85.12	3.1098E-001	3.11E-001	3.2954E-001
Eu-152	121.78	28.40	1.5988E+000	8.49E-001	2.5711E-001
	244.69	7.49	3.9670E+000		-6.3971E+000
	344.27	26.50	8.8779E-001		-4.6884E-001
	778.89	12.74	1.5114E+000		-8.7849E-002
	867.32	4.16	4.4413E+000		-2.9476E+000
	964.01	14.40	1.6635E+000		8.4928E-001
	1085.78	10.00	2.0143E+000		4.8239E-001
	1112.02	13.30	1.7155E+000		1.2274E-001
	1407.95	20.70	8.4884E-001		7.6131E-001
Eu-154	123.07	40.50	1.1201E+000	5.33E-001	-2.1375E-001
	247.94	6.60	4.2956E+000		-1.2887E+000
	591.81	4.83	4.6479E+000		8.0316E-001
	723.30	19.70	1.2109E+000		1.7295E-002
	756.87	4.33	4.8174E+000		-7.9383E-001
	873.19	11.50	1.5871E+000		-1.3267E+000
	996.32	10.30	2.1423E+000		9.2600E-001
	1004.76	17.90	1.1202E+000		-8.9222E-003
	1274.45	35.50	5.3307E-001		1.7778E-001
Eu-155	86.54	30.90	2.8747E+000	2.60E+000	4.3347E-001
	105.31	20.70	2.5955E+000		-3.9212E+000
Am-241	59.54	35.90	9.2592E+000	9.26E+000	-1.4119E+000
Cm-243	228.19	10.56	2.7745E+000	1.90E+000	1.3061E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.9022E+000	1.90E+000	-1.3868E+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 8/9/2006 3:55:11 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-08-06-175-F-
Sample Title: OOL-08-06-175-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/9/2006 3:45:11 PM
Live Time: 600.0 seconds
Real Time: 600.4 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-08-06-175-F-
Title: OOL-08-06-175-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	3431-	3442	3436.62	859.12	0.30	1.42E+001	10.57	5.82E+000
2	5830-	5856	5841.71	1460.40	2.26	2.83E+002	35.34	9.75E+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	0.994	1460.81*	10.67	1.94332E+001	2.89040E+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	0.994	1.943319E+001	2.890404E+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	859.12	2.3625E-002	74.58

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: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	1.8051E-001	1.70E-001	1.4863E-002
	1332.49	100.00	1.7006E-001		-9.6192E-002
Nb-94	702.63	100.00	2.0954E-001	1.72E-001	-1.3426E-002
	871.10	100.00	1.7206E-001		6.4810E-002
Ag-108m	79.20	7.10	1.5861E+001	2.48E-001	2.8300E-001
	433.93	89.90	2.4830E-001		1.1472E-001
	614.37	90.40	2.7938E-001		5.1971E-003
	722.95	90.50	2.6356E-001		7.5419E-002
Sb-125	176.33	6.89	5.3412E+000	7.72E-001	3.4336E+000
	427.89	29.33	7.7165E-001		-3.4059E-001
	463.38	10.35	2.1344E+000		2.5965E-001
	600.56	17.80	1.3131E+000		1.8958E-001
	606.64	5.02	5.9820E+000		9.9407E+000
	635.90	11.32	1.9528E+000		6.6560E-001
Cs-134	563.23	8.38	2.8426E+000	2.26E-001	1.0860E+000
	569.32	15.43	1.3827E+000		-5.6474E-001
	604.70	97.60	2.9573E-001		1.3889E-001
	795.84	85.40	2.2643E-001		-4.9080E-002
	801.93	8.73	2.3930E+000		3.3631E-001
Cs-137	661.65	85.12	2.9092E-001	2.91E-001	7.2099E-002
Eu-152	121.78	28.40	1.5200E+000	7.17E-001	-4.1473E-001
	244.69	7.49	3.6865E+000		-9.7996E-001
	344.27	26.50	9.2167E-001		-5.0590E-001
	778.89	12.74	1.8149E+000		4.6026E-001
	867.32	4.16	4.6723E+000		4.6988E+000
	964.01	14.40	1.6770E+000		1.8747E+000
	1085.78	10.00	2.0390E+000		8.1202E-001
	1112.02	13.30	1.6308E+000		-3.9277E-001
	1407.95	20.70	7.1723E-001		2.0532E-001
Eu-154	123.07	40.50	1.0627E+000	5.65E-001	9.4617E-002
	247.94	6.60	3.9307E+000		-9.1484E-001
	591.81	4.83	4.6134E+000		1.0875E-002
	723.30	19.70	1.1931E+000		-1.1336E-001
	756.87	4.33	5.3521E+000		2.9318E-001
	873.19	11.50	1.5427E+000		-3.1004E-001
	996.32	10.30	1.8471E+000		1.3748E+000
	1004.76	17.90	1.0929E+000		-2.9146E-001
	1274.45	35.50	5.6518E-001		9.9936E-002
Eu-155	86.54	30.90	2.8223E+000	2.82E+000	7.4415E-001
	105.31	20.70	2.8499E+000		6.6329E-001
Am-241	59.54	35.90	7.3926E+000	7.39E+000	-4.7302E+000
Cm-243	228.19	10.56	2.7672E+000	1.92E+000	-4.6420E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.9218E+000	1.92E+000	8.4318E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 8/10/2006 8:49:24 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-08-06-176-F-
Sample Title: OOL-08-06-176-F-G
Description: 50% Vegetation and large rock

Sample Type:
Geometry:

Acquisition Started: 8/10/2006 8:39:24 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: 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-08-06-176-F-
Title: OOL-08-06-176-F-G
Description: 50% Vegetation and large rock

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	307	300.05	74.97	1.10	5.42E+001	53.26	2.67E+002
2	945-	959	954.69	238.63	0.58	8.00E+001	35.79	8.80E+001
3	1400-	1412	1406.31	351.54	0.82	5.09E+001	23.80	3.61E+001
4	2324-	2338	2329.74	582.40	0.68	5.18E+001	20.81	2.12E+001
5	2429-	2442	2435.56	608.85	1.06	4.17E+001	20.96	2.63E+001
6	3636-	3648	3641.92	910.44	1.03	3.48E+001	15.71	1.12E+001
7	5828-	5851	5839.95	1459.96	1.56	3.12E+002	35.25	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: 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	2.14077E+001	2.97528E+000
TL-208	0.460	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.46801E-001	1.46635E-001
		860.37	12.46		
Pb-212	0.581	74.81* @	10.70	5.78129E+000	5.79745E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.07767E-001	3.82972E-001
Bi-214	0.402	609.31*	46.30	5.14485E-001	2.66535E-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	2.140767E+001	2.975282E+000
TL-208	0.460	3.468007E-001	1.466347E-001
Pb-212 @	0.581	8.077669E-001	3.829722E-001
Bi-214	0.402	5.144854E-001	2.665346E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	351.54	8.4799E-002	46.77
6	910.44	5.7971E-002	45.16

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: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	2.1226E-001	2.01E-001	8.9178E-002
	1332.49	100.00	2.0123E-001		1.0919E-001
Nb-94	702.63	100.00	2.3544E-001	1.99E-001	8.1323E-003
	871.10	100.00	1.9915E-001		-1.2279E-001
Ag-108m	79.20	7.10	1.4740E+001	2.73E-001	-9.2073E-001
	433.93	89.90	2.7273E-001		1.8631E-001
	614.37	90.40	3.2518E-001		-1.6274E-001
	722.95	90.50	2.8026E-001		1.5837E-001
Sb-125	176.33	6.89	5.0898E+000	8.07E-001	-4.4524E+000
	427.89	29.33	8.0702E-001		-4.7127E-001
	463.38	10.35	2.5606E+000		-4.2887E-001
	600.56	17.80	1.2857E+000		-1.1767E-001
	606.64	5.02	5.9075E+000		4.0621E+000
	635.90	11.32	2.0591E+000		1.0240E+000
Cs-134	563.23	8.38	2.8064E+000	2.44E-001	6.6708E-001
	569.32	15.43	1.4891E+000		-7.8985E-001
	604.70	97.60	2.9966E-001		-8.6189E-002
	795.84	85.40	2.4426E-001		-9.0895E-002
	801.93	8.73	2.1657E+000		2.1236E-002
Cs-137	661.65	85.12	3.0744E-001	3.07E-001	-2.5158E-002
Eu-152	121.78	28.40	1.5988E+000	8.66E-001	-1.2389E-001
	244.69	7.49	4.0084E+000		-7.7120E-001
	344.27	26.50	1.0709E+000		-1.4196E-001
	778.89	12.74	1.6943E+000		1.5989E-001
	867.32	4.16	4.6157E+000		-3.9578E+000
	964.01	14.40	1.9601E+000		7.5845E-001
	1085.78	10.00	1.9639E+000		-1.3456E-001
	1112.02	13.30	1.7959E+000		-2.0801E+000
	1407.95	20.70	8.6582E-001		-2.4487E-001
Eu-154	123.07	40.50	1.1291E+000	5.57E-001	7.5130E-001
	247.94	6.60	4.3940E+000		1.2981E+000
	591.81	4.83	4.8494E+000		-4.8817E-001
	723.30	19.70	1.2710E+000		6.0353E-001
	756.87	4.33	4.7699E+000		-4.4458E+000
	873.19	11.50	1.8288E+000		4.9486E-001
	996.32	10.30	1.9197E+000		-1.3988E+000
	1004.76	17.90	1.0648E+000		7.8673E-001
	1274.45	35.50	5.5735E-001		-2.6237E-001
Eu-155	86.54	30.90	2.7282E+000	2.73E+000	1.5523E+000
	105.31	20.70	2.8101E+000		-3.8458E-001
Am-241	59.54	35.90	7.3926E+000	7.39E+000	6.0436E-001
Cm-243	228.19	10.56	2.8953E+000	2.20E+000	-6.7817E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.1996E+000	2.20E+000	6.5594E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 8/10/2006 8:32:53 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-08-06-177-F-
Sample Title: OOL-08-06-177-F-G
Description: 50% Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/10/2006 8:22:53 AM
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-08-06-177-F-
Title: OOL-08-06-177-F-G
Description: 50% Vegetation

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	308	300.21	75.01	0.83	6.60E+001	50.03	2.21E+002
2	947-	959	954.57	238.60	0.70	4.06E+001	31.79	8.44E+001
3	2035-	2045	2040.44	510.07	0.49	2.60E+001	20.81	3.60E+001
4	2325-	2338	2330.80	582.66	0.34	3.51E+001	19.50	2.29E+001
5	2429-	2440	2434.68	608.63	0.37	3.91E+001	17.14	1.49E+001
6	2637-	2650	2643.77	660.90	0.75	3.00E+001	16.22	1.40E+001
7	3636-	3648	3642.38	910.56	0.97	2.40E+001	16.64	1.80E+001
8	5829-	5851	5840.15	1460.01	1.55	2.69E+002	34.01	8.47E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: 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	0.979	1460.81*	10.67	1.84205E+001	2.76867E+000
Cs-137	0.982	661.65*	85.12	2.06811E-001	1.14455E-001
TL-208	0.745	277.35	6.80		
		510.84*	21.60	6.49028E-001	5.30850E-001
		583.14*	84.20	2.34664E-001	1.34182E-001
		860.37	12.46		
Pb-212	0.581	74.81* @	10.70	7.03513E+000	5.50780E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	4.09596E-001	3.27301E-001
Bi-214	0.397	609.31*	46.30	4.82532E-001	2.19910E-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		0.972		
	K-40		0.979	1.842047E+001	2.768665E+000
	Cs-137		0.982	2.068111E-001	1.144545E-001
	TL-208		0.745	2.595480E-001	1.300903E-001
	Pb-212	@	0.581	4.095961E-001	3.273015E-001
	Bi-214		0.397	4.825321E-001	2.199098E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	910.56	4.0030E-002	69.29

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	2.2858E-001	1.83E-001	9.3535E-002
		1332.49	100.00	1.8324E-001		-1.0399E-002
	Nb-94	702.63	100.00	2.0954E-001	1.90E-001	1.2532E-001
		871.10	100.00	1.8979E-001		2.9224E-002
	Ag-108m	79.20	7.10	1.4174E+001	2.71E-001	-3.1083E+000
		433.93	89.90	2.7545E-001		1.9678E-001
		614.37	90.40	2.7436E-001		-3.0074E-001
		722.95	90.50	2.7112E-001		1.8395E-002
	Sb-125	176.33	6.89	5.0059E+000	7.90E-001	5.7957E+000
		427.89	29.33	7.8955E-001		4.8236E-001
		463.38	10.35	2.2816E+000		-2.4732E+000
		600.56	17.80	1.3221E+000		3.7946E-001
		606.64	5.02	5.6517E+000		3.3602E+000
		635.90	11.32	1.9683E+000		6.9120E-001
	Cs-134	563.23	8.38	2.9136E+000	2.34E-001	1.0947E+000
		569.32	15.43	1.4788E+000		-1.4799E-001
		604.70	97.60	2.9440E-001		-8.5588E-002
		795.84	85.40	2.3425E-001		-1.6078E-001
		801.93	8.73	2.3446E+000		-7.2224E-001
+	Cs-137	661.65*	85.12	1.5939E-001	1.59E-001	2.0681E-001
	Eu-152	121.78	28.40	1.5875E+000	7.77E-001	2.6053E-002
		244.69	7.49	3.9357E+000		-1.0404E+000
		344.27	26.50	9.6622E-001		5.0433E-001
		778.89	12.74	1.6943E+000		-4.1637E-001
		867.32	4.16	4.7281E+000		1.0353E+000
		964.01	14.40	1.8427E+000		1.2830E+000
		1085.78	10.00	1.9382E+000		1.5811E-001
		1112.02	13.30	1.5594E+000		-2.5052E+000
		1407.95	20.70	7.7675E-001		1.2977E-001
	Eu-154	123.07	40.50	1.1162E+000	5.65E-001	-1.3376E-001
		247.94	6.60	4.3818E+000		2.2779E+000
		591.81	4.83	4.4002E+000		-1.4972E-001
		723.30	19.70	1.2456E+000		6.3685E-001
		756.87	4.33	4.9569E+000		1.3309E+000
		873.19	11.50	1.6924E+000		-9.3082E-001
		996.32	10.30	1.8471E+000		-6.4413E-001
		1004.76	17.90	1.1202E+000		-2.8434E-001
		1274.45	35.50	5.6518E-001		6.5605E-002
	Eu-155	86.54	30.90	2.6116E+000	2.61E+000	1.5364E-001
		105.31	20.70	2.6630E+000		-3.5956E-001
	Am-241	59.54	35.90	6.3632E+000	6.36E+000	-6.7487E-001
	Cm-243	228.19	10.56	2.8462E+000	1.98E+000	-8.8590E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.9794E+000	1.98E+000	-6.9924E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 8/10/2006 8:16:43 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: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-08-06-178-F-
Sample Title: OOL-08-06-178-F-G
Description: 50% Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/10/2006 8:06:43 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-08-06-178-F-
Title: OOL-08-06-178-F-G
Description: 50% Vegetation

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	305	300.69	75.13	1.14	5.65E+001	46.55	2.25E+002
2	948-	958	953.47	238.33	1.04	5.11E+001	28.23	6.49E+001
3	1174-	1185	1179.82	294.91	0.74	2.51E+001	24.71	5.29E+001
4	1401-	1416	1406.06	351.47	0.38	3.72E+001	25.74	4.18E+001
5	2038-	2051	2042.99	510.71	0.84	3.47E+001	22.50	3.43E+001
6	2430-	2440	2434.64	608.62	0.81	3.63E+001	16.17	1.27E+001
7	2637-	2649	2643.66	660.88	1.06	2.33E+001	17.05	1.97E+001
8	3634-	3646	3640.58	910.11	1.01	2.03E+001	16.81	1.97E+001
9	5828-	5851	5839.41	1459.82	1.66	2.72E+002	32.33	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
ANN	0.997	511.00*	100.00	1.87266E-001	1.24349E-001
K-40	0.969	1460.81*	10.67	1.86571E+001	2.68288E+000
Cs-137	0.981	661.65*	85.12	1.60838E-001	1.19023E-001
Pb-212	0.580	74.81* @	10.70	5.98915E+000	5.07432E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.15482E-001	2.96183E-001
Bi-214	0.397	609.31*	46.30	4.48450E-001	2.07296E-001
		1120.29	15.10		
		1764.49	15.80		
PB-214	0.618	74.82* @	6.21	1.03195E+001	8.77522E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	6.14235E-001	6.13581E-001
		351.92*	37.20	4.86499E-001	3.46527E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R 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	1.872656E-001	1.243491E-001
K-40		0.969	1.865706E+001	2.682881E+000
Cs-137		0.981	1.608375E-001	1.190233E-001
Pb-212	@	0.580	5.154818E-001	2.961835E-001
Bi-214		0.397	4.484503E-001	2.072961E-001
PB-214	@	0.618	5.173889E-001	3.017323E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	910.11	3.3833E-002	82.79

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	2.0982E-001	1.83E-001	1.3631E-001
		1332.49	100.00	1.8324E-001		3.2664E-002
	Nb-94	702.63	100.00	2.0555E-001	2.06E-001	-5.8833E-002
		871.10	100.00	2.3063E-001		-6.5838E-002
	Ag-108m	79.20	7.10	1.5667E+001	2.56E-001	-8.9972E+000
		433.93	89.90	2.5574E-001		1.1692E-001
		614.37	90.40	2.8432E-001		-1.2926E-001
		722.95	90.50	2.6737E-001		1.4952E-001
	Sb-125	176.33	6.89	4.6548E+000	7.49E-001	-4.6276E+000
		427.89	29.33	7.4865E-001		-4.5656E-001
		463.38	10.35	2.3452E+000		1.8370E+000
		600.56	17.80	1.2671E+000		4.0723E-001
		606.64	5.02	5.4105E+000		-4.1057E-001
		635.90	11.32	2.1878E+000		3.3280E-001
	Cs-134	563.23	8.38	2.7696E+000	2.56E-001	-2.0717E-001
		569.32	15.43	1.5194E+000		3.0330E-001
		604.70	97.60	2.8080E-001		-1.9410E-001
		795.84	85.40	2.5617E-001		6.7411E-002
		801.93	8.73	2.2184E+000		-2.2001E+000
+	Cs-137	661.65*	85.12	1.8267E-001	1.83E-001	1.6084E-001
	Eu-152	121.78	28.40	1.6377E+000	8.31E-001	8.8745E-001
		244.69	7.49	3.7642E+000		-2.4467E-001
		344.27	26.50	9.1751E-001		-1.6600E+000
		778.89	12.74	1.6140E+000		4.6395E-001
		867.32	4.16	5.3002E+000		1.9724E+000
		964.01	14.40	1.7935E+000		6.1211E-001
		1085.78	10.00	2.2258E+000		2.6458E+000
		1112.02	13.30	1.6822E+000		3.8690E-001
		1407.95	20.70	8.3148E-001		4.3998E-001
	Eu-154	123.07	40.50	1.1445E+000	5.95E-001	2.3307E-001
		247.94	6.60	4.0517E+000		-7.4883E-001
		591.81	4.83	4.8494E+000		1.4951E+000
		723.30	19.70	1.2370E+000		1.0137E+000
		756.87	4.33	5.3941E+000		-1.4618E+000
		873.19	11.50	2.1372E+000		1.4154E+000
		996.32	10.30	2.0119E+000		-2.1253E-001
		1004.76	17.90	1.1727E+000		8.3826E-001
		1274.45	35.50	5.9540E-001		4.7589E-001
	Eu-155	86.54	30.90	2.7328E+000	2.70E+000	9.6000E-001
		105.31	20.70	2.6991E+000		1.1427E+000
	Am-241	59.54	35.90	6.8259E+000	6.83E+000	-6.5907E-002
	Cm-243	228.19	10.56	2.8249E+000	1.88E+000	9.9498E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.8757E+000	1.88E+000	3.5932E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 8/10/2006 7:59:37 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-08-06-179-F-
Sample Title: OOL-08-06-179-F-G
Description: 25% Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/10/2006 7:49:36 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: 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-08-06-179-F-
Title: OOL-08-06-179-F-G
Description: 25% Vegetation

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	948-	960	953.64	238.37	0.53	6.53E+001	31.66	7.37E+001
2	2428-	2442	2433.99	608.46	0.59	4.29E+001	17.26	1.21E+001
3	2637-	2650	2643.90	660.94	0.74	2.84E+001	17.34	1.76E+001
4	5827-	5851	5839.04	1459.73	1.35	3.05E+002	35.55	5.99E+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	0.962	1460.81*		10.67	2.09207E+001	2.96920E+000
Cs-137	0.983	661.65*		85.12	1.95574E-001	1.21738E-001
Pb-212	0.426	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.59247E-001	3.35893E-001
Bi-214	0.392	609.31*		46.30	5.29031E-001	2.22995E-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		0.962	2.092068E+001	2.969197E+000
Cs-137		0.983	1.955742E-001	1.217383E-001
Pb-212	@	0.426	6.592467E-001	3.358935E-001
Bi-214		0.392	5.290311E-001	2.229950E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	2.1706E-001	1.59E-001	-2.2609E-002
		1332.49	100.00	1.5936E-001		-2.4538E-002
	Nb-94	702.63	100.00	2.2290E-001	2.08E-001	1.2724E-001
		871.10	100.00	2.0805E-001		9.4023E-003
	Ag-108m	79.20	7.10	1.4698E+001	2.64E-001	-2.8001E+001
		433.93	89.90	2.7135E-001		-2.5436E-002
		614.37	90.40	2.6575E-001		-2.3261E-002
		722.95	90.50	2.6356E-001		6.5002E-002
	Sb-125	176.33	6.89	5.1968E+000	7.63E-001	1.6914E-001
		427.89	29.33	7.6254E-001		-6.8810E-001
		463.38	10.35	2.1205E+000		7.3649E-001
		600.56	17.80	1.2857E+000		2.8649E-001
		606.64	5.02	5.5725E+000		5.4691E+000
		635.90	11.32	1.5876E+000		-7.2856E-001
	Cs-134	563.23	8.38	2.8245E+000	2.61E-001	1.1546E+000
		569.32	15.43	1.6256E+000		-3.1302E-001
		604.70	97.60	2.8769E-001		-1.6812E-001
		795.84	85.40	2.6077E-001		4.2774E-002
		801.93	8.73	2.1922E+000		-4.5338E+000
+	Cs-137	661.65*	85.12	1.7887E-001	1.79E-001	1.9557E-001
	Eu-152	121.78	28.40	1.6395E+000	9.22E-001	1.1319E+000
		244.69	7.49	3.9147E+000		-1.4201E+000
		344.27	26.50	9.2167E-001		-8.4629E-001
		778.89	12.74	1.5806E+000		-1.6256E+000
		867.32	4.16	4.8376E+000		3.5027E+000
		964.01	14.40	1.7809E+000		7.4246E-001
		1085.78	10.00	2.0390E+000		-9.6588E-002
		1112.02	13.30	1.5955E+000		-2.5108E+000
		1407.95	20.70	9.3027E-001		9.3434E-001
	Eu-154	123.07	40.50	1.1343E+000	5.49E-001	-2.8090E-001
		247.94	6.60	4.1947E+000		-3.8545E+000
		591.81	4.83	4.5082E+000		-1.4708E-001
		723.30	19.70	1.1931E+000		9.8560E-002
		756.87	4.33	4.9109E+000		1.9142E+000
		873.19	11.50	1.9199E+000		2.0355E+000
		996.32	10.30	1.9197E+000		1.0424E+000
		1004.76	17.90	1.0648E+000		-1.8632E+000
		1274.45	35.50	5.4939E-001		7.2006E-002
	Eu-155	86.54	30.90	2.8024E+000	2.77E+000	2.5332E-001
		105.31	20.70	2.7668E+000		-2.5123E+000
	Am-241	59.54	35.90	6.4439E+000	6.44E+000	-4.9618E+000
	Cm-243	228.19	10.56	2.7083E+000	1.95E+000	-8.4103E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.9540E+000	1.95E+000	-6.8899E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 8/10/2006 7:39:56 AM

Y A N K E E R O W E P O R T A B L E I S O C 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-08-06-180-F-
Sample Title: OOL-08-06-180-F-G
Description: 25% Vegetation

Sample Type:
Geometry:

Acquisition Started: 8/10/2006 7:30:05 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: 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-08-06-180-F-
Title: OOL-08-06-180-F-G
Description: 25% Vegetation

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	305	300.69	75.13	0.36	5.02E+001	52.02	2.75E+002
2	947-	959	954.14	238.49	0.98	6.07E+001	31.33	7.23E+001
3	2323-	2336	2329.86	582.43	1.15	3.26E+001	19.92	2.54E+001
4	2427-	2440	2434.87	608.68	0.33	3.48E+001	20.26	2.62E+001
5	5829-	5849	5839.37	1459.81	1.14	2.44E+002	32.39	7.96E+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: 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	1.67393E+001	2.60264E+000
TL-208	0.461	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.17960E-001	1.36375E-001
		860.37	12.46		
Pb-212	0.581	74.81* @	10.70	5.32340E+000	5.61517E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.13054E-001	3.30551E-001
Bi-214	0.398	609.31*	46.30	4.29952E-001	2.55704E-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		0.968	1.673932E+001	2.602643E+000
TL-208		0.461	2.179604E-001	1.363751E-001
Pb-212	@	0.581	6.130545E-001	3.305506E-001
Bi-214		0.398	4.299524E-001	2.557040E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	1.73E-001	-5.9452E-002
	1332.49	100.00	1.7346E-001		1.5945E-001
Nb-94	702.63	100.00	2.2104E-001	1.97E-001	-6.2642E-003
	871.10	100.00	1.9686E-001		1.7680E-002
Ag-108m	79.20	7.10	1.4960E+001	2.42E-001	-8.4733E-001
	433.93	89.90	2.4217E-001		-3.9789E-002
	614.37	90.40	2.7938E-001		-1.6311E-001
	722.95	90.50	2.5969E-001		1.4508E-001
Sb-125	176.33	6.89	4.7984E+000	6.85E-001	-1.2684E+000
	427.89	29.33	6.8495E-001		-5.2807E-001
	463.38	10.35	2.1892E+000		-5.7270E-001
	600.56	17.80	1.1171E+000		-7.8841E-001
	606.64	5.02	5.7555E+000		3.6558E+000
	635.90	11.32	1.8398E+000		-2.7733E-001
Cs-134	563.23	8.38	2.6754E+000	2.49E-001	5.2195E-001
	569.32	15.43	1.4047E+000		1.4320E-001
	604.70	97.60	2.9039E-001		3.7127E-002
	795.84	85.40	2.4910E-001		1.2030E-001
	801.93	8.73	2.2184E+000		2.6191E-001
Cs-137	661.65	85.12	2.7535E-001	2.75E-001	9.0378E-002
Eu-152	121.78	28.40	1.5240E+000	8.14E-001	-1.5509E+000
	244.69	7.49	3.9357E+000		-1.0315E+000
	344.27	26.50	9.9347E-001		-5.9606E-001
	778.89	12.74	1.5464E+000		-8.7040E-004
	867.32	4.16	4.7281E+000		-6.2978E-001
	964.01	14.40	1.8669E+000		1.8458E+000
	1085.78	10.00	2.2034E+000		1.2159E+000
	1112.02	13.30	1.2284E+000		-2.1896E+000
	1407.95	20.70	8.1370E-001		-2.9414E-001
Eu-154	123.07	40.50	1.0558E+000	5.81E-001	-4.4946E-001
	247.94	6.60	4.2202E+000		1.6321E+000
	591.81	4.83	4.3636E+000		-1.0884E+000
	723.30	19.70	1.1750E+000		4.4478E-001
	756.87	4.33	4.3697E+000		3.5170E-001
	873.19	11.50	1.6719E+000		-3.4428E-001
	996.32	10.30	2.1423E+000		1.3992E+000
	1004.76	17.90	1.1066E+000		-6.7809E-001
	1274.45	35.50	5.8051E-001		2.8789E-001
Eu-155	86.54	30.90	2.5561E+000	2.56E+000	-2.6720E-001
	105.31	20.70	2.7552E+000		-1.2006E+000
Am-241	59.54	35.90	6.0449E+000	6.04E+000	1.5853E+000
Cm-243	228.19	10.56	2.6858E+000	1.98E+000	-9.2875E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.9794E+000	1.98E+000	-2.3478E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 8/10/2006 10:56:53 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-08-06-181-F-
Sample Title: OOL-08-06-181-F-G
Description: 25% vegetation

Sample Type:
Geometry:

Acquisition Started: 8/10/2006 10:46:49 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-08-06-181-F-
Title: OOL-08-06-181-F-G
Description: 25% vegetation

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	950-	959	954.53	238.59	1.09	7.40E+001	29.00	6.40E+001
2	2324-	2340	2332.07	582.98	0.79	6.48E+001	22.46	2.13E+001
3	2430-	2443	2435.95	608.95	0.36	4.79E+001	20.75	2.31E+001
4	3637-	3650	3643.11	910.74	0.42	4.37E+001	19.92	2.13E+001
5	3869-	3880	3874.28	968.53	0.34	2.54E+001	15.10	1.26E+001
6	5831-	5853	5842.24	1460.53	2.06	2.95E+002	37.76	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: 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	2.02567E+001	3.06627E+000
TL-208	0.472	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	4.33456E-001	1.60909E-001
		860.37		12.46		
Pb-212	0.427	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.46899E-001	3.15386E-001
Bi-214	0.404	609.31*		46.30	5.90753E-001	2.66529E-001
		1120.29		15.10		
		1764.49		15.80		
Ac-228	0.632	338.32		11.40		
		911.07*		27.70	9.86841E-001	4.63857E-001
		969.11*		16.60	9.69562E-001	5.85256E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R 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	2.025666E+001	3.066275E+000
TL-208		0.472	4.334561E-001	1.609088E-001
Pb-212	@	0.427	7.468989E-001	3.153856E-001
Bi-214		0.404	5.907526E-001	2.665288E-001
Ac-228		0.632	9.801740E-001	3.635251E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	2.4788E-001	1.86E-001	2.3683E-001
	1332.49	100.00	1.8637E-001		3.3701E-002
Nb-94	702.63	100.00	2.3370E-001	2.17E-001	3.4156E-002
	871.10	100.00	2.1656E-001		-4.3320E-002
Ag-108m	79.20	7.10	1.5324E+001	2.83E-001	-1.4532E+001
	433.93	89.90	2.8345E-001		-1.4762E-001
	614.37	90.40	3.1658E-001		-1.6492E-001
	722.95	90.50	2.9083E-001		3.1180E-001
Sb-125	176.33	6.89	5.5354E+000	8.20E-001	3.0925E+000
	427.89	29.33	8.1986E-001		-1.1628E+000
	463.38	10.35	2.3327E+000		2.6156E-001
	600.56	17.80	1.2857E+000		-1.5651E+000
	606.64	5.02	5.9573E+000		7.0866E+000
	635.90	11.32	1.8230E+000		1.3414E-001
Cs-134	563.23	8.38	2.8426E+000	3.01E-001	-2.0281E+000
	569.32	15.43	1.6624E+000		-5.6530E-001
	604.70	97.60	3.0096E-001		-2.8574E-001
	795.84	85.40	3.0269E-001		-2.9981E-002
	801.93	8.73	2.5770E+000		-1.4871E+000
Cs-137	661.65	85.12	2.9838E-001	2.98E-001	-2.2231E-003
Eu-152	121.78	28.40	1.6558E+000	8.82E-001	-6.3252E-001
	244.69	7.49	4.2573E+000		-9.0316E-001
	344.27	26.50	9.3404E-001		-1.1749E+000
	778.89	12.74	1.5806E+000		-1.3036E+000
	867.32	4.16	5.3490E+000		-8.7490E-001
	964.01	14.40	1.8548E+000		1.2250E+000
	1085.78	10.00	1.9121E+000		3.7648E-001
	1112.02	13.30	1.8725E+000		5.1149E-001
	1407.95	20.70	8.8242E-001		-9.3001E-001
Eu-154	123.07	40.50	1.1521E+000	6.58E-001	6.0618E-001
	247.94	6.60	4.6421E+000		-2.9051E+000
	591.81	4.83	4.8165E+000		7.9282E-001
	723.30	19.70	1.3202E+000		6.5241E-001
	756.87	4.33	5.5586E+000		2.4472E+000
	873.19	11.50	1.8658E+000		5.5267E-001
	996.32	10.30	1.7187E+000		2.9460E-001
	1004.76	17.90	1.0505E+000		1.0274E-002
	1274.45	35.50	6.5790E-001		2.4910E-001
Eu-155	86.54	30.90	2.7076E+000	2.71E+000	5.6630E-001
	105.31	20.70	2.8414E+000		-3.8004E+000
Am-241	59.54	35.90	5.9823E+000	5.98E+000	-5.6908E+000
Cm-243	228.19	10.56	2.9640E+000	2.07E+000	-1.3056E+000

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	3.4215E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 8/10/2006 11:12:37 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-08-06-182-F-
Sample Title: OOL-08-06-182-F-G
Description: 25% vegetation

Sample Type:
Geometry:

Acquisition Started: 8/10/2006 11:02:37 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: 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-08-06-182-F-
Title: OOL-08-06-182-F-G
Description: 25% vegetation

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	948-	960	954.16	238.50	1.00	8.97E+001	37.08	1.01E+002
2	1400-	1411	1406.74	351.64	0.54	3.04E+001	23.23	4.36E+001
3	2324-	2338	2332.03	582.97	0.46	7.58E+001	24.13	2.62E+001
4	2429-	2442	2435.85	608.92	0.37	4.48E+001	21.86	2.82E+001
5	3636-	3651	3643.91	910.94	1.05	5.73E+001	17.55	7.68E+000
6	3869-	3880	3874.50	968.59	0.49	2.20E+001	15.96	1.70E+001
7	5832-	5853	5842.71	1460.65	1.69	3.42E+002	38.93	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: 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	2.34758E+001	3.27838E+000
TL-208	0.472	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	5.07550E-001	1.74938E-001
		860.37		12.46		
Pb-212	0.427	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	9.05840E-001	4.00357E-001
Bi-214	0.403	609.31*		46.30	5.53252E-001	2.78584E-001
		1120.29		15.10		
		1764.49		15.80		
Ac-228	0.634	338.32		11.40		
		911.07*		27.70	1.29431E+000	4.23236E-001
		969.11*		16.60	8.39962E-001	6.15625E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R 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	2.347585E+001	3.278384E+000
TL-208		0.472	5.075505E-001	1.749376E-001
Pb-212	@	0.427	9.058396E-001	4.003573E-001
Bi-214		0.403	5.532516E-001	2.785840E-001
Ac-228		0.634	1.148489E+000	3.487658E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	5.0664E-002	76.42

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: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	2.0734E-001	1.83E-001	3.8983E-002
	1332.49	100.00	1.8324E-001		8.7593E-002
Nb-94	702.63	100.00	2.3370E-001	2.14E-001	1.6517E-001
	871.10	100.00	2.1447E-001		-1.4143E-002
Ag-108m	79.20	7.10	1.5835E+001	2.99E-001	-1.5972E+001
	433.93	89.90	3.0125E-001		2.2266E-001
	614.37	90.40	3.2376E-001		-1.1830E-001
	722.95	90.50	2.9934E-001		1.4577E-001
Sb-125	176.33	6.89	5.1064E+000	8.49E-001	1.3336E+000
	427.89	29.33	8.4903E-001		-7.2932E-001
	463.38	10.35	2.7049E+000		1.3780E+000
	600.56	17.80	1.4579E+000		9.1912E-001
	606.64	5.02	6.4329E+000		9.5861E+000
	635.90	11.32	2.1174E+000		1.3262E+000
Cs-134	563.23	8.38	3.1488E+000	2.85E-001	4.6512E-001
	569.32	15.43	1.5294E+000		-3.7386E-001
	604.70	97.60	3.2341E-001		-5.4338E-002
	795.84	85.40	2.8465E-001		4.4946E-002
	801.93	8.73	2.7887E+000		-1.4994E+000
Cs-137	661.65	85.12	2.7334E-001	2.73E-001	8.4506E-002
Eu-152	121.78	28.40	1.6558E+000	8.66E-001	-3.6670E-001
	244.69	7.49	4.6797E+000		-1.7672E-001
	344.27	26.50	1.0850E+000		-3.8323E-001
	778.89	12.74	1.8580E+000		4.9730E-001
	867.32	4.16	4.9445E+000		-1.7344E+000
	964.01	14.40	2.0161E+000		1.3336E+000
	1085.78	10.00	2.5365E+000		2.3991E+000
	1112.02	13.30	1.5224E+000		-2.8778E+000
	1407.95	20.70	8.6582E-001		7.1843E-002
Eu-154	123.07	40.50	1.1330E+000	5.81E-001	-8.1662E-001
	247.94	6.60	4.8222E+000		-3.9257E+000
	591.81	4.83	4.6821E+000		-4.3681E+000
	723.30	19.70	1.3753E+000		8.3605E-001
	756.87	4.33	5.4770E+000		4.5868E+000
	873.19	11.50	1.9199E+000		-1.2552E+000
	996.32	10.30	1.9197E+000		-2.3781E+000
	1004.76	17.90	1.2350E+000		3.1228E-001
	1274.45	35.50	5.8051E-001		-2.7170E-001
Eu-155	86.54	30.90	2.8704E+000	2.81E+000	2.4855E+000
	105.31	20.70	2.8072E+000		-7.4286E-001
Am-241	59.54	35.90	6.7845E+000	6.78E+000	-3.3519E+000
Cm-243	228.19	10.56	3.1734E+000	2.22E+000	2.1024E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.2220E+000	2.22E+000	4.2236E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 8/10/2006 11:29:28 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-08-06-183-F-
Sample Title: OOL-08-06-183-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/10/2006 11:19:25 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: 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-08-06-183-F-
Title: OOL-08-06-183-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	296-	305	300.53	75.09	0.87	5.18E+001	48.16	2.44E+002
2	948-	961	955.08	238.73	1.27	6.57E+001	38.62	1.17E+002
3	1402-	1413	1406.91	351.69	1.21	3.87E+001	24.29	4.53E+001
4	2300-	2340	2331.66	582.87	1.49	8.48E+001	38.63	4.72E+001
5	2428-	2445	2437.00	609.21	1.44	5.47E+001	24.56	3.13E+001
6	3636-	3650	3643.13	910.75	1.38	4.29E+001	20.27	2.21E+001
7	5830-	5855	5842.97	1460.71	1.74	3.68E+002	38.96	6.50E+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	2.52167E+001	3.36376E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	5.67969E-001	2.69308E-001
		860.37	12.46		
Pb-212	0.581	74.81* @	10.70	5.50009E+000	5.22827E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.63882E-001	4.03635E-001
Bi-214	0.406	609.31*	46.30	6.75787E-001	3.14664E-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	2.521671E+001	3.363761E+000
TL-208	0.471	5.679692E-001	2.693080E-001
Pb-212 @	0.581	6.638820E-001	4.036347E-001
Bi-214	0.406	6.757874E-001	3.146640E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	6.4425E-002	62.84
6	910.75	7.1436E-002	47.30

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: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	2.2405E-001	1.70E-001	-1.3689E-001
	1332.49	100.00	1.7006E-001		1.0872E-002
Nb-94	702.63	100.00	2.2837E-001	2.27E-001	-1.5185E-001
	871.10	100.00	2.2671E-001		5.8762E-002
Ag-108m	79.20	7.10	1.6467E+001	2.86E-001	-3.9749E+000
	433.93	89.90	3.1332E-001		4.3999E-002
	614.37	90.40	3.4833E-001		1.2788E-001
	722.95	90.50	2.8560E-001		3.4654E-001
Sb-125	176.33	6.89	5.2211E+000	9.71E-001	-7.0139E-001
	427.89	29.33	9.7072E-001		2.0715E-001
	463.38	10.35	2.7264E+000		9.1574E-001
	600.56	17.80	1.4739E+000		3.0325E-001
	606.64	5.02	6.6793E+000		7.5342E+000
	635.90	11.32	2.1458E+000		-1.7251E+000
Cs-134	563.23	8.38	3.1164E+000	2.93E-001	1.1137E+000
	569.32	15.43	1.6983E+000		3.0312E-001
	604.70	97.60	3.4206E-001		1.7530E-001
	795.84	85.40	2.9281E-001		2.3347E-001
	801.93	8.73	2.3689E+000		-3.7680E+000
Cs-137	661.65	85.12	3.0385E-001	3.04E-001	1.9414E-001
Eu-152	121.78	28.40	1.7420E+000	1.06E+000	-9.9459E-002
	244.69	7.49	4.3622E+000		-4.5904E+000
	344.27	26.50	1.0566E+000		-1.7718E+000
	778.89	12.74	1.9943E+000		-1.7962E-001
	867.32	4.16	5.4450E+000		-7.0335E+000
	964.01	14.40	1.9487E+000		2.2308E+000
	1085.78	10.00	2.1807E+000		-4.5473E-001
	1112.02	13.30	1.8725E+000		1.5288E+000
	1407.95	20.70	1.0862E+000		-6.2653E-001
Eu-154	123.07	40.50	1.2290E+000	6.31E-001	3.5526E-001
	247.94	6.60	4.6764E+000		2.4803E+000
	591.81	4.83	5.0738E+000		2.9154E+000
	723.30	19.70	1.2959E+000		6.5591E-001
	756.87	4.33	5.4357E+000		1.1377E+000
	873.19	11.50	2.0233E+000		3.7744E-001
	996.32	10.30	2.2447E+000		6.1909E-002
	1004.76	17.90	1.1727E+000		-4.8435E-002
	1274.45	35.50	6.3095E-001		-6.7217E-001
Eu-155	86.54	30.90	2.9048E+000	2.90E+000	2.0419E+000
	105.31	20.70	2.9030E+000		-4.1515E-001
Am-241	59.54	35.90	6.5452E+000	6.55E+000	-7.8385E-001
Cm-243	228.19	10.56	3.4107E+000	2.22E+000	9.7436E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.2220E+000	2.22E+000	-5.7848E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 8/10/2006 2:14:37 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-08-06-184-F-
Sample Title: OOL-08-06-184-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/10/2006 2:04:35 PM
Live Time: 600.0 seconds
Real Time: 600.5 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780_2M90Soil170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: GRN7780
Log Number: OOL-08-06-184-F-
Title: OOL-08-06-184-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	5831-	5856	5843.18	1460.76	2.21	3.27E+002	37.38	9.06E+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	1.000	1460.81*	10.67	2.24338E+001	3.14296E+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	2.243377E+001	3.142961E+000

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:GRN7780
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.5988E-001	1.83E-001	1.5081E-001
	1332.49	100.00	1.8324E-001		9.5059E-002
Nb-94	702.63	100.00	2.4731E-001	2.12E-001	2.4609E-001
	871.10	100.00	2.1235E-001		2.2568E-002
Ag-108m	79.20	7.10	1.6846E+001	2.89E-001	-9.1346E+000
	433.93	89.90	3.0248E-001		3.1918E-002
	614.37	90.40	2.8916E-001		-1.4592E-001
	722.95	90.50	2.9256E-001		1.4027E-001
Sb-125	176.33	6.89	5.3570E+000	9.27E-001	3.2248E+000
	427.89	29.33	9.2706E-001		-3.1722E-003
	463.38	10.35	2.7898E+000		2.0168E+000
	600.56	17.80	1.3574E+000		-5.4348E-001
	606.64	5.02	5.7038E+000		1.1919E-001
	635.90	11.32	2.0143E+000		-2.1397E+000
Cs-134	563.23	8.38	3.0504E+000	2.83E-001	2.0251E+000
	569.32	15.43	1.5974E+000		9.0634E-003
	604.70	97.60	2.9307E-001		2.0658E-001
	795.84	85.40	2.8257E-001		2.4128E-001
	801.93	8.73	2.7271E+000		5.1524E-001
Cs-137	661.65	85.12	2.9281E-001	2.93E-001	2.9944E-001
Eu-152	121.78	28.40	1.6558E+000	9.61E-001	-1.4723E+000
	244.69	7.49	4.6797E+000		-2.3808E+000
	344.27	26.50	1.0530E+000		-4.5533E-001
	778.89	12.74	1.6627E+000		-1.4194E+000
	867.32	4.16	5.3002E+000		-2.1436E+000
	964.01	14.40	2.1442E+000		2.4952E+000
	1085.78	10.00	2.3130E+000		2.0158E+000
	1112.02	13.30	1.6481E+000		-2.2216E+000
	1407.95	20.70	9.6070E-001		7.8428E-001
Eu-154	123.07	40.50	1.1733E+000	6.24E-001	-3.8486E-001
	247.94	6.60	4.9849E+000		3.8750E-001
	591.81	4.83	5.4933E+000		1.4300E+000
	723.30	19.70	1.3362E+000		2.5777E-001
	756.87	4.33	5.2670E+000		-2.8246E+000
	873.19	11.50	1.7523E+000		-1.0593E+000
	996.32	10.30	2.4719E+000		1.9929E+000
	1004.76	17.90	1.3612E+000		6.9532E-002
	1274.45	35.50	6.2402E-001		-1.3593E-001
Eu-155	86.54	30.90	3.1072E+000	2.89E+000	4.5924E+000
	105.31	20.70	2.8864E+000		3.0277E-001
Am-241	59.54	35.90	7.5553E+000	7.56E+000	5.1810E+000
Cm-243	228.19	10.56	3.2668E+000	2.23E+000	2.9953E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.2276E+000	2.23E+000	1.6119E+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 8/10/2006 1:32:06 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-08-06-185-F-
Sample Title: OOL-08-06-185-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/10/2006 1:22:04 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-08-06-185-F-
Title: OOL-08-06-185-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	5831-	5857	5842.88	1460.69	2.43	3.72E+002	39.62	9.06E+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	1.000	1460.81*	10.67	2.55211E+001	3.41494E+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	2.552107E+001	3.414941E+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	2.3081E-001	2.04E-001	9.7986E-002
	1332.49	100.00	2.0406E-001		-1.2973E-002
Nb-94	702.63	100.00	2.2104E-001	2.21E-001	-8.6510E-002
	871.10	100.00	2.2472E-001		-5.3516E-002
Ag-108m	79.20	7.10	1.5874E+001	3.04E-001	-5.2339E+000
	433.93	89.90	3.1095E-001		1.1262E-001
	614.37	90.40	3.2091E-001		-5.1287E-001
	722.95	90.50	3.0432E-001		2.1813E-001
Sb-125	176.33	6.89	5.2534E+000	9.23E-001	5.9441E-001
	427.89	29.33	9.2333E-001		3.2600E-001
	463.38	10.35	2.4910E+000		3.5164E-001
	600.56	17.80	1.4579E+000		-8.9411E-001
	606.64	5.02	6.5908E+000		8.5624E+000
	635.90	11.32	2.0294E+000		-2.8188E+000
Cs-134	563.23	8.38	2.9311E+000	3.03E-001	-8.8123E-001
	569.32	15.43	1.5393E+000		7.9050E-001
	604.70	97.60	3.2699E-001		-2.2782E-002
	795.84	85.40	3.0269E-001		1.8892E-001
	801.93	8.73	2.7271E+000		-1.7461E-001
Cs-137	661.65	85.12	2.8903E-001	2.89E-001	-5.4732E-002
Eu-152	121.78	28.40	1.6898E+000	7.95E-001	-1.2084E+000
	244.69	7.49	4.5554E+000		-6.3052E+000
	344.27	26.50	1.1228E+000		-5.3264E-001
	778.89	12.74	1.8149E+000		-1.4507E+000
	867.32	4.16	5.4924E+000		-3.5636E+000
	964.01	14.40	2.0597E+000		7.2474E-001
	1085.78	10.00	2.2479E+000		-6.1852E-001
	1112.02	13.30	1.6481E+000		-6.4997E-001
	1407.95	20.70	7.9547E-001		4.4531E-001
Eu-154	123.07	40.50	1.2015E+000	6.45E-001	5.2784E-001
	247.94	6.60	4.8988E+000		-2.5553E+000
	591.81	4.83	5.0108E+000		-9.1711E-001
	723.30	19.70	1.3982E+000		1.1001E+000
	756.87	4.33	5.3521E+000		-3.7164E-001
	873.19	11.50	2.0400E+000		1.0628E+000
	996.32	10.30	2.0998E+000		-1.8253E+000
	1004.76	17.90	1.1202E+000		2.3597E-001
	1274.45	35.50	6.4458E-001		-2.1122E-001
Eu-155	86.54	30.90	2.8661E+000	2.87E+000	3.3141E+000
	105.31	20.70	2.9361E+000		2.1526E+000
Am-241	59.54	35.90	6.4220E+000	6.42E+000	-3.9858E+000
Cm-243	228.19	10.56	3.2422E+000	2.13E+000	3.1644E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.1308E+000	2.13E+000	-4.2805E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 8/10/2006 12:58:30 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-08-06-186-F-
Sample Title: OOL-08-06-186-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/10/2006 12:48:31 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: 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-08-06-186-F-
Title: OOL-08-06-186-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	288-	305	292.34	73.04	0.73	3.66E+001	23.10	1.73E+002
m	2	288-	305	300.14	74.99	0.73	7.12E+001	27.55	2.01E+002
	3	948-	961	954.42	238.56	1.18	1.06E+002	36.77	8.93E+001
	4	1175-	1186	1180.29	295.03	0.90	3.06E+001	26.07	5.84E+001
	5	1402-	1414	1407.95	351.95	1.10	5.30E+001	22.76	3.10E+001
	6	2034-	2047	2040.43	510.07	0.58	4.73E+001	23.86	3.47E+001
	7	2428-	2443	2436.08	608.98	1.07	6.20E+001	21.67	2.00E+001
	8	3636-	3652	3643.56	910.85	1.22	4.74E+001	18.91	1.46E+001
	9	5832-	5854	5842.33	1460.55	1.79	3.22E+002	38.98	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	0.972	511.00*	100.00	2.55394E-001	1.33763E-001
K-40	0.998	1460.81*	10.67	2.20630E+001	3.21628E+000
Pb-212	0.581	74.81* @	10.70	7.59280E+000	3.29399E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	1.06682E+000	4.07194E-001
Bi-214	0.404	609.31*	46.30	7.65351E-001	2.84010E-001
		1120.29	15.10		
		1764.49	15.80		
PB-214	0.622	74.82* @	6.21	1.30826E+001	5.75454E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	7.49237E-001	6.50477E-001
		351.92*	37.20	6.93820E-001	3.19724E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R 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		0.972	2.553942E-001	1.337630E-001
K-40		0.998	2.206302E+001	3.216277E+000
Pb-212	@	0.581	1.066820E+000	4.071943E-001
Bi-214		0.404	7.653506E-001	2.840100E-001
PB-214	@	0.622	7.046032E-001	2.869360E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I 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	6.0924E-002	63.20
8	910.85	7.8958E-002	39.92

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	2.5595E-001	1.89E-001	9.1930E-002
	1332.49	100.00	1.8945E-001		-9.9039E-002
Nb-94	702.63	100.00	2.3890E-001	2.08E-001	-4.8572E-002
	871.10	100.00	2.0805E-001		-3.3694E-001
Ag-108m	79.20	7.10	1.5719E+001	2.74E-001	-1.9943E+000
	433.93	89.90	2.7409E-001		1.2940E-001
	614.37	90.40	3.2939E-001		-3.4183E-001
	722.95	90.50	3.0596E-001		3.8384E-001
Sb-125	176.33	6.89	5.3491E+000	8.77E-001	-2.7121E+000
	427.89	29.33	8.7718E-001		2.8665E-001
	463.38	10.35	2.5720E+000		-1.0992E+000
	600.56	17.80	1.4498E+000		1.0850E+000
	606.64	5.02	6.4784E+000		7.7901E+000
	635.90	11.32	2.1174E+000		6.5280E-001
Cs-134	563.23	8.38	2.7135E+000	2.74E-001	-3.4453E-001
	569.32	15.43	1.5094E+000		-9.5036E-002
	604.70	97.60	3.2936E-001		-7.1094E-002
	795.84	85.40	2.7407E-001		1.2548E-001
	801.93	8.73	2.6424E+000		-1.0853E+000
Cs-137	661.65	85.12	2.9468E-001	2.95E-001	2.7757E-001
Eu-152	121.78	28.40	1.7091E+000	9.46E-001	2.9947E-001
	244.69	7.49	4.3622E+000		1.1351E+000
	344.27	26.50	1.0602E+000		4.5169E-001
	778.89	12.74	1.8294E+000		-9.2448E-001
	867.32	4.16	4.9970E+000		-1.0725E+001
	964.01	14.40	1.9939E+000		2.2426E+000
	1085.78	10.00	2.3130E+000		-8.4126E-001
	1112.02	13.30	1.7319E+000		-9.8192E-002
	1407.95	20.70	9.4562E-001		4.7582E-001
Eu-154	123.07	40.50	1.1857E+000	5.88E-001	4.0008E-001
	247.94	6.60	4.6421E+000		1.6733E+000
	591.81	4.83	5.1359E+000		3.1823E+000
	723.30	19.70	1.4132E+000		1.9910E+000
	756.87	4.33	4.9109E+000		-5.7313E+000
	873.19	11.50	1.8658E+000		5.5267E-001
	996.32	10.30	2.2447E+000		-1.8692E-001
	1004.76	17.90	1.3612E+000		2.0921E-002
	1274.45	35.50	5.8800E-001		-2.3469E-002
Eu-155	86.54	30.90	3.0711E+000	2.95E+000	2.3916E+000
	105.31	20.70	2.9497E+000		-9.2079E-002
Am-241	59.54	35.90	7.4241E+000	7.42E+000	6.3882E+000
Cm-243	228.19	10.56	3.2545E+000	2.06E+000	2.1087E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.0595E+000	2.06E+000	-5.7700E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 8/10/2006 1:54:52 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-08-06-187-F-
Sample Title: OOL-08-06-187-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/10/2006 1:44:51 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-08-06-187-F-
Title: OOL-08-06-187-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	2325-	2340	2333.23	583.27	1.13	5.70E+001	21.21	2.00E+001
2	5830-	5854	5842.59	1460.62	2.74	2.89E+002	38.22	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: 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	1.98314E+001	3.07499E+000
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.81636E-001	1.50683E-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	0.999	1.983140E+001	3.074992E+000
TL-208	0.472	3.816361E-001	1.506830E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	2.2633E-001	1.67E-001	4.1286E-002
	1332.49	100.00	1.6658E-001		5.0263E-002
Nb-94	702.63	100.00	2.2474E-001	2.25E-001	-3.1472E-002
	871.10	100.00	2.2671E-001		2.6107E-002
Ag-108m	79.20	7.10	1.6955E+001	2.81E-001	1.5571E+001
	433.93	89.90	2.8081E-001		-1.3375E-002
	614.37	90.40	3.0622E-001		8.3456E-002
	722.95	90.50	3.1562E-001		6.0530E-002
Sb-125	176.33	6.89	5.0731E+000	8.45E-001	-7.7686E-001
	427.89	29.33	8.4493E-001		-5.2478E-001
	463.38	10.35	2.5376E+000		8.0272E-002
	600.56	17.80	1.2387E+000		6.3406E-001
	606.64	5.02	5.2147E+000		2.6157E+000
	635.90	11.32	1.9052E+000		5.5342E-001
Cs-134	563.23	8.38	2.8783E+000	2.34E-001	-1.6999E+000
	569.32	15.43	1.5094E+000		9.0634E-002
	604.70	97.60	2.6647E-001		4.1075E-002
	795.84	85.40	2.3425E-001		8.2747E-003
	801.93	8.73	2.3930E+000		1.1452E+000
Cs-137	661.65	85.12	3.0565E-001	3.06E-001	2.0186E-001
Eu-152	121.78	28.40	1.7489E+000	8.99E-001	4.8320E-001
	244.69	7.49	4.2283E+000		-6.5653E+000
	344.27	26.50	9.7800E-001		-4.7647E-001
	778.89	12.74	1.8861E+000		1.1041E+000
	867.32	4.16	5.6775E+000		3.0747E+000
	964.01	14.40	1.8183E+000		5.9739E-002
	1085.78	10.00	2.0390E+000		-1.8027E+000
	1112.02	13.30	1.7959E+000		1.3717E+000
	1407.95	20.70	8.9869E-001		3.5643E-001
Eu-154	123.07	40.50	1.1857E+000	5.65E-001	-4.3435E-001
	247.94	6.60	4.6075E+000		2.4606E-001
	591.81	4.83	4.5435E+000		1.0818E+000
	723.30	19.70	1.4789E+000		1.0436E+000
	756.87	4.33	5.5990E+000		1.0173E-001
	873.19	11.50	1.9550E+000		8.8708E-001
	996.32	10.30	1.7713E+000		-2.8858E+000
	1004.76	17.90	1.1066E+000		3.9137E-001
	1274.45	35.50	5.6518E-001		2.5500E-001
Eu-155	86.54	30.90	2.8639E+000	2.82E+000	1.8527E+000
	105.31	20.70	2.8244E+000		1.6829E-001
Am-241	59.54	35.90	8.3485E+000	8.35E+000	-2.2588E+000
Cm-243	228.19	10.56	3.1095E+000	2.29E+000	2.4090E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.2934E+000	2.29E+000	6.3005E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 8/10/2006 10:38:06 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-08-06-188-F-
Sample Title: OOL-08-06-188-F-G
Description: 50% vegetation amall rocks

Sample Type:
Geometry:

Acquisition Started: 8/10/2006 10:27:58 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-08-06-188-F-
Title: OOL-08-06-188-F-G
Description: 50% vegetation amall rocks

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	291.42	72.81	0.68	4.79E+001	23.02	1.48E+002
m	2	285-	304	299.73	74.89	0.68	5.01E+001	23.57	1.52E+002
	3	947-	959	953.90	238.43	0.77	4.68E+001	33.62	9.43E+001
	4	1401-	1412	1407.32	351.79	1.15	4.95E+001	24.18	4.05E+001
	5	2323-	2338	2329.84	582.42	0.89	4.63E+001	21.82	2.57E+001
	6	2428-	2442	2434.74	608.65	1.79	4.80E+001	18.10	1.30E+001
	7	3866-	3877	3871.04	967.72	1.77	3.22E+001	14.20	7.77E+000
	8	5826-	5849	5838.02	1459.47	1.50	2.86E+002	34.46	5.83E+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: 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	0.943	1460.81*	10.67	1.96263E+001	2.84790E+000
TL-208	0.461	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.09610E-001	1.51663E-001
		860.37	12.46		
Pb-212	0.581	74.81* @	10.70	5.37144E+000	2.73558E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	4.71969E-001	3.47360E-001
Bi-214	0.398	609.31*	46.30	5.92484E-001	2.35351E-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	0.943	1.962630E+001	2.847903E+000
TL-208	0.461	3.096097E-001	1.516626E-001
Pb-212 @	0.581	4.719695E-001	3.473596E-001
Bi-214	0.398	5.924840E-001	2.353511E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I 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	7.9864E-002	48.04
4	351.79	8.2500E-002	48.85
7	967.72	5.3719E-002	44.06

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	2.3081E-001	1.83E-001	9.8364E-002
	1332.49	100.00	1.8324E-001		-1.0399E-002
Nb-94	702.63	100.00	2.3193E-001	1.77E-001	1.8996E-001
	871.10	100.00	1.7733E-001		-9.1218E-002
Ag-108m	79.20	7.10	1.4072E+001	2.52E-001	-1.0663E+001
	433.93	89.90	2.5866E-001		4.2115E-002
	614.37	90.40	2.9549E-001		3.1705E-003
	722.95	90.50	2.5176E-001		1.5017E-001
Sb-125	176.33	6.89	4.7629E+000	8.07E-001	1.4891E+000
	427.89	29.33	8.0702E-001		1.1910E-001
	463.38	10.35	2.4314E+000		1.9525E+000
	600.56	17.80	1.2290E+000		4.3755E-001
	606.64	5.02	5.5991E+000		4.8432E+000
	635.90	11.32	1.8728E+000		9.8559E-001
Cs-134	563.23	8.38	2.9657E+000	2.49E-001	2.0483E+000
	569.32	15.43	1.4685E+000		-4.6223E-001
	604.70	97.60	2.8496E-001		-3.9705E-003
	795.84	85.40	2.4910E-001		-1.3634E-001
	801.93	8.73	2.5990E+000		9.4035E-001
Cs-137	661.65	85.12	2.7334E-001	2.73E-001	1.0481E-002
Eu-152	121.78	28.40	1.5913E+000	7.17E-001	2.5638E-001
	244.69	7.49	3.9774E+000		-1.6882E+000
	344.27	26.50	9.7409E-001		2.9328E-001
	778.89	12.74	1.6466E+000		0.0000E+000
	867.32	4.16	4.2590E+000		1.7383E+000
	964.01	14.40	1.9601E+000		1.2117E+000
	1085.78	10.00	1.9382E+000		-2.7322E-001
	1112.02	13.30	1.4843E+000		-1.8260E+000
	1407.95	20.70	7.1723E-001		-1.8514E-001
Eu-154	123.07	40.50	1.1214E+000	6.10E-001	4.8765E-001
	247.94	6.60	4.1433E+000		-1.3864E+000
	591.81	4.83	4.3636E+000		-1.3992E+000
	723.30	19.70	1.1474E+000		-1.1452E-001
	756.87	4.33	5.0476E+000		1.7295E+000
	873.19	11.50	1.6087E+000		-8.6430E-002
	996.32	10.30	1.9197E+000		-7.9269E-001
	1004.76	17.90	1.1980E+000		6.7646E-001
	1274.45	35.50	6.0989E-001		2.5971E-002
Eu-155	86.54	30.90	2.6636E+000	2.66E+000	3.3070E+000
	105.31	20.70	2.8130E+000		6.1289E-002
Am-241	59.54	35.90	6.2665E+000	6.27E+000	-3.7615E+000
Cm-243	228.19	10.56	2.7818E+000	1.83E+000	2.0150E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.8285E+000	1.83E+000	8.3730E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 8/10/2006 10:23:15 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-08-06-189-F-
Sample Title: OOL-08-06-189-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/10/2006 10:13:12 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-08-06-189-F-
Title: OOL-08-06-189-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	947-	961	953.72	238.39	0.72	7.23E+001	40.38	1.20E+002
2	1399-	1412	1405.64	351.37	1.03	4.05E+001	25.70	4.75E+001
3	2321-	2337	2330.14	582.49	0.82	6.06E+001	22.66	2.34E+001
4	2426-	2441	2434.40	608.56	0.53	5.41E+001	20.91	1.99E+001
5	3633-	3647	3639.82	909.92	0.91	4.49E+001	15.12	5.09E+000
6	3865-	3876	3870.63	967.62	0.38	2.70E+001	13.51	8.03E+000
7	5826-	5847	5837.70	1459.39	1.61	2.81E+002	33.50	2.84E+000
8	7044-	7057	7050.77	1762.66	1.50	1.90E+001	8.54	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	0.937	1460.81*	10.67	1.92821E+001	2.77749E+000
TL-208	0.463	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	4.05854E-001	1.60883E-001
		860.37	12.46		
Pb-212	0.426	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.29550E-001	4.23387E-001
Bi-214	0.660	609.31*	46.30	6.67932E-001	2.71166E-001
		1120.29	15.10		
		1764.49*	15.80	9.84331E-001	4.53416E-001
Ac-228	0.595	338.32	11.40		
		911.07*	27.70	1.01390E+000	3.60668E-001
		969.11*	16.60	1.02955E+000	5.26997E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R 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	0.937	1.928214E+001	2.777485E+000
TL-208	0.463	4.058539E-001	1.608833E-001
Pb-212 @	0.426	7.295498E-001	4.233866E-001
Bi-214	0.660	7.512846E-001	2.327230E-001
Ac-228	0.595	1.018893E+000	2.976378E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	351.37	6.7576E-002	63.38

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	2.0229E-001	2.01E-001	5.1653E-002
	1332.49	100.00	2.0123E-001		4.0513E-002
Nb-94	702.63	100.00	2.2837E-001	1.99E-001	1.0395E-002
	871.10	100.00	1.9915E-001		-1.6374E-001
Ag-108m	79.20	7.10	1.4712E+001	2.86E-001	-9.5156E+000
	433.93	89.90	2.8994E-001		2.3238E-001
	614.37	90.40	3.1366E-001		-2.7477E-002
	722.95	90.50	2.8560E-001		-3.2135E-003
Sb-125	176.33	6.89	5.1723E+000	7.76E-001	3.0458E+000
	427.89	29.33	7.7617E-001		-4.4590E-001
	463.38	10.35	2.4673E+000		1.0749E+000
	600.56	17.80	1.2387E+000		-8.9514E-001
	606.64	5.02	5.9820E+000		2.8431E+000
	635.90	11.32	2.0294E+000		-5.3028E-001
Cs-134	563.23	8.38	2.9999E+000	2.85E-001	-1.0670E+000
	569.32	15.43	1.4475E+000		-5.7128E-001
	604.70	97.60	3.0610E-001		4.5143E-002
	795.84	85.40	2.8465E-001		7.9449E-002
	801.93	8.73	2.6639E+000		-5.2383E-002
Cs-137	661.65	85.12	3.1794E-001	3.18E-001	2.8482E-001
Eu-152	121.78	28.40	1.5951E+000	7.77E-001	-2.0627E+000
	244.69	7.49	4.3149E+000		-2.5816E+000
	344.27	26.50	9.7409E-001		-1.2600E+000
	778.89	12.74	1.7707E+000		-6.2293E-001
	867.32	4.16	5.3002E+000		5.1654E-001
	964.01	14.40	1.8788E+000		2.2207E+000
	1085.78	10.00	1.9893E+000		-2.0210E+000
	1112.02	13.30	1.6481E+000		-1.2843E+000
	1407.95	20.70	7.7675E-001		-6.3443E-001
Eu-154	123.07	40.50	1.1419E+000	4.80E-001	2.5023E-001
	247.94	6.60	4.6191E+000		8.9585E-001
	591.81	4.83	4.9469E+000		1.8265E+000
	723.30	19.70	1.3202E+000		3.4826E-001
	756.87	4.33	5.0025E+000		-1.8767E-001
	873.19	11.50	1.7326E+000		-4.8528E-001
	996.32	10.30	1.9893E+000		1.0834E-001
	1004.76	17.90	1.1468E+000		6.2455E-002
	1274.45	35.50	4.8042E-001		-6.5557E-001
Eu-155	86.54	30.90	2.6984E+000	2.70E+000	-1.1753E+000
	105.31	20.70	2.9795E+000		2.1674E+000
Am-241	59.54	35.90	6.6094E+000	6.61E+000	-6.9298E-001
Cm-243	228.19	10.56	3.0377E+000	2.19E+000	9.4515E-001

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	7.8048E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 8/10/2006 10:09:49 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-08-06-190-F-
Sample Title: OOL-08-06-190-F-G
Description: water shed

Sample Type:
Geometry:

Acquisition Started: 8/10/2006 9:59:46 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-08-06-190-F-
Title: OOL-08-06-190-F-G
Description: water shed

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	223-	230	226.63	56.61	0.41	2.81E+001	30.08	1.03E+002
2	947-	960	953.93	238.44	1.12	5.29E+001	31.60	7.41E+001
3	1401-	1411	1405.99	351.46	0.41	2.79E+001	20.14	3.21E+001
4	2325-	2338	2330.61	582.61	0.38	3.42E+001	18.18	1.88E+001
5	2426-	2441	2433.46	608.33	0.78	4.74E+001	20.77	2.16E+001
6	2637-	2649	2643.57	660.85	0.63	3.65E+001	16.03	1.15E+001
7	3635-	3648	3640.84	910.17	0.84	2.63E+001	13.82	7.69E+000
8	5826-	5847	5836.71	1459.15	1.69	2.53E+002	31.81	2.71E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: GRN7780

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.913	1460.81*		10.67	1.73686E+001	2.59530E+000
Cs-137	0.980	661.65*		85.12	2.51865E-001	1.14415E-001
TL-208	0.466	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	2.29013E-001	1.25383E-001
		860.37		12.46		
Pb-212	0.427	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	5.33917E-001	3.29825E-001
Bi-214	0.387	609.31*		46.30	5.84604E-001	2.66541E-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	0.913	1.736859E+001	2.595303E+000
Cs-137	0.980	2.518653E-001	1.144150E-001
TL-208	0.466	2.290128E-001	1.253832E-001
Pb-212 @	0.427	5.339170E-001	3.298249E-001
Bi-214	0.387	5.846037E-001	2.665408E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	56.61	4.6889E-002	106.93
3	351.46	4.6563E-002	72.09
7	910.17	4.3848E-002	52.53

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	2.2405E-001	1.73E-001	3.4680E-002
		1332.49	100.00	1.7346E-001		6.5258E-002
	Nb-94	702.63	100.00	1.5700E-001	1.57E-001	-4.2266E-002
		871.10	100.00	1.7733E-001		3.4588E-002
	Ag-108m	79.20	7.10	1.3941E+001	2.37E-001	-2.4262E+001
		433.93	89.90	2.5279E-001		1.0284E-002
		614.37	90.40	2.6400E-001		6.1248E-004
		722.95	90.50	2.3719E-001		-1.0749E-001
	Sb-125	176.33	6.89	4.6820E+000	6.95E-001	2.5299E-001
		427.89	29.33	6.9516E-001		-4.6940E-001
		463.38	10.35	2.1205E+000		9.5811E-001
		600.56	17.80	1.1996E+000		-7.9923E-003
		606.64	5.02	5.6778E+000		4.4148E+000
		635.90	11.32	1.7890E+000		1.8816E+000
	Cs-134	563.23	8.38	2.4962E+000	2.34E-001	-1.0264E+000
		569.32	15.43	1.4475E+000		1.2590E-001
		604.70	97.60	2.9573E-001		1.9544E-002
		795.84	85.40	2.3425E-001		8.4911E-002
		801.93	8.73	2.2184E+000		1.4739E+000
+	Cs-137	661.65*	85.12	1.4359E-001	1.44E-001	2.5187E-001
	Eu-152	121.78	28.40	1.4326E+000	8.14E-001	-1.6092E+000
		244.69	7.49	3.8936E+000		2.5618E+000
		344.27	26.50	9.7800E-001		3.0922E-001
		778.89	12.74	1.8149E+000		-7.5479E-002
		867.32	4.16	4.1326E+000		-4.5222E+000
		964.01	14.40	1.5065E+000		8.4161E-001
		1085.78	10.00	1.7752E+000		1.8189E+000
		1112.02	13.30	1.6822E+000		-2.0754E+000
		1407.95	20.70	8.1370E-001		-6.8345E-002
	Eu-154	123.07	40.50	1.0106E+000	5.73E-001	8.2495E-002
		247.94	6.60	4.1174E+000		-8.0987E-001
		591.81	4.83	4.4725E+000		2.2978E+000
		723.30	19.70	1.0897E+000		3.8934E-001
		756.87	4.33	4.5746E+000		1.7303E+000
		873.19	11.50	1.4969E+000		-9.1105E-002
		996.32	10.30	1.9893E+000		-3.2425E-001
		1004.76	17.90	1.0505E+000		-3.1660E-001
		1274.45	35.50	5.7290E-001		1.3328E-001
	Eu-155	86.54	30.90	2.7122E+000	2.69E+000	3.7554E+000
		105.31	20.70	2.6871E+000		-6.4038E-001
	Am-241	59.54	35.90	6.4001E+000	6.40E+000	-3.7649E+000
	Cm-243	228.19	10.56	2.6632E+000	1.84E+000	-6.6660E-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	-1.2435E+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 8/10/2006 9:55:13 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: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-08-06-191-F-
Sample Title: OOL-08-06-191-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/10/2006 9:45:11 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-08-06-191-F-
Title: OOL-08-06-191-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	949-	958	953.34	238.29	0.77	4.73E+001	27.37	6.27E+001
2	1401-	1411	1405.35	351.30	0.40	2.32E+001	19.56	3.18E+001
3	2324-	2339	2331.04	582.72	0.43	4.07E+001	22.66	3.03E+001
4	2637-	2648	2642.27	660.53	0.84	2.30E+001	15.25	1.50E+001
5	3633-	3647	3640.14	910.00	0.94	3.43E+001	16.33	1.17E+001
6	5826-	5849	5837.76	1459.41	1.27	3.11E+002	36.54	9.07E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I 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	0.938	1460.81*		10.67	2.13236E+001	3.04284E+000
Cs-137	0.960	661.65*		85.12	1.58526E-001	1.06762E-001
TL-208	0.468	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	2.72377E-001	1.55925E-001
		860.37		12.46		
Pb-212	0.425	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	4.77649E-001	2.86241E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R 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	0.938	2.132359E+001	3.042838E+000
Cs-137	0.960	1.585262E-001	1.067622E-001
TL-208	0.468	2.723773E-001	1.559249E-001
Pb-212 @	0.425	4.776493E-001	2.862405E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	351.30	3.8689E-002	84.25
5	910.00	5.7192E-002	47.59

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: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	1.52E-001	6.3079E-002
		1332.49	100.00	1.5176E-001		-6.3720E-002
	Nb-94	702.63	100.00	2.2104E-001	2.17E-001	6.5099E-002
		871.10	100.00	2.1656E-001		2.3920E-002
	Ag-108m	79.20	7.10	1.4781E+001	2.73E-001	-2.3664E+001
		433.93	89.90	2.7814E-001		-5.3835E-003
		614.37	90.40	2.7266E-001		-2.1515E-001
		722.95	90.50	2.7297E-001		3.3817E-002
	Sb-125	176.33	6.89	4.7984E+000	8.16E-001	-9.3571E-001
		427.89	29.33	8.1560E-001		-1.1343E+000
		463.38	10.35	2.2686E+000		-1.1057E+000
		600.56	17.80	1.1996E+000		-1.5828E+000
		606.64	5.02	4.7663E+000		4.3504E+000
		635.90	11.32	2.1599E+000		4.0906E-001
	Cs-134	563.23	8.38	2.8960E+000	2.48E-001	-6.8251E-002
		569.32	15.43	1.4475E+000		-1.1811E-001
		604.70	97.60	2.4810E-001		1.3670E-001
		795.84	85.40	2.5617E-001		-1.0956E-001
		801.93	8.73	2.2950E+000		-2.8112E+000
+	Cs-137	661.65*	85.12	1.5759E-001	1.58E-001	1.5853E-001
	Eu-152	121.78	28.40	1.7213E+000	6.74E-001	-2.7768E-001
		244.69	7.49	4.2185E+000		2.2588E-002
		344.27	26.50	9.9347E-001		-1.2999E-001
		778.89	12.74	1.8149E+000		-7.6956E-001
		867.32	4.16	5.1003E+000		-3.2166E+000
		964.01	14.40	1.6770E+000		1.1352E+000
		1085.78	10.00	2.1346E+000		-1.8015E+000
		1112.02	13.30	1.6822E+000		-2.4084E+000
		1407.95	20.70	6.7417E-001		-4.3256E-002
	Eu-154	123.07	40.50	1.1746E+000	5.65E-001	2.2348E-001
		247.94	6.60	4.5493E+000		8.1902E-001
		591.81	4.83	4.8165E+000		-3.5351E-002
		723.30	19.70	1.2456E+000		1.6122E-001
		756.87	4.33	5.5990E+000		1.6631E+000
		873.19	11.50	1.8474E+000		-1.4857E+000
		996.32	10.30	2.0564E+000		1.5456E+000
		1004.76	17.90	1.2350E+000		5.0837E-001
		1274.45	35.50	5.6518E-001		-3.3603E-002
	Eu-155	86.54	30.90	2.8267E+000	2.78E+000	1.2585E+000
		105.31	20.70	2.7813E+000		-4.3948E-001
	Am-241	59.54	35.90	6.9888E+000	6.99E+000	4.7728E+000
	Cm-243	228.19	10.56	2.8391E+000	2.01E+000	-2.0367E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.0106E+000	2.01E+000	-3.3112E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 8/10/2006 11:47:17 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: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-08-06-192-F-
Sample Title: OOL-08-06-192-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/10/2006 11:37:14 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-08-06-192-F-
Title: OOL-08-06-192-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	948-	959	954.93	238.69	1.02	1.11E+002	35.97	9.00E+001
2	1347-	1359	1352.06	337.97	0.59	4.32E+001	25.37	4.68E+001
3	1402-	1414	1408.28	352.03	1.46	5.73E+001	26.14	4.57E+001
4	2036-	2046	2041.48	510.33	0.91	2.86E+001	20.74	3.44E+001
5	2323-	2339	2332.10	582.98	1.30	6.79E+001	22.74	2.11E+001
6	2430-	2444	2436.37	609.05	0.89	6.39E+001	22.58	2.31E+001
7	2902-	2914	2908.22	727.02	0.50	2.40E+001	14.01	9.99E+000
8	3633-	3649	3642.39	910.56	1.18	5.10E+001	20.62	1.90E+001
9	3869-	3881	3874.84	968.67	0.58	2.73E+001	15.93	1.47E+001
10	5831-	5852	5842.39	1460.57	1.41	3.29E+002	36.62	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: 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	2.25393E+001	3.10554E+000
TL-208	0.751	277.35	6.80		
		510.84*	21.60	7.16128E-001	5.31473E-001
		583.14*	84.20	4.54255E-001	1.63654E-001
		860.37	12.46		
Bi-212	0.999	727.17*	11.80	1.21708E+000	7.24364E-001
Pb-212	0.427	74.81 @	10.70		
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	1.12116E+000	4.03502E-001
Bi-214	0.405	609.31*	46.30	7.88977E-001	2.95586E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.993	338.32*	11.40	1.82859E+000	1.11236E+000
		911.07*	27.70	1.15200E+000	4.84006E-001
		969.11*	16.60	1.04338E+000	6.17799E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R 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		0.985		
	K-40		0.998	2.253933E+001	3.105535E+000
	TL-208		0.751	4.769350E-001	1.564065E-001
	Bi-212		0.999	1.217082E+000	7.243643E-001
	Pb-212	@	0.427	1.121156E+000	4.035016E-001
	Bi-214		0.405	7.889767E-001	2.955855E-001
	Ac-228		0.993	1.186070E+000	3.604466E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
3	352.03	9.5574E-002	45.59

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: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	2.3951E-001	1.98E-001	-1.9881E-002
	1332.49	100.00	1.9836E-001		6.7427E-002
Nb-94	702.63	100.00	2.4398E-001	2.44E-001	-1.6855E-001
	871.10	100.00	2.4383E-001		-2.8990E-003
Ag-108m	79.20	7.10	1.6230E+001	2.75E-001	-3.0781E+001
	433.93	89.90	2.7680E-001		-8.6686E-002
	614.37	90.40	3.6374E-001		-1.9874E-002
	722.95	90.50	2.7482E-001		-8.0447E-002
Sb-125	176.33	6.89	5.3174E+000	8.93E-001	1.5376E-002
	427.89	29.33	8.9284E-001		8.0806E-001
	463.38	10.35	2.5261E+000		1.3388E+000
	600.56	17.80	1.3747E+000		1.1489E+000
	606.64	5.02	6.4329E+000		9.0848E+000
	635.90	11.32	2.1316E+000		-4.6994E-001
Cs-134	563.23	8.38	2.9999E+000	2.70E-001	2.7251E-001
	569.32	15.43	1.6894E+000		3.7160E-001
	604.70	97.60	3.3053E-001		-2.2460E-001
	795.84	85.40	2.6972E-001		1.1181E-001
	801.93	8.73	2.4868E+000		-1.4266E+000
Cs-137	661.65	85.12	2.8711E-001	2.87E-001	1.7240E-002
Eu-152	121.78	28.40	1.6986E+000	7.95E-001	-1.5955E-001
	244.69	7.49	4.4645E+000		-2.5596E+000
	344.27	26.50	1.0384E+000		-4.5305E-001
	778.89	12.74	1.9545E+000		1.3803E+000
	867.32	4.16	5.8122E+000		-4.6976E+000
	964.01	14.40	1.9257E+000		9.3432E-002
	1085.78	10.00	2.0390E+000		-8.4450E-001
	1112.02	13.30	1.7481E+000		-4.1020E-001
	1407.95	20.70	7.9547E-001		-5.4139E-001
Eu-154	123.07	40.50	1.2087E+000	5.95E-001	6.3065E-001
	247.94	6.60	5.0904E+000		4.4286E+000
	591.81	4.83	5.1359E+000		-5.8294E+000
	723.30	19.70	1.2456E+000		2.0961E-002
	756.87	4.33	5.5990E+000		-2.1969E+000
	873.19	11.50	2.1213E+000		-6.2007E-001
	996.32	10.30	2.2646E+000		-6.6523E-001
	1004.76	17.90	1.2105E+000		7.4570E-001
	1274.45	35.50	5.9540E-001		2.5429E-002
Eu-155	86.54	30.90	3.0508E+000	2.93E+000	3.3305E+000
	105.31	20.70	2.9251E+000		1.7018E+000
Am-241	59.54	35.90	7.1609E+000	7.16E+000	3.7316E+000
Cm-243	228.19	10.56	3.0509E+000	2.22E+000	-5.6255E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.2164E+000	2.22E+000	-1.0395E+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 8/10/2006 2:30:23 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: OOL-08-06-193-F-
Sample Title: OOL-08-06-193-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 8/10/2006 2:20:21 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: 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-08-06-193-F-
Title: OOL-08-06-193-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	2326-	2342	2332.36	583.05	0.79	5.52E+001	27.52	4.48E+001
2	5829-	5854	5841.13	1460.25	2.56	3.22E+002	39.42	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: 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	7.05633E+000	1.03672E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.20339E-001	6.20129E-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	0.990	7.056333E+000	1.036716E+000
TL-208	0.471	1.203395E-001	6.201285E-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	7.9719E-002	5.82E-002	-8.3243E-002
	1332.49	100.00	5.8194E-002		-1.3243E-002
Nb-94	702.63	100.00	7.4965E-002	7.50E-002	2.6410E-002
	871.10	100.00	8.0426E-002		1.3533E-002
Ag-108m	79.20	7.10	5.9340E+000	8.71E-002	6.7880E-001
	433.93	89.90	9.5084E-002		-5.7644E-002
	614.37	90.40	1.0313E-001		-5.3772E-002
	722.95	90.50	8.7059E-002		-5.5483E-002
Sb-125	176.33	6.89	1.7346E+000	2.85E-001	-1.7615E-001
	427.89	29.33	2.8502E-001		1.3011E-001
	463.38	10.35	8.4746E-001		3.6790E-001
	600.56	17.80	4.0032E-001		-1.6109E-001
	606.64	5.02	2.0805E+000		2.2008E+000
	635.90	11.32	6.8521E-001		-7.8322E-002
Cs-134	563.23	8.38	1.0664E+000	1.02E-001	3.0865E-001
	569.32	15.43	5.7567E-001		-5.0128E-001
	604.70	97.60	1.0176E-001		2.5148E-002
	795.84	85.40	1.0338E-001		7.9971E-002
	801.93	8.73	9.9501E-001		8.3933E-001
Cs-137	661.65	85.12	1.0362E-001	1.04E-001	7.9362E-002
Eu-152	121.78	28.40	5.3283E-001	2.83E-001	-2.6824E-001
	244.69	7.49	1.3894E+000		-2.9316E+000
	344.27	26.50	3.2952E-001		-4.7458E-001
	778.89	12.74	7.1766E-001		5.7008E-001
	867.32	4.16	1.9034E+000		-8.5329E-001
	964.01	14.40	6.5977E-001		2.7112E-001
	1085.78	10.00	6.2419E-001		-1.1133E-001
	1112.02	13.30	5.9675E-001		-5.4240E-001
	1407.95	20.70	2.8346E-001		1.9639E-001
Eu-154	123.07	40.50	3.7522E-001	1.98E-001	2.1755E-002
	247.94	6.60	1.4664E+000		-8.6336E-001
	591.81	4.83	1.5579E+000		4.1056E-001
	723.30	19.70	4.2195E-001		2.2181E-001
	756.87	4.33	1.7691E+000		8.7537E-001
	873.19	11.50	7.0978E-001		5.1255E-001
	996.32	10.30	6.4800E-001		-3.5568E-001
	1004.76	17.90	3.9840E-001		-5.8139E-002
	1274.45	35.50	1.9795E-001		7.5306E-002
Eu-155	86.54	30.90	1.0404E+000	1.01E+000	2.8911E-001
	105.31	20.70	1.0059E+000		7.1817E-001
Am-241	59.54	35.90	3.0012E+000	3.00E+000	3.3689E+000
Cm-243	228.19	10.56	1.0766E+000	7.54E-001	-3.0858E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	7.5449E-001	7.54E-001	-2.8427E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 9/18/2006 8:31:05 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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-194-F-G
Sample ID: OOL-08-06-194-F-
Sample Title: OOL-08-06-194-F-G-I
Description: LOCATION 159 CENTER

Sample Type:
Geometry:

Acquisition Started: 9/14/2006 8:39:40 AM
Live Time: 300.0 seconds
Real Time: 300.3 seconds

Energy Calibration Date: 8/14/2006
Eff Calibration Date: 5/16/2006
Calibration Efficiency: 7829_1M90D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-194-F-G
Log Number: OOL-08-06-194-F-
Title: OOL-08-06-194-F-G-I
Description: LOCATION 159 CENTER

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5833-	5856	5842.95	1460.84	0.39	1.35E+002	22.77	0.00E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-194-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	1.000	1460.81*	10.67	1.91689E+001	3.58674E+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-08-06-194-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	1.000	1.916888E+001	3.586739E+000

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-194-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	2.9723E-001	2.85E-001	1.1721E-001
	1332.49	100.00	2.8527E-001		-2.3992E-001
Nb-94	702.63	100.00	3.3861E-001	3.21E-001	1.3879E-001
	871.10	100.00	3.2076E-001		4.6404E-002
Ag-108m	79.20	7.10	2.8619E+001	3.46E-001	-3.0691E+001
	433.93	89.90	3.9534E-001		2.0262E-001
	614.37	90.40	4.7917E-001		5.7358E-002
	722.95	90.50	3.4595E-001		1.5941E-001
Sb-125	176.33	6.89	7.3088E+000	1.22E+000	-3.1202E+000
	427.89	29.33	1.2186E+000		-1.1648E+000
	463.38	10.35	3.2467E+000		-4.1770E+000
	600.56	17.80	1.8731E+000		4.4296E-001
	606.64	5.02	8.5191E+000		5.6786E+000
	635.90	11.32	2.4662E+000		8.6530E-001
Cs-134	563.23	8.38	4.5231E+000	3.95E-001	-1.7021E-001
	569.32	15.43	2.5172E+000		0.0000E+000
	604.70	97.60	4.1000E-001		1.2727E-001
	795.84	85.40	3.9519E-001		1.0604E-001
	801.93	8.73	3.3875E+000		-1.8440E+000
Cs-137	661.65	85.12	5.1235E-001	5.12E-001	5.6876E-001
Eu-152	121.78	28.40	2.3243E+000	1.15E+000	-2.0894E+000
	244.69	7.49	5.3624E+000		-1.0270E+001
	344.27	26.50	1.5054E+000		-7.8132E-001
	778.89	12.74	2.6794E+000		2.1712E-001
	867.32	4.16	7.8507E+000		-7.3119E-001
	964.01	14.40	2.3335E+000		1.0295E+000
	1085.78	10.00	2.9849E+000		-4.1911E-001
	1112.02	13.30	2.6324E+000		-2.5808E-001
	1407.95	20.70	1.1455E+000		1.6019E-001
Eu-154	123.07	40.50	1.6318E+000	7.90E-001	3.4191E-001
	247.94	6.60	6.6239E+000		4.5317E+000
	591.81	4.83	7.7154E+000		5.5150E+000
	723.30	19.70	1.5894E+000		3.6230E-001
	756.87	4.33	7.1703E+000		8.9713E-001
	873.19	11.50	2.8443E+000		4.3920E-001
	996.32	10.30	2.7532E+000		-2.9463E-001
	1004.76	17.90	1.9347E+000		-3.7249E-002
	1274.45	35.50	7.8993E-001		-8.3901E-001
Eu-155	86.54	30.90	4.8637E+000	4.18E+000	3.7567E+000
	105.31	20.70	4.1809E+000		-3.2910E+000
Am-241	59.54	35.90	1.2926E+001	1.29E+001	-1.5476E+000
Cm-243	228.19	10.56	4.5243E+000	2.86E+000	2.6264E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.8630E+000	2.86E+000	1.5075E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 9/18/2006 8:31:44 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: ORG7829

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-195-F-G
Sample ID: OOL-08-06-195-F-
Sample Title: OOL-08-06-195-F-G-I
Description: LOCATION 159 NORTH

Sample Type:
Geometry:

Acquisition Started: 9/14/2006 9:35:56 AM
Live Time: 300.0 seconds
Real Time: 300.4 seconds

Energy Calibration Date: 8/14/2006
Eff Calibration Date: 5/16/2006
Calibration Efficiency: 7829_1M90D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-195-F-G
Log Number: OOL-08-06-195-F-
Title: OOL-08-06-195-F-G-I
Description: LOCATION 159 NORTH

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5833-	5855	5842.26	1460.66	1.40	1.41E+002	25.08	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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-195-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	2.00554E+001	3.91426E+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-08-06-195-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	2.005545E+001	3.914256E+000

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-195-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	3.1297E-001	3.12E-001	5.9259E-002
	1332.49	100.00	3.1214E-001		1.6016E-002
Nb-94	702.63	100.00	3.6391E-001	3.33E-001	6.8159E-002
	871.10	100.00	3.3294E-001		9.5127E-002
Ag-108m	79.20	7.10	2.5938E+001	3.99E-001	-1.0296E+001
	433.93	89.90	4.3373E-001		-2.1902E-001
	614.37	90.40	4.4939E-001		2.6954E-001
	722.95	90.50	3.9932E-001		4.8305E-003
Sb-125	176.33	6.89	7.4937E+000	1.24E+000	-2.7613E+000
	427.89	29.33	1.2427E+000		3.1491E-001
	463.38	10.35	3.7837E+000		7.9287E-001
	600.56	17.80	1.9792E+000		-1.1541E+000
	606.64	5.02	9.3667E+000		8.1560E+000
	635.90	11.32	2.9118E+000		1.1980E+000
Cs-134	563.23	8.38	4.2741E+000	3.82E-001	-9.3707E-001
	569.32	15.43	2.3012E+000		-5.9372E-001
	604.70	97.60	4.7780E-001		3.7938E-001
	795.84	85.40	3.8178E-001		-2.9210E-001
	801.93	8.73	3.6044E+000		-1.3670E+000
Cs-137	661.65	85.12	5.3462E-001	5.35E-001	6.5398E-001
Eu-152	121.78	28.40	2.6982E+000	1.26E+000	5.3326E-001
	244.69	7.49	6.3221E+000		-5.6071E+000
	344.27	26.50	1.4839E+000		-6.5344E-001
	778.89	12.74	2.8054E+000		1.7175E+000
	867.32	4.16	8.2764E+000		4.6181E-001
	964.01	14.40	3.0069E+000		1.0556E+000
	1085.78	10.00	2.9068E+000		1.5447E+000
	1112.02	13.30	2.6809E+000		1.4370E+000
	1407.95	20.70	1.2576E+000		7.2198E-001
Eu-154	123.07	40.50	1.8727E+000	6.43E-001	-4.8403E-001
	247.94	6.60	7.0421E+000		-5.4512E+000
	591.81	4.83	6.3462E+000		-7.9421E-001
	723.30	19.70	1.9327E+000		1.3662E+000
	756.87	4.33	7.3079E+000		3.3674E+000
	873.19	11.50	2.7361E+000		-9.5826E-001
	996.32	10.30	2.8990E+000		1.0727E+000
	1004.76	17.90	1.4514E+000		-1.1031E+000
	1274.45	35.50	6.4332E-001		8.7430E-002
Eu-155	86.54	30.90	4.5518E+000	4.55E+000	-1.1467E+000
	105.31	20.70	5.0077E+000		1.3648E+000
Am-241	59.54	35.90	1.4791E+001	1.48E+001	-9.0538E+000
Cm-243	228.19	10.56	4.7200E+000	3.76E+000	9.7169E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	3.7629E+000	3.76E+000	3.0401E+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 9/18/2006 8:39:10 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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-196-F-G
Sample ID: OOL-08-06-196-F
Sample Title: OOL-08-06-196-F-G-I
Description: LOCATION 159 EAST

Sample Type:
Geometry:

Acquisition Started: 9/14/2006 9:45:51 AM
Live Time: 300.0 seconds
Real Time: 300.3 seconds

Energy Calibration Date: 8/14/2006
Eff Calibration Date: 5/16/2006
Calibration Efficiency: 7829_1M90D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-196-F-G
Log Number: OOL-08-06-196-F
Title: OOL-08-06-196-F-G-I
Description: LOCATION 159 EAST

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2037-	2048	2042.71	510.71	0.43	3.11E+001	15.40	1.19E+001
2	5833-	5853	5843.73	1461.03	1.07	1.22E+002	23.25	5.19E+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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-196-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	3.43376E-001	1.76905E-001
K-40	0.998	1460.81*	10.67	1.72965E+001	3.58622E+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-08-06-196-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	3.433761E-001	1.769051E-001
K-40	0.998	1.729645E+001	3.586216E+000

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-196-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	3.1297E-001	2.55E-001	-3.5090E-001
	1332.49	100.00	2.5507E-001		-6.2232E-002
Nb-94	702.63	100.00	3.1675E-001	3.01E-001	-5.7569E-002
	871.10	100.00	3.0146E-001		9.2948E-002
Ag-108m	79.20	7.10	2.3949E+001	4.41E-001	-1.3074E+001
	433.93	89.90	4.8202E-001		-2.5465E-001
	614.37	90.40	4.7504E-001		-1.7630E-001
	722.95	90.50	4.4089E-001		-1.0853E-001
Sb-125	176.33	6.89	7.8497E+000	1.75E+000	-3.2715E-001
	427.89	29.33	1.7511E+000		1.7645E+000
	463.38	10.35	3.8814E+000		2.9873E+000
	600.56	17.80	1.9533E+000		1.0730E+000
	606.64	5.02	9.2312E+000		7.1838E+000
	635.90	11.32	3.3702E+000		2.9630E+000
Cs-134	563.23	8.38	4.3755E+000	4.08E-001	-3.0860E+000
	569.32	15.43	2.5428E+000		9.0913E-001
	604.70	97.60	4.5641E-001		1.4489E-001
	795.84	85.40	4.0812E-001		1.3890E-001
	801.93	8.73	3.6044E+000		-1.0789E+000
Cs-137	661.65	85.12	5.6009E-001	5.60E-001	5.6854E-001
Eu-152	121.78	28.40	2.4246E+000	1.20E+000	-6.0021E-001
	244.69	7.49	6.6603E+000		-1.0785E+001
	344.27	26.50	1.7042E+000		-6.2749E-001
	778.89	12.74	2.7641E+000		-1.9284E-001
	867.32	4.16	7.0770E+000		-4.0185E+000
	964.01	14.40	3.3764E+000		3.7557E+000
	1085.78	10.00	3.2764E+000		-7.5485E-001
	1112.02	13.30	2.6809E+000		1.9067E+000
	1407.95	20.70	1.2031E+000		9.6263E-002
Eu-154	123.07	40.50	1.7483E+000	8.88E-001	1.6268E+000
	247.94	6.60	7.1961E+000		-4.9892E+000
	591.81	4.83	7.6265E+000		2.5843E+000
	723.30	19.70	2.0924E+000		6.2119E-001
	756.87	4.33	8.0789E+000		5.0630E+000
	873.19	11.50	2.5640E+000		6.9715E-001
	996.32	10.30	2.8990E+000		-1.8960E+000
	1004.76	17.90	1.7900E+000		1.0110E-001
	1274.45	35.50	8.8757E-001		-1.3381E+000
Eu-155	86.54	30.90	4.2274E+000	4.23E+000	4.6917E-001
	105.31	20.70	4.5206E+000		2.5627E+000
Am-241	59.54	35.90	1.3961E+001	1.40E+001	-1.3686E+001
Cm-243	228.19	10.56	4.7374E+000	3.07E+000	-7.8268E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	3.0722E+000	3.07E+000	1.3945E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 9/18/2006 8:39:38 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: ORG7829

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-197-F-G
Sample ID: OOL-08-06-197-F
Sample Title: OOL-08-06-197-F-G-I
Description: LOCATION 159 SOUTH

Sample Type:
Geometry:

Acquisition Started: 9/14/2006 9:53:20 AM
Live Time: 300.0 seconds
Real Time: 300.3 seconds

Energy Calibration Date: 8/14/2006
Eff Calibration Date: 5/16/2006
Calibration Efficiency: 7829_1M90D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-197-F-G
Log Number: OOL-08-06-197-F
Title: OOL-08-06-197-F-G-I
Description: LOCATION 159 SOUTH

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2431-	2442	2436.35	609.13	0.60	3.24E+001	11.85	1.57E+000
2	5835-	5855	5844.23	1461.16	1.86	1.13E+002	21.55	2.40E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-197-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	0.996	1460.81*	10.67	1.59896E+001	3.32213E+000
Bi-214	0.405	609.31*	46.30	8.20106E-001	3.16496E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-197-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	0.996	1.598956E+001	3.322130E+000
Bi-214	0.405	8.201058E-001	3.164957E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-197-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	3.3502E-001	2.85E-001	1.0623E-001
	1332.49	100.00	2.8527E-001		8.2789E-002
Nb-94	702.63	100.00	3.7820E-001	3.61E-001	2.0438E-002
	871.10	100.00	3.6141E-001		2.2115E-001
Ag-108m	79.20	7.10	2.6947E+001	4.11E-001	-2.5501E+001
	433.93	89.90	4.1116E-001		3.2529E-002
	614.37	90.40	5.1092E-001		-2.0730E-001
	722.95	90.50	4.2582E-001		1.8136E-001
Sb-125	176.33	6.89	7.4249E+000	1.29E+000	3.1750E+000
	427.89	29.33	1.2896E+000		-1.2722E-001
	463.38	10.35	3.9767E+000		3.1540E+000
	600.56	17.80	2.0548E+000		1.3442E+000
	606.64	5.02	8.8829E+000		4.1581E+000
	635.90	11.32	2.5201E+000		-1.2736E+000
Cs-134	563.23	8.38	3.7210E+000	3.75E-001	1.5939E+000
	569.32	15.43	1.9273E+000		1.1355E-001
	604.70	97.60	4.6005E-001		-2.7638E-001
	795.84	85.40	3.7487E-001		9.3258E-002
	801.93	8.73	3.0710E+000		-1.2245E+000
Cs-137	661.65	85.12	5.1235E-001	5.12E-001	4.9756E-001
Eu-152	121.78	28.40	2.8889E+000	1.26E+000	3.6205E+000
	244.69	7.49	6.1318E+000		-3.6349E+000
	344.27	26.50	1.3830E+000		-1.7601E+000
	778.89	12.74	2.2009E+000		-2.5003E+000
	867.32	4.16	7.9954E+000		-2.2782E+000
	964.01	14.40	2.2895E+000		4.4959E-001
	1085.78	10.00	3.4117E+000		1.3295E+000
	1112.02	13.30	2.3730E+000		9.5083E-002
	1407.95	20.70	1.2576E+000		7.2198E-001
Eu-154	123.07	40.50	1.9570E+000	7.35E-001	6.6629E-001
	247.94	6.60	6.8203E+000		7.7853E-001
	591.81	4.83	6.4548E+000		-2.1432E+000
	723.30	19.70	1.9564E+000		1.2503E+000
	756.87	4.33	6.1091E+000		-2.8121E+000
	873.19	11.50	2.8968E+000		-1.4077E+000
	996.32	10.30	2.4311E+000		-6.1617E-001
	1004.76	17.90	1.2415E+000		6.7048E-001
	1274.45	35.50	7.3542E-001		2.0274E-002
Eu-155	86.54	30.90	4.4623E+000	4.44E+000	2.1938E+000
	105.31	20.70	4.4365E+000		-1.3459E+000
Am-241	59.54	35.90	1.6579E+001	1.66E+001	9.8737E-003
Cm-243	228.19	10.56	4.4137E+000	3.06E+000	-2.7766E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	3.0554E+000	3.06E+000	2.3352E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 9/18/2006 8:38:13 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: ORG7829

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-198-F-G
Sample ID: OOL-08-06-198-F
Sample Title: OOL-08-06-198-F-G-I
Description: LOCATION 159 WEST

Sample Type:
Geometry:

Acquisition Started: 9/14/2006 10:00:11 AM
Live Time: 300.0 seconds
Real Time: 300.3 seconds

Energy Calibration Date: 8/14/2006
Eff Calibration Date: 5/16/2006
Calibration Efficiency: 7829_1M90D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-198-F-G
Log Number: OOL-08-06-198-F
Title: OOL-08-06-198-F-G-I
Description: LOCATION 159 WEST

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	199-	213	203.81	50.96	0.53	5.93E+001	70.54	4.19E+002
2	5832-	5853	5842.46	1460.71	1.16	1.03E+002	21.71	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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-198-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	1.000	1460.81*	10.67	1.45714E+001	3.30115E+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-08-06-198-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	1.000	1.457145E+001	3.301149E+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	50.96	1.9761E-001	118.99

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:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-198-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	2.6246E-001	2.62E-001	-3.6281E-001
	1332.49	100.00	3.2053E-001		-3.8545E-002
Nb-94	702.63	100.00	2.8680E-001	2.87E-001	-1.1175E-001
	871.10	100.00	3.2076E-001		-1.1441E-001
Ag-108m	79.20	7.10	2.1947E+001	4.15E-001	-1.0136E+001
	433.93	89.90	4.3373E-001		1.8125E-001
	614.37	90.40	4.3595E-001		-3.2341E-001
	722.95	90.50	4.1545E-001		1.8409E-001
Sb-125	176.33	6.89	7.8280E+000	1.30E+000	7.3488E-001
	427.89	29.33	1.3010E+000		8.6400E-002
	463.38	10.35	3.6830E+000		-6.4649E-001
	600.56	17.80	1.8175E+000		-1.6519E+000
	606.64	5.02	8.2926E+000		4.0559E+000
	635.90	11.32	2.9567E+000		3.2339E-002
Cs-134	563.23	8.38	4.0628E+000	3.95E-001	-2.1837E+000
	569.32	15.43	2.4913E+000		2.8775E+000
	604.70	97.60	4.1409E-001		1.3876E-001
	795.84	85.40	3.9519E-001		1.8920E-002
	801.93	8.73	3.9995E+000		-4.5082E-001
Cs-137	661.65	85.12	5.8832E-001	5.88E-001	9.0850E-001
Eu-152	121.78	28.40	2.4635E+000	1.31E+000	-2.5227E-001
	244.69	7.49	6.0483E+000		-7.7586E+000
	344.27	26.50	1.4839E+000		7.2139E-001
	778.89	12.74	2.4052E+000		-9.4042E-001
	867.32	4.16	8.4129E+000		2.2403E+000
	964.01	14.40	2.2895E+000		-7.5992E-001
	1085.78	10.00	3.0607E+000		-1.1856E+000
	1112.02	13.30	2.2598E+000		3.4006E-001
	1407.95	20.70	1.3095E+000		7.9417E-001
Eu-154	123.07	40.50	1.7383E+000	7.06E-001	3.6591E-001
	247.94	6.60	6.9479E+000		-1.2281E+000
	591.81	4.83	7.2590E+000		-4.4163E+000
	723.30	19.70	1.9327E+000		1.2032E+000
	756.87	4.33	7.8312E+000		-8.6743E-001
	873.19	11.50	2.7361E+000		-2.5921E+000
	996.32	10.30	3.5293E+000		1.9696E+000
	1004.76	17.90	1.8274E+000		9.5324E-001
	1274.45	35.50	7.0630E-001		-1.5205E-001
Eu-155	86.54	30.90	4.0552E+000	4.06E+000	6.6865E-001
	105.31	20.70	4.5276E+000		2.3152E+000
Am-241	59.54	35.90	1.2249E+001	1.22E+001	3.9913E-002
Cm-243	228.19	10.56	4.2030E+000	3.12E+000	-2.1597E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	3.1222E+000	3.12E+000	1.6315E+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 9/18/2006 8:40:34 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: ORG7829

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-199-F-G
Sample ID: OOL-08-06-199-F
Sample Title: OOL-08-06-199-F-G-I
Description: LOCATION 169 CENTER

Sample Type:
Geometry:

Acquisition Started: 9/14/2006 10:12:44 AM
Live Time: 300.0 seconds
Real Time: 300.3 seconds

Energy Calibration Date: 8/14/2006
Eff Calibration Date: 5/16/2006
Calibration Efficiency: 7829_1M90D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-199-F-G
Log Number: OOL-08-06-199-F
Title: OOL-08-06-199-F-G-I
Description: LOCATION 169 CENTER

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	203-	222	212.81	53.21	0.93	1.45E+002	84.28	4.85E+002
2	5832-	5853	5843.62	1461.00	0.78	1.53E+002	27.32	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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-199-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	2.17257E+001	4.25948E+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-08-06-199-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	2.172565E+001	4.259484E+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	53.21	4.8422E-001	58.01

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:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-199-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	3.4886E-001	2.76E-001	-1.7111E-001
	1332.49	100.00	2.7563E-001		-1.0158E-001
Nb-94	702.63	100.00	3.4383E-001	3.44E-001	1.4819E-001
	871.10	100.00	3.5033E-001		-4.9679E-002
Ag-108m	79.20	7.10	2.7368E+001	3.94E-001	4.1834E+000
	433.93	89.90	4.0727E-001		-1.0818E-001
	614.37	90.40	4.8326E-001		-1.6971E-001
	722.95	90.50	3.9379E-001		9.2635E-002
Sb-125	176.33	6.89	7.6068E+000	1.36E+000	-3.4512E+000
	427.89	29.33	1.3565E+000		-4.9395E-001
	463.38	10.35	3.4723E+000		1.5539E+000
	600.56	17.80	1.9002E+000		-1.4909E+000
	606.64	5.02	8.5191E+000		1.0634E+000
	635.90	11.32	2.6242E+000		-1.5140E+000
Cs-134	563.23	8.38	4.7120E+000	3.82E-001	2.5597E+000
	569.32	15.43	2.5681E+000		1.3706E+000
	604.70	97.60	4.3388E-001		1.0747E-001
	795.84	85.40	3.8178E-001		-2.4991E-001
	801.93	8.73	3.7413E+000		6.9871E-001
Cs-137	661.65	85.12	5.8437E-001	5.84E-001	3.1164E-001
Eu-152	121.78	28.40	2.5628E+000	1.45E+000	-9.8467E-001
	244.69	7.49	5.9919E+000		-3.0286E+000
	344.27	26.50	1.5265E+000		-1.6172E+000
	778.89	12.74	2.7221E+000		1.0735E+000
	867.32	4.16	9.1857E+000		4.5253E+000
	964.01	14.40	2.1987E+000		-3.7584E-001
	1085.78	10.00	3.2063E+000		-5.5226E-001
	1112.02	13.30	2.0765E+000		-2.3338E+000
	1407.95	20.70	1.4523E+000		-1.8049E-002
Eu-154	123.07	40.50	1.8195E+000	8.40E-001	4.0655E-001
	247.94	6.60	6.5234E+000		-2.1609E+000
	591.81	4.83	7.8032E+000		-1.4407E+000
	723.30	19.70	1.8597E+000		5.9214E-001
	756.87	4.33	7.8312E+000		4.9948E+000
	873.19	11.50	2.9986E+000		3.6665E-001
	996.32	10.30	2.8990E+000		7.3546E-001
	1004.76	17.90	1.8997E+000		-2.2815E-001
	1274.45	35.50	8.4038E-001		3.4060E-001
Eu-155	86.54	30.90	4.5674E+000	4.39E+000	1.9343E+000
	105.31	20.70	4.3866E+000		2.4780E+000
Am-241	59.54	35.90	1.5638E+001	1.56E+001	7.4221E+000
Cm-243	228.19	10.56	4.6144E+000	3.16E+000	-9.1081E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	3.1551E+000	3.16E+000	2.8493E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 9/18/2006 8:41:10 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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-200-F-G
Sample ID: OOL-08-06-200-F
Sample Title: OOL-08-06-200-F-G-I
Description: LOCATION 169 NORTH

Sample Type:
Geometry:

Acquisition Started: 9/14/2006 10:19:46 AM
Live Time: 300.0 seconds
Real Time: 300.3 seconds

Energy Calibration Date: 8/14/2006
Eff Calibration Date: 5/16/2006
Calibration Efficiency: 7829_1M90D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-200-F-G
Log Number: OOL-08-06-200-F
Title: OOL-08-06-200-F-G-I
Description: LOCATION 169 NORTH

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	330-	342	338.24	84.57	0.74	5.49E+001	44.49	1.75E+002
2	946-	962	953.27	238.33	0.53	5.58E+001	24.69	3.22E+001
3	5833-	5854	5842.53	1460.73	1.83	1.38E+002	25.97	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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-200-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	1.000	1460.81*		10.67	1.95512E+001	4.01266E+000
Pb-212	0.418	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	1.13395E+000	5.32138E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R 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-08-06-200-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	1.000	1.955116E+001	4.012662E+000
Pb-212 @	0.418	1.133947E+000	5.321379E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	84.57	1.8301E-001	81.03

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:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-200-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	3.3502E-001	2.76E-001	-1.0839E-001
	1332.49	100.00	2.7563E-001		6.6808E-002
Nb-94	702.63	100.00	3.2237E-001	3.22E-001	4.3393E-002
	871.10	100.00	3.6681E-001		1.3689E-001
Ag-108m	79.20	7.10	2.7700E+001	4.19E-001	-1.7359E+001
	433.93	89.90	4.1883E-001		6.9934E-002
	614.37	90.40	5.0707E-001		-4.8232E-001
	722.95	90.50	4.2582E-001		-1.3067E-001
Sb-125	176.33	6.89	8.2104E+000	1.33E+000	3.7027E+000
	427.89	29.33	1.3346E+000		-6.1098E-001
	463.38	10.35	3.9767E+000		-9.2042E-003
	600.56	17.80	1.9270E+000		-5.4605E-001
	606.64	5.02	9.1627E+000		2.9366E+000
	635.90	11.32	3.4839E+000		4.6649E-001
Cs-134	563.23	8.38	4.1699E+000	4.33E-001	-2.5816E-001
	569.32	15.43	2.3847E+000		1.7380E+000
	604.70	97.60	4.6723E-001		2.0976E-001
	795.84	85.40	4.3271E-001		-3.4692E-001
	801.93	8.73	3.8077E+000		-1.2993E+000
Cs-137	661.65	85.12	5.2583E-001	5.26E-001	2.7908E-001
Eu-152	121.78	28.40	2.9697E+000	8.67E-001	1.0859E+000
	244.69	7.49	5.9919E+000		7.1289E-001
	344.27	26.50	1.7860E+000		1.8036E+000
	778.89	12.74	2.3056E+000		-1.6669E+000
	867.32	4.16	8.4129E+000		-7.4384E+000
	964.01	14.40	2.7665E+000		1.2968E+000
	1085.78	10.00	3.2063E+000		1.0227E-001
	1112.02	13.30	2.3172E+000		9.9075E-001
	1407.95	20.70	8.6721E-001		-7.4003E-001
Eu-154	123.07	40.50	2.0933E+000	9.53E-001	5.7001E-001
	247.94	6.60	6.9795E+000		-3.2436E+000
	591.81	4.83	7.4453E+000		-2.4011E+000
	723.30	19.70	2.0256E+000		1.0285E+000
	756.87	4.33	6.8860E+000		-5.8272E+000
	873.19	11.50	3.2377E+000		2.2832E-001
	996.32	10.30	3.4136E+000		5.9361E-001
	1004.76	17.90	1.8639E+000		8.4215E-001
	1274.45	35.50	9.5342E-001		-1.3583E-001
Eu-155	86.54	30.90	4.8928E+000	4.81E+000	3.7644E+000
	105.31	20.70	4.8099E+000		1.5169E+000
Am-241	59.54	35.90	1.1964E+001	1.20E+001	-2.0469E+000
Cm-243	228.19	10.56	4.4694E+000	3.19E+000	-1.8525E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	3.1876E+000	3.19E+000	-7.0350E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 9/18/2006 8:41:37 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: ORG7829

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-201-F-G
Sample ID: OOL-08-06-201-F
Sample Title: OOL-08-06-201-F-G-I
Description: LOCATION 169 EAST

Sample Type:
Geometry:

Acquisition Started: 9/14/2006 10:27:23 AM
Live Time: 300.0 seconds
Real Time: 300.4 seconds

Energy Calibration Date: 8/14/2006
Eff Calibration Date: 5/16/2006
Calibration Efficiency: 7829_1M90D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-201-F-G
Log Number: OOL-08-06-201-F
Title: OOL-08-06-201-F-G-I
Description: LOCATION 169 EAST

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	657-	666	661.46	165.38	0.29	2.33E+001	19.52	3.37E+001
2	1401-	1411	1406.97	351.77	0.91	2.56E+001	15.56	1.54E+001
3	5831-	5853	5843.01	1460.85	1.35	1.50E+002	26.55	8.57E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I 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-08-06-201-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	1.000	1460.81*	10.67	2.13605E+001	4.14792E+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-08-06-201-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	1.000	2.136046E+001	4.147922E+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	165.38	7.7822E-002	83.63
2	351.77	8.5488E-002	60.67

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:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-201-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	3.1297E-001	3.12E-001	1.6538E-001
	1332.49	100.00	3.1214E-001		1.0479E-001
Nb-94	702.63	100.00	3.6391E-001	3.21E-001	-2.3129E-001
	871.10	100.00	3.2076E-001		-1.0800E-001
Ag-108m	79.20	7.10	2.9534E+001	3.94E-001	-2.1917E+000
	433.93	89.90	4.3006E-001		-2.4558E-001
	614.37	90.40	4.7917E-001		-1.2716E-001
	722.95	90.50	3.9379E-001		-1.5930E-001
Sb-125	176.33	6.89	8.8096E+000	1.27E+000	2.7917E+000
	427.89	29.33	1.2664E+000		4.0190E-001
	463.38	10.35	4.0695E+000		2.3916E+000
	600.56	17.80	2.1746E+000		-1.7794E+000
	606.64	5.02	8.5932E+000		3.1862E+000
	635.90	11.32	3.3702E+000		8.4104E-001
Cs-134	563.23	8.38	4.6656E+000	4.39E-001	2.4496E+000
	569.32	15.43	2.4118E+000		-6.0367E-001
	604.70	97.60	4.5274E-001		1.5982E-001
	795.84	85.40	4.3861E-001		3.1239E-002
	801.93	8.73	4.5218E+000		9.6769E-001
Cs-137	661.65	85.12	5.5174E-001	5.52E-001	7.7591E-001
Eu-152	121.78	28.40	2.4344E+000	1.41E+000	1.3438E+000
	244.69	7.49	6.1318E+000		-9.1064E+000
	344.27	26.50	1.4622E+000		-1.2867E+000
	778.89	12.74	2.5916E+000		-2.4702E+000
	867.32	4.16	8.1372E+000		-4.1622E+000
	964.01	14.40	2.8375E+000		7.2527E-001
	1085.78	10.00	3.7856E+000		2.1477E+000
	1112.02	13.30	2.5322E+000		3.3199E-001
	1407.95	20.70	1.4065E+000		-6.9698E-001
Eu-154	123.07	40.50	1.6634E+000	9.32E-001	9.2096E-002
	247.94	6.60	7.0421E+000		-5.1440E+000
	591.81	4.83	8.5494E+000		1.8176E+000
	723.30	19.70	1.8347E+000		-9.3072E-001
	756.87	4.33	7.9561E+000		-1.6182E+000
	873.19	11.50	2.8443E+000		5.5656E-001
	996.32	10.30	3.4720E+000		-6.4936E-001
	1004.76	17.90	1.8639E+000		1.3410E+000
	1274.45	35.50	9.3205E-001		3.1584E-001
Eu-155	86.54	30.90	4.7254E+000	4.31E+000	2.3220E+000
	105.31	20.70	4.3070E+000		-1.8282E+000
Am-241	59.54	35.90	1.7672E+001	1.77E+001	1.8303E+001
Cm-243	228.19	10.56	4.6851E+000	3.38E+000	5.8005E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	3.3756E+000	3.38E+000	-1.7564E+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 9/18/2006 8:42:09 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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-202-F-G
Sample ID: OOL-08-06-202-F
Sample Title: OOL-08-06-202-F-G-I
Description: LOCATION 169 SOUTH

Sample Type:
Geometry:

Acquisition Started: 9/14/2006 10:35:22 AM
Live Time: 300.0 seconds
Real Time: 300.4 seconds

Energy Calibration Date: 8/14/2006
Eff Calibration Date: 5/16/2006
Calibration Efficiency: 7829_1M90D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-202-F-G
Log Number: OOL-08-06-202-F
Title: OOL-08-06-202-F-G-I
Description: LOCATION 169 SOUTH

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2326-	2338	2331.37	582.88	0.33	2.67E+001	13.71	8.29E+000
2	5833-	5855	5843.53	1460.98	0.63	1.58E+002	24.64	0.00E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-202-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	2.24355E+001	3.94181E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.66126E-001	1.94098E-001
		860.37	12.46		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-202-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	2.243550E+001	3.941809E+000
TL-208	0.471	3.661263E-001	1.940975E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-202-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	3.4886E-001	2.44E-001	-6.2744E-002
	1332.49	100.00	2.4401E-001		6.2639E-002
Nb-94	702.63	100.00	3.5403E-001	3.54E-001	-9.8719E-002
	871.10	100.00	3.5592E-001		-1.5053E-001
Ag-108m	79.20	7.10	3.1788E+001	4.19E-001	1.4699E+001
	433.93	89.90	4.1883E-001		4.5709E-003
	614.37	90.40	5.2230E-001		4.7656E-001
	722.95	90.50	4.3593E-001		2.1028E-001
Sb-125	176.33	6.89	8.1688E+000	1.27E+000	8.7214E+000
	427.89	29.33	1.2664E+000		3.5922E-001
	463.38	10.35	4.4479E+000		3.1594E+000
	600.56	17.80	1.8175E+000		-4.5149E-002
	606.64	5.02	8.6666E+000		-7.8868E-001
	635.90	11.32	3.2522E+000		7.4412E-002
Cs-134	563.23	8.38	4.2223E+000	4.33E-001	-2.2358E-001
	569.32	15.43	2.6179E+000		6.7853E-001
	604.70	97.60	4.4529E-001		4.6082E-001
	795.84	85.40	4.3271E-001		2.1984E-001
	801.93	8.73	3.9367E+000		-2.9198E-001
Cs-137	661.65	85.12	5.5174E-001	5.52E-001	6.1469E-001
Eu-152	121.78	28.40	2.4971E+000	1.15E+000	1.7642E+000
	244.69	7.49	7.7558E+000		-5.8687E+000
	344.27	26.50	1.6278E+000		2.2085E-001
	778.89	12.74	2.3560E+000		-1.6809E-001
	867.32	4.16	7.8507E+000		-4.6181E-001
	964.01	14.40	2.8022E+000		8.5027E-001
	1085.78	10.00	3.3448E+000		-1.9540E+000
	1112.02	13.30	2.5829E+000		1.7954E-001
	1407.95	20.70	1.1455E+000		5.7758E-001
Eu-154	123.07	40.50	1.7081E+000	7.06E-001	-1.1751E-001
	247.94	6.60	8.5532E+000		4.1681E+000
	591.81	4.83	7.6265E+000		8.0360E+000
	723.30	19.70	1.9564E+000		-2.7188E-001
	756.87	4.33	8.6641E+000		-6.1411E-001
	873.19	11.50	3.2832E+000		1.6334E+000
	996.32	10.30	2.7532E+000		-2.8737E+000
	1004.76	17.90	1.7125E+000		-4.8424E-001
	1274.45	35.50	7.0630E-001		1.1049E-001
Eu-155	86.54	30.90	5.2740E+000	4.87E+000	1.4220E+000
	105.31	20.70	4.8681E+000		4.9423E+000
Am-241	59.54	35.90	1.4680E+001	1.47E+001	6.0070E+000
Cm-243	228.19	10.56	5.0717E+000	3.33E+000	3.6323E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	3.3297E+000	3.33E+000	3.0592E+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 9/18/2006 8:42:46 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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-203-F-G
Sample ID: OOL-08-06-203-F
Sample Title: OOL-08-06-203-F-G-I
Description: LOCATION 169 WEST

Sample Type:
Geometry:

Acquisition Started: 9/14/2006 10:43:40 AM
Live Time: 300.0 seconds
Real Time: 300.3 seconds

Energy Calibration Date: 8/14/2006
Eff Calibration Date: 5/16/2006
Calibration Efficiency: 7829_1M90D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-203-F-G
Log Number: OOL-08-06-203-F
Title: OOL-08-06-203-F-G-I
Description: LOCATION 169 WEST

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	334-	342	338.72	84.69	0.37	3.64E+001	32.08	1.09E+002
2	2325-	2337	2331.13	582.82	0.37	1.95E+001	11.85	6.50E+000
3	2430-	2441	2435.85	609.00	0.51	1.30E+001	11.76	9.00E+000
4	3638-	3650	3643.96	911.05	0.67	1.75E+001	11.59	6.50E+000
5	5834-	5854	5843.56	1460.99	1.63	1.37E+002	24.47	5.25E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-203-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	1.94181E+001	3.81392E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.67243E-001	1.66256E-001
		860.37	12.46		
Bi-214	0.404	609.31*	46.30	3.28689E-001	3.00049E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-203-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	1.941812E+001	3.813921E+000
TL-208	0.470	2.672434E-001	1.662555E-001
Bi-214	0.404	3.286895E-001	3.000494E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	84.69	1.2126E-001	88.19
4	911.05	5.8333E-002	66.24

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-203-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	3.2786E-001	3.03E-001	-4.2457E-001
	1332.49	100.00	3.0349E-001		-9.4202E-002
Nb-94	702.63	100.00	3.5900E-001	3.59E-001	-1.0146E-001
	871.10	100.00	3.6141E-001		4.0598E-002
Ag-108m	79.20	7.10	2.9015E+001	3.82E-001	-4.3598E-001
	433.93	89.90	3.9936E-001		-1.1998E-001
	614.37	90.40	4.5377E-001		-6.8069E-002
	722.95	90.50	3.8245E-001		-1.8213E-001
Sb-125	176.33	6.89	8.2724E+000	1.37E+000	-2.0403E+000
	427.89	29.33	1.3673E+000		4.9793E-001
	463.38	10.35	3.7169E+000		-5.4305E-001
	600.56	17.80	2.2654E+000		1.1941E+000
	606.64	5.02	8.9537E+000		1.4438E+000
	635.90	11.32	3.1709E+000		1.2062E+000
Cs-134	563.23	8.38	4.7120E+000	3.95E-001	1.9252E+000
	569.32	15.43	2.4651E+000		-1.0671E+000
	604.70	97.60	4.5641E-001		1.1667E-001
	795.84	85.40	3.9519E-001		1.9165E-001
	801.93	8.73	3.9995E+000		-4.1878E+000
Cs-137	661.65	85.12	5.8437E-001	5.84E-001	4.0037E-001
Eu-152	121.78	28.40	2.5628E+000	1.08E+000	1.4275E+000
	244.69	7.49	6.7108E+000		-8.9651E+000
	344.27	26.50	1.6081E+000		1.8192E-001
	778.89	12.74	2.7221E+000		-1.7075E-001
	867.32	4.16	8.5471E+000		2.5028E+000
	964.01	14.40	2.5405E+000		2.2144E+000
	1085.78	10.00	2.9068E+000		-2.2457E+000
	1112.02	13.30	2.3730E+000		-2.5251E+000
	1407.95	20.70	1.0841E+000		-5.9305E-002
Eu-154	123.07	40.50	1.7843E+000	9.53E-001	5.7847E-001
	247.94	6.60	7.2567E+000		-1.7494E+001
	591.81	4.83	8.1440E+000		3.7017E+000
	723.30	19.70	1.7304E+000		-1.6507E+000
	756.87	4.33	7.0298E+000		4.1457E+000
	873.19	11.50	3.2377E+000		-1.5076E-001
	996.32	10.30	3.2934E+000		-2.5548E+000
	1004.76	17.90	2.1315E+000		7.6841E-001
	1274.45	35.50	9.5342E-001		7.0450E-002
Eu-155	86.54	30.90	4.7154E+000	4.42E+000	1.0859E+000
	105.31	20.70	4.4152E+000		3.1336E+000
Am-241	59.54	35.90	1.2670E+001	1.27E+001	1.6769E+001
Cm-243	228.19	10.56	4.2421E+000	3.28E+000	-2.2852E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	3.2830E+000	3.28E+000	3.5855E+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 9/18/2006 8:43:24 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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-204-F-G
Sample ID: OOL-08-06-204-F
Sample Title: OOL-08-06-204-F-G-I
Description: LOCATION 164 CENTER

Sample Type:
Geometry:

Acquisition Started: 9/14/2006 10:58:02 AM
Live Time: 300.0 seconds
Real Time: 300.4 seconds

Energy Calibration Date: 8/14/2006
Eff Calibration Date: 5/16/2006
Calibration Efficiency: 7829_1M90D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-204-F-G
Log Number: OOL-08-06-204-F
Title: OOL-08-06-204-F-G-I
Description: LOCATION 164 CENTER

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5833-	5854	5842.77	1460.79	1.98	1.80E+002	28.38	8.02E+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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-204-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	1.000	1460.81*	10.67	2.55554E+001	4.52958E+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-08-06-204-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	1.000	2.555538E+001	4.529579E+000

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-204-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	3.0521E-001	2.95E-001	4.5315E-002
	1332.49	100.00	2.9454E-001		2.0500E-001
Nb-94	702.63	100.00	3.3329E-001	3.14E-001	-7.5577E-002
	871.10	100.00	3.1448E-001		2.6223E-002
Ag-108m	79.20	7.10	3.1907E+001	3.77E-001	1.6245E+001
	433.93	89.90	4.4455E-001		3.3058E-002
	614.37	90.40	3.9769E-001		-2.1915E-002
	722.95	90.50	3.7664E-001		2.2724E-001
Sb-125	176.33	6.89	9.1681E+000	1.17E+000	6.9055E+000
	427.89	29.33	1.1687E+000		-1.2019E+000
	463.38	10.35	3.8166E+000		4.5072E+000
	600.56	17.80	2.2875E+000		2.0022E+000
	606.64	5.02	7.9797E+000		4.0871E+000
	635.90	11.32	2.6242E+000		-1.2848E+000
Cs-134	563.23	8.38	3.8387E+000	4.22E-001	2.1674E-001
	569.32	15.43	2.3294E+000		3.2127E-001
	604.70	97.60	4.2212E-001		3.0515E-001
	795.84	85.40	4.3861E-001		4.9723E-003
	801.93	8.73	4.4116E+000		-4.1618E-001
Cs-137	661.65	85.12	5.6831E-001	5.68E-001	6.6230E-001
Eu-152	121.78	28.40	2.7718E+000	1.26E+000	1.3549E+000
	244.69	7.49	6.8352E+000		-3.0753E+000
	344.27	26.50	1.6375E+000		-1.4843E-001
	778.89	12.74	2.5464E+000		-1.0884E+000
	867.32	4.16	8.1372E+000		1.1723E+000
	964.01	14.40	2.6182E+000		6.4204E-002
	1085.78	10.00	3.2063E+000		-1.0909E-001
	1112.02	13.30	2.2006E+000		-1.2711E+000
	1407.95	20.70	1.2576E+000		7.2198E-001
Eu-154	123.07	40.50	1.8727E+000	1.03E+000	1.4238E+000
	247.94	6.60	7.5522E+000		-7.4130E+000
	591.81	4.83	7.3528E+000		-3.2882E+000
	723.30	19.70	1.7304E+000		9.6398E-001
	756.87	4.33	8.8863E+000		5.6252E+000
	873.19	11.50	2.5640E+000		-1.5264E-001
	996.32	10.30	3.4136E+000		9.3761E-001
	1004.76	17.90	1.7517E+000		-1.6129E+000
	1274.45	35.50	1.0339E+000		-6.7578E-003
Eu-155	86.54	30.90	4.9121E+000	4.91E+000	-2.8270E+000
	105.31	20.70	4.9889E+000		3.8253E+000
Am-241	59.54	35.90	1.6131E+001	1.61E+001	8.4069E+000
Cm-243	228.19	10.56	4.6499E+000	3.60E+000	-1.8056E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	3.5962E+000	3.60E+000	7.5124E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 9/18/2006 8:43:55 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: ORG7829

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-205-F-G
Sample ID: OOL-08-06-204-F
Sample Title: OOL-08-06-205-F-G-I
Description: LOCATION 164 NORTH

Sample Type:
Geometry:

Acquisition Started: 9/14/2006 11:11:03 AM
Live Time: 300.0 seconds
Real Time: 300.4 seconds

Energy Calibration Date: 8/14/2006
Eff Calibration Date: 5/16/2006
Calibration Efficiency: 7829_1M90D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-205-F-G
Log Number: OOL-08-06-204-F
Title: OOL-08-06-205-F-G-I
Description: LOCATION 164 NORTH

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	216-	231	221.75	55.44	0.77	1.41E+002	68.70	3.54E+002
2	947-	960	954.91	238.74	1.07	3.45E+001	24.83	4.55E+001
3	1402-	1412	1407.60	351.92	0.32	1.67E+001	14.70	1.63E+001
4	2641-	2652	2646.41	661.65	0.48	1.25E+001	13.85	1.45E+001
5	5833-	5856	5844.14	1461.13	2.05	1.46E+002	26.12	8.29E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-205-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	2.06913E+001	4.06953E+000
Cs-137	1.000	661.65*		85.12	1.76895E-001	1.96805E-001
Pb-212	0.419	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.00451E-001	5.16449E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R 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-08-06-205-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	2.069131E+001	4.069532E+000
Cs-137	1.000	1.768953E-001	1.968046E-001
Pb-212 @	0.419	7.004506E-001	5.164491E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	55.44	4.6988E-001	48.74
3	351.92	5.5556E-002	88.22

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-205-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	3.9894E-001	2.66E-001	-4.0818E-002
		1332.49	100.00	2.6559E-001		1.6107E-001
	Nb-94	702.63	100.00	3.1675E-001	3.17E-001	1.5051E-001
		871.10	100.00	3.2076E-001		-3.3068E-001
	Ag-108m	79.20	7.10	2.5101E+001	4.36E-001	-2.0618E+001
		433.93	89.90	4.4810E-001		1.4120E-001
		614.37	90.40	4.4496E-001		1.7391E-001
		722.95	90.50	4.3593E-001		1.2778E-001
	Sb-125	176.33	6.89	8.2518E+000	1.39E+000	2.7063E+000
		427.89	29.33	1.3887E+000		-1.0835E+000
		463.38	10.35	3.2855E+000		9.1305E-001
		600.56	17.80	1.8175E+000		7.7714E-001
		606.64	5.02	7.5688E+000		1.7865E+000
		635.90	11.32	3.2522E+000		8.0081E-001
	Cs-134	563.23	8.38	5.2350E+000	3.80E-001	3.2364E+000
		569.32	15.43	2.4386E+000		9.1620E-001
		604.70	97.60	3.8009E-001		1.6155E-001
		795.84	85.40	3.8855E-001		9.2587E-002
		801.93	8.73	3.8077E+000		-7.8819E-001
+	Cs-137	661.65*	85.12	3.2258E-001	3.23E-001	1.7690E-001
	Eu-152	121.78	28.40	2.5302E+000	1.45E+000	6.7475E-001
		244.69	7.49	6.9330E+000		5.2054E-001
		344.27	26.50	1.5370E+000		-5.5250E-001
		778.89	12.74	2.8461E+000		3.5544E-001
		867.32	4.16	8.4129E+000		-2.0946E+000
		964.01	14.40	2.9739E+000		5.5017E-001
		1085.78	10.00	3.2764E+000		-2.2597E+000
		1112.02	13.30	2.7752E+000		-1.4682E+000
		1407.95	20.70	1.4523E+000		1.0108E+000
	Eu-154	123.07	40.50	1.7216E+000	8.40E-001	-5.2967E-001
		247.94	6.60	7.7238E+000		6.6734E-001
		591.81	4.83	6.6659E+000		-9.3767E-001
		723.30	19.70	2.0029E+000		9.6613E-001
		756.87	4.33	7.9561E+000		-2.2210E+000
		873.19	11.50	2.7908E+000		-2.4976E+000
		996.32	10.30	3.3541E+000		3.2288E+000
		1004.76	17.90	1.4985E+000		1.0430E+000
		1274.45	35.50	8.4038E-001		6.0821E-001
	Eu-155	86.54	30.90	4.7951E+000	4.56E+000	3.6576E+000
		105.31	20.70	4.5552E+000		2.8932E+000
	Am-241	59.54	35.90	1.5470E+001	1.55E+001	-2.0884E+001
	Cm-243	228.19	10.56	4.6322E+000	3.57E+000	1.8379E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	3.5676E+000	3.57E+000	2.3955E+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 9/18/2006 8:44:40 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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-206-F-G
Sample ID: OOL-08-06-206-F
Sample Title: OOL-08-06-206-F-G-I
Description: LOCATION 164 EAST

Sample Type:
Geometry:

Acquisition Started: 9/14/2006 11:20:55 AM
Live Time: 300.0 seconds
Real Time: 300.4 seconds

Energy Calibration Date: 8/14/2006
Eff Calibration Date: 5/16/2006
Calibration Efficiency: 7829_1M90D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-206-F-G
Log Number: OOL-08-06-206-F
Title: OOL-08-06-206-F-G-I
Description: LOCATION 164 EAST

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2640-	2653	2647.09	661.82	0.48	2.28E+001	11.95	5.21E+000
2	5833-	5854	5842.47	1460.72	0.92	1.56E+002	24.48	0.00E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-206-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	1.000	1460.81*	10.67	2.21500E+001	3.91125E+000
Cs-137	0.999	661.65*	85.12	3.21997E-001	1.73127E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R 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-08-06-206-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	1.000	2.215003E+001	3.911252E+000
Cs-137	0.999	3.219972E-001	1.731266E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-206-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	3.9894E-001	3.12E-001	4.8801E-002
		1332.49	100.00	3.1214E-001		-1.8578E-001
	Nb-94	702.63	100.00	3.0516E-001	3.05E-001	-9.9033E-002
		871.10	100.00	3.5592E-001		-3.1012E-001
	Ag-108m	79.20	7.10	2.7117E+001	3.79E-001	-2.8590E+001
		433.93	89.90	3.7879E-001		-3.8549E-001
		614.37	90.40	4.4939E-001		-1.3173E-001
		722.95	90.50	4.4579E-001		2.3742E-001
	Sb-125	176.33	6.89	8.0428E+000	1.27E+000	-2.1847E+000
		427.89	29.33	1.2664E+000		4.8193E-002
		463.38	10.35	3.5794E+000		1.0652E+000
		600.56	17.80	2.1276E+000		-3.5887E-001
		606.64	5.02	9.2992E+000		6.6959E+000
		635.90	11.32	2.8196E+000		-2.3793E-001
	Cs-134	563.23	8.38	4.1167E+000	4.33E-001	-5.0383E-001
		569.32	15.43	1.9951E+000		-2.6463E+000
		604.70	97.60	4.6723E-001		-1.9696E-001
		795.84	85.40	4.3271E-001		-2.6461E-001
		801.93	8.73	3.7413E+000		-1.7446E+000
+	Cs-137	661.65*	85.12	2.1473E-001	2.15E-001	3.2200E-001
	Eu-152	121.78	28.40	2.8058E+000	1.31E+000	6.5919E-001
		244.69	7.49	6.4544E+000		-8.6431E+000
		344.27	26.50	1.3713E+000		-8.5515E-001
		778.89	12.74	2.5464E+000		-4.3830E-001
		867.32	4.16	8.5471E+000		-7.5535E+000
		964.01	14.40	2.6182E+000		-1.2619E-001
		1085.78	10.00	3.3448E+000		-8.1816E-001
		1112.02	13.30	2.8210E+000		7.6319E-001
		1407.95	20.70	1.3095E+000		-7.7941E-001
	Eu-154	123.07	40.50	1.9774E+000	8.64E-001	2.4617E+000
		247.94	6.60	7.2567E+000		1.5493E-001
		591.81	4.83	6.0075E+000		-6.6578E+000
		723.30	19.70	2.0924E+000		1.5909E+000
		756.87	4.33	7.3079E+000		-1.4329E-001
		873.19	11.50	3.0967E+000		-1.6376E+000
		996.32	10.30	3.4720E+000		2.6787E+000
		1004.76	17.90	1.7517E+000		-1.1892E+000
		1274.45	35.50	8.6434E-001		9.1231E-002
	Eu-155	86.54	30.90	4.4835E+000	4.48E+000	1.1330E+000
		105.31	20.70	4.4858E+000		-3.9926E+000
	Am-241	59.54	35.90	1.7450E+001	1.74E+001	1.8560E+001
	Cm-243	228.19	10.56	4.4509E+000	3.33E+000	-1.0833E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	3.3297E+000	3.33E+000	-1.0461E+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 9/18/2006 8:45:13 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: ORG7829

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-207-F-G
Sample ID: OOL-08-06-207-F
Sample Title: OOL-08-06-207-F-G-I
Description: LOCATION 164 WEST

Sample Type:
Geometry:

Acquisition Started: 9/14/2006 11:36:01 AM
Live Time: 300.0 seconds
Real Time: 300.4 seconds

Energy Calibration Date: 8/14/2006
Eff Calibration Date: 5/16/2006
Calibration Efficiency: 7829_1M90D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-207-F-G
Log Number: OOL-08-06-207-F
Title: OOL-08-06-207-F-G-I
Description: LOCATION 164 WEST

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2640-	2652	2645.97	661.54	0.37	1.53E+001	15.32	1.67E+001
2	5832-	5854	5842.76	1460.79	2.00	1.37E+002	22.94	0.00E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-207-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	1.000	1460.81*	10.67	1.94526E+001	3.61817E+000
Cs-137	1.000	661.65*	85.12	2.15702E-001	2.17896E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R 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-08-06-207-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	1.000	1.945263E+001	3.618174E+000
Cs-137	1.000	2.157021E-001	2.178957E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-207-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	3.8101E-001	3.37E-001	3.0924E-001
		1332.49	100.00	3.3660E-001		-3.7378E-002
	Nb-94	702.63	100.00	3.1102E-001	3.08E-001	-1.1663E-001
		871.10	100.00	3.0804E-001		-1.3324E-001
	Ag-108m	79.20	7.10	2.8936E+001	3.88E-001	4.9163E+000
		433.93	89.90	4.4810E-001		-2.2462E-001
		614.37	90.40	4.3595E-001		4.2355E-001
		722.95	90.50	3.8816E-001		-7.8008E-002
	Sb-125	176.33	6.89	7.8280E+000	1.32E+000	3.9656E+000
		427.89	29.33	1.3235E+000		2.8728E-001
		463.38	10.35	3.6830E+000		-1.0499E-001
		600.56	17.80	1.7303E+000		1.8885E-003
		606.64	5.02	7.6529E+000		5.9583E+000
		635.90	11.32	3.0444E+000		2.5975E-001
	Cs-134	563.23	8.38	4.5711E+000	3.76E-001	-1.2348E+000
		569.32	15.43	2.4386E+000		6.1227E-001
		604.70	97.60	3.7560E-001		1.2919E-001
		795.84	85.40	4.4444E-001		5.3343E-002
		801.93	8.73	4.4116E+000		5.2723E-001
+	Cs-137	661.65*	85.12	3.5283E-001	3.53E-001	2.1570E-001
	Eu-152	121.78	28.40	2.8268E+000	1.41E+000	-3.0150E-001
		244.69	7.49	6.8843E+000		-1.4796E+001
		344.27	26.50	1.5265E+000		-9.2914E-002
		778.89	12.74	2.6794E+000		-2.0591E+000
		867.32	4.16	7.3974E+000		-1.3854E+000
		964.01	14.40	2.7665E+000		1.3792E+000
		1085.78	10.00	2.9849E+000		5.1135E-001
		1112.02	13.30	2.0765E+000		-3.3753E+000
		1407.95	20.70	1.4065E+000		4.8039E-001
	Eu-154	123.07	40.50	1.9833E+000	7.90E-001	3.4263E-001
		247.94	6.60	7.6955E+000		-4.5288E+000
		591.81	4.83	8.2268E+000		5.4025E+000
		723.30	19.70	1.7571E+000		-9.0172E-001
		756.87	4.33	7.1703E+000		-7.4450E-001
		873.19	11.50	2.7908E+000		-2.7886E-001
		996.32	10.30	2.8990E+000		1.5247E+000
		1004.76	17.90	1.7125E+000		4.6561E-001
		1274.45	35.50	7.8993E-001		2.4640E-001
	Eu-155	86.54	30.90	4.2832E+000	4.28E+000	-2.2843E+000
		105.31	20.70	4.4223E+000		3.7912E+000
	Am-241	59.54	35.90	1.4802E+001	1.48E+001	-9.5848E+000
	Cm-243	228.19	10.56	4.5425E+000	2.99E+000	-7.5810E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.9869E+000	2.99E+000	-5.9281E+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 9/18/2006 8:45:52 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: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-208-F-G
Sample ID: OOL-08-06-208-F
Sample Title: OOL-08-06-208-F-G-I
Description: LOCATION 172 CENTER

Sample Type:
Geometry:

Acquisition Started: 9/14/2006 12:45:57 PM
Live Time: 300.0 seconds
Real Time: 300.3 seconds

Energy Calibration Date: 8/14/2006
Eff Calibration Date: 5/16/2006
Calibration Efficiency: 7829_1M90D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-208-F-G
Log Number: OOL-08-06-208-F
Title: OOL-08-06-208-F-G-I
Description: LOCATION 172 CENTER

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5833-	5854	5843.63	1461.00	1.32	1.34E+002	22.69	0.00E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-208-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	1.90277E+001	3.57111E+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-08-06-208-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	1.902770E+001	3.571105E+000

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-208-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	3.4886E-001	2.07E-001	1.5398E-001
	1332.49	100.00	2.0651E-001		-1.2080E-001
Nb-94	702.63	100.00	3.2237E-001	3.08E-001	4.1751E-002
	871.10	100.00	3.0804E-001		0.0000E+000
Ag-108m	79.20	7.10	2.3465E+001	3.77E-001	-3.0513E+001
	433.93	89.90	3.9936E-001		1.7800E-001
	614.37	90.40	4.4048E-001		2.3802E-001
	722.95	90.50	3.7664E-001		-2.7133E-001
Sb-125	176.33	6.89	7.2382E+000	1.39E+000	-3.5412E+000
	427.89	29.33	1.3887E+000		1.1087E+000
	463.38	10.35	3.5084E+000		1.1637E+000
	600.56	17.80	2.0300E+000		-1.5305E+000
	606.64	5.02	8.8829E+000		2.1362E+000
	635.90	11.32	3.3314E+000		3.9332E-001
Cs-134	563.23	8.38	4.0628E+000	4.39E-001	1.5660E+000
	569.32	15.43	2.0921E+000		1.8368E-001
	604.70	97.60	4.6005E-001		3.1802E-001
	795.84	85.40	4.3861E-001		-6.2478E-002
	801.93	8.73	4.2983E+000		-4.8897E+000
Cs-137	661.65	85.12	5.1235E-001	5.12E-001	-2.5204E-002
Eu-152	121.78	28.40	2.5905E+000	1.15E+000	3.6188E-001
	244.69	7.49	5.9350E+000		-3.3708E+000
	344.27	26.50	1.4511E+000		-1.3882E+000
	778.89	12.74	2.5464E+000		2.3435E-001
	867.32	4.16	7.2392E+000		2.5015E-001
	964.01	14.40	2.7665E+000		2.1792E+000
	1085.78	10.00	3.0607E+000		2.4545E+000
	1112.02	13.30	2.5322E+000		-4.6455E-001
	1407.95	20.70	1.1455E+000		5.7758E-001
Eu-154	123.07	40.50	1.7939E+000	6.76E-001	6.6601E-001
	247.94	6.60	6.3867E+000		-6.7139E+000
	591.81	4.83	6.6659E+000		2.8130E+000
	723.30	19.70	1.8347E+000		1.2934E+000
	756.87	4.33	7.1703E+000		3.0808E+000
	873.19	11.50	2.4417E+000		-9.3172E-001
	996.32	10.30	3.1033E+000		-1.3669E+000
	1004.76	17.90	1.8639E+000		7.1907E-001
	1274.45	35.50	6.7569E-001		1.8584E-001
Eu-155	86.54	30.90	4.2330E+000	4.23E+000	4.0913E-001
	105.31	20.70	4.5414E+000		4.1376E+000
Am-241	59.54	35.90	1.4791E+001	1.48E+001	-1.9112E+001
Cm-243	228.19	10.56	4.3762E+000	3.04E+000	-9.9817E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	3.0384E+000	3.04E+000	1.8473E+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 9/18/2006 8:46:29 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: ORG7829

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-209-F-G
Sample ID: OOL-08-06-209-F
Sample Title: OOL-08-06-209-F-G-I
Description: LOCATION 172 NORTH

Sample Type:
Geometry:

Acquisition Started: 9/14/2006 12:54:58 PM
Live Time: 300.0 seconds
Real Time: 300.4 seconds

Energy Calibration Date: 8/14/2006
Eff Calibration Date: 5/16/2006
Calibration Efficiency: 7829_1M90D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-209-F-G
Log Number: OOL-08-06-209-F
Title: OOL-08-06-209-F-G-I
Description: LOCATION 172 NORTH

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	5834-	5853	5843.46	1460.96	0.40	1.15E+002	21.88	2.57E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I 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-08-06-209-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	1.63906E+001	3.37896E+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-08-06-209-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	1.639064E+001	3.378956E+000

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-209-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	3.2786E-001	2.66E-001	-5.7847E-001
	1332.49	100.00	2.6559E-001		7.3214E-002
Nb-94	702.63	100.00	3.9192E-001	2.41E-001	3.4456E-001
	871.10	100.00	2.4133E-001		-2.4679E-001
Ag-108m	79.20	7.10	3.4685E+001	3.52E-001	2.5898E+001
	433.93	89.90	4.3006E-001		4.0147E-002
	614.37	90.40	5.0707E-001		5.2910E-001
	722.95	90.50	3.5232E-001		6.7833E-003
Sb-125	176.33	6.89	7.9576E+000	1.30E+000	5.1088E+000
	427.89	29.33	1.3010E+000		4.8736E-001
	463.38	10.35	3.6830E+000		-5.5340E-002
	600.56	17.80	2.1746E+000		5.2678E-001
	606.64	5.02	8.9537E+000		1.1704E+000
	635.90	11.32	3.1709E+000		-1.8317E+000
Cs-134	563.23	8.38	4.1167E+000	3.89E-001	-5.5344E-001
	569.32	15.43	2.0921E+000		-2.9438E-001
	604.70	97.60	4.4903E-001		-2.5236E-001
	795.84	85.40	3.8855E-001		-1.6991E-001
	801.93	8.73	3.6044E+000		-5.8706E+000
Cs-137	661.65	85.12	4.7435E-001	4.74E-001	2.1927E-001
Eu-152	121.78	28.40	2.7504E+000	1.41E+000	9.3158E-001
	244.69	7.49	6.2953E+000		7.1542E-002
	344.27	26.50	1.5576E+000		4.1196E-001
	778.89	12.74	2.6794E+000		3.4318E-001
	867.32	4.16	5.7953E+000		2.0781E+000
	964.01	14.40	2.8022E+000		2.1276E+000
	1085.78	10.00	3.4771E+000		3.2726E+000
	1112.02	13.30	2.8210E+000		1.5227E+000
	1407.95	20.70	1.4065E+000		3.8320E-001
Eu-154	123.07	40.50	1.9062E+000	8.88E-001	4.5410E-001
	247.94	6.60	6.8524E+000		-8.2874E+000
	591.81	4.83	7.2590E+000		-5.7026E+000
	723.30	19.70	1.6474E+000		1.2868E+000
	756.87	4.33	7.4426E+000		-1.0449E+001
	873.19	11.50	2.3778E+000		-2.2657E-001
	996.32	10.30	2.8990E+000		-9.8659E-002
	1004.76	17.90	1.6722E+000		-1.5831E-001
	1274.45	35.50	8.8757E-001		4.4721E-001
Eu-155	86.54	30.90	5.7573E+000	4.48E+000	3.4077E+000
	105.31	20.70	4.4788E+000		2.2717E+000
Am-241	59.54	35.90	1.3593E+001	1.36E+001	-2.9651E-001
Cm-243	228.19	10.56	4.2226E+000	3.09E+000	-2.9584E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	3.0890E+000	3.09E+000	-3.4659E+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 9/18/2006 8:47:00 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: ORG7829

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-210-F-G
Sample ID: OOL-08-06-210-F
Sample Title: OOL-08-06-210-F-G-I
Description: LOCATION 172 EAST

Sample Type:
Geometry:

Acquisition Started: 9/14/2006 1:05:52 PM
Live Time: 300.0 seconds
Real Time: 300.3 seconds

Energy Calibration Date: 8/14/2006
Eff Calibration Date: 5/16/2006
Calibration Efficiency: 7829_1M90D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-210-F-G
Log Number: OOL-08-06-210-F
Title: OOL-08-06-210-F-G-I
Description: LOCATION 172 EAST

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	240-	250	243.55	60.89	1.04	4.16E+001	41.31	1.40E+002
2	5832-	5855	5842.35	1460.68	1.52	1.34E+002	24.35	5.49E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-210-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	1.000	1460.81*	10.67	1.89567E+001	3.78324E+000
Am-241	0.944	59.54*	35.90	4.72495E+000	4.78187E+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-08-06-210-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	1.000	1.895670E+001	3.783239E+000
Am-241	0.944	4.724950E+000	4.781873E+000

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-210-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	2.9723E-001	2.76E-001	1.2004E-001
		1332.49	100.00	2.7563E-001		-3.2946E-002
	Nb-94	702.63	100.00	3.3329E-001	2.95E-001	-1.0150E-001
		871.10	100.00	2.9470E-001		-2.3616E-002
	Ag-108m	79.20	7.10	2.3724E+001	3.91E-001	-2.3167E+001
		433.93	89.90	3.9127E-001		-6.6888E-002
		614.37	90.40	4.2205E-001		3.1319E-001
		722.95	90.50	3.9379E-001		-7.4617E-002
	Sb-125	176.33	6.89	8.0003E+000	1.31E+000	2.9378E+000
		427.89	29.33	1.3123E+000		1.3352E+000
		463.38	10.35	3.0024E+000		-1.3447E+000
		600.56	17.80	1.8455E+000		8.0415E-001
		606.64	5.02	7.1320E+000		1.7467E-001
		635.90	11.32	3.3702E+000		2.4045E+000
	Cs-134	563.23	8.38	4.3251E+000	3.22E-001	2.0661E+000
		569.32	15.43	2.1844E+000		-1.8717E+000
		604.70	97.60	3.7105E-001		2.1637E-001
		795.84	85.40	3.2180E-001		7.0477E-002
		801.93	8.73	3.2336E+000		-1.0805E+000
	Cs-137	661.65	85.12	4.7928E-001	4.79E-001	-2.5278E-002
	Eu-152	121.78	28.40	2.6850E+000	1.15E+000	1.3104E-001
		244.69	7.49	6.5582E+000		-7.8957E-001
		344.27	26.50	1.5054E+000		-3.2900E-001
		778.89	12.74	2.2539E+000		-1.0786E+000
		867.32	4.16	6.7393E+000		3.6990E+000
		964.01	14.40	2.5797E+000		1.0539E+000
		1085.78	10.00	3.6041E+000		-5.2708E-001
		1112.02	13.30	2.6324E+000		-8.9038E-001
		1407.95	20.70	1.1455E+000		5.7758E-001
	Eu-154	123.07	40.50	1.8541E+000	7.90E-001	-2.9491E-001
		247.94	6.60	7.4941E+000		1.4426E+000
		591.81	4.83	6.6659E+000		-1.4448E+000
		723.30	19.70	1.8092E+000		-1.0694E+000
		756.87	4.33	8.6641E+000		9.7848E-001
		873.19	11.50	2.3778E+000		2.4052E-001
		996.32	10.30	2.9688E+000		-8.4970E-003
		1004.76	17.90	1.7125E+000		9.9102E-001
		1274.45	35.50	7.8993E-001		-2.7213E-001
	Eu-155	86.54	30.90	4.5309E+000	4.53E+000	7.6017E+000
		105.31	20.70	4.6507E+000		1.9646E+000
+	Am-241	59.54*	35.90	7.8042E+000	7.80E+000	4.7250E+000
	Cm-243	228.19	10.56	4.2615E+000	3.22E+000	-1.1046E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	3.2197E+000	3.22E+000	1.9106E+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 9/18/2006 8:47:34 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: ORG7829

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-211-F-G
Sample ID: OOL-08-06-211-F
Sample Title: OOL-08-06-211-F-G-I
Description: LOCATION 172 SOUTH

Sample Type:
Geometry:

Acquisition Started: 9/14/2006 1:22:41 PM
Live Time: 300.0 seconds
Real Time: 300.4 seconds

Energy Calibration Date: 8/14/2006
Eff Calibration Date: 5/16/2006
Calibration Efficiency: 7829_1M90D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-211-F-G
Log Number: OOL-08-06-211-F
Title: OOL-08-06-211-F-G-I
Description: LOCATION 172 SOUTH

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2640-	2652	2645.94	661.53	0.40	2.93E+001	15.51	1.27E+001
2	5832-	5854	5843.70	1461.02	1.86	1.46E+002	23.68	0.00E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-211-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	2.07318E+001	3.75853E+000
Cs-137	1.000	661.65*	85.12	4.14140E-001	2.24573E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R 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-08-06-211-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	2.073178E+001	3.758527E+000
Cs-137	1.000	4.141401E-001	2.245735E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\OOL-08-06-211-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	3.6210E-001	3.29E-001	3.4858E-001
		1332.49	100.00	3.2867E-001		2.6357E-001
	Nb-94	702.63	100.00	2.6000E-001	2.60E-001	-1.8105E-002
		871.10	100.00	3.4464E-001		1.1206E-001
	Ag-108m	79.20	7.10	2.3853E+001	3.52E-001	-1.3482E+001
		433.93	89.90	4.4455E-001		2.7029E-002
		614.37	90.40	3.8747E-001		-6.1114E-002
		722.95	90.50	3.5232E-001		-5.6166E-002
	Sb-125	176.33	6.89	7.6292E+000	1.32E+000	-5.1799E+000
		427.89	29.33	1.3235E+000		-7.9863E-002
		463.38	10.35	3.2074E+000		-1.8249E+000
		600.56	17.80	1.9533E+000		1.0402E+000
		606.64	5.02	7.8182E+000		4.7744E+000
		635.90	11.32	2.9118E+000		2.4241E+000
	Cs-134	563.23	8.38	4.3251E+000	3.71E-001	1.4865E+000
		569.32	15.43	2.4651E+000		1.2547E+000
		604.70	97.60	3.7105E-001		-5.5353E-001
		795.84	85.40	3.9519E-001		1.8893E-001
		801.93	8.73	3.8728E+000		-6.6696E-001
+	Cs-137	661.65*	85.12	3.0668E-001	3.07E-001	4.1414E-001
	Eu-152	121.78	28.40	2.7461E+000	1.20E+000	2.7579E+000
		244.69	7.49	5.9919E+000		-1.6068E+000
		344.27	26.50	1.5054E+000		1.4866E-001
		778.89	12.74	2.8054E+000		-7.1484E-001
		867.32	4.16	7.8507E+000		-4.6181E-001
		964.01	14.40	2.2447E+000		-2.9408E+000
		1085.78	10.00	2.9068E+000		-2.7911E+000
		1112.02	13.30	2.6324E+000		-2.8260E+000
		1407.95	20.70	1.2031E+000		6.4978E-001
	Eu-154	123.07	40.50	1.8259E+000	9.10E-001	-7.4327E-001
		247.94	6.60	6.5234E+000		3.5279E+000
		591.81	4.83	6.1228E+000		-7.1033E+000
		723.30	19.70	1.5894E+000		-7.6355E-001
		756.87	4.33	7.5746E+000		-1.2841E+000
		873.19	11.50	3.1914E+000		7.3763E-002
		996.32	10.30	2.8990E+000		1.4117E+000
		1004.76	17.90	1.5881E+000		1.1920E+000
		1274.45	35.50	9.1012E-001		1.7232E-001
	Eu-155	86.54	30.90	4.3218E+000	4.32E+000	1.2459E+000
		105.31	20.70	5.0883E+000		4.8542E+000
	Am-241	59.54	35.90	1.3879E+001	1.39E+001	-3.9025E+000
	Cm-243	228.19	10.56	4.5606E+000	3.04E+000	7.9657E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	3.0384E+000	3.04E+000	1.1741E+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 9/15/2006 9:29:41 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: GRY6278

Spectrum File: C:\GENIE2K\CAMFILES\ToBeReprocessed\OOL-08-06-212-F-G-I.CNF
Sample ID: OOL-08-06-212-F-
Sample Title: OOL-08-06-212-F-G-I
Description: LOCATION 173 CENTER

Sample Type:
Geometry:

Acquisition Started: 9/14/2006 3:40:34 PM
Live Time: 300.0 seconds
Real Time: 300.3 seconds

Energy Calibration Date: 8/8/2006
Eff Calibration Date: 9/14/2006
Calibration Efficiency: 6278_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: C:\GENIE2K\CAMFILES\ToBeReprocessed\OOL-08-06-212-F-G-I.CNF
Log Number: OOL-08-06-212-F-
Title: OOL-08-06-212-F-G-I
Description: LOCATION 173 CENTER

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	306	300.02	74.92	1.04	9.78E+001	49.96	2.28E+002
2	948-	959	954.43	238.58	0.36	4.27E+001	23.05	3.73E+001
3	2433-	2443	2438.03	609.62	0.71	1.25E+001	15.71	2.15E+001
4	5836-	5857	5845.73	1461.86	1.24	1.49E+002	26.75	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: C:\GENIE2K\CAMFILES\ToBeReprocessed\OOL-08-06-212-F-G-I.CNF

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/g)	Activity Uncertainty
K-40	0.963	1460.81*	10.67	1.36822E+001	2.69972E+000
Pb-212	0.518	74.81* @	10.70	7.60333E+000	4.15913E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.80099E-001	3.26359E-001
Bi-214	0.397	609.31*	46.30	2.12328E-001	2.68406E-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:C:\GENIE2K\CAMFILES\ToBeReprocessed\OOL-08-06-212-F-G-I.CNF

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/g)	Wt mean Activity Uncertainty
K-40		0.963	1.368215E+001	2.699723E+000
Pb-212	@	0.518	5.800990E-001	3.263588E-001
Bi-214		0.397	2.123285E-001	2.684059E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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:C:\GENIE2K\CAMFILES\ToBeReprocessed\OOL-08-06-212-F-G-I.CNF
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/g)	Nuclide MDA (pCi/g)	Activity (pCi/g)
Co-60	1173.22	100.00	2.7020E-001	2.50E-001	2.9788E-001
	1332.49	100.00	2.4972E-001		1.1577E-001
Nb-94	702.63	100.00	2.5362E-001	2.34E-001	2.6582E-002
	871.10	100.00	2.3435E-001		3.8285E-002
Ag-108m	79.20	7.10	1.0244E+001	2.65E-001	-2.7219E+000
	433.93	89.90	2.6526E-001		7.8255E-002
	614.37	90.40	3.3031E-001		-1.4842E-001
	722.95	90.50	2.8546E-001		-6.3663E-002
Sb-125	176.33	6.89	5.0073E+000	8.90E-001	1.6675E+000
	427.89	29.33	8.9008E-001		-4.6013E-002
	463.38	10.35	2.7128E+000		1.7442E+000
	600.56	17.80	1.1436E+000		-1.9420E-001
	606.64	5.02	6.4329E+000		3.1548E+000
	635.90	11.32	1.8939E+000		-5.8319E-001
Cs-134	563.23	8.38	2.8445E+000	2.99E-001	1.5136E+000
	569.32	15.43	1.4508E+000		-6.8650E-001
	604.70	97.60	2.9947E-001		-5.7163E-002
	795.84	85.40	3.1632E-001		1.8470E-001
	801.93	8.73	2.6359E+000		-4.0996E-001
Cs-137	661.65	85.12	4.1282E-001	4.13E-001	3.5541E-001
Eu-152	121.78	28.40	1.5332E+000	9.16E-001	4.1940E-001
	244.69	7.49	4.5102E+000		2.2778E+000
	344.27	26.50	1.0340E+000		-9.7822E-001
	778.89	12.74	1.7358E+000		-4.4836E-002
	867.32	4.16	5.9780E+000		-6.6935E-001
	964.01	14.40	1.8730E+000		-1.4943E+000
	1085.78	10.00	2.5676E+000		6.1630E-001
	1112.02	13.30	1.8839E+000		6.7096E-001
	1407.95	20.70	9.1635E-001		-3.5277E-002
Eu-154	123.07	40.50	1.0546E+000	6.30E-001	-3.3294E-002
	247.94	6.60	4.5688E+000		-2.5076E+000
	591.81	4.83	4.6896E+000		-8.9113E-001
	723.30	19.70	1.2796E+000		-9.1869E-001
	756.87	4.33	4.8043E+000		1.2314E-001
	873.19	11.50	1.9026E+000		-8.1296E-001
	996.32	10.30	2.2009E+000		-6.5452E-001
	1004.76	17.90	1.3604E+000		-4.6405E-001
	1274.45	35.50	6.2972E-001		3.3476E-001
Eu-155	86.54	30.90	2.1725E+000	2.17E+000	4.0676E-001
	105.31	20.70	2.4743E+000		-5.9465E-002
Am-241	59.54	35.90	3.0029E+000	3.00E+000	4.7512E-001
Cm-243	228.19	10.56	2.9978E+000	1.97E+000	1.3605E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/g)	Nuclide MDA (pCi/g)	Activity (pCi/g)
Cm-243	277.60	14.00	1.9733E+000	1.97E+000	-6.1950E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 9/15/2006 9:30:44 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: GRY6278

Spectrum File: C:\GENIE2K\CAMFILES\ToBeReprocessed\OOL-08-06-213-F-G-I.CNF
Sample ID: OOL-08-06-213-F-
Sample Title: OOL-08-06-213-F-G-I
Description: LOCATION 173 NORTH

Sample Type:
Geometry:

Acquisition Started: 9/14/2006 3:52:54 PM
Live Time: 300.0 seconds
Real Time: 300.5 seconds

Energy Calibration Date: 8/8/2006
Eff Calibration Date: 9/14/2006
Calibration Efficiency: 6278_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: C:\GENIE2K\CAMFILES\ToBeReprocessed\OOL-08-06-213-F-G-I.CNF
Log Number: OOL-08-06-213-F-
Title: OOL-08-06-213-F-G-I
Description: LOCATION 173 NORTH

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	305	300.70	75.09	1.01	5.73E+001	49.30	2.37E+002
2	2433-	2443	2438.11	609.64	0.71	2.41E+001	15.15	1.49E+001
3	2639-	2655	2646.84	661.84	1.53	4.42E+001	19.27	1.68E+001
4	5836-	5855	5846.20	1461.97	1.55	1.19E+002	25.05	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: C:\GENIE2K\CAMFILES\ToBeReprocessed\OOL-08-06-213-F-G-I.CNF

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/g)	Activity Uncertainty
K-40	0.954	1460.81*	10.67	1.09974E+001	2.47139E+000
Cs-137	0.999	661.65*	85.12	4.19323E-001	1.89292E-001
Bi-214	0.397	609.31*	46.30	4.09027E-001	2.62584E-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:C:\GENIE2K\CAMFILES\ToBeReprocessed\OOL-08-06-213-F-G-I.CNF

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/g)	Wt mean Activity Uncertainty
K-40	0.954	1.099738E+001	2.471390E+000
Cs-137	0.999	4.193229E-001	1.892920E-001
Bi-214	0.397	4.090270E-001	2.625844E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	75.09	1.9107E-001	86.01

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:C:\GENIE2K\CAMFILES\ToBeReprocessed\OOL-08-06-213-F-G-I.CNF
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/g)	Nuclide MDA (pCi/g)	Activity (pCi/g)
	Co-60	1173.22	100.00	2.1398E-001	1.67E-001	-1.1636E-001
		1332.49	100.00	1.6750E-001		-1.7308E-002
	Nb-94	702.63	100.00	2.3057E-001	2.31E-001	5.6846E-002
		871.10	100.00	2.3054E-001		3.0016E-002
	Ag-108m	79.20	7.10	9.7254E+000	2.65E-001	-1.0751E+001
		433.93	89.90	2.6526E-001		3.9509E-002
		614.37	90.40	3.4089E-001		-1.3403E-001
		722.95	90.50	2.9556E-001		1.0121E-001
	Sb-125	176.33	6.89	4.2253E+000	9.20E-001	-2.5677E+000
		427.89	29.33	9.2008E-001		4.9931E-001
		463.38	10.35	2.4227E+000		8.9789E-001
		600.56	17.80	1.2033E+000		-1.1646E+000
		606.64	5.02	6.4329E+000		6.3862E+000
		635.90	11.32	2.1846E+000		3.5416E-001
	Cs-134	563.23	8.38	2.8445E+000	2.41E-001	1.0227E-001
		569.32	15.43	1.5876E+000		4.8190E-001
		604.70	97.60	3.0199E-001		-7.6014E-002
		795.84	85.40	2.4147E-001		-2.9085E-003
		801.93	8.73	2.3661E+000		9.5803E-001
+	Cs-137	661.65*	85.12	2.5160E-001	2.52E-001	4.1932E-001
	Eu-152	121.78	28.40	1.5957E+000	9.29E-001	1.4720E+000
		244.69	7.49	4.5102E+000		4.7175E-001
		344.27	26.50	9.2888E-001		2.2191E-001
		778.89	12.74	1.6747E+000		1.3135E-001
		867.32	4.16	5.5366E+000		-7.7576E+000
		964.01	14.40	1.7243E+000		1.5393E-001
		1085.78	10.00	1.9937E+000		3.8709E-001
		1112.02	13.30	1.9140E+000		1.8840E-001
		1407.95	20.70	1.0027E+000		7.5258E-001
	Eu-154	123.07	40.50	1.1090E+000	4.86E-001	1.0461E+000
		247.94	6.60	4.5688E+000		1.0602E+000
		591.81	4.83	4.8844E+000		-5.9375E+000
		723.30	19.70	1.3579E+000		-6.1150E-003
		756.87	4.33	4.3100E+000		-1.7068E-001
		873.19	11.50	1.9720E+000		5.9762E-001
		996.32	10.30	2.2009E+000		-5.7091E-001
		1004.76	17.90	1.3821E+000		1.1184E+000
		1274.45	35.50	4.8574E-001		-2.3068E-001
	Eu-155	86.54	30.90	2.0590E+000	2.06E+000	6.4976E-001
		105.31	20.70	2.4303E+000		-1.8151E+000
	Am-241	59.54	35.90	2.6891E+000	2.69E+000	-4.9258E-001
	Cm-243	228.19	10.56	2.6728E+000	2.02E+000	-1.9669E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/g)	Nuclide MDA (pCi/g)	Activity (pCi/g)
Cm-243	277.60	14.00	2.0202E+000	2.02E+000	1.3280E+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 9/15/2006 9:32:26 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: GRY6278

Spectrum File: C:\GENIE2K\CAMFILES\ToBeReprocessed\OOL-08-06-214-F-G-I.CNF
Sample ID: OOL-08-06-214-F-
Sample Title: OOL-08-06-214-F-G-I
Description: LOCATION 173 EAST

Sample Type:
Geometry:

Acquisition Started: 9/14/2006 4:03:27 PM
Live Time: 300.0 seconds
Real Time: 300.2 seconds

Energy Calibration Date: 8/8/2006
Eff Calibration Date: 9/14/2006
Calibration Efficiency: 6278_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: C:\GENIE2K\CAMFILES\ToBeReprocessed\OOL-08-06-214-F-G-I.CNF
Log Number: OOL-08-06-214-F-
Title: OOL-08-06-214-F-G-I
Description: LOCATION 173 EAST

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	306	300.45	75.02	0.61	6.28E+001	51.47	2.48E+002
2	949-	959	954.78	238.67	0.43	3.03E+001	21.04	3.58E+001
3	2328-	2339	2332.88	583.32	0.36	2.03E+001	13.54	1.07E+001
4	2434-	2444	2438.46	609.72	0.52	3.00E+001	14.42	1.00E+001
5	5834-	5857	5845.92	1461.90	1.46	1.94E+002	29.70	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: C:\GENIE2K\CAMFILES\ToBeReprocessed\OOL-08-06-214-F-G-I.CNF

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/g)	Activity Uncertainty
K-40	0.959	1460.81*	10.67	1.78607E+001	3.09254E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.87376E-001	1.27342E-001
		860.37	12.46		
Pb-212	0.517	74.81* @	10.70	4.86876E+000	4.10587E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	4.11301E-001	2.93197E-001
Bi-214	0.396	609.31*	46.30	5.09790E-001	2.53320E-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:C:\GENIE2K\CAMFILES\ToBeReprocessed\OOL-08-06-214-F-G-I.CNF

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/g)	Wt mean Activity Uncertainty
K-40	0.959	1.786066E+001	3.092536E+000
TL-208	0.471	1.873760E-001	1.273420E-001
Pb-212 @	0.517	4.113010E-001	2.931974E-001
Bi-214	0.396	5.097905E-001	2.533200E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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:C:\GENIE2K\CAMFILES\ToBeReprocessed\OOL-08-06-214-F-G-I.CNF
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/g)	Nuclide MDA (pCi/g)	Activity (pCi/g)
Co-60	1173.22	100.00	2.6242E-001	2.58E-001	-6.5317E-002
	1332.49	100.00	2.5849E-001		-1.2109E-002
Nb-94	702.63	100.00	2.3741E-001	2.37E-001	-1.0454E-001
	871.10	100.00	2.8180E-001		2.0812E-001
Ag-108m	79.20	7.10	1.0192E+001	2.65E-001	-1.9261E+000
	433.93	89.90	2.6526E-001		-2.5748E-001
	614.37	90.40	3.3564E-001		-3.1081E-001
	722.95	90.50	2.6770E-001		-5.0641E-002
Sb-125	176.33	6.89	4.7616E+000	8.67E-001	-6.2841E-001
	427.89	29.33	8.6684E-001		4.4487E-001
	463.38	10.35	2.2753E+000		-1.9057E+000
	600.56	17.80	1.3313E+000		-7.2658E-001
	606.64	5.02	6.6071E+000		6.7988E+000
	635.90	11.32	1.9559E+000		2.2533E-001
Cs-134	563.23	8.38	2.6627E+000	2.46E-001	-1.4448E+000
	569.32	15.43	1.6244E+000		9.7377E-001
	604.70	97.60	3.1661E-001		-2.5822E-001
	795.84	85.40	2.4630E-001		4.9220E-003
	801.93	8.73	2.1651E+000		-1.1254E+000
Cs-137	661.65	85.12	3.7307E-001	3.73E-001	2.1799E-001
Eu-152	121.78	28.40	1.4557E+000	9.46E-001	-9.0411E-001
	244.69	7.49	4.2688E+000		2.6434E+000
	344.27	26.50	1.0340E+000		1.5901E-001
	778.89	12.74	1.6747E+000		-6.4034E-001
	867.32	4.16	6.1449E+000		-2.6774E+000
	964.01	14.40	1.6981E+000		-1.9204E+000
	1085.78	10.00	2.3225E+000		9.7341E-001
	1112.02	13.30	1.8534E+000		1.0597E+000
	1407.95	20.70	9.4614E-001		-2.6962E-001
Eu-154	123.07	40.50	1.0338E+000	5.86E-001	3.3173E-001
	247.94	6.60	4.5688E+000		-1.2713E+000
	591.81	4.83	5.0711E+000		1.0629E+000
	723.30	19.70	1.2299E+000		-4.7135E-001
	756.87	4.33	4.7101E+000		3.1486E+000
	873.19	11.50	2.3136E+000		-2.9744E-001
	996.32	10.30	2.5052E+000		-3.8975E-001
	1004.76	17.90	1.4653E+000		7.2185E-001
	1274.45	35.50	5.8623E-001		4.5527E-001
Eu-155	86.54	30.90	2.1310E+000	2.13E+000	1.8766E+000
	105.31	20.70	2.4782E+000		2.9493E-001
Am-241	59.54	35.90	2.8067E+000	2.81E+000	-1.5180E+000
Cm-243	228.19	10.56	2.9978E+000	2.10E+000	-1.1619E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/g)	Nuclide MDA (pCi/g)	Activity (pCi/g)
Cm-243	277.60	14.00	2.0995E+000	2.10E+000	-1.3511E+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 9/15/2006 9:36:59 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: GRY6278

Spectrum File: C:\GENIE2K\CAMFILES\ToBeReprocessed\OOL-08-06-215-F-G-I.CNF
Sample ID: OOL-08-06-215-F-
Sample Title: OOL-08-06-215-F-G-I
Description: LOCATION 173 SOUTH

Sample Type:
Geometry:

Acquisition Started: 9/14/2006 4:15:22 PM
Live Time: 300.0 seconds
Real Time: 300.3 seconds

Energy Calibration Date: 8/8/2006
Eff Calibration Date: 9/14/2006
Calibration Efficiency: 6278_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: C:\GENIE2K\CAMFILES\ToBeReprocessed\OOL-08-06-215-F-G-I.CNF
Log Number: OOL-08-06-215-F-
Title: OOL-08-06-215-F-G-I
Description: LOCATION 173 SOUTH

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	284-	297	290.16	72.45	0.68	4.79E+001	57.99	3.00E+002
2	947-	964	955.39	238.82	0.79	6.03E+001	28.10	4.47E+001
3	2431-	2444	2437.70	609.53	0.59	3.83E+001	15.84	9.73E+000
4	2640-	2655	2647.38	661.97	1.08	3.17E+001	19.18	1.93E+001
5	5836-	5855	5845.52	1461.80	1.57	1.84E+002	27.29	2.60E+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: C:\GENIE2K\CAMFILES\ToBeReprocessed\OOL-08-06-215-F-G-I.CNF

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/g)	Activity Uncertainty
K-40	0.966	1460.81*		10.67	1.69706E+001	2.86245E+000
Cs-137	0.996	661.65*		85.12	3.00409E-001	1.85263E-001
Pb-212	0.327	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	8.20537E-001	4.03213E-001
Bi-214	0.398	609.31*		46.30	6.50818E-001	2.81300E-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:C:\GENIE2K\CAMFILES\ToBeReprocessed\OOL-08-06-215-F-G-I.CNF

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/g)	Wt mean Activity Uncertainty
K-40	0.966	1.697062E+001	2.862455E+000
Cs-137	0.996	3.004095E-001	1.852626E-001
Pb-212 @	0.327	8.205368E-001	4.032131E-001
Bi-214	0.398	6.508179E-001	2.813001E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	72.45	1.5960E-001	121.13

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:C:\GENIE2K\CAMFILES\ToBeReprocessed\OOL-08-06-215-F-G-I.CNF
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/g)	Nuclide MDA (pCi/g)	Activity (pCi/g)
	Co-60	1173.22	100.00	2.5025E-001	2.31E-001	1.8902E-001
		1332.49	100.00	2.3104E-001		-5.5290E-002
	Nb-94	702.63	100.00	2.4075E-001	2.41E-001	-3.2890E-001
		871.10	100.00	2.6592E-001		7.5734E-002
	Ag-108m	79.20	7.10	1.0712E+001	2.75E-001	1.2761E+000
		433.93	89.90	2.9651E-001		-8.1135E-002
		614.37	90.40	3.1655E-001		-1.2535E-001
		722.95	90.50	2.7495E-001		-8.0359E-002
	Sb-125	176.33	6.89	4.6498E+000	9.63E-001	6.5636E-001
		427.89	29.33	9.6321E-001		5.0697E-002
		463.38	10.35	2.2753E+000		9.7379E-001
		600.56	17.80	1.3822E+000		7.5324E-002
		606.64	5.02	6.4769E+000		-1.1633E+000
		635.90	11.32	2.1574E+000		7.7644E-001
	Cs-134	563.23	8.38	3.2054E+000	2.21E-001	7.5491E-001
		569.32	15.43	1.7961E+000		5.8364E-001
		604.70	97.60	3.3281E-001		-6.0861E-002
		795.84	85.40	2.2096E-001		-1.6571E-001
		801.93	8.73	2.5051E+000		-7.1766E-001
+	Cs-137	661.65*	85.12	2.7535E-001	2.75E-001	3.0041E-001
	Eu-152	121.78	28.40	1.4920E+000	1.02E+000	-2.8616E-001
		244.69	7.49	3.7975E+000		1.1893E-001
		344.27	26.50	1.0197E+000		-1.9482E-001
		778.89	12.74	1.9063E+000		5.7877E-001
		867.32	4.16	6.8410E+000		4.2388E-001
		964.01	14.40	2.2373E+000		2.1933E+000
		1085.78	10.00	2.4484E+000		1.2979E+000
		1112.02	13.30	1.6911E+000		-5.6095E-001
		1407.95	20.70	1.0296E+000		1.5287E-001
	Eu-154	123.07	40.50	1.0546E+000	5.39E-001	-4.1109E-001
		247.94	6.60	4.3925E+000		1.2089E+000
		591.81	4.83	5.1915E+000		3.0213E+000
		723.30	19.70	1.2796E+000		-8.1829E-002
		756.87	4.33	5.4939E+000		6.5038E-001
		873.19	11.50	2.1657E+000		-7.5778E-001
		996.32	10.30	2.2009E+000		3.5603E-001
		1004.76	17.90	1.1962E+000		-4.7709E-001
		1274.45	35.50	5.3870E-001		2.0086E-002
	Eu-155	86.54	30.90	2.2132E+000	2.21E+000	8.2090E-001
		105.31	20.70	2.4703E+000		-7.7974E-001
	Am-241	59.54	35.90	2.9487E+000	2.95E+000	9.4726E-001
	Cm-243	228.19	10.56	2.9608E+000	2.15E+000	2.2954E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/g)	Nuclide MDA (pCi/g)	Activity (pCi/g)
Cm-243	277.60	14.00	2.1543E+000	2.15E+000	4.8314E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 9/15/2006 9:41:59 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: GRY6278

Spectrum File: C:\GENIE2K\CAMFILES\ToBeReprocessed\OOL-08-06-216-F-G-I.CNF
Sample ID: OOL-08-06-216-F-
Sample Title: OOL-08-06-216-F-G-I
Description: LOCATION 173 WEST

Sample Type:
Geometry:

Acquisition Started: 9/14/2006 4:24:29 PM
Live Time: 300.0 seconds
Real Time: 300.2 seconds

Energy Calibration Date: 8/8/2006
Eff Calibration Date: 9/14/2006
Calibration Efficiency: 6278_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: C:\GENIE2K\CAMFILES\ToBeReprocessed\OOL-08-06-216-F-G-I.CNF
Log Number: OOL-08-06-216-F-
Title: OOL-08-06-216-F-G-I
Description: LOCATION 173 WEST

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	286-	295	290.77	72.60	1.09	5.56E+001	43.61	1.94E+002
2	5837-	5855	5846.14	1461.96	0.81	1.39E+002	23.78	2.48E+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: C:\GENIE2K\CAMFILES\ToBeReprocessed\OOL-08-06-216-F-G-I.CNF

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/g)	Activity Uncertainty
K-40	0.955	1460.81*	10.67	1.27485E+001	2.41974E+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:C:\GENIE2K\CAMFILES\ToBeReprocessed\OOL-08-06-216-F-G-I.CNF

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/g)	Wt mean Activity Uncertainty
K-40	0.955	1.274849E+001	2.419738E+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	72.60	1.8540E-001	78.41

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:C:\GENIE2K\CAMFILES\ToBeReprocessed\OOL-08-06-216-F-G-I.CNF
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/g)	Nuclide MDA (pCi/g)	Activity (pCi/g)
Co-60	1173.22	100.00	2.4175E-001	1.74E-001	-4.6544E-003
	1332.49	100.00	1.7440E-001		-3.7916E-001
Nb-94	702.63	100.00	2.6581E-001	2.52E-001	1.2817E-002
	871.10	100.00	2.5242E-001		4.5803E-002
Ag-108m	79.20	7.10	1.0386E+001	2.49E-001	-6.0042E-001
	433.93	89.90	2.7343E-001		-1.9166E-002
	614.37	90.40	3.1086E-001		-1.9513E-001
	722.95	90.50	2.4853E-001		-2.6797E-003
Sb-125	176.33	6.89	4.6660E+000	8.35E-001	-4.3508E+000
	427.89	29.33	8.3476E-001		-5.4701E-001
	463.38	10.35	2.4929E+000		-1.8834E-001
	600.56	17.80	1.2961E+000		-7.8930E-001
	606.64	5.02	6.3439E+000		4.5526E+000
	635.90	11.32	1.7627E+000		-4.4109E-001
Cs-134	563.23	8.38	2.3392E+000	2.86E-001	-2.9900E+000
	569.32	15.43	1.4712E+000		-2.0789E-001
	604.70	97.60	2.9694E-001		-1.9151E-002
	795.84	85.40	2.8573E-001		1.3236E-001
	801.93	8.73	2.5051E+000		1.3659E+000
Cs-137	661.65	85.12	3.3134E-001	3.31E-001	5.3340E-002
Eu-152	121.78	28.40	1.4950E+000	8.85E-001	5.5922E-001
	244.69	7.49	4.1057E+000		2.6193E+000
	344.27	26.50	1.0551E+000		5.5731E-001
	778.89	12.74	1.3612E+000		-9.5996E-001
	867.32	4.16	6.3068E+000		-2.9992E+000
	964.01	14.40	1.7243E+000		2.1816E-001
	1085.78	10.00	2.3225E+000		5.5312E-001
	1112.02	13.30	1.3868E+000		8.6179E-002
	1407.95	20.70	8.8540E-001		5.6444E-001
Eu-154	123.07	40.50	1.0253E+000	6.01E-001	-1.2349E-001
	247.94	6.60	4.0644E+000		-1.9137E+000
	591.81	4.83	5.4799E+000		1.4272E+000
	723.30	19.70	1.1418E+000		-2.4176E-001
	756.87	4.33	5.4130E+000		4.7140E+000
	873.19	11.50	2.1348E+000		9.7357E-001
	996.32	10.30	2.3961E+000		8.6310E-001
	1004.76	17.90	1.1706E+000		2.4767E-001
	1274.45	35.50	6.0112E-001		-4.2031E-002
Eu-155	86.54	30.90	2.0178E+000	2.02E+000	-1.6114E-001
	105.31	20.70	2.4423E+000		1.6989E+000
Am-241	59.54	35.90	2.9705E+000	2.97E+000	1.1343E+000
Cm-243	228.19	10.56	2.7545E+000	1.89E+000	-1.7168E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/g)	Nuclide MDA (pCi/g)	Activity (pCi/g)
Cm-243	277.60	14.00	1.8883E+000	1.89E+000	-1.3272E+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