Report Generated On 6/28/2006 10:25:45 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: NOL-03-02-101
Sample Title: NOL-03-02-101-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/28/2006 10:15:42 AM
Live Time: 600.0 seconds
Real Time: 601.2 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: GRN7780
Log Number: NOL-03-02-101
Title: NOL-03-02-101-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	344-	351	347.12	86.74	0.37	8.07E+001	68.53	5.65E+002
2	3634-	3654	3642.79	910.66	0.76	9.59E+001	34.50	5.91E+001
3	4612-	4623	4617.28	1154.29	0.51	1.88E+001	15.50	1.72E+001
4	5828-	5856	5841.50	1460.34	2.72	7.29E+002	58.09	3.25E+001

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: GRN7780

Nuclide Library: C:\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	1.59903E+001	1.81704E+000

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

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

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

Spectrum File:GRN7780

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

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.993	1.599032E+001	1.817043E+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	86.74	1.3443E-001	84.97
2	910.66	1.5983E-001	35.97
3	1154.29	3.1343E-002	82.43

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

Errors quoted at 1.960 sigma

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

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1365E-001	9.33E-002	2.0582E-002
	1332.49	100.00	9.3294E-002		4.5977E-002
Nb-94	702.63	100.00	1.1658E-001	1.11E-001	-5.3279E-002
	871.10	100.00	1.1065E-001		3.2020E-002
Ag-108m	79.20	7.10	1.0910E+001	1.33E-001	-2.3915E+001
	433.93	89.90	1.3297E-001		-3.9135E-002
	614.37	90.40	1.6026E-001		-2.1713E-001
	722.95	90.50	1.3735E-001		9.9384E-002
Sb-125	176.33	6.89	2.9685E+000	4.26E-001	-1.2034E+000
	427.89	29.33	4.2562E-001		-1.2978E-001
	463.38	10.35	1.2131E+000		3.7790E-001
	600.56	17.80	6.5052E-001		-6.2478E-001
	606.64	5.02	3.2690E+000		5.3459E+000
	635.90	11.32	9.4030E-001		2.5334E-001
Cs-134	563.23	8.38	1.4219E+000	1.27E-001	1.8425E-001
	569.32	15.43	7.8902E-001		3.8492E-001
	604.70	97.60	1.6057E-001		1.1571E-001
	795.84	85.40	1.2691E-001		2.2541E-002
	801.93	8.73	1.1751E+000		-4.2847E-001
Cs-137	661.65	85.12	1.4363E-001	1.44E-001	-7.8388E-002
Eu-152	121.78	28.40	1.0193E+000	3.53E-001	-9.2045E-004
	244.69	7.49	2.3769E+000		-5.2762E+000
	344.27	26.50	5.3044E-001		-7.7359E-001
	778.89	12.74	8.7578E-001		-6.8880E-001
	867.32	4.16	2.7269E+000		-3.9232E-001
	964.01	14.40	1.0036E+000		1.6367E+000
	1085.78	10.00	9.7240E-001		-3.3684E-001
	1112.02	13.30	8.3305E-001		-1.5276E+000
	1407.95	20.70	3.5308E-001		3.4888E-001
Eu-154	123.07	40.50	7.0691E-001	2.75E-001	5.2870E-002
	247.94	6.60	2.5475E+000		-1.7043E-001
	591.81	4.83	2.4338E+000		-9.3203E-001
	723.30	19.70	6.3277E-001		6.7395E-001
	756.87	4.33	2.5721E+000		7.7152E-001
	873.19	11.50	9.2931E-001		3.5417E-001
	996.32	10.30	1.1036E+000		8.5860E-001
	1004.76	17.90	6.4355E-001		5.0181E-001
	1274.45	35.50	2.7459E-001		-2.2751E-001
Eu-155	86.54	30.90	1.9178E+000	1.83E+000	1.2967E+000
	105.31	20.70	1.8276E+000		3.9286E-001
Am-241	59.54	35.90	4.6259E+000	4.63E+000	7.8309E-001
Cm-243	228.19	10.56	1.6767E+000	1.13E+000	1.8917E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1291E+000	1.13E+000	1.1655E+000

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

Report Generated On 7/5/2006 8:04:16 AM

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

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

Detector ID: GRN7780

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\NOL-03-02-102-F-G
Sample ID: NOL-03-02-102-F
Sample Title: NOL-03-02-102-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/28/2006 1:05:12 PM
Live Time: 600.0 seconds
Real Time: 601.2 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: S:\Analyzed Results\BlueLogging\Reanalysis\NOL-03-02-102-F-G
Log Number: NOL-03-02-102-F
Title: NOL-03-02-102-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	332-	343	337.39	84.30	0.94	7.41E+001	86.95	7.53E+002
2	2320-	2341	2329.00	582.21	0.42	1.32E+002	41.64	8.52E+001
3	2424-	2446	2436.73	609.14	2.01	1.36E+002	45.89	1.06E+002
4	3636-	3655	3643.51	910.84	0.82	1.38E+002	31.13	3.31E+001
5	5826-	5856	5841.56	1460.36	2.53	7.43E+002	57.35	2.33E+001
6	7054-	7067	7060.04	1764.98	0.35	2.00E+001	17.19	1.90E+001

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: S:\Analyzed Results\BlueLogging\Reanalysis\NOL-03-02-102-F-G

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.993	1460.81*	10.67	1.63026E+001	1.82387E+000
TL-208	0.453	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.87312E-001	9.81508E-002
		860.37	12.46		
Bi-214	0.692	609.31*	46.30	5.45469E-001	1.96408E-001
		1120.29	15.10		
		1764.49*	15.80	3.24778E-001	2.80964E-001

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

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

I N T E R 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\NOL-03-02-102-F-G

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

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.993	1.630258E+001	1.823870E+000
TL-208	0.453	2.873117E-001	9.815080E-002
Bi-214	0.692	4.730246E-001	1.609758E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	84.30	1.2355E-001	117.30
4	910.84	2.2985E-001	22.57

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

Errors quoted at 1.960 sigma

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

Spectrum File:S:\Analyzed Results\BlueLogging\Reanalysis\NOL-03-02-102-F-G
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1176E-001	8.55E-002	8.2677E-002
	1332.49	100.00	8.5466E-002		-6.7997E-003
Nb-94	702.63	100.00	1.1326E-001	1.07E-001	-6.6847E-002
	871.10	100.00	1.0726E-001		-9.3872E-002
Ag-108m	79.20	7.10	1.0367E+001	1.37E-001	-8.4162E+000
	433.93	89.90	1.4545E-001		1.1211E-001
	614.37	90.40	1.6439E-001		-1.2735E-002
	722.95	90.50	1.3735E-001		4.8720E-002
Sb-125	176.33	6.89	2.9226E+000	4.32E-001	3.3022E-001
	427.89	29.33	4.3232E-001		-2.6162E-001
	463.38	10.35	1.3118E+000		1.1681E+000
	600.56	17.80	6.7819E-001		5.4356E-001
	606.64	5.02	3.2170E+000		4.4385E+000
	635.90	11.32	9.9261E-001		4.2630E-002
Cs-134	563.23	8.38	1.5500E+000	1.43E-001	1.0884E+000
	569.32	15.43	8.4289E-001		3.0348E-001
	604.70	97.60	1.6233E-001		4.0481E-002
	795.84	85.40	1.4276E-001		2.6270E-003
	801.93	8.73	1.2620E+000		-1.4136E+000
Cs-137	661.65	85.12	1.5360E-001	1.54E-001	1.9741E-001
Eu-152	121.78	28.40	9.7364E-001	3.99E-001	-6.6500E-001
	244.69	7.49	2.3077E+000		-5.3586E+000
	344.27	26.50	5.2675E-001		-6.1654E-001
	778.89	12.74	8.6953E-001		-1.7817E+000
	867.32	4.16	2.6677E+000		-1.0470E+000
	964.01	14.40	9.6132E-001		1.4704E+000
	1085.78	10.00	9.9862E-001		-5.0755E-001
	1112.02	13.30	7.2725E-001		-2.0727E+000
	1407.95	20.70	3.9945E-001		-2.3486E-001
Eu-154	123.07	40.50	6.8502E-001	2.79E-001	3.6434E-001
	247.94	6.60	2.4504E+000		-1.6204E+000
	591.81	4.83	2.4675E+000		-2.4069E-001
	723.30	19.70	6.3103E-001		3.0215E-001
	756.87	4.33	2.4890E+000		3.8513E-001
	873.19	11.50	9.3307E-001		2.3070E-001
	996.32	10.30	1.0114E+000		-5.1386E-002
	1004.76	17.90	5.4185E-001		-5.1469E-001
	1274.45	35.50	2.7944E-001		-3.8820E-001
Eu-155	86.54	30.90	1.8014E+000	1.73E+000	2.5588E+000
	105.31	20.70	1.7295E+000		-1.7534E+000
Am-241	59.54	35.90	4.7856E+000	4.79E+000	-7.9542E-001
Cm-243	228.19	10.56	1.6536E+000	1.12E+000	4.3593E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1168E+000	1.12E+000	3.9661E-001

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

Report Generated On 6/28/2006 10:09:05 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: GRN7780

Spectrum File: GRN7780
Sample ID: NOL-03-02-103
Sample Title: NOL-03-02-103-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/28/2006 9:59:03 AM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: GRN7780
Log Number: NOL-03-02-103
Title: NOL-03-02-103-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	290-	308	296.89	74.18	0.61	8.45E+001	42.13	5.63E+002
m	2	290-	308	303.97	75.95	0.61	7.47E+001	41.56	5.82E+002
	3	2424-	2447	2434.87	608.68	2.27	2.06E+002	45.59	8.37E+001
	4	5827-	5857	5842.01	1460.47	2.86	7.51E+002	57.58	2.31E+001

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: GRN7780

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.996	1460.81*	10.67	1.64820E+001	1.83796E+000
Bi-214	0.395	609.31*	46.30	8.29356E-001	2.09882E-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	1.648199E+001	1.837958E+000
Bi-214	0.395	8.293561E-001	2.098818E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	74.18	1.4076E-001	49.88
m 2	75.95	1.2449E-001	55.64

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	1.0935E-001	1.04E-001	5.8968E-002
	1332.49	100.00	1.0387E-001		7.3947E-002
Nb-94	702.63	100.00	1.1695E-001	1.07E-001	-3.8252E-002
	871.10	100.00	1.0726E-001		-7.0811E-002
Ag-108m	79.20	7.10	1.0520E+001	1.36E-001	-1.2330E+000
	433.93	89.90	1.4142E-001		-1.2360E-002
	614.37	90.40	1.6670E-001		-7.4971E-002
	722.95	90.50	1.3582E-001		2.2018E-002
Sb-125	176.33	6.89	2.8730E+000	4.29E-001	1.4630E+000
	427.89	29.33	4.2898E-001		-1.7972E-001
	463.38	10.35	1.2428E+000		3.3581E-003
	600.56	17.80	7.0647E-001		4.3163E-002
	606.64	5.02	3.4601E+000		8.0089E+000
	635.90	11.32	9.4700E-001		-6.0076E-001
Cs-134	563.23	8.38	1.4219E+000	1.41E-001	4.3358E-001
	569.32	15.43	7.8101E-001		5.8903E-001
	604.70	97.60	1.7012E-001		-3.0540E-003
	795.84	85.40	1.4061E-001		1.7237E-001
	801.93	8.73	1.3077E+000		3.5720E-001
Cs-137	661.65	85.12	1.4521E-001	1.45E-001	5.6770E-002
Eu-152	121.78	28.40	9.5638E-001	4.14E-001	1.7308E-001
	244.69	7.49	2.2677E+000		-4.3108E+000
	344.27	26.50	5.6664E-001		-2.9451E-001
	778.89	12.74	9.8390E-001		1.1023E-002
	867.32	4.16	2.5658E+000		-3.7665E+000
	964.01	14.40	9.5892E-001		1.2317E+000
	1085.78	10.00	1.0922E+000		-3.6870E-001
	1112.02	13.30	7.8580E-001		-2.2123E+000
	1407.95	20.70	4.1366E-001		5.5127E-002
Eu-154	123.07	40.50	6.6309E-001	2.54E-001	-1.3929E-002
	247.94	6.60	2.3811E+000		-3.6011E+000
	591.81	4.83	2.4541E+000		-1.7007E+000
	723.30	19.70	6.2752E-001		4.0459E-001
	756.87	4.33	2.6786E+000		5.5127E-001
	873.19	11.50	9.5896E-001		7.9538E-001
	996.32	10.30	1.0206E+000		-5.6147E-001
	1004.76	17.90	6.1666E-001		4.7092E-001
	1274.45	35.50	2.5421E-001		-9.9482E-002
Eu-155	86.54	30.90	1.8198E+000	1.76E+000	1.2040E+000
	105.31	20.70	1.7575E+000		-7.5962E-001
Am-241	59.54	35.90	4.7839E+000	4.78E+000	-2.2295E+000
Cm-243	228.19	10.56	1.6327E+000	1.10E+000	1.0670E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0997E+000	1.10E+000	1.2340E+000

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

Report Generated On 6/29/2006 8:59:42 AM

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

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

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: NOL-03-02-104-F-
Sample Title: NOL-03-02-104-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/29/2006 8:49:38 AM
Live Time: 600.0 seconds
Real Time: 600.8 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: ORG7829
Log Number: NOL-03-02-104-F-
Title: NOL-03-02-104-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	948-	963	953.57	238.41	1.60	1.71E+002	65.49	3.10E+002
2	1173-	1186	1179.42	294.87	0.88	7.66E+001	47.22	1.81E+002
3	1399-	1413	1405.64	351.43	1.70	1.65E+002	45.70	1.31E+002
4	2028-	2050	2040.31	510.11	0.93	1.40E+002	45.37	9.99E+001
5	2320-	2339	2330.21	582.59	1.38	1.40E+002	37.57	6.49E+001
6	2423-	2445	2434.33	608.62	1.25	2.22E+002	48.27	9.83E+001
7	3631-	3649	3640.28	910.13	1.11	1.02E+002	30.39	4.04E+001
8	4471-	4482	4476.94	1119.31	1.03	2.20E+001	23.40	4.80E+001
9	5825-	5851	5837.87	1459.57	1.95	6.75E+002	55.60	2.99E+001
10	7044-	7059	7052.19	1763.17	0.69	4.80E+001	16.76	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: 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	0.974	511.00*		100.00	2.51495E-001	8.83071E-002
K-40	0.951	1460.81*		10.67	1.53391E+001	1.77153E+000
TL-208	0.743	277.35		6.80		
		510.84*		21.60	1.16433E+000	4.19741E-001
		583.14*		84.20	3.12522E-001	9.31862E-002
		860.37		12.46		
Pb-212	0.446	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	5.56794E-001	2.30859E-001
Bi-214	0.973	609.31*		46.30	9.13298E-001	2.28467E-001
		1120.29*		15.10	3.24468E-001	3.46794E-001
		1764.49*		15.80	7.80932E-001	2.83458E-001
PB-214	0.546	74.82	@	6.21		
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	6.11222E-001	3.90522E-001
		351.92*		37.20	7.08555E-001	2.29267E-001

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

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

I N T E R 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		0.974	1.839901E-001	9.054530E-002
K-40		0.951	1.533914E+001	1.771532E+000
TL-208		0.743	3.125222E-001	9.262800E-002
Pb-212	@	0.446	5.567944E-001	2.308592E-001
Bi-214		0.973	7.493783E-001	1.582748E-001
PB-214	@	0.546	6.836068E-001	1.977127E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	910.13	1.6925E-001	29.93

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

Errors quoted at 1.960 sigma

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

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.1050E-001	8.85E-002	-7.5465E-002
	1332.49	100.00	8.8473E-002		-3.0061E-002
Nb-94	702.63	100.00	1.1642E-001	1.06E-001	8.4317E-002
	871.10	100.00	1.0558E-001		-1.1433E-001
Ag-108m	79.20	7.10	1.0216E+001	1.41E-001	-1.8895E+001
	433.93	89.90	1.4356E-001		1.1862E-001
	614.37	90.40	1.5732E-001		-2.6413E-002
	722.95	90.50	1.4133E-001		1.7370E-001
Sb-125	176.33	6.89	2.7306E+000	4.43E-001	8.3616E-001
	427.89	29.33	4.4300E-001		3.3284E-001
	463.38	10.35	1.2143E+000		8.1333E-001
	600.56	17.80	6.5655E-001		-5.4678E-001
	606.64	5.02	3.6384E+000		1.0193E+001
	635.90	11.32	1.0208E+000		5.5253E-001
Cs-134	563.23	8.38	1.5292E+000	1.26E-001	-5.6279E-002
	569.32	15.43	7.8471E-001		-2.3125E-001
	604.70	97.60	1.8671E-001		-8.0079E-002
	795.84	85.40	1.2594E-001		9.8840E-003
	801.93	8.73	1.2290E+000		3.9513E-001
Cs-137	661.65	85.12	1.4651E-001	1.47E-001	1.3922E-001
Eu-152	121.78	28.40	9.6485E-001	4.05E-001	-4.8865E-001
	244.69	7.49	2.2021E+000		-8.9905E-001
	344.27	26.50	5.2491E-001		-4.6179E-001
	778.89	12.74	8.8073E-001		-1.1997E+000
	867.32	4.16	2.7208E+000		-2.2133E+000
	964.01	14.40	8.6719E-001		2.7629E-001
	1085.78	10.00	1.0018E+000		-2.7811E-001
	1112.02	13.30	8.6093E-001		-1.2646E+000
	1407.95	20.70	4.0475E-001		-1.4914E-001
Eu-154	123.07	40.50	6.7054E-001	2.57E-001	3.0021E-001
	247.94	6.60	2.4222E+000		-2.0988E+000
	591.81	4.83	2.4361E+000		2.5420E-001
	723.30	19.70	6.4570E-001		5.2796E-001
	756.87	4.33	2.6036E+000		8.3668E-001
	873.19	11.50	9.1032E-001		2.3316E-001
	996.32	10.30	1.0369E+000		-1.2308E+000
	1004.76	17.90	5.8670E-001		-1.0301E-001
	1274.45	35.50	2.5725E-001		-1.7695E-001
Eu-155	86.54	30.90	1.7330E+000	1.69E+000	2.4968E+000
	105.31	20.70	1.6948E+000		-1.3024E-001
Am-241	59.54	35.90	4.0979E+000	4.10E+000	3.4084E-001
Cm-243	228.19	10.56	1.5964E+000	1.11E+000	-3.8477E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1135E+000	1.11E+000	3.3692E-001

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

Report Generated On 6/28/2006 8:34:30 AM

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

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-105
Sample Title: NOL-03-02-105-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/28/2006 8:24:27 AM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

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

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

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

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

Filename: BLUE6279
Log Number: NOL-03-02-105
Title: NOL-03-02-105-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	316	291.83	72.79	1.20	4.39E+002	68.93	1.44E+003
m	2	286-	316	300.11	74.86	1.20	7.77E+002	76.32	1.81E+003
m	3	286-	316	308.75	77.02	1.21	2.62E+002	61.72	1.74E+003
M	4	332-	355	339.84	84.79	0.84	1.67E+002	58.49	1.09E+003
m	5	332-	355	349.38	87.18	0.84	8.51E+001	53.15	1.23E+003
	6	949-	960	954.26	238.44	0.90	1.85E+002	57.74	2.67E+002
M	7	1174-	1204	1180.33	294.98	1.24	9.11E+001	28.48	1.83E+002
m	8	1174-	1204	1199.86	299.86	1.24	3.61E+001	23.18	1.85E+002
	9	1346-	1358	1352.87	338.13	0.77	7.03E+001	40.12	1.33E+002
	10	1401-	1417	1406.84	351.62	1.10	1.75E+002	47.27	1.29E+002
	11	2033-	2053	2042.59	510.61	1.76	1.51E+002	47.69	1.20E+002
	12	2323-	2340	2331.47	582.85	0.98	1.32E+002	43.00	1.08E+002
	13	2429-	2448	2436.30	609.07	1.31	2.46E+002	46.12	8.66E+001
	14	3633-	3651	3643.14	910.87	1.25	1.20E+002	35.46	6.14E+001
	15	3853-	3884	3874.93	968.83	0.32	8.84E+001	45.54	8.86E+001
	16	5828-	5855	5842.39	1460.84	1.89	1.05E+003	67.14	2.82E+001
	17	7050-	7068	7059.04	1765.10	1.32	6.83E+001	18.01	4.75E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: BLUE6279

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.995	511.00*	100.00	2.06538E-001	7.08055E-002
K-40	1.000	1460.81*	10.67	1.75412E+001	1.81241E+000
TL-208	0.749	277.35	6.80		
		510.84*	21.60	9.56192E-001	3.36976E-001
		583.14*	84.20	2.22514E-001	7.83130E-002
		860.37	12.46		
Pb-212	0.999	74.81* @	10.70	1.11296E+001	2.43996E+000
		77.11* @	18.00	2.14917E+000	6.57864E-001
		87.30* @	8.00	1.32287E+000	8.65534E-001
		238.63*	44.60	4.50663E-001	1.57131E-001
Bi-214	0.695	609.31*	46.30	7.69331E-001	1.72380E-001
		1120.29	15.10		
		1764.49*	15.80	8.01894E-001	2.26328E-001
PB-214	0.848	74.82* @	6.21	1.91765E+001	4.42859E+000
		77.11* @	10.50	3.68430E+000	1.16083E+000
		87.30* @	4.67	2.26615E+000	1.49257E+000
		241.98	7.49		
		295.21*	19.20	5.46847E-001	1.94104E-001
		351.92*	37.20	5.70860E-001	1.81104E-001
Ac-228	0.998	338.32*	11.40	7.38175E-001	4.37172E-001
		911.07*	27.70	6.84276E-001	2.17704E-001
		969.11*	16.60	8.59548E-001	4.51773E-001

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

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

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

Spectrum File:BLUE6279

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

	Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
	ANN		0.995	1.584744E-001	7.278119E-002
	K-40		1.000	1.754117E+001	1.812414E+000
X	Eu-155		0.325		
	TL-208		0.749	2.225144E-001	7.797651E-002
	Pb-212	@	0.999	4.506629E-001	1.571309E-001
	Bi-214		0.695	7.812855E-001	1.371344E-001
	PB-214	@	0.848	5.596846E-001	1.324172E-001
	Ac-228		0.998	7.208029E-001	1.789393E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.79	7.3196E-001	15.70
M 4	84.79	2.7838E-001	35.02
m 8	299.86	6.0149E-002	64.23

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

Errors quoted at 1.960 sigma

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

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	9.6844E-002	6.65E-002	8.8681E-002
	1332.49	100.00	6.6513E-002		-4.4830E-002
Nb-94	702.63	100.00	9.3936E-002	9.12E-002	3.3452E-002
	871.10	100.00	9.1249E-002		7.4703E-002
Ag-108m	79.20	7.10	4.9305E+000	1.09E-001	1.1686E+000
	433.93	89.90	1.0879E-001		9.2796E-002
	614.37	90.40	1.2853E-001		-1.2805E-002
	722.95	90.50	1.1281E-001		9.9959E-002
Sb-125	176.33	6.89	2.0617E+000	3.34E-001	-9.2302E-001
	427.89	29.33	3.3384E-001		-2.0983E-001
	463.38	10.35	1.0332E+000		1.0570E+000
	600.56	17.80	5.0356E-001		-4.5604E-001
	606.64	5.02	2.8462E+000		-1.9582E+000
	635.90	11.32	8.5265E-001		-8.2109E-002
Cs-134	563.23	8.38	1.0742E+000	1.08E-001	-1.6917E-001
	569.32	15.43	5.4864E-001		-7.8073E-001
	604.70	97.60	1.3873E-001		-1.1329E-001
	795.84	85.40	1.0807E-001		-7.1386E-002
	801.93	8.73	1.0002E+000		-1.1289E-001
Cs-137	661.65	85.12	1.1843E-001	1.18E-001	9.5648E-002
Eu-152	121.78	28.40	7.0492E-001	3.60E-001	1.2538E-001
	244.69	7.49	1.7012E+000		4.0953E-001
	344.27	26.50	4.0550E-001		-5.4316E-002
	778.89	12.74	6.9103E-001		-7.7281E-001
	867.32	4.16	2.0937E+000		-1.1033E+000
	964.01	14.40	8.0435E-001		-9.9277E-004
	1085.78	10.00	9.3346E-001		2.9542E-002
	1112.02	13.30	6.0992E-001		-1.1058E+000
	1407.95	20.70	3.5976E-001		1.3734E-001
Eu-154	123.07	40.50	4.9224E-001	2.45E-001	6.0223E-001
	247.94	6.60	1.8374E+000		6.4957E-001
	591.81	4.83	1.9050E+000		-1.1294E+000
	723.30	19.70	5.1956E-001		4.6061E-001
	756.87	4.33	2.1695E+000		9.1577E-001
	873.19	11.50	7.8581E-001		7.7474E-001
	996.32	10.30	8.4112E-001		3.1151E-001
	1004.76	17.90	4.5700E-001		-1.0772E-001
	1274.45	35.50	2.4466E-001		5.0229E-002
Eu-155	86.54*	30.90	6.6755E-001	6.68E-001	3.4249E-001
	105.31	20.70	1.1590E+000		2.9038E-001
Am-241	59.54	35.90	1.3465E+000	1.35E+000	9.4417E-001
Cm-243	228.19	10.56	1.2123E+000	8.27E-001	-2.2907E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.2713E-001	8.27E-001	-8.5209E-001

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

Report Generated On 6/28/2006 8:50:52 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: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-106
Sample Title: NOL-03-02-106-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/28/2006 8:40:51 AM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

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

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

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

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

Filename: BLUE6279
Log Number: NOL-03-02-106
Title: NOL-03-02-106-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	307	291.13	72.61	1.11	3.59E+002	64.50	1.21E+003
m	2	286-	307	300.26	74.89	1.11	6.14E+002	74.64	1.71E+003
	3	336-	346	340.09	84.85	1.37	1.62E+002	105.10	1.12E+003
	4	946-	961	954.28	238.45	0.71	2.12E+002	70.22	3.55E+002
	5	1174-	1185	1180.42	295.00	0.96	7.89E+001	40.99	1.43E+002
	6	1348-	1358	1352.16	337.95	1.28	5.39E+001	34.15	1.04E+002
	7	1402-	1413	1406.79	351.61	1.13	1.80E+002	41.47	1.03E+002
	8	2031-	2053	2042.65	510.62	1.16	1.22E+002	50.51	1.39E+002
	9	2323-	2340	2331.71	582.91	1.12	1.53E+002	40.02	7.95E+001
	10	2425-	2444	2435.88	608.96	1.28	2.12E+002	46.00	9.66E+001
	11	3635-	3655	3643.56	910.97	1.29	1.28E+002	33.78	4.64E+001
M	12	3851-	3885	3857.27	964.42	1.58	2.74E+001	14.10	3.20E+001
m	13	3851-	3885	3875.23	968.91	1.58	7.71E+001	19.72	4.20E+001
	14	5830-	5856	5842.82	1460.95	1.97	9.79E+002	64.75	2.62E+001
	15	6347-	6360	6353.96	1588.78	1.23	1.93E+001	12.90	8.71E+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: BLUE6279

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.995	511.00*		100.00	1.66717E-001	7.24977E-002
K-40	0.999	1460.81*		10.67	1.64165E+001	1.71643E+000
TL-208	0.750	277.35		6.80		
		510.84*		21.60	7.71838E-001	3.41505E-001
		583.14*		84.20	2.59701E-001	7.56988E-002
		860.37		12.46		
Pb-212	0.520	74.81*	@	10.70	8.78563E+000	2.02651E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	5.14645E-001	1.88792E-001
Bi-214	0.395	609.31*		46.30	6.63265E-001	1.65243E-001
		1120.29		15.10		
		1764.49		15.80		
PB-214	0.581	74.82*	@	6.21	1.51379E+001	3.66057E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	4.73298E-001	2.58529E-001
		351.92*		37.20	5.84913E-001	1.66703E-001
Ac-228	0.998	338.32*		11.40	5.66158E-001	3.69594E-001
		911.07*		27.70	7.30017E-001	2.10763E-001
		969.11*		16.60	7.49519E-001	2.07192E-001

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

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

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

Spectrum File:BLUE6279

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

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.995	1.106215E-001	7.429620E-002
K-40		0.999	1.641654E+001	1.716430E+000
TL-208		0.750	2.597012E-001	7.522421E-002
Pb-212	@	0.520	5.146445E-001	1.887918E-001
Bi-214		0.395	6.632649E-001	1.652426E-001
PB-214	@	0.581	5.521345E-001	1.401025E-001
Ac-228		0.998	7.159890E-001	1.371963E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.61	5.9763E-001	17.99
3	84.85	2.7060E-001	64.73
M 12	964.42	4.5676E-002	51.45
15	1588.78	3.2143E-002	66.89

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	9.8871E-002	7.56E-002	-5.6026E-002
	1332.49	100.00	7.5596E-002		3.5161E-002
Nb-94	702.63	100.00	9.0607E-002	8.72E-002	-8.3542E-002
	871.10	100.00	8.7171E-002		1.5555E-002
Ag-108m	79.20	7.10	4.6052E+000	1.06E-001	-1.0130E-001
	433.93	89.90	1.1699E-001		-3.8373E-003
	614.37	90.40	1.2280E-001		-5.8636E-002
	722.95	90.50	1.0619E-001		3.4818E-002
Sb-125	176.33	6.89	2.0561E+000	3.47E-001	-1.7468E-001
	427.89	29.33	3.4652E-001		2.7435E-001
	463.38	10.35	1.0350E+000		8.5541E-001
	600.56	17.80	5.1516E-001		-1.6318E-001
	606.64	5.02	2.7238E+000		5.3180E+000
	635.90	11.32	8.2324E-001		2.1716E-001
Cs-134	563.23	8.38	1.1762E+000	1.08E-001	6.1710E-001
	569.32	15.43	6.1702E-001		4.5677E-001
	604.70	97.60	1.3517E-001		-2.4615E-002
	795.84	85.40	1.0807E-001		6.9485E-002
	801.93	8.73	1.0282E+000		-5.7572E-001
Cs-137	661.65	85.12	1.2628E-001	1.26E-001	1.3564E-001
Eu-152	121.78	28.40	7.0354E-001	3.25E-001	7.2023E-001
	244.69	7.49	1.6845E+000		6.1507E-001
	344.27	26.50	3.9220E-001		2.0551E-001
	778.89	12.74	7.5475E-001		-4.9511E-001
	867.32	4.16	2.1470E+000		-2.1629E+000
	964.01	14.40	7.7581E-001		-1.2310E-001
	1085.78	10.00	8.3664E-001		-1.5663E+000
	1112.02	13.30	6.7518E-001		-8.5580E-001
	1407.95	20.70	3.2476E-001		-4.1791E-002
Eu-154	123.07	40.50	4.8543E-001	2.27E-001	1.3719E-001
	247.94	6.60	1.8173E+000		-4.5259E-001
	591.81	4.83	1.9766E+000		4.4668E-001
	723.30	19.70	4.9329E-001		4.0025E-001
	756.87	4.33	1.9506E+000		-5.3986E-001
	873.19	11.50	7.6671E-001		4.7160E-002
	996.32	10.30	8.3773E-001		3.7833E-001
	1004.76	17.90	4.2461E-001		-5.2848E-001
	1274.45	35.50	2.2715E-001		-1.2055E-001
Eu-155	86.54	30.90	9.8114E-001	9.81E-001	1.4369E+000
	105.31	20.70	1.1233E+000		-1.1917E+000
Am-241	59.54	35.90	1.2838E+000	1.28E+000	-4.5222E-001
Cm-243	228.19	10.56	1.2094E+000	8.64E-001	8.3182E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.6408E-001	8.64E-001	3.5943E-002

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

Report Generated On 6/28/2006 9:45:10 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: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-107
Sample Title: NOL-03-02-107-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/28/2006 9:35:05 AM
Live Time: 600.0 seconds
Real Time: 601.2 seconds

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

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

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

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

Filename: BLUE6279
Log Number: NOL-03-02-107
Title: NOL-03-02-107-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	308	291.61	72.73	1.10	3.90E+002	67.48	1.57E+003
m	2	285-	308	300.30	74.90	1.11	7.55E+002	79.23	1.84E+003
	3	332-	346	339.03	84.59	0.90	2.47E+002	136.96	1.60E+003
M	4	947-	970	954.58	238.52	1.24	3.23E+002	41.85	2.62E+002
m	5	947-	970	965.86	241.35	1.24	8.84E+001	29.37	2.57E+002
	6	1175-	1190	1181.20	295.20	0.47	8.59E+001	52.85	2.12E+002
	7	1345-	1357	1351.50	337.78	1.14	6.66E+001	41.33	1.43E+002
	8	1398-	1417	1407.34	351.75	0.39	2.18E+002	57.05	1.80E+002
	9	2030-	2047	2042.11	510.49	0.90	1.29E+002	45.06	1.23E+002
	10	2324-	2343	2331.48	582.85	1.76	1.49E+002	46.82	1.20E+002
	11	2429-	2444	2436.17	609.03	1.71	1.87E+002	38.32	6.44E+001
	12	3633-	3653	3643.20	910.88	1.16	1.32E+002	38.67	7.09E+001
	13	3867-	3883	3875.04	968.86	1.23	8.91E+001	32.39	5.89E+001
	14	5828-	5857	5843.02	1461.00	1.95	1.05E+003	68.73	3.75E+001
	15	7051-	7064	7057.95	1764.83	0.35	3.44E+001	17.39	1.56E+001

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: BLUE6279

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.991	511.00*		100.00	1.76460E-001	6.59438E-002
K-40	0.999	1460.81*		10.67	1.76366E+001	1.83517E+000
TL-208	0.749	277.35		6.80		
		510.84*		21.60	8.16944E-001	3.12500E-001
		583.14*		84.20	2.52267E-001	8.57665E-002
		860.37		12.46		
Pb-212	0.520	74.81*	@	10.70	1.08094E+001	2.40296E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.84723E-001	1.59658E-001
Bi-214	0.696	609.31*		46.30	5.82545E-001	1.39515E-001
		1120.29		15.10		
		1764.49*		15.80	4.04166E-001	2.08297E-001
PB-214	0.730	74.82*	@	6.21	1.86249E+001	4.35552E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98*		7.49	1.28394E+000	4.76881E-001
		295.21*		19.20	5.15233E-001	3.28798E-001
		351.92*		37.20	7.11059E-001	2.20540E-001
Ac-228	0.997	338.32*		11.40	6.99907E-001	4.47740E-001
		911.07*		27.70	7.56251E-001	2.37810E-001
		969.11*		16.60	8.66384E-001	3.27739E-001

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

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

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

Spectrum File:BLUE6279

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

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.991	1.219702E-001	6.847354E-002
K-40		0.999	1.763659E+001	1.835174E+000
TL-208		0.749	2.522669E-001	8.537162E-002
Pb-212	@	0.520	7.847228E-001	1.596577E-001
Bi-214		0.696	5.273029E-001	1.159163E-001
PB-214	@	0.730	7.317478E-001	1.709782E-001
Ac-228		0.997	7.795239E-001	1.768305E-001

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

Errors quoted at 1.960 sigma

U N I D E N T I F 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	6.4950E-001	17.32
3	84.59	4.1137E-001	55.49

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

Errors quoted at 1.960 sigma

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

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	9.9537E-002	9.21E-002	-3.9080E-002
	1332.49	100.00	9.2093E-002		1.4326E-001
Nb-94	702.63	100.00	1.0521E-001	9.12E-002	2.7069E-002
	871.10	100.00	9.1249E-002		1.1686E-002
Ag-108m	79.20	7.10	4.9101E+000	1.16E-001	-2.6746E+000
	433.93	89.90	1.1560E-001		-5.5186E-002
	614.37	90.40	1.2763E-001		4.9982E-002
	722.95	90.50	1.1957E-001		1.2842E-001
Sb-125	176.33	6.89	2.2256E+000	3.56E-001	1.6595E+000
	427.89	29.33	3.5633E-001		-1.3154E-001
	463.38	10.35	1.0594E+000		2.2297E-001
	600.56	17.80	5.8732E-001		5.4650E-001
	606.64	5.02	2.6622E+000		6.0461E+000
	635.90	11.32	8.7673E-001		-1.2456E-001
Cs-134	563.23	8.38	1.2239E+000	1.12E-001	6.9149E-002
	569.32	15.43	6.6282E-001		-1.7985E-001
	604.70	97.60	1.3226E-001		-7.9771E-002
	795.84	85.40	1.1242E-001		2.5531E-003
	801.93	8.73	1.0317E+000		-7.6051E-001
Cs-137	661.65	85.12	1.2298E-001	1.23E-001	-2.5253E-002
Eu-152	121.78	28.40	7.4157E-001	3.33E-001	6.1859E-001
	244.69	7.49	1.7677E+000		-1.7554E+000
	344.27	26.50	4.1615E-001		-1.9760E-003
	778.89	12.74	7.3266E-001		-8.3457E-002
	867.32	4.16	2.2063E+000		-2.7858E+000
	964.01	14.40	8.8588E-001		1.7768E-001
	1085.78	10.00	9.3684E-001		-3.5087E-001
	1112.02	13.30	7.0157E-001		-6.6035E-001
	1407.95	20.70	3.3260E-001		-1.0766E-002
Eu-154	123.07	40.50	5.1121E-001	2.61E-001	-1.4589E-001
	247.94	6.60	1.8900E+000		-9.5932E-001
	591.81	4.83	2.1494E+000		1.1957E+000
	723.30	19.70	5.5177E-001		5.0544E-001
	756.87	4.33	2.2144E+000		7.9719E-002
	873.19	11.50	7.8040E-001		-5.9365E-002
	996.32	10.30	8.4112E-001		-2.2205E-001
	1004.76	17.90	5.0242E-001		2.9889E-001
	1274.45	35.50	2.6094E-001		-7.2053E-002
Eu-155	86.54	30.90	1.0410E+000	1.04E+000	1.4277E-001
	105.31	20.70	1.1920E+000		-1.1943E+000
Am-241	59.54	35.90	1.3501E+000	1.35E+000	1.5221E-001
Cm-243	228.19	10.56	1.2492E+000	8.90E-001	-8.5379E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.8975E-001	8.90E-001	-1.5013E-001

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

Report Generated On 6/28/2006 9:59:04 AM

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

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-108
Sample Title: NOL-03-02-108-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/28/2006 9:48:58 AM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

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

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

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

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

Filename: BLUE6279
Log Number: NOL-03-02-108
Title: NOL-03-02-108-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	296-	306	300.45	74.94	0.98	4.03E+002	125.13	1.53E+003
	2	948-	961	954.75	238.57	1.26	2.39E+002	62.75	2.84E+002
M	3	1171-	1205	1180.47	295.01	1.08	1.09E+002	28.72	1.80E+002
m	4	1171-	1205	1200.57	300.04	1.08	4.54E+001	23.49	1.56E+002
	5	1348-	1360	1352.65	338.07	0.62	5.41E+001	39.69	1.34E+002
	6	1399-	1416	1406.71	351.59	1.45	1.73E+002	52.97	1.70E+002
	7	2030-	2051	2041.50	510.34	0.60	1.15E+002	51.29	1.51E+002
	8	2326-	2341	2331.45	582.84	1.83	1.29E+002	38.69	8.56E+001
	9	2425-	2446	2435.62	608.90	1.38	1.63E+002	45.12	9.78E+001
	10	3635-	3655	3644.35	911.17	0.64	1.32E+002	37.99	6.63E+001
	11	3867-	3884	3875.12	968.88	1.64	7.75E+001	28.36	4.05E+001
	12	4471-	4488	4480.33	1120.23	0.86	7.66E+001	28.73	4.24E+001
	13	5829-	5857	5843.69	1461.17	2.01	1.03E+003	66.82	2.88E+001
	14	7051-	7068	7058.88	1765.06	0.73	6.41E+001	17.11	3.95E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: BLUE6279

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.985	511.00*		100.00	1.56402E-001	7.30741E-002
K-40	0.995	1460.81*		10.67	1.72622E+001	1.79143E+000
TL-208	0.748	277.35		6.80		
		510.84*		21.60	7.24083E-001	3.43435E-001
		583.14*		84.20	2.19019E-001	7.14043E-002
		860.37		12.46		
Pb-212	0.520	74.81*	@	10.70	5.75843E+000	2.11570E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	5.79787E-001	1.77579E-001
Bi-214	0.994	609.31*		46.30	5.09392E-001	1.54206E-001
		1120.29*		15.10	8.54220E-001	3.32870E-001
		1764.49*		15.80	7.52560E-001	2.14649E-001
PB-214	0.580	74.82*	@	6.21	9.92194E+000	3.71588E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	6.51162E-001	2.04225E-001
		351.92*		37.20	5.63803E-001	1.96553E-001
Ac-228	0.999	338.32*		11.40	5.67947E-001	4.26424E-001
		911.07*		27.70	7.53625E-001	2.34085E-001
		969.11*		16.60	7.53468E-001	2.86839E-001

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

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

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

Spectrum File:BLUE6279

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

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.985	1.090938E-001	7.466807E-002
K-40		0.995	1.726219E+001	1.791434E+000
TL-208		0.748	2.190192E-001	7.104666E-002
Pb-212	@	0.520	5.797871E-001	1.775785E-001
Bi-214		0.994	6.246650E-001	1.172160E-001
PB-214	@	0.580	6.058107E-001	1.416184E-001
Ac-228		0.999	7.251308E-001	1.668914E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
m 4	300.04	7.5615E-002	51.76

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

Errors quoted at 1.960 sigma

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

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0407E-001	7.84E-002	4.0192E-002
	1332.49	100.00	7.8375E-002		2.8101E-002
Nb-94	702.63	100.00	9.6884E-002	8.59E-002	1.9571E-002
	871.10	100.00	8.5875E-002		-9.0474E-002
Ag-108m	79.20	7.10	4.7994E+000	1.14E-001	-9.3955E-001
	433.93	89.90	1.2202E-001		9.9319E-002
	614.37	90.40	1.2209E-001		7.8046E-002
	722.95	90.50	1.1419E-001		-1.5038E-002
Sb-125	176.33	6.89	2.1404E+000	3.21E-001	1.4175E-001
	427.89	29.33	3.2064E-001		-7.0532E-001
	463.38	10.35	1.0244E+000		1.8628E-001
	600.56	17.80	5.1373E-001		3.5455E-001
	606.64	5.02	2.5234E+000		-2.9016E-001
	635.90	11.32	7.9268E-001		-4.1634E-001
Cs-134	563.23	8.38	1.1789E+000	1.14E-001	4.5292E-001
	569.32	15.43	6.1240E-001		-4.8935E-001
	604.70	97.60	1.2775E-001		-3.8140E-003
	795.84	85.40	1.1405E-001		1.2228E-001
	801.93	8.73	9.7133E-001		-1.4519E+000
Cs-137	661.65	85.12	1.1872E-001	1.19E-001	1.3199E-001
Eu-152	121.78	28.40	7.0767E-001	3.33E-001	-3.5167E-002
	244.69	7.49	1.6915E+000		-1.9203E-001
	344.27	26.50	4.0322E-001		6.9672E-002
	778.89	12.74	6.8625E-001		-4.6771E-001
	867.32	4.16	2.2136E+000		-1.2954E+000
	964.01	14.40	7.5926E-001		-6.7205E-002
	1085.78	10.00	9.1634E-001		4.0034E-001
	1112.02	13.30	6.9377E-001		-2.3910E-001
	1407.95	20.70	3.3260E-001		1.9464E-001
Eu-154	123.07	40.50	4.9114E-001	2.51E-001	1.5539E-001
	247.94	6.60	1.7953E+000		-1.6763E+000
	591.81	4.83	1.9258E+000		-1.6306E-001
	723.30	19.70	5.3343E-001		4.1440E-001
	756.87	4.33	2.2646E+000		-1.3259E+000
	873.19	11.50	7.2693E-001		-3.0855E-001
	996.32	10.30	8.9034E-001		1.5354E-001
	1004.76	17.90	5.0617E-001		3.1626E-002
	1274.45	35.50	2.5131E-001		1.1464E-001
Eu-155	86.54	30.90	1.0152E+000	1.02E+000	2.0167E+000
	105.31	20.70	1.1750E+000		-2.5013E-001
Am-241	59.54	35.90	1.2986E+000	1.30E+000	-9.4241E-001
Cm-243	228.19	10.56	1.1905E+000	8.80E-001	-1.1442E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	8.7990E-001	8.80E-001	1.6883E-001

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

Report Generated On 6/28/2006 10:14:53 AM

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

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

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-109
Sample Title: NOL-03-02-109-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/28/2006 10:04:49 AM
Live Time: 600.0 seconds
Real Time: 601.3 seconds

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

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

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

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

Filename: BLUE6279
Log Number: NOL-03-02-109
Title: NOL-03-02-109-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	305	291.54	72.71	0.99	3.99E+002	72.23	1.51E+003
m	2	287-	305	300.31	74.91	1.00	7.79E+002	84.80	1.84E+003
	3	333-	346	339.09	84.60	0.93	2.06E+002	139.37	1.75E+003
	4	947-	961	954.64	238.54	1.54	2.66E+002	71.25	3.67E+002
	5	1173-	1190	1180.60	295.04	0.78	9.94E+001	60.71	2.64E+002
	6	1400-	1417	1407.30	351.74	1.17	1.61E+002	58.02	2.19E+002
	7	2325-	2339	2332.27	583.05	1.41	1.29E+002	36.93	7.85E+001
	8	2428-	2443	2435.94	608.98	1.04	1.96E+002	43.91	1.02E+002
	9	3636-	3652	3643.71	911.01	0.96	1.15E+002	33.38	5.55E+001
	10	3867-	3883	3874.56	968.74	1.13	6.78E+001	26.95	3.83E+001
	11	4472-	4490	4479.46	1120.01	0.64	6.65E+001	29.58	4.75E+001
	12	5828-	5856	5843.43	1461.11	1.94	1.21E+003	70.86	2.18E+001
	13	7050-	7067	7058.80	1765.04	0.68	5.86E+001	16.02	2.38E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: BLUE6279

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.997	1460.81*	10.67	2.02325E+001	2.02382E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.17547E-001	6.86181E-002
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	1.11542E+001	2.50044E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.46680E-001	2.00694E-001
Bi-214	0.995	609.31*	46.30	6.12068E-001	1.56466E-001
		1120.29*	15.10	7.41273E-001	3.39051E-001
		1764.49*	15.80	6.88729E-001	2.00377E-001
PB-214	0.582	74.82* @	6.21	1.92191E+001	4.52860E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	5.96395E-001	3.77838E-001
		351.92*	37.20	5.24287E-001	2.08262E-001
Ac-228	0.632	338.32	11.40		
		911.07*	27.70	6.60952E-001	2.05636E-001
		969.11*	16.60	6.58649E-001	2.70939E-001

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

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

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

Spectrum File:BLUE6279

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

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.997	2.023248E+001	2.023817E+000
TL-208		0.471	2.175466E-001	6.861806E-002
Pb-212	@	0.520	6.466800E-001	2.006939E-001
Bi-214		0.995	6.528095E-001	1.158944E-001
PB-214	@	0.582	5.410895E-001	1.823902E-001
Ac-228		0.632	6.601106E-001	1.638006E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.71	6.6456E-001	18.12
3	84.60	3.4416E-001	67.49

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

Errors quoted at 1.960 sigma

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

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0280E-001	8.78E-002	1.1139E-002
	1332.49	100.00	8.7772E-002		9.6184E-002
Nb-94	702.63	100.00	1.0025E-001	9.16E-002	8.7057E-003
	871.10	100.00	9.1555E-002		4.2083E-003
Ag-108m	79.20	7.10	5.2270E+000	1.18E-001	-1.3313E+001
	433.93	89.90	1.1817E-001		7.5033E-002
	614.37	90.40	1.3075E-001		-6.2921E-002
	722.95	90.50	1.2140E-001		-3.5925E-002
Sb-125	176.33	6.89	2.4277E+000	3.66E-001	6.9933E-001
	427.89	29.33	3.6587E-001		-2.6797E-002
	463.38	10.35	1.0332E+000		-1.1124E-001
	600.56	17.80	5.5778E-001		-6.0719E-002
	606.64	5.02	2.8623E+000		6.8205E+000
	635.90	11.32	8.9804E-001		-1.2792E-001
Cs-134	563.23	8.38	1.2030E+000	1.16E-001	6.0778E-001
	569.32	15.43	6.2313E-001		-3.9981E-001
	604.70	97.60	1.3802E-001		-4.4122E-002
	795.84	85.40	1.1565E-001		9.8124E-003
	801.93	8.73	1.0754E+000		-4.9351E-001
Cs-137	661.65	85.12	1.2101E-001	1.21E-001	6.7309E-002
Eu-152	121.78	28.40	7.8852E-001	3.48E-001	7.3023E-002
	244.69	7.49	1.8799E+000		-1.9525E-001
	344.27	26.50	4.2868E-001		-5.4531E-001
	778.89	12.74	6.9103E-001		-2.9684E-001
	867.32	4.16	2.3476E+000		-9.8105E-001
	964.01	14.40	8.1652E-001		-1.5021E-001
	1085.78	10.00	9.4357E-001		5.4294E-001
	1112.02	13.30	7.0416E-001		-5.2501E-001
	1407.95	20.70	3.4770E-001		2.2156E-001
Eu-154	123.07	40.50	5.4639E-001	2.37E-001	-1.0338E-001
	247.94	6.60	2.0288E+000		-7.5153E-001
	591.81	4.83	2.0982E+000		2.9024E-001
	723.30	19.70	5.6129E-001		2.0678E-001
	756.87	4.33	2.1630E+000		-4.9590E-001
	873.19	11.50	7.9651E-001		5.0853E-001
	996.32	10.30	9.4288E-001		5.2135E-001
	1004.76	17.90	5.3339E-001		2.2909E-001
	1274.45	35.50	2.3666E-001		-2.3625E-001
Eu-155	86.54	30.90	1.0944E+000	1.09E+000	-8.5977E-002
	105.31	20.70	1.3155E+000		-1.5207E-001
Am-241	59.54	35.90	1.4074E+000	1.41E+000	3.8712E-002
Cm-243	228.19	10.56	1.2727E+000	9.28E-001	-5.9628E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.2805E-001	9.28E-001	9.0490E-002

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

Report Generated On 6/28/2006 8:38:50 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: NOL-03-02-110
Sample Title: NOL-03-02-110-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/28/2006 8:28:50 AM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: GRN7780
Log Number: NOL-03-02-110
Title: NOL-03-02-110-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-	956	951.34	237.79	0.96	6.37E+001	58.65	3.22E+002
2	2425-	2446	2434.01	608.46	1.74	1.25E+002	44.92	1.07E+002
3	5827-	5857	5841.73	1460.40	2.77	7.58E+002	60.29	3.86E+001
4	7052-	7065	7058.70	1764.65	1.86	4.22E+001	15.28	6.77E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: GRN7780

Nuclide Library: C:\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	1.66472E+001	1.88877E+000
Pb-212	0.441	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.05790E-001	1.92314E-001
Bi-214	0.680	609.31*		46.30	5.04428E-001	1.91001E-001
		1120.29		15.10		
		1764.49*		15.80	6.85781E-001	2.57464E-001

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

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

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

Spectrum File:GRN7780

Nuclide Library: C:\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	1.664717E+001	1.888767E+000
Pb-212	@	0.441	2.057899E-001	1.923138E-001
Bi-214		0.680	5.688055E-001	1.533982E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	1.1505E-001	9.70E-002	8.4025E-002
	1332.49	100.00	9.6956E-002		-4.8001E-002
Nb-94	702.63	100.00	1.1767E-001	1.08E-001	3.0594E-002
	871.10	100.00	1.0811E-001		-5.4444E-002
Ag-108m	79.20	7.10	1.1239E+001	1.42E-001	-2.0656E+001
	433.93	89.90	1.4223E-001		-1.2437E-001
	614.37	90.40	1.6056E-001		-2.6416E-002
	722.95	90.50	1.4183E-001		1.1982E-001
Sb-125	176.33	6.89	3.1425E+000	4.57E-001	-6.1833E-001
	427.89	29.33	4.5654E-001		3.7196E-001
	463.38	10.35	1.2861E+000		7.9385E-001
	600.56	17.80	6.8359E-001		1.5198E-001
	606.64	5.02	3.1979E+000		4.6334E+000
	635.90	11.32	1.0778E+000		5.9305E-001
Cs-134	563.23	8.38	1.5770E+000	1.35E-001	-4.3722E-001
	569.32	15.43	7.6883E-001		-9.2253E-001
	604.70	97.60	1.5777E-001		-2.1234E-002
	795.84	85.40	1.3530E-001		1.0132E-002
	801.93	8.73	1.3517E+000		-4.9366E-001
Cs-137	661.65	85.12	1.3330E-001	1.33E-001	1.1752E-001
Eu-152	121.78	28.40	1.0527E+000	4.03E-001	3.4928E-001
	244.69	7.49	2.4761E+000		-4.0876E+000
	344.27	26.50	5.3410E-001		-9.5011E-001
	778.89	12.74	9.0333E-001		-1.6530E-001
	867.32	4.16	2.6070E+000		-5.5727E-001
	964.01	14.40	9.7326E-001		1.4712E+000
	1085.78	10.00	1.1382E+000		-3.1690E-001
	1112.02	13.30	8.1160E-001		-9.7041E-001
	1407.95	20.70	4.0305E-001		4.1964E-001
Eu-154	123.07	40.50	7.3293E-001	2.66E-001	1.1077E-002
	247.94	6.60	2.5517E+000		-8.3203E-001
	591.81	4.83	2.5203E+000		-2.7971E+000
	723.30	19.70	6.5332E-001		2.3142E-001
	756.87	4.33	2.5991E+000		3.6822E-001
	873.19	11.50	9.5164E-001		-2.0828E-001
	996.32	10.30	1.0160E+000		1.5293E-001
	1004.76	17.90	6.2658E-001		6.0082E-001
	1274.45	35.50	2.6631E-001		3.9878E-002
Eu-155	86.54	30.90	1.9918E+000	1.93E+000	3.1389E+000
	105.31	20.70	1.9277E+000		2.3195E-001
Am-241	59.54	35.90	4.9300E+000	4.93E+000	-1.5744E-001
Cm-243	228.19	10.56	1.7546E+000	1.17E+000	1.3528E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1730E+000	1.17E+000	5.9062E-001

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

Report Generated On 6/28/2006 8:05:37 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: NOL-03-02-111
Sample Title: NOL-03-02-111-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/28/2006 7:55:33 AM
Live Time: 600.0 seconds
Real Time: 601.3 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: GRN7780
Log Number: NOL-03-02-111
Title: NOL-03-02-111-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	2421-	2445	2433.08	608.23	2.38	2.00E+002	45.37	8.14E+001
2	3430-	3442	3435.72	858.89	0.60	1.79E+001	21.17	3.71E+001
3	3629-	3654	3640.40	910.06	0.59	1.63E+002	40.60	6.30E+001
4	3862-	3876	3870.45	967.58	1.29	5.36E+001	27.27	4.84E+001
5	4847-	4859	4852.95	1213.21	0.28	1.70E+001	16.07	1.90E+001
6	5822-	5853	5837.72	1459.40	2.60	9.11E+002	59.81	4.03E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: GRN7780

Nuclide Library: C:\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	1.99885E+001	2.08358E+000
Bi-214	0.380	609.31*	46.30	8.02921E-001	2.07569E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.597	338.32	11.40		
		911.07*	27.70	1.19622E+000	3.28203E-001
		969.11*	16.60	6.65798E-001	3.45935E-001

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

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

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

Spectrum File:GRN7780

Nuclide Library: C:\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	1.998851E+001	2.083585E+000
Bi-214	0.380	8.029211E-001	2.075689E-001
Ac-228	0.597	9.449528E-001	2.380966E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	858.89	2.9841E-002	118.26
5	1213.21	2.8403E-002	94.32

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

Errors quoted at 1.960 sigma

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

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.3461E-001	1.01E-001	6.1233E-002
	1332.49	100.00	1.0075E-001		-3.9239E-004
Nb-94	702.63	100.00	1.2261E-001	1.07E-001	-7.6241E-002
	871.10	100.00	1.0726E-001		-9.0645E-003
Ag-108m	79.20	7.10	1.1693E+001	1.51E-001	-1.6345E+001
	433.93	89.90	1.5328E-001		7.8100E-002
	614.37	90.40	1.6115E-001		-1.2183E-001
	722.95	90.50	1.5088E-001		8.0234E-002
Sb-125	176.33	6.89	4.2126E+000	5.87E-001	1.7121E+000
	427.89	29.33	5.8656E-001		-2.4498E-001
	463.38	10.35	1.7498E+000		1.0426E+000
	600.56	17.80	9.1749E-001		-6.5810E-001
	606.64	5.02	4.3455E+000		5.9839E+000
	635.90	11.32	1.4376E+000		7.4420E-001
Cs-134	563.23	8.38	2.3285E+000	2.03E-001	1.6645E+000
	569.32	15.43	1.1936E+000		5.9935E-001
	604.70	97.60	2.4065E-001		-5.3775E-002
	795.84	85.40	2.0262E-001		1.5311E-001
	801.93	8.73	1.7949E+000		-8.3796E-001
Cs-137	661.65	85.12	1.5142E-001	1.51E-001	-1.2479E-001
Eu-152	121.78	28.40	1.1935E+000	4.43E-001	8.1226E-001
	244.69	7.49	2.6807E+000		-2.0628E+000
	344.27	26.50	5.9890E-001		-3.9460E-001
	778.89	12.74	9.4494E-001		-5.8949E-001
	867.32	4.16	2.7988E+000		8.3966E-001
	964.01	14.40	1.0808E+000		8.5401E-001
	1085.78	10.00	1.1502E+000		3.3854E-001
	1112.02	13.30	9.2773E-001		-1.0356E+000
	1407.95	20.70	4.4291E-001		1.7273E-001
Eu-154	123.07	40.50	8.4621E-001	3.26E-001	-2.0581E-001
	247.94	6.60	2.9133E+000		-8.9486E-001
	591.81	4.83	2.8680E+000		7.2975E-001
	723.30	19.70	7.5360E-001		6.0926E-001
	756.87	4.33	2.8922E+000		1.2919E+000
	873.19	11.50	1.0622E+000		1.1945E+000
	996.32	10.30	1.2618E+000		-1.4909E-001
	1004.76	17.90	6.7608E-001		1.3890E-001
	1274.45	35.50	3.2603E-001		-9.4515E-002
Eu-155	86.54	30.90	2.3874E+000	2.32E+000	3.4744E+000
	105.31	20.70	2.3229E+000		-3.2807E-001
Am-241	59.54	35.90	5.2851E+000	5.29E+000	1.6252E-001
Cm-243	228.19	10.56	1.8370E+000	1.25E+000	-3.4104E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2509E+000	1.25E+000	1.9821E-001

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

Report Generated On 6/28/2006 1:06:44 AM

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

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

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: NOL-03-02-112-F-
Sample Title: NOL-03-02-112-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/28/2006 12:56:40 AM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: ORG7829
Log Number: NOL-03-02-112-F-
Title: NOL-03-02-112-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	308	291.19	72.80	1.16	2.10E+002	52.69	1.18E+003
m	2	282-	308	300.16	75.04	1.16	3.62E+002	59.31	1.32E+003
	3	332-	346	340.27	85.07	0.60	1.56E+002	117.19	1.18E+003
	4	947-	959	953.33	238.35	1.02	2.07E+002	61.72	2.98E+002
	5	1344-	1356	1351.50	337.90	0.69	5.65E+001	41.30	1.47E+002
	6	1398-	1414	1405.44	351.38	1.18	1.17E+002	52.10	1.86E+002
	7	2321-	2337	2328.72	582.22	1.36	1.27E+002	36.09	6.67E+001
	8	2423-	2441	2432.98	608.29	0.74	1.44E+002	35.42	5.36E+001
	9	3630-	3648	3639.16	909.85	0.82	1.37E+002	30.94	3.33E+001
	10	3862-	3879	3870.25	967.63	0.45	5.60E+001	31.49	6.20E+001
	11	4467-	4481	4474.08	1118.60	0.39	5.70E+001	20.20	1.70E+001
	12	5823-	5849	5836.09	1459.13	1.54	7.89E+002	57.61	1.70E+001
	13	7044-	7058	7050.40	1762.73	0.78	3.30E+001	15.06	9.02E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: 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	0.911	1460.81*	10.67	1.79258E+001	1.95427E+000
TL-208	0.453	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.84101E-001	8.86158E-002
		860.37	12.46		
Pb-212	0.592	74.81* @	10.70	1.40854E+001	3.59955E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.75622E-001	2.27574E-001
Bi-214	0.941	609.31*	46.30	5.94633E-001	1.63262E-001
		1120.29*	15.10	8.40773E-001	3.11000E-001
		1764.49*	15.80	5.36063E-001	2.50553E-001
Ac-228	0.954	338.32*	11.40	7.84897E-001	5.86551E-001
		911.07*	27.70	1.04051E+000	2.64203E-001
		969.11*	16.60	7.22477E-001	4.13380E-001

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

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

I N T E R 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	0.911	1.792578E+001	1.954275E+000
TL-208	0.453	2.841010E-001	8.861581E-002
Pb-212 @	0.592	6.756218E-001	2.275738E-001
Bi-214	0.941	6.199027E-001	1.252097E-001
Ac-228	0.954	9.277023E-001	2.081322E-001

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

Errors quoted at 1.960 sigma

U N I D E N T I F 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	3.5058E-001	25.05
3	85.07	2.6033E-001	75.03
6	351.38	1.9427E-001	44.70

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

Errors quoted at 1.960 sigma

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

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.2936E-001	9.41E-002	-1.5714E-001
	1332.49	100.00	9.4141E-002		-5.6807E-002
Nb-94	702.63	100.00	1.1795E-001	1.09E-001	1.1839E-001
	871.10	100.00	1.0928E-001		-5.6916E-002
Ag-108m	79.20	7.10	1.1295E+001	1.39E-001	-3.0597E+000
	433.93	89.90	1.6115E-001		2.0515E-001
	614.37	90.40	1.5604E-001		-4.5100E-003
	722.95	90.50	1.3896E-001		-3.2471E-002
Sb-125	176.33	6.89	3.2261E+000	5.11E-001	8.2614E-001
	427.89	29.33	5.1082E-001		9.5565E-002
	463.38	10.35	1.3405E+000		8.5719E-001
	600.56	17.80	7.1467E-001		3.8172E-001
	606.64	5.02	3.1558E+000		4.3845E+000
	635.90	11.32	1.0337E+000		-1.4190E-001
Cs-134	563.23	8.38	1.5364E+000	1.42E-001	-8.8758E-002
	569.32	15.43	8.5303E-001		4.6677E-001
	604.70	97.60	1.6135E-001		-3.7742E-002
	795.84	85.40	1.4154E-001		1.4310E-001
	801.93	8.73	1.2985E+000		-5.6269E-002
Cs-137	661.65	85.12	1.5565E-001	1.56E-001	1.4903E-001
Eu-152	121.78	28.40	1.1145E+000	4.09E-001	-1.4326E-001
	244.69	7.49	2.4976E+000		2.3809E+000
	344.27	26.50	5.5613E-001		-1.5655E-001
	778.89	12.74	8.8073E-001		-1.3903E+000
	867.32	4.16	2.5804E+000		6.0347E-001
	964.01	14.40	1.0589E+000		1.2144E+000
	1085.78	10.00	1.1080E+000		1.8533E-001
	1112.02	13.30	8.6462E-001		1.8134E-001
	1407.95	20.70	4.0862E-001		3.2854E-001
Eu-154	123.07	40.50	7.7246E-001	3.13E-001	4.8789E-001
	247.94	6.60	2.7691E+000		-1.9659E+000
	591.81	4.83	2.6008E+000		-5.6811E-001
	723.30	19.70	6.4026E-001		9.8962E-002
	756.87	4.33	2.9592E+000		-3.3251E-001
	873.19	11.50	9.5865E-001		1.1000E-001
	996.32	10.30	1.0797E+000		-2.3788E-001
	1004.76	17.90	6.2533E-001		-2.9134E-002
	1274.45	35.50	3.1267E-001		1.6121E-002
Eu-155	86.54	30.90	1.9750E+000	1.96E+000	3.5028E+000
	105.31	20.70	1.9557E+000		-6.1650E-001
Am-241	59.54	35.90	4.4866E+000	4.49E+000	7.5549E-001
Cm-243	228.19	10.56	1.7793E+000	1.23E+000	9.8973E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2303E+000	1.23E+000	5.1983E-001

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

Report Generated On 6/28/2006 12:53:04 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: NOL-03-02-113-F-
Sample Title: NOL-03-02-113-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/28/2006 12:43:00 AM
Live Time: 600.0 seconds
Real Time: 600.9 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: ORG7829
Log Number: NOL-03-02-113-F-
Title: NOL-03-02-113-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	309	291.59	72.90	1.11	1.85E+002	48.40	8.04E+002
m	2	286-	309	300.27	75.07	1.11	3.76E+002	57.54	1.04E+003
	3	335-	344	338.69	84.68	0.68	9.03E+001	81.49	7.21E+002
	4	947-	959	953.41	238.37	1.26	1.45E+002	57.63	2.73E+002
	5	1342-	1361	1352.19	338.07	0.65	6.76E+001	50.79	1.72E+002
	6	1398-	1415	1405.07	351.29	1.00	7.57E+001	48.76	1.65E+002
	7	2320-	2338	2329.33	582.37	0.66	1.01E+002	35.83	6.90E+001
	8	2426-	2445	2433.76	608.48	1.16	1.45E+002	34.75	4.89E+001
	9	3631-	3648	3639.77	910.01	1.03	8.20E+001	29.25	4.30E+001
	10	3862-	3879	3869.02	967.32	0.79	6.25E+001	23.38	2.45E+001
	11	5825-	5848	5835.91	1459.08	1.77	6.73E+002	53.02	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: 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	0.906	1460.81*	10.67	1.52959E+001	1.72762E+000
TL-208	0.458	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.25447E-001	8.51606E-002
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	1.46395E+001	3.63893E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	4.71936E-001	2.02090E-001
Bi-214	0.389	609.31*	46.30	5.97799E-001	1.60966E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.951	338.32*	11.40	9.38614E-001	7.20447E-001
		911.07*	27.70	6.24165E-001	2.33911E-001
		969.11*	16.60	8.06610E-001	3.13439E-001

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

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

I N T E R 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	0.906	1.529592E+001	1.727618E+000
TL-208	0.458	2.254473E-001	8.516059E-002
Pb-212 @	0.593	4.719356E-001	2.020897E-001
Bi-214	0.389	5.977988E-001	1.609664E-001
Ac-228	0.951	7.052287E-001	1.814228E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.90	3.0833E-001	26.16
3	84.68	1.5044E-001	90.28
6	351.29	1.2621E-001	64.39

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.1207E-001	9.41E-002	6.0970E-002
	1332.49	100.00	9.4141E-002		5.0121E-002
Nb-94	702.63	100.00	1.2206E-001	1.07E-001	3.6380E-002
	871.10	100.00	1.0652E-001		-1.5057E-002
Ag-108m	79.20	7.10	1.0770E+001	1.37E-001	-6.1524E+000
	433.93	89.90	1.3931E-001		2.9719E-002
	614.37	90.40	1.3930E-001		-1.4874E-002
	722.95	90.50	1.3695E-001		7.2428E-002
Sb-125	176.33	6.89	2.9853E+000	4.35E-001	2.6931E+000
	427.89	29.33	4.3536E-001		-2.2776E-001
	463.38	10.35	1.1690E+000		5.4972E-001
	600.56	17.80	6.9648E-001		1.3065E-001
	606.64	5.02	3.0834E+000		4.2590E+000
	635.90	11.32	9.5353E-001		-4.5241E-001
Cs-134	563.23	8.38	1.4434E+000	1.23E-001	4.5655E-001
	569.32	15.43	7.4145E-001		-2.5369E-001
	604.70	97.60	1.6029E-001		-6.5086E-002
	795.84	85.40	1.2278E-001		5.9746E-003
	801.93	8.73	1.1441E+000		-1.6650E-001
Cs-137	661.65	85.12	1.3805E-001	1.38E-001	6.3381E-002
Eu-152	121.78	28.40	1.0622E+000	4.20E-001	-1.4630E-001
	244.69	7.49	2.3183E+000		-1.0155E-001
	344.27	26.50	5.2107E-001		-5.4190E-002
	778.89	12.74	8.7077E-001		4.6088E-001
	867.32	4.16	2.5692E+000		2.3924E-001
	964.01	14.40	9.3122E-001		1.0536E+000
	1085.78	10.00	1.0721E+000		-1.0243E-001
	1112.02	13.30	8.1907E-001		-2.2469E-001
	1407.95	20.70	4.2000E-001		3.5798E-001
Eu-154	123.07	40.50	7.4423E-001	3.13E-001	6.1606E-001
	247.94	6.60	2.6518E+000		1.8040E+000
	591.81	4.83	2.4432E+000		-4.2515E-001
	723.30	19.70	6.3107E-001		3.0233E-001
	756.87	4.33	2.6226E+000		-4.0966E-001
	873.19	11.50	9.3883E-001		2.6326E-002
	996.32	10.30	1.0514E+000		8.3145E-001
	1004.76	17.90	5.9520E-001		5.5294E-001
	1274.45	35.50	3.1267E-001		3.4799E-001
Eu-155	86.54	30.90	1.8568E+000	1.86E+000	1.4995E+000
	105.31	20.70	1.8552E+000		2.8098E-001
Am-241	59.54	35.90	4.3395E+000	4.34E+000	-1.0607E+000
Cm-243	228.19	10.56	1.6745E+000	1.12E+000	3.1341E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1181E+000	1.12E+000	1.3026E-001

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

Report Generated On 6/27/2006 10:42:26 PM

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

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

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: NOL-03-02-114-F-
Sample Title: NOL-03-02-114-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 10:32:25 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: ORG7829
Log Number: NOL-03-02-114-F-
Title: NOL-03-02-114-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	305	290.61	72.65	1.17	2.27E+002	50.76	1.01E+003
m	2	282-	305	300.07	75.02	1.17	4.01E+002	60.88	1.14E+003
	3	331-	345	339.62	84.91	0.59	9.58E+001	112.05	1.10E+003
	4	947-	958	953.24	238.32	1.10	1.81E+002	56.94	2.65E+002
	5	1399-	1412	1405.45	351.38	1.14	9.41E+001	41.80	1.31E+002
	6	2319-	2337	2328.59	582.19	1.10	1.43E+002	39.19	7.54E+001
	7	2425-	2444	2433.15	608.33	1.76	1.36E+002	38.22	6.98E+001
	8	3631-	3648	3639.37	909.91	0.49	1.07E+002	29.86	3.84E+001
	9	3865-	3878	3870.83	967.78	1.55	4.75E+001	23.25	3.35E+001
	10	4468-	4482	4475.11	1118.86	0.35	3.85E+001	19.93	2.25E+001
	11	5824-	5848	5836.06	1459.12	1.68	7.78E+002	57.33	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: 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	0.910	1460.81*	10.67	1.76813E+001	1.93543E+000
TL-208	0.452	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.18038E-001	9.67558E-002
		860.37	12.46		
Pb-212	0.592	74.81* @	10.70	1.56468E+001	3.87781E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.90457E-001	2.07588E-001
Bi-214	0.673	609.31*	46.30	5.60753E-001	1.71916E-001
		1120.29*	15.10	5.67757E-001	3.00070E-001
		1764.49	15.80		
Ac-228	0.594	338.32	11.40		
		911.07*	27.70	8.11232E-001	2.45661E-001
		969.11*	16.60	6.13669E-001	3.06951E-001

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

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

I N T E R 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	0.910	1.768132E+001	1.935429E+000
TL-208	0.452	3.180376E-001	9.675578E-002
Pb-212 @	0.592	5.904571E-001	2.075883E-001
Bi-214	0.673	5.624836E-001	1.491689E-001
Ac-228	0.594	7.340959E-001	1.917987E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.65	3.7830E-001	22.36
3	84.91	1.5972E-001	116.92
5	351.38	1.5692E-001	44.40

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

Errors quoted at 1.960 sigma

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

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.2434E-001	9.48E-002	9.4473E-002
	1332.49	100.00	9.4824E-002		1.1109E-002
Nb-94	702.63	100.00	1.2170E-001	1.09E-001	-5.4610E-002
	871.10	100.00	1.0883E-001		5.6372E-002
Ag-108m	79.20	7.10	1.1304E+001	1.44E-001	-8.2704E+000
	433.93	89.90	1.4687E-001		-7.0384E-002
	614.37	90.40	1.5012E-001		2.1935E-002
	722.95	90.50	1.4404E-001		2.0862E-002
Sb-125	176.33	6.89	3.1012E+000	4.64E-001	-1.6509E+000
	427.89	29.33	4.6435E-001		1.9597E-001
	463.38	10.35	1.3662E+000		1.3730E-001
	600.56	17.80	7.2359E-001		-5.8404E-001
	606.64	5.02	3.1913E+000		4.7229E+000
	635.90	11.32	1.0868E+000		1.0005E+000
Cs-134	563.23	8.38	1.4123E+000	1.42E-001	-4.2733E-001
	569.32	15.43	7.7838E-001		1.5430E-001
	604.70	97.60	1.6602E-001		-3.6373E-002
	795.84	85.40	1.4200E-001		8.5784E-002
	801.93	8.73	1.3081E+000		-2.5807E-001
Cs-137	661.65	85.12	1.4935E-001	1.49E-001	-4.1330E-002
Eu-152	121.78	28.40	1.1024E+000	3.59E-001	-7.7600E-001
	244.69	7.49	2.3991E+000		-6.5092E-001
	344.27	26.50	5.8152E-001		4.3998E-001
	778.89	12.74	8.9056E-001		-9.0429E-001
	867.32	4.16	2.5804E+000		-9.4483E-001
	964.01	14.40	9.8083E-001		1.6127E+000
	1085.78	10.00	1.0349E+000		-1.1260E+000
	1112.02	13.30	7.7894E-001		-8.1732E-002
	1407.95	20.70	3.5918E-001		2.3637E-002
Eu-154	123.07	40.50	7.6970E-001	3.06E-001	6.7137E-001
	247.94	6.60	2.7151E+000		8.8046E-004
	591.81	4.83	2.7238E+000		-3.1835E-002
	723.30	19.70	6.6000E-001		-3.7010E-002
	756.87	4.33	2.7516E+000		-6.5567E-003
	873.19	11.50	9.7805E-001		2.0738E-001
	996.32	10.30	1.0024E+000		-9.6952E-001
	1004.76	17.90	5.9801E-001		6.1674E-002
	1274.45	35.50	3.0632E-001		1.7980E-001
Eu-155	86.54	30.90	1.8916E+000	1.89E+000	-2.0561E-002
	105.31	20.70	1.9920E+000		1.0425E+000
Am-241	59.54	35.90	4.5906E+000	4.59E+000	-2.5439E+000
Cm-243	228.19	10.56	1.7253E+000	1.18E+000	-2.9417E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1799E+000	1.18E+000	6.6547E-001

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

Report Generated On 6/27/2006 10:29:38 PM

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

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

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: NOL-03-02-115-F-
Sample Title: NOL-03-02-115-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 10:19:37 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: ORG7829
Log Number: NOL-03-02-115-F-
Title: NOL-03-02-115-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	305	291.15	72.79	0.91	1.83E+002	49.68	8.95E+002
m	2	282-	305	299.94	74.99	0.91	2.49E+002	54.91	9.70E+002
	3	332-	346	339.62	84.91	0.59	1.18E+002	114.31	1.13E+003
	4	948-	961	953.46	238.38	1.52	1.98E+002	61.00	2.77E+002
M	5	1155-	1185	1159.17	289.81	0.68	3.13E+001	19.72	1.10E+002
m	6	1155-	1185	1178.34	294.60	0.69	4.49E+001	22.76	1.25E+002
	7	1398-	1411	1405.89	351.49	0.92	7.82E+001	42.43	1.42E+002
	8	2032-	2050	2038.23	509.59	0.53	1.13E+002	42.71	1.07E+002
	9	2323-	2340	2328.42	582.15	1.01	1.61E+002	35.23	4.98E+001
	10	2425-	2442	2433.13	608.32	1.42	1.11E+002	36.04	6.96E+001
	11	3631-	3648	3639.27	909.88	1.18	1.18E+002	29.58	3.35E+001
	12	3862-	3878	3869.79	967.52	1.01	4.57E+001	27.81	4.93E+001
	13	5823-	5850	5836.30	1459.18	1.95	6.79E+002	53.15	1.31E+001

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: ORG7829

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
ANN	0.936	511.00*		100.00	2.02903E-001	8.14508E-002
K-40	0.916	1460.81*		10.67	1.54242E+001	1.73710E+000
TL-208	0.722	277.35		6.80		
		510.84*		21.60	9.39365E-001	3.84811E-001
		583.14*		84.20	3.59613E-001	9.14968E-002
		860.37		12.46		
Pb-212	0.593	74.81*	@	10.70	9.72837E+000	2.86923E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.46270E-001	2.23383E-001
Bi-214	0.383	609.31*		46.30	4.58930E-001	1.58858E-001
		1120.29		15.10		
		1764.49		15.80		
PB-214	0.622	74.82*	@	6.21	1.67623E+001	5.09131E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	3.57979E-001	1.91257E-001
		351.92*		37.20	3.35869E-001	1.90715E-001
Ac-228	0.586	338.32		11.40		
		911.07*		27.70	9.01592E-001	2.47915E-001
		969.11*		16.60	5.89729E-001	3.64217E-001

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

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

I N T E R 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		0.936	1.252264E-001	8.377595E-002
K-40		0.916	1.542417E+001	1.737096E+000
TL-208		0.722	3.596132E-001	9.074314E-002
Pb-212	@	0.593	6.462701E-001	2.233825E-001
Bi-214		0.383	4.589298E-001	1.588580E-001
PB-214	@	0.622	3.468928E-001	1.350469E-001
Ac-228		0.586	8.028488E-001	2.049427E-001

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

Errors quoted at 1.960 sigma

U N I D E N T I F 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	3.0521E-001	27.13
3	84.91	1.9724E-001	96.59
M 5	289.81	5.2133E-002	63.03

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

Errors quoted at 1.960 sigma

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

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.1310E-001	1.01E-001	1.1725E-002
	1332.49	100.00	1.0138E-001		8.5752E-002
Nb-94	702.63	100.00	1.1048E-001	1.10E-001	-7.1921E-003
	871.10	100.00	1.1758E-001		-8.0329E-002
Ag-108m	79.20	7.10	1.0973E+001	1.36E-001	-8.0095E+000
	433.93	89.90	1.5611E-001		5.1127E-002
	614.37	90.40	1.4499E-001		6.7317E-003
	722.95	90.50	1.3614E-001		4.5199E-002
Sb-125	176.33	6.89	3.0861E+000	4.55E-001	-2.9468E-002
	427.89	29.33	4.5463E-001		-3.1029E-001
	463.38	10.35	1.2401E+000		-1.1517E-001
	600.56	17.80	7.0381E-001		6.0375E-002
	606.64	5.02	3.1506E+000		5.1668E+000
	635.90	11.32	1.0401E+000		-1.3558E-001
Cs-134	563.23	8.38	1.5255E+000	1.39E-001	8.8510E-001
	569.32	15.43	8.6450E-001		1.0701E+000
	604.70	97.60	1.6266E-001		-8.9516E-003
	795.84	85.40	1.3876E-001		6.8881E-002
	801.93	8.73	1.2290E+000		-2.2411E-001
Cs-137	661.65	85.12	1.4319E-001	1.43E-001	3.7489E-002
Eu-152	121.78	28.40	1.0812E+000	4.24E-001	1.3728E-001
	244.69	7.49	2.3492E+000		-4.2189E-002
	344.27	26.50	5.6543E-001		-2.5379E-001
	778.89	12.74	8.5392E-001		1.1600E-001
	867.32	4.16	2.8838E+000		1.7087E+000
	964.01	14.40	9.9094E-001		9.1533E-001
	1085.78	10.00	1.1524E+000		8.0632E-001
	1112.02	13.30	8.9720E-001		-8.6576E-001
	1407.95	20.70	4.2372E-001		6.0377E-002
Eu-154	123.07	40.50	7.4769E-001	2.86E-001	-1.6393E-001
	247.94	6.60	2.6518E+000		1.8092E-001
	591.81	4.83	2.4573E+000		1.1438E+000
	723.30	19.70	6.2549E-001		-1.5292E-001
	756.87	4.33	2.8917E+000		2.5097E+000
	873.19	11.50	1.0519E+000		1.0067E+000
	996.32	10.30	1.1252E+000		5.4070E-001
	1004.76	17.90	6.1997E-001		3.1443E-001
	1274.45	35.50	2.8639E-001		-1.0542E-001
Eu-155	86.54	30.90	1.9207E+000	1.90E+000	1.8913E+000
	105.31	20.70	1.8968E+000		5.8402E-001
Am-241	59.54	35.90	4.6195E+000	4.62E+000	-3.5559E-001
Cm-243	228.19	10.56	1.7770E+000	1.19E+000	8.4193E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1908E+000	1.19E+000	-5.3921E-001

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

Report Generated On 6/27/2006 10:16:33 PM

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

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

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: NOL-03-02-116-F-
Sample Title: NOL-03-02-116-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 10:06:32 PM
Live Time: 600.0 seconds
Real Time: 600.9 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: ORG7829
Log Number: NOL-03-02-116-F-
Title: NOL-03-02-116-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	297-	305	300.44	75.11	0.88	2.57E+002	79.95	6.54E+002
2	942-	959	953.29	238.34	0.98	1.86E+002	69.10	3.25E+002
3	1395-	1412	1405.49	351.39	0.96	1.15E+002	48.22	1.51E+002
4	2243-	2252	2247.14	561.82	0.49	1.75E+001	20.33	3.85E+001
5	2320-	2337	2329.24	582.35	0.60	9.64E+001	39.79	9.66E+001
6	2425-	2443	2434.05	608.56	1.76	1.04E+002	39.49	8.71E+001
7	2899-	2910	2904.06	726.06	0.27	2.24E+001	21.88	4.06E+001
8	3631-	3648	3640.20	910.11	0.65	9.90E+001	32.48	5.40E+001
9	3862-	3878	3870.04	967.58	0.91	8.28E+001	27.88	3.83E+001
10	4470-	4481	4475.89	1119.05	0.77	2.99E+001	20.36	3.11E+001
11	5825-	5849	5836.76	1459.30	1.90	7.58E+002	56.85	2.08E+001
12	7043-	7056	7049.42	1762.48	0.27	3.56E+001	16.40	1.24E+001

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: ORG7829

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.927	1460.81*	10.67	1.72261E+001	1.90097E+000
TL-208	0.458	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.15155E-001	9.30990E-002
		860.37	12.46		
Bi-212	0.960	727.17*	11.80	3.79843E-001	3.74143E-001
Pb-212	0.592	74.81* @	10.70	9.96939E+000	3.66718E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.06131E-001	2.44700E-001
Bi-214	0.952	609.31*	46.30	4.27750E-001	1.70970E-001
		1120.29*	15.10	4.40676E-001	3.03883E-001
		1764.49*	15.80	5.79351E-001	2.72757E-001
Ac-228	0.595	338.32	11.40		
		911.07*	27.70	7.53332E-001	2.61921E-001
		969.11*	16.60	1.06798E+000	3.76951E-001

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

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

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

Spectrum File: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	0.927	1.722606E+001	1.900972E+000
TL-208	0.458	2.151547E-001	9.309902E-002
Bi-212	0.960	3.798428E-001	3.741432E-001
Pb-212 @	0.592	6.061313E-001	2.447002E-001
Bi-214	0.952	4.649885E-001	1.307655E-001
Ac-228	0.595	8.557810E-001	2.150941E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.39	1.9219E-001	41.81
4	561.82	2.9226E-002	115.92

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

Errors quoted at 1.960 sigma

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

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.2341E-001	1.02E-001	7.2726E-002
	1332.49	100.00	1.0202E-001		9.1922E-002
Nb-94	702.63	100.00	1.1487E-001	1.05E-001	2.6757E-002
	871.10	100.00	1.0463E-001		-1.0561E-001
Ag-108m	79.20	7.10	1.0470E+001	1.45E-001	-1.5030E+001
	433.93	89.90	1.5534E-001		1.1104E-001
	614.37	90.40	1.5079E-001		6.1377E-002
	722.95	90.50	1.4518E-001		1.1034E-001
Sb-125	176.33	6.89	2.8956E+000	4.68E-001	-2.5452E-001
	427.89	29.33	4.6834E-001		-2.9072E-002
	463.38	10.35	1.1690E+000		-1.0102E+000
	600.56	17.80	7.0199E-001		5.8225E-002
	606.64	5.02	3.1301E+000		4.5909E+000
	635.90	11.32	1.0776E+000		6.5537E-001
Cs-134	563.23	8.38	1.4888E+000	1.34E-001	-4.5941E-001
	569.32	15.43	7.8261E-001		3.0375E-001
	604.70	97.60	1.5788E-001		-3.2165E-002
	795.84	85.40	1.3398E-001		1.5559E-001
	801.93	8.73	1.2442E+000		-3.2885E-002
Cs-137	661.65	85.12	1.4403E-001	1.44E-001	-7.4477E-002
Eu-152	121.78	28.40	1.0386E+000	3.41E-001	3.9944E-001
	244.69	7.49	2.2212E+000		9.8893E-003
	344.27	26.50	5.3926E-001		-1.4527E-001
	778.89	12.74	8.9381E-001		1.6201E-001
	867.32	4.16	2.6244E+000		-1.6940E+000
	964.01	14.40	1.0328E+000		1.4742E+000
	1085.78	10.00	1.0510E+000		-1.2050E+000
	1112.02	13.30	9.6217E-001		4.8141E-001
	1407.95	20.70	3.4096E-001		-9.0915E-002
Eu-154	123.07	40.50	7.1508E-001	2.74E-001	-2.7107E-003
	247.94	6.60	2.4425E+000		-2.0214E-001
	591.81	4.83	2.5198E+000		-9.7387E-001
	723.30	19.70	6.7051E-001		5.2642E-001
	756.87	4.33	2.6601E+000		-8.7453E-001
	873.19	11.50	9.5865E-001		-6.2196E-003
	996.32	10.30	1.0562E+000		-7.9907E-002
	1004.76	17.90	5.9801E-001		3.7456E-001
	1274.45	35.50	2.7405E-001		-2.0821E-001
Eu-155	86.54	30.90	1.8291E+000	1.82E+000	2.4615E+000
	105.31	20.70	1.8239E+000		-1.4134E-001
Am-241	59.54	35.90	4.3599E+000	4.36E+000	1.7760E+000
Cm-243	228.19	10.56	1.6372E+000	1.11E+000	1.2581E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1146E+000	1.11E+000	2.1505E-001

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

Report Generated On 6/27/2006 10:00:43 PM

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

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

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: NOL-03-02-117-F-
Sample Title: NOL-03-02-117-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 9:50:42 PM
Live Time: 600.0 seconds
Real Time: 600.9 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: ORG7829
Log Number: NOL-03-02-117-F-
Title: NOL-03-02-117-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	306	291.02	72.76	1.01	2.28E+002	49.50	8.79E+002
m	2	282-	306	300.32	75.08	1.02	3.52E+002	56.55	9.73E+002
	3	943-	962	953.29	238.34	1.39	2.03E+002	79.74	4.13E+002
	4	1345-	1358	1351.19	337.82	0.77	4.14E+001	42.18	1.52E+002
	5	1399-	1414	1405.66	351.44	1.53	9.10E+001	45.91	1.52E+002
	6	2031-	2049	2040.77	510.23	0.45	8.51E+001	44.56	1.28E+002
	7	2319-	2337	2328.94	582.27	1.64	1.35E+002	41.44	9.10E+001
	8	2424-	2441	2433.54	608.43	1.38	1.04E+002	37.64	8.11E+001
	9	3632-	3647	3640.19	910.11	1.09	1.04E+002	26.44	2.60E+001
	10	3865-	3878	3871.12	967.85	0.78	3.91E+001	24.83	4.39E+001
	11	5823-	5849	5836.49	1459.23	1.78	8.26E+002	60.66	3.02E+001

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: ORG7829

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
ANN	0.980	511.00*		100.00	1.52734E-001	8.26483E-002
K-40	0.920	1460.81*		10.67	1.87616E+001	2.05102E+000
TL-208	0.734	277.35		6.80		
		510.84*		21.60	7.07103E-001	3.86964E-001
		583.14*		84.20	3.01149E-001	1.00441E-001
		860.37		12.46		
Pb-212	0.592	74.81*	@	10.70	1.36708E+001	3.46576E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.61809E-001	2.80123E-001
Bi-214	0.387	609.31*		46.30	4.27933E-001	1.63752E-001
		1120.29		15.10		
		1764.49		15.80		
Ac-228	0.968	338.32*		11.40	5.74830E-001	5.92566E-001
		911.07*		27.70	7.91627E-001	2.20881E-001
		969.11*		16.60	5.04968E-001	3.24802E-001

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

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

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

Spectrum File:ORG7829

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

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
ANN	0.980	8.768609E-002	8.542214E-002
K-40	0.920	1.876160E+001	2.051023E+000
TL-208	0.734	3.011490E-001	9.996055E-002
Pb-212 @	0.592	6.618089E-001	2.801229E-001
Bi-214	0.387	4.279332E-001	1.637515E-001
Ac-228	0.968	6.900340E-001	1.745447E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.76	3.7987E-001	21.72
5	351.44	1.5168E-001	50.44

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

Errors quoted at 1.960 sigma

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

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.3288E-001	9.21E-002	9.0843E-002
	1332.49	100.00	9.2059E-002		7.4791E-003
Nb-94	702.63	100.00	1.2388E-001	1.14E-001	3.4258E-002
	871.10	100.00	1.1373E-001		9.2144E-002
Ag-108m	79.20	7.10	1.0544E+001	1.47E-001	-1.2411E+001
	433.93	89.90	1.5143E-001		-8.6711E-002
	614.37	90.40	1.5012E-001		1.1519E-002
	722.95	90.50	1.4670E-001		6.0155E-002
Sb-125	176.33	6.89	2.9350E+000	4.55E-001	-1.8521E-001
	427.89	29.33	4.5544E-001		-4.6239E-001
	463.38	10.35	1.2803E+000		8.3327E-001
	600.56	17.80	7.1287E-001		8.1579E-002
	606.64	5.02	3.1250E+000		4.3875E+000
	635.90	11.32	1.0715E+000		-3.8660E-001
Cs-134	563.23	8.38	1.4434E+000	1.49E-001	2.4385E-001
	569.32	15.43	8.0133E-001		8.2919E-001
	604.70	97.60	1.6135E-001		2.4089E-002
	795.84	85.40	1.4870E-001		-5.8497E-003
	801.93	8.73	1.4181E+000		5.8066E-001
Cs-137	661.65	85.12	1.4895E-001	1.49E-001	1.1457E-001
Eu-152	121.78	28.40	1.0219E+000	3.76E-001	-1.6958E-001
	244.69	7.49	2.2870E+000		-1.4299E+000
	344.27	26.50	5.3252E-001		-1.7121E-001
	778.89	12.74	9.6246E-001		-3.2866E-001
	867.32	4.16	2.7103E+000		-1.6796E-001
	964.01	14.40	9.7317E-001		1.2329E+000
	1085.78	10.00	1.0510E+000		-5.0239E-001
	1112.02	13.30	9.1824E-001		-1.7695E+000
	1407.95	20.70	3.7645E-001		-2.9079E-001
Eu-154	123.07	40.50	7.1125E-001	2.90E-001	2.9480E-002
	247.94	6.60	2.5590E+000		-9.5839E-001
	591.81	4.83	2.6598E+000		-1.5343E+000
	723.30	19.70	6.7051E-001		-3.3325E-002
	756.87	4.33	2.7063E+000		-1.0928E+000
	873.19	11.50	9.5865E-001		-4.2766E-001
	996.32	10.30	9.9224E-001		-1.1499E+000
	1004.76	17.90	6.5400E-001		7.0421E-001
	1274.45	35.50	2.8981E-001		-2.5165E-001
Eu-155	86.54	30.90	1.8287E+000	1.79E+000	2.2263E+000
	105.31	20.70	1.7930E+000		4.0219E-001
Am-241	59.54	35.90	4.3902E+000	4.39E+000	-1.6532E+000
Cm-243	228.19	10.56	1.6547E+000	1.11E+000	-4.7828E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1088E+000	1.11E+000	2.2939E-001

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

Report Generated On 6/27/2006 9:42:54 PM

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

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

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: NOL-03-02-118-F-
Sample Title: NOL-03-02-118-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 9:32:53 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: ORG7829
Log Number: NOL-03-02-118-F-
Title: NOL-03-02-118-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	309	291.66	72.91	1.13	2.31E+002	50.33	1.03E+003
m	2	282-	309	300.47	75.12	1.14	4.24E+002	59.13	1.10E+003
	3	331-	345	339.99	85.00	0.81	1.50E+002	111.93	1.08E+003
	4	947-	963	953.91	238.49	0.86	2.15E+002	70.93	3.47E+002
	5	1174-	1184	1179.50	294.89	0.54	4.73E+001	37.50	1.34E+002
	6	1398-	1412	1405.14	351.31	1.06	1.24E+002	43.74	1.30E+002
	7	2324-	2338	2328.88	582.26	0.66	1.11E+002	34.85	6.98E+001
	8	2425-	2444	2433.47	608.41	1.59	1.27E+002	40.84	8.78E+001
	9	2899-	2910	2904.61	726.20	0.65	3.52E+001	23.06	4.08E+001
	10	3632-	3648	3640.50	910.19	1.10	8.46E+001	28.47	4.04E+001
	11	3863-	3878	3870.14	967.60	1.23	5.54E+001	26.34	4.06E+001
	12	5824-	5849	5836.86	1459.32	2.14	8.73E+002	61.82	2.89E+001
	13	7044-	7058	7051.30	1762.95	0.80	4.11E+001	13.40	1.91E+000

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

Errors quoted at 1.960 sigma

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

N U C L I 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	0.929	1460.81*		10.67	1.98380E+001	2.13369E+000
TL-208	0.454	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	2.48179E-001	8.42062E-002
		860.37		12.46		
Bi-212	0.970	727.17*		11.80	5.97038E-001	3.97807E-001
Pb-212	0.593	74.81*	@	10.70	1.64468E+001	3.95678E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.02890E-001	2.56399E-001
Bi-214	0.666	609.31*		46.30	5.24015E-001	1.80170E-001
		1120.29		15.10		
		1764.49*		15.80	6.68037E-001	2.27827E-001
PB-214	0.621	74.82*	@	6.21	2.83383E+001	7.12124E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	3.76986E-001	3.05825E-001
		351.92*		37.20	5.34293E-001	2.08017E-001
Ac-228	0.598	338.32		11.40		
		911.07*		27.70	6.43740E-001	2.28984E-001
		969.11*		16.60	7.14813E-001	3.48130E-001

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

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

I N T E R 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		0.929	1.983799E+001	2.133690E+000
TL-208		0.454	2.481789E-001	8.420623E-002
Bi-212		0.970	5.970383E-001	3.978067E-001
Pb-212	@	0.593	7.028904E-001	2.563993E-001
Bi-214		0.666	5.794292E-001	1.413198E-001
PB-214	@	0.621	4.845352E-001	1.720002E-001
Ac-228		0.598	6.652032E-001	1.913097E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.91	3.8478E-001	21.80
3	85.00	2.4965E-001	74.73

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

Errors quoted at 1.960 sigma

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

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.2619E-001	1.03E-001	1.2699E-001
	1332.49	100.00	1.0327E-001		1.9814E-002
Nb-94	702.63	100.00	1.2170E-001	1.14E-001	-7.7919E-002
	871.10	100.00	1.1417E-001		-2.1087E-002
Ag-108m	79.20	7.10	1.1023E+001	1.42E-001	-8.4962E+000
	433.93	89.90	1.4159E-001		-7.9963E-002
	614.37	90.40	1.6205E-001		6.4693E-002
	722.95	90.50	1.4782E-001		7.6284E-002
Sb-125	176.33	6.89	3.0695E+000	4.35E-001	1.1029E+000
	427.89	29.33	4.3451E-001		2.2268E-001
	463.38	10.35	1.3047E+000		7.5114E-001
	600.56	17.80	7.2359E-001		-4.9314E-001
	606.64	5.02	3.3391E+000		5.2561E+000
	635.90	11.32	1.0622E+000		2.9215E-001
Cs-134	563.23	8.38	1.5825E+000	1.51E-001	-2.1751E+000
	569.32	15.43	8.4334E-001		6.0357E-001
	604.70	97.60	1.7106E-001		1.2831E-002
	795.84	85.40	1.5087E-001		-1.1693E-001
	801.93	8.73	1.3551E+000		-6.0278E-001
Cs-137	661.65	85.12	1.4692E-001	1.47E-001	3.3429E-002
Eu-152	121.78	28.40	1.0814E+000	3.68E-001	-1.1358E-001
	244.69	7.49	2.3849E+000		-1.1964E+000
	344.27	26.50	5.5396E-001		-1.2428E-001
	778.89	12.74	9.5946E-001		-8.9979E-001
	867.32	4.16	2.5914E+000		-2.6133E+000
	964.01	14.40	1.0352E+000		1.4118E+000
	1085.78	10.00	1.1230E+000		-6.0017E-001
	1112.02	13.30	9.0427E-001		-1.0259E+000
	1407.95	20.70	3.6793E-001		-2.7482E-001
Eu-154	123.07	40.50	7.4708E-001	3.11E-001	-9.1482E-002
	247.94	6.60	2.6949E+000		-2.4234E+000
	591.81	4.83	2.5471E+000		-2.2585E-001
	723.30	19.70	6.8597E-001		6.9468E-001
	756.87	4.33	2.9257E+000		1.1525E+000
	873.19	11.50	9.8949E-001		-8.7414E-001
	996.32	10.30	1.0935E+000		6.5759E-001
	1004.76	17.90	6.2800E-001		-8.0076E-001
	1274.45	35.50	3.1109E-001		6.3297E-002
Eu-155	86.54	30.90	1.9180E+000	1.91E+000	6.7522E-001
	105.31	20.70	1.9098E+000		-1.1245E+000
Am-241	59.54	35.90	4.4503E+000	4.45E+000	-1.3356E+000
Cm-243	228.19	10.56	1.7218E+000	1.18E+000	-6.2385E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1767E+000	1.18E+000	6.1538E-001

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

Report Generated On 6/28/2006 9:52:27 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: NOL-03-02-119
Sample Title: NOL-03-02-119-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/28/2006 9:42:13 AM
Live Time: 600.0 seconds
Real Time: 601.2 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: GRN7780
Log Number: NOL-03-02-119
Title: NOL-03-02-119-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	2424-	2446	2434.52	608.59	1.63	1.84E+002	44.67	8.63E+001
2	3635-	3654	3643.08	910.73	2.18	8.25E+001	36.36	7.45E+001
3	5828-	5856	5841.13	1460.25	2.42	7.95E+002	58.49	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: GRN7780

Nuclide Library: C:\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	1.74467E+001	1.90874E+000
Bi-214	0.393	609.31*	46.30	7.38602E-001	2.01355E-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	0.990	1.744666E+001	1.908736E+000
Bi-214	0.393	7.386016E-001	2.013551E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	910.73	1.3753E-001	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	1.1271E-001	8.05E-002	-1.3494E-002
	1332.49	100.00	8.0520E-002		-5.6306E-002
Nb-94	702.63	100.00	1.1910E-001	1.06E-001	-6.0280E-003
	871.10	100.00	1.0595E-001		-1.3969E-003
Ag-108m	79.20	7.10	1.1041E+001	1.40E-001	-1.7506E+001
	433.93	89.90	1.3977E-001		-6.2121E-002
	614.37	90.40	1.5966E-001		-1.1383E-001
	722.95	90.50	1.4510E-001		3.8150E-002
Sb-125	176.33	6.89	3.0066E+000	4.52E-001	1.3012E+000
	427.89	29.33	4.5180E-001		1.2860E-001
	463.38	10.35	1.2477E+000		2.0484E-001
	600.56	17.80	7.2860E-001		-3.8773E-001
	606.64	5.02	3.4866E+000		9.6498E+000
	635.90	11.32	1.0270E+000		3.9538E-001
Cs-134	563.23	8.38	1.5466E+000	1.41E-001	5.7939E-001
	569.32	15.43	8.4475E-001		4.8053E-001
	604.70	97.60	1.7177E-001		5.3974E-002
	795.84	85.40	1.4147E-001		-4.1624E-002
	801.93	8.73	1.2942E+000		-7.8949E-001
Cs-137	661.65	85.12	1.4599E-001	1.46E-001	8.8138E-002
Eu-152	121.78	28.40	1.0636E+000	4.14E-001	4.8663E-001
	244.69	7.49	2.3540E+000		-3.6150E+000
	344.27	26.50	5.3846E-001		-5.9433E-001
	778.89	12.74	9.4738E-001		-2.8550E-001
	867.32	4.16	2.5132E+000		-3.3858E+000
	964.01	14.40	9.7799E-001		3.7176E-001
	1085.78	10.00	1.0038E+000		-4.9904E-001
	1112.02	13.30	8.7427E-001		-1.0978E+000
	1407.95	20.70	4.1366E-001		2.9458E-001
Eu-154	123.07	40.50	7.3397E-001	2.86E-001	5.1945E-002
	247.94	6.60	2.4701E+000		-3.3201E+000
	591.81	4.83	2.6784E+000		1.6300E+000
	723.30	19.70	6.6830E-001		4.7767E-001
	756.87	4.33	2.6348E+000		-1.3774E+000
	873.19	11.50	9.1411E-001		-6.8422E-001
	996.32	10.30	1.0297E+000		-3.1389E-001
	1004.76	17.90	6.4115E-001		1.4244E-001
	1274.45	35.50	2.8577E-001		-2.0997E-002
Eu-155	86.54	30.90	1.9910E+000	1.92E+000	2.5457E+000
	105.31	20.70	1.9230E+000		-7.8091E-002
Am-241	59.54	35.90	5.2954E+000	5.30E+000	-2.8719E+000
Cm-243	228.19	10.56	1.6683E+000	1.13E+000	3.9514E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1314E+000	1.13E+000	-1.0249E-004

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

Report Generated On 6/28/2006 10:42:22 AM

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

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

Detector ID: GRN7780

Spectrum File: GRN7780
Sample ID: NOL-03-02-120
Sample Title: NOL-03-02-120-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/28/2006 10:32:18 AM
Live Time: 600.0 seconds
Real Time: 601.2 seconds

Energy Calibration Date: 4/19/2006
Eff Calibration Date: 3/23/2006
Calibration Efficiency: 7780Soil1M180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: GRN7780
Log Number: NOL-03-02-120
Title: NOL-03-02-120-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	1399-	1416	1405.91	351.44	1.23	1.22E+002	48.80	1.53E+002
2	2321-	2343	2330.83	582.67	0.33	1.31E+002	46.61	1.12E+002
3	2425-	2446	2434.87	608.68	1.39	1.64E+002	46.42	1.05E+002
4	3632-	3648	3640.10	909.99	1.31	6.94E+001	34.15	7.46E+001
5	5829-	5856	5842.22	1460.52	2.82	7.08E+002	55.22	1.98E+001
6	7051-	7064	7057.59	1764.37	1.31	2.85E+001	14.86	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	0.997	1460.81*	10.67	1.55461E+001	1.74739E+000
TL-208	0.467	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.85623E-001	1.08190E-001
		860.37	12.46		
Bi-214	0.687	609.31*	46.30	6.59762E-001	2.03567E-001
		1120.29	15.10		
		1764.49*	15.80	4.62731E-001	2.45738E-001

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

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

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

Spectrum File:GRN7780

Nuclide Library: C:\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	1.554606E+001	1.747393E+000
TL-208	0.467	2.856228E-001	1.081902E-001
Bi-214	0.687	5.795777E-001	1.567648E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.44	2.0333E-001	40.00
4	909.99	1.1573E-001	49.18

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

Errors quoted at 1.960 sigma

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

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0737E-001	9.58E-002	-6.8313E-003
	1332.49	100.00	9.5752E-002		-3.2431E-002
Nb-94	702.63	100.00	1.1475E-001	1.10E-001	5.8899E-002
	871.10	100.00	1.1023E-001		4.1167E-002
Ag-108m	79.20	7.10	1.1145E+001	1.35E-001	-2.5134E+001
	433.93	89.90	1.3922E-001		-3.1325E-002
	614.37	90.40	1.6954E-001		-3.5180E-003
	722.95	90.50	1.3505E-001		-2.8852E-002
Sb-125	176.33	6.89	3.0581E+000	4.29E-001	8.2491E-001
	427.89	29.33	4.2898E-001		-5.3732E-002
	463.38	10.35	1.2670E+000		-6.8304E-001
	600.56	17.80	6.6727E-001		4.6824E-001
	606.64	5.02	3.4067E+000		7.6538E+000
	635.90	11.32	1.0300E+000		-1.4631E-001
Cs-134	563.23	8.38	1.3879E+000	1.37E-001	-1.2186E+000
	569.32	15.43	7.6472E-001		4.9921E-001
	604.70	97.60	1.6724E-001		7.2654E-002
	795.84	85.40	1.3665E-001		3.2149E-002
	801.93	8.73	1.1901E+000		-1.2774E+000
Cs-137	661.65	85.12	1.4243E-001	1.42E-001	-7.2847E-003
Eu-152	121.78	28.40	1.0768E+000	3.65E-001	6.8713E-001
	244.69	7.49	2.3540E+000		-3.2413E+000
	344.27	26.50	4.9701E-001		-5.2135E-001
	778.89	12.74	8.2442E-001		-8.1405E-001
	867.32	4.16	2.6274E+000		-5.0457E+000
	964.01	14.40	9.4435E-001		4.2881E-001
	1085.78	10.00	1.0684E+000		-4.0893E-001
	1112.02	13.30	7.9697E-001		-2.0567E+000
	1407.95	20.70	3.6528E-001		-2.3966E-001
Eu-154	123.07	40.50	7.5220E-001	3.04E-001	1.2569E+000
	247.94	6.60	2.4014E+000		-3.5926E+000
	591.81	4.83	2.4134E+000		-8.4688E-001
	723.30	19.70	6.2045E-001		3.3770E-001
	756.87	4.33	2.4984E+000		-2.8049E+000
	873.19	11.50	9.3307E-001		-4.2145E-001
	996.32	10.30	1.1120E+000		6.2238E-001
	1004.76	17.90	5.9630E-001		-5.7232E-002
	1274.45	35.50	3.0392E-001		4.5406E-002
Eu-155	86.54	30.90	1.9840E+000	1.93E+000	1.9874E+000
	105.31	20.70	1.9315E+000		6.8073E-003
Am-241	59.54	35.90	4.9266E+000	4.93E+000	-3.6868E+000
Cm-243	228.19	10.56	1.6610E+000	1.11E+000	6.1241E-003

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1145E+000	1.11E+000	-3.2240E-002

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

Report Generated On 6/28/2006 1:21:03 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: ORG7829

Spectrum File: ORG7829
Sample ID: NOL-03-02-121-F-
Sample Title: NOL-03-02-121-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/28/2006 1:10:59 AM
Live Time: 600.0 seconds
Real Time: 600.9 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: ORG7829
Log Number: NOL-03-02-121-F-
Title: NOL-03-02-121-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	305	291.79	72.95	0.95	2.04E+002	49.31	8.33E+002
m	2	285-	305	300.25	75.06	0.95	3.19E+002	56.95	9.31E+002
	3	332-	346	339.79	84.95	1.09	2.29E+002	111.77	1.05E+003
	4	944-	958	953.25	238.33	1.07	2.14E+002	64.66	3.04E+002
	5	1347-	1357	1351.91	338.00	0.83	4.83E+001	34.06	1.06E+002
M	6	1386-	1414	1390.84	347.73	1.19	2.44E+001	18.69	9.13E+001
m	7	1386-	1414	1405.43	351.38	1.20	1.05E+002	26.96	1.46E+002
	8	2031-	2046	2040.00	510.03	1.06	9.10E+001	38.77	1.00E+002
	9	2320-	2335	2329.08	582.31	1.55	1.27E+002	37.82	8.16E+001
	10	2424-	2441	2432.48	608.16	1.28	1.17E+002	34.24	5.79E+001
	11	3631-	3647	3638.65	909.73	1.55	9.95E+001	29.50	4.05E+001
	12	3864-	3879	3870.25	967.63	0.76	5.29E+001	26.98	4.51E+001
	13	4471-	4483	4476.82	1119.28	0.97	3.12E+001	20.56	2.98E+001
	14	5822-	5848	5836.06	1459.12	1.85	7.32E+002	56.10	2.00E+001

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: 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	0.969	511.00*		100.00	1.63319E-001	7.30366E-002
K-40	0.910	1460.81*		10.67	1.66295E+001	1.85388E+000
TL-208	0.734	277.35		6.80		
		510.84*		21.60	7.56105E-001	3.43724E-001
		583.14*		84.20	2.84265E-001	9.21420E-002
		860.37		12.46		
Pb-212	0.592	74.81*	@	10.70	1.24050E+001	3.28930E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.99129E-001	2.37765E-001
Bi-214	0.673	609.31*		46.30	4.82051E-001	1.53013E-001
		1120.29*		15.10	4.60768E-001	3.07219E-001
		1764.49		15.80		
Ac-228	0.949	338.32*		11.40	6.70927E-001	4.84454E-001
		911.07*		27.70	7.57173E-001	2.40832E-001
		969.11*		16.60	6.83241E-001	3.55567E-001

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

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

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

Spectrum File: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	0.969	1.019174E-001	7.567332E-002
K-40	0.910	1.662947E+001	1.853883E+000
TL-208	0.734	2.842654E-001	9.167516E-002
Pb-212 @	0.592	6.991294E-001	2.377654E-001
Bi-214	0.673	4.778207E-001	1.369648E-001
Ac-228	0.949	7.247963E-001	1.843908E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.95	3.3978E-001	24.19
3	84.95	3.8222E-001	48.74
M 6	347.73	4.0618E-002	76.68
m 7	351.38	1.7457E-001	25.74

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

Errors quoted at 1.960 sigma

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

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.1764E-001	9.62E-002	1.0414E-001
	1332.49	100.00	9.6174E-002		-2.9736E-003
Nb-94	702.63	100.00	1.2096E-001	1.08E-001	7.5348E-002
	871.10	100.00	1.0837E-001		-5.9190E-002
Ag-108m	79.20	7.10	1.1072E+001	1.28E-001	-1.4360E+001
	433.93	89.90	1.3581E-001		1.7316E-002
	614.37	90.40	1.2833E-001		-8.6318E-002
	722.95	90.50	1.3816E-001		7.7961E-002
Sb-125	176.33	6.89	3.0487E+000	4.28E-001	-7.8152E-001
	427.89	29.33	4.2845E-001		-1.9274E-002
	463.38	10.35	1.2703E+000		5.9987E-001
	600.56	17.80	6.8344E-001		-1.8517E-001
	606.64	5.02	2.9661E+000		4.1717E+000
	635.90	11.32	1.0684E+000		-3.5401E-001
Cs-134	563.23	8.38	1.3845E+000	1.31E-001	1.2105E-001
	569.32	15.43	7.8681E-001		2.0552E-001
	604.70	97.60	1.5761E-001		-3.3145E-002
	795.84	85.40	1.3053E-001		7.4211E-002
	801.93	8.73	1.2392E+000		1.9052E+000
Cs-137	661.65	85.12	1.3271E-001	1.33E-001	-2.4597E-002
Eu-152	121.78	28.40	1.0601E+000	4.24E-001	8.0200E-001
	244.69	7.49	2.2926E+000		-1.7900E-001
	344.27	26.50	5.3025E-001		1.1425E-001
	778.89	12.74	8.5050E-001		-3.6534E-001
	867.32	4.16	2.6025E+000		-1.4353E+000
	964.01	14.40	9.8083E-001		1.3436E+000
	1085.78	10.00	1.0876E+000		9.9961E-002
	1112.02	13.30	8.9364E-001		-2.6933E-001
	1407.95	20.70	4.2372E-001		1.4305E-001
Eu-154	123.07	40.50	7.4055E-001	2.61E-001	3.9969E-001
	247.94	6.60	2.4605E+000		-5.8924E-001
	591.81	4.83	2.4713E+000		-2.0983E-001
	723.30	19.70	6.3292E-001		2.8573E-001
	756.87	4.33	2.8313E+000		2.0350E+000
	873.19	11.50	9.5865E-001		-3.2639E-001
	996.32	10.30	1.0466E+000		-2.2825E-001
	1004.76	17.90	5.8670E-001		3.3953E-001
	1274.45	35.50	2.6109E-001		-3.1060E-002
Eu-155	86.54	30.90	1.8818E+000	1.86E+000	2.7805E+000
	105.31	20.70	1.8586E+000		1.2399E+000
Am-241	59.54	35.90	4.3767E+000	4.38E+000	-1.1814E+000
Cm-243	228.19	10.56	1.6472E+000	1.08E+000	-4.5169E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0829E+000	1.08E+000	3.1237E-001

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

Report Generated On 6/28/2006 12:38:24 AM

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

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

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: NOL-03-02-122-F-
Sample Title: NOL-03-02-122-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/28/2006 12:28:20 AM
Live Time: 600.0 seconds
Real Time: 600.9 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: ORG7829
Log Number: NOL-03-02-122-F-
Title: NOL-03-02-122-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	309	291.62	72.90	1.21	2.55E+002	51.27	9.26E+002
m	2	283-	309	300.46	75.12	1.21	4.43E+002	59.27	1.12E+003
	3	335-	344	339.69	84.93	0.87	1.64E+002	80.57	6.72E+002
	4	925-	959	953.22	238.32	1.13	1.86E+002	121.71	6.81E+002
	5	1345-	1359	1350.14	337.55	0.62	4.54E+001	42.26	1.45E+002
	6	1395-	1415	1405.98	351.52	1.14	1.41E+002	51.58	1.52E+002
	7	2028-	2051	2039.42	509.89	1.97	1.43E+002	43.89	8.91E+001
	8	2322-	2338	2329.24	582.35	1.48	1.14E+002	35.12	6.62E+001
	9	2425-	2442	2433.58	608.44	1.70	1.32E+002	36.39	6.54E+001
	10	3631-	3647	3639.29	909.89	1.50	9.54E+001	29.30	4.06E+001
	11	3863-	3876	3870.10	967.59	0.70	4.87E+001	22.75	3.13E+001
	12	5825-	5848	5836.60	1459.26	1.64	7.54E+002	55.73	1.42E+001
	13	7041-	7056	7049.63	1762.54	0.35	3.40E+001	14.98	8.00E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: 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	0.960	511.00*	100.00	2.56426E-001	8.61321E-002
K-40	0.923	1460.81*	10.67	1.71268E+001	1.87780E+000
TL-208	0.734	277.35	6.80		
		510.84*	21.60	1.18716E+000	4.10377E-001
		583.14*	84.20	2.53931E-001	8.50455E-002
		860.37	12.46		
Pb-212	0.592	74.81* @	10.70	1.71915E+001	4.07975E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.05597E-001	4.08337E-001
Bi-214	0.657	609.31*	46.30	5.42194E-001	1.64084E-001
		1120.29	15.10		
		1764.49*	15.80	5.52688E-001	2.49728E-001
Ac-228	0.951	338.32*	11.40	6.29899E-001	5.94857E-001
		911.07*	27.70	7.25588E-001	2.38097E-001
		969.11*	16.60	6.28367E-001	3.01001E-001

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

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

I N T E R 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	0.960	2.015770E-001	8.805112E-002
K-40	0.923	1.712679E+001	1.877796E+000
TL-208	0.734	2.539308E-001	8.464190E-002
Pb-212 @	0.592	6.055973E-001	4.083369E-001
Bi-214	0.657	5.453584E-001	1.371317E-001
Ac-228	0.951	6.829416E-001	1.781655E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.90	4.2473E-001	20.12
3	84.93	2.7375E-001	49.06
6	351.52	2.3467E-001	36.63

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

Errors quoted at 1.960 sigma

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

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.1862E-001	1.00E-001	3.8851E-002
	1332.49	100.00	1.0011E-001		9.0297E-002
Nb-94	702.63	100.00	1.1487E-001	1.06E-001	4.4389E-002
	871.10	100.00	1.0605E-001		-1.9438E-002
Ag-108m	79.20	7.10	1.0792E+001	1.44E-001	-1.0928E+001
	433.93	89.90	1.4495E-001		3.3528E-002
	614.37	90.40	1.4944E-001		-2.7514E-002
	722.95	90.50	1.4404E-001		1.0034E-001
Sb-125	176.33	6.89	3.0136E+000	4.46E-001	8.4791E-001
	427.89	29.33	4.4636E-001		6.9435E-002
	463.38	10.35	1.2012E+000		7.5114E-001
	600.56	17.80	6.7777E-001		-1.0592E-001
	606.64	5.02	3.1043E+000		2.2192E+000
	635.90	11.32	9.9113E-001		3.3873E-001
Cs-134	563.23	8.38	1.3561E+000	1.46E-001	-2.1650E-001
	569.32	15.43	7.3922E-001		1.3480E-001
	604.70	97.60	1.6214E-001		4.5547E-005
	795.84	85.40	1.4606E-001		5.8940E-003
	801.93	8.73	1.2543E+000		-5.6651E-001
Cs-137	661.65	85.12	1.4569E-001	1.46E-001	2.7110E-002
Eu-152	121.78	28.40	1.0515E+000	3.46E-001	-1.0736E-001
	244.69	7.49	2.3725E+000		6.0167E-001
	344.27	26.50	5.1014E-001		1.4969E-001
	778.89	12.74	8.2619E-001		-6.7495E-001
	867.32	4.16	2.5127E+000		-1.5247E+000
	964.01	14.40	9.7061E-001		1.2009E+000
	1085.78	10.00	1.1716E+000		7.8135E-001
	1112.02	13.30	8.3070E-001		-2.3335E+000
	1407.95	20.70	3.4561E-001		-4.0270E-001
Eu-154	123.07	40.50	7.2290E-001	2.93E-001	-5.6976E-001
	247.94	6.60	2.5889E+000		1.9283E-002
	591.81	4.83	2.6206E+000		1.2564E+000
	723.30	19.70	6.6528E-001		7.7978E-001
	756.87	4.33	2.5458E+000		2.4983E+000
	873.19	11.50	9.2673E-001		-4.6468E-002
	996.32	10.30	9.9224E-001		-2.7741E-002
	1004.76	17.90	5.8384E-001		2.4607E-001
	1274.45	35.50	2.9320E-001		1.3100E-001
Eu-155	86.54	30.90	1.8592E+000	1.86E+000	1.2124E+000
	105.31	20.70	1.8742E+000		3.0880E-001
Am-241	59.54	35.90	4.4685E+000	4.47E+000	-4.2567E-001
Cm-243	228.19	10.56	1.6309E+000	1.12E+000	2.2177E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1158E+000	1.12E+000	-1.0225E+000

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

Report Generated On 6/27/2006 10:57:50 PM

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

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

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: NOL-03-02-123-F-
Sample Title: NOL-03-02-123-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 10:47:49 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: ORG7829
Log Number: NOL-03-02-123-F-
Title: NOL-03-02-123-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	305	292.04	73.01	0.88	1.57E+002	47.70	8.84E+002
m	2	285-	305	300.03	75.01	0.88	2.52E+002	54.81	9.53E+002
	3	333-	345	339.00	84.75	0.78	9.76E+001	101.06	9.69E+002
	4	943-	960	953.82	238.47	1.06	2.43E+002	71.20	3.31E+002
	5	1175-	1187	1179.44	294.88	0.34	3.93E+001	41.01	1.49E+002
	6	1400-	1412	1405.75	351.46	0.98	1.12E+002	40.07	1.15E+002
	7	2033-	2051	2039.57	509.93	0.81	1.09E+002	41.30	9.89E+001
	8	2320-	2339	2328.80	582.24	1.21	1.43E+002	39.54	7.50E+001
	9	2424-	2443	2433.56	608.43	1.29	1.12E+002	37.41	7.21E+001
	10	3630-	3648	3638.82	909.77	0.37	1.07E+002	32.26	4.80E+001
	11	3864-	3877	3870.41	967.67	0.35	4.40E+001	23.24	3.50E+001
	12	5824-	5850	5836.23	1459.16	2.10	7.12E+002	56.92	3.01E+001
	13	7042-	7055	7048.73	1762.31	0.36	1.80E+001	13.40	9.03E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: 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	0.962	511.00*		100.00	1.95765E-001	7.87489E-002
K-40	0.914	1460.81*		10.67	1.61751E+001	1.84043E+000
TL-208	0.730	277.35		6.80		
		510.84*		21.60	9.06320E-001	3.72016E-001
		583.14*		84.20	3.19020E-001	9.75152E-002
		860.37		12.46		
Pb-212	0.593	74.81*	@	10.70	9.83633E+000	2.87864E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.93574E-001	2.63597E-001
Bi-214	0.651	609.31*		46.30	4.60903E-001	1.64233E-001
		1120.29		15.10		
		1764.49*		15.80	2.92136E-001	2.19755E-001
PB-214	0.623	74.82*	@	6.21	1.69483E+001	5.11029E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	3.13674E-001	3.31415E-001
		351.92*		37.20	4.82033E-001	1.90037E-001
Ac-228	0.586	338.32		11.40		
		911.07*		27.70	8.14420E-001	2.62834E-001
		969.11*		16.60	5.67881E-001	3.05862E-001

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

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

I N T E R 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		0.962	1.268568E-001	8.148630E-002
K-40		0.914	1.617510E+001	1.840430E+000
TL-208		0.730	3.190196E-001	9.695945E-002
Pb-212	@	0.593	7.935736E-001	2.635967E-001
Bi-214		0.651	4.004227E-001	1.315537E-001
PB-214	@	0.623	4.403742E-001	1.648574E-001
Ac-228		0.586	7.096978E-001	1.993439E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.01	2.6248E-001	30.29
3	84.75	1.6260E-001	103.59

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.2152E-001	9.62E-002	-6.1809E-002
	1332.49	100.00	9.6174E-002		7.8730E-002
Nb-94	702.63	100.00	1.1984E-001	1.08E-001	-1.6034E-002
	871.10	100.00	1.0837E-001		-4.3409E-002
Ag-108m	79.20	7.10	1.0916E+001	1.42E-001	-1.0403E+001
	433.93	89.90	1.4244E-001		-1.3680E-002
	614.37	90.40	1.4394E-001		-2.1749E-002
	722.95	90.50	1.4707E-001		9.8052E-002
Sb-125	176.33	6.89	3.0612E+000	4.51E-001	-5.7869E-001
	427.89	29.33	4.5051E-001		1.4407E-001
	463.38	10.35	1.3095E+000		7.5058E-001
	600.56	17.80	6.4267E-001		-5.6292E-001
	606.64	5.02	2.9932E+000		3.3893E+000
	635.90	11.32	1.0653E+000		-3.6357E-001
Cs-134	563.23	8.38	1.4241E+000	1.37E-001	4.0744E-001
	569.32	15.43	7.9307E-001		-7.8557E-003
	604.70	97.60	1.5378E-001		6.6700E-005
	795.84	85.40	1.3687E-001		3.1317E-002
	801.93	8.73	1.3318E+000		8.2230E-001
Cs-137	661.65	85.12	1.4444E-001	1.44E-001	1.0906E-001
Eu-152	121.78	28.40	1.0710E+000	3.55E-001	-3.5844E-001
	244.69	7.49	2.3401E+000		-7.8260E-001
	344.27	26.50	5.5323E-001		3.1202E-001
	778.89	12.74	9.2568E-001		-2.9303E-001
	867.32	4.16	2.5692E+000		-1.6023E+000
	964.01	14.40	9.4454E-001		6.4712E-002
	1085.78	10.00	1.1080E+000		7.3771E-001
	1112.02	13.30	8.8648E-001		-1.6792E+000
	1407.95	20.70	3.5472E-001		1.6410E-002
Eu-154	123.07	40.50	7.3582E-001	2.92E-001	-6.9504E-001
	247.94	6.60	2.6121E+000		-8.5387E-001
	591.81	4.83	2.6272E+000		9.1100E-001
	723.30	19.70	6.7571E-001		3.8173E-001
	756.87	4.33	2.8487E+000		-5.8319E-001
	873.19	11.50	9.8569E-001		1.5704E-001
	996.32	10.30	1.1027E+000		-1.3407E-001
	1004.76	17.90	6.6661E-001		8.4104E-001
	1274.45	35.50	2.9151E-001		1.2751E-001
Eu-155	86.54	30.90	1.8912E+000	1.88E+000	1.0795E+000
	105.31	20.70	1.8837E+000		1.2077E+000
Am-241	59.54	35.90	4.4784E+000	4.48E+000	-5.0901E-001
Cm-243	228.19	10.56	1.6880E+000	1.13E+000	-1.3336E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1250E+000	1.13E+000	1.0040E-001

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

Report Generated On 6/27/2006 3:02:18 PM

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

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

Detector ID: YEL7810

Spectrum File: YEL7810
Sample ID: NOL-03-02-124-F-
Sample Title: NOL-03-02-124-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 2:52:16 PM
Live Time: 600.0 seconds
Real Time: 600.9 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7810Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: YEL7810
Log Number: NOL-03-02-124-F-
Title: NOL-03-02-124-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	308	290.68	72.69	1.40	2.34E+002	56.66	1.17E+003
m	2	284-	308	299.77	74.96	1.40	4.21E+002	63.26	1.90E+003
	3	948-	960	954.65	238.70	1.39	1.98E+002	58.60	2.63E+002
	4	1402-	1417	1408.08	352.07	1.24	9.14E+001	42.78	1.28E+002
	5	2037-	2051	2042.90	510.79	0.51	3.54E+001	36.95	1.10E+002
	6	2323-	2343	2331.62	582.98	0.80	1.53E+002	34.63	4.41E+001
	7	2431-	2447	2437.76	609.51	2.18	1.03E+002	32.16	5.32E+001
	8	3635-	3653	3644.85	911.31	0.50	9.29E+001	30.71	4.51E+001
	9	3867-	3883	3875.16	968.90	0.81	5.28E+001	25.74	3.83E+001
	10	5832-	5859	5846.46	1461.77	1.93	7.34E+002	54.23	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: YEL7810

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.968	1460.81*	10.67	1.69591E+001	1.85880E+000
TL-208	0.751	277.35	6.80		
		510.84*	21.60	2.90272E-001	3.06667E-001
		583.14*	84.20	3.39167E-001	8.85885E-002
		860.37	12.46		
Pb-212	0.576	74.81* @	10.70	1.31516E+001	3.24906E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.10217E-001	2.04770E-001
Bi-214	0.406	609.31*	46.30	4.21932E-001	1.41866E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.627	338.32	11.40		
		911.07*	27.70	7.04961E-001	2.46713E-001
		969.11*	16.60	6.77726E-001	3.38251E-001

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

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

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

Spectrum File:YEL7810

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

	Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
X	ANN		0.998		
	K-40		0.968	1.695912E+001	1.858805E+000
	TL-208		0.751	3.354008E-001	8.510850E-002
	Pb-212	@	0.576	6.102170E-001	2.047701E-001
	Bi-214		0.406	4.219317E-001	1.418657E-001
	Ac-228		0.627	6.955038E-001	1.993258E-001

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

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.69	3.8990E-001	24.22
	4	352.07	1.5241E-001	46.79

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

Errors quoted at 1.960 sigma

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

Spectrum File:YEL7810
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.1296E-001	9.77E-002	-7.6170E-003
	1332.49	100.00	9.7684E-002		8.1338E-002
Nb-94	702.63	100.00	1.2166E-001	1.12E-001	5.7296E-002
	871.10	100.00	1.1214E-001		-1.8033E-002
Ag-108m	79.20	7.10	9.1285E+000	1.37E-001	-2.9746E+000
	433.93	89.90	1.3740E-001		3.1920E-002
	614.37	90.40	1.5024E-001		4.4591E-002
	722.95	90.50	1.4007E-001		1.3638E-001
Sb-125	176.33	6.89	2.7816E+000	4.09E-001	1.8938E-001
	427.89	29.33	4.0935E-001		-1.7913E-002
	463.38	10.35	1.2470E+000		3.3778E-001
	600.56	17.80	6.4157E-001		-1.5885E-001
	606.64	5.02	2.8709E+000		-1.9321E+000
	635.90	11.32	9.7925E-001		-1.0106E+000
Cs-134	563.23	8.38	1.4505E+000	1.32E-001	-1.2425E-001
	569.32	15.43	7.5973E-001		7.1932E-002
	604.70	97.60	1.3675E-001		-1.2846E-001
	795.84	85.40	1.3182E-001		5.2263E-002
	801.93	8.73	1.1960E+000		-1.9812E+000
Cs-137	661.65	85.12	1.4532E-001	1.45E-001	6.0073E-002
Eu-152	121.78	28.40	9.7671E-001	4.01E-001	3.5762E-001
	244.69	7.49	2.2245E+000		-4.0337E+000
	344.27	26.50	5.0926E-001		-6.6176E-001
	778.89	12.74	8.5619E-001		-7.4071E-001
	867.32	4.16	2.7352E+000		-3.2263E+000
	964.01	14.40	9.4008E-001		2.0988E-001
	1085.78	10.00	1.0634E+000		-6.8804E-001
	1112.02	13.30	8.3480E-001		-5.7783E-001
	1407.95	20.70	4.0105E-001		-2.3703E-001
Eu-154	123.07	40.50	6.7647E-001	2.86E-001	-1.4264E-001
	247.94	6.60	2.3713E+000		-1.0704E-001
	591.81	4.83	2.4506E+000		4.9677E-001
	723.30	19.70	6.5072E-001		7.9241E-001
	756.87	4.33	2.5722E+000		-1.1639E+000
	873.19	11.50	9.6410E-001		-3.0795E-001
	996.32	10.30	1.1364E+000		5.4581E-001
	1004.76	17.90	5.9726E-001		2.9789E-001
	1274.45	35.50	2.8570E-001		5.2645E-002
Eu-155	86.54	30.90	1.6693E+000	1.67E+000	1.8589E+000
	105.31	20.70	1.7584E+000		7.3124E-001
Am-241	59.54	35.90	3.3769E+000	3.38E+000	3.2455E-001
Cm-243	228.19	10.56	1.5841E+000	1.01E+000	-1.1876E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0057E+000	1.01E+000	2.4459E-001

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

Report Generated On 6/27/2006 2:46:04 PM

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

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

Detector ID: YEL7810

Spectrum File: YEL7810
Sample ID: NOL-03-02-125-F-
Sample Title: NOL-03-02-125-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 2:36:02 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7810Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: YEL7810
Log Number: NOL-03-02-125-F-
Title: NOL-03-02-125-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	308	290.70	72.70	1.36	2.35E+002	55.78	1.22E+003
m	2	283-	308	300.15	75.06	1.36	4.15E+002	61.79	1.77E+003
	3	946-	961	955.12	238.82	1.61	2.24E+002	68.39	3.30E+002
	4	1345-	1361	1354.26	338.61	1.37	9.44E+001	44.90	1.38E+002
	5	1400-	1415	1406.99	351.80	0.74	1.04E+002	42.81	1.24E+002
	6	2326-	2342	2332.92	583.30	0.37	1.22E+002	36.97	7.41E+001
	7	2430-	2446	2437.34	609.41	1.13	1.21E+002	35.49	6.56E+001
	8	3635-	3654	3645.34	911.44	0.54	1.01E+002	31.93	4.69E+001
	9	3869-	3884	3875.22	968.91	0.87	4.80E+001	26.75	4.60E+001
	10	4474-	4485	4479.46	1119.99	0.51	2.45E+001	19.80	2.95E+001
	11	5832-	5859	5845.13	1461.44	1.80	7.89E+002	56.14	7.00E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: YEL7810

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.986	1460.81*	10.67	1.82280E+001	1.96477E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.70428E-001	8.92442E-002
		860.37	12.46		
Pb-212	0.575	74.81* @	10.70	1.29222E+001	3.18089E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.92203E-001	2.37541E-001
Bi-214	0.710	609.31*	46.30	4.98148E-001	1.58053E-001
		1120.29*	15.10	3.58296E-001	2.91991E-001
		1764.49	15.80		
Ac-228	0.997	338.32*	11.40	1.26515E+000	6.33871E-001
		911.07*	27.70	7.66998E-001	2.57852E-001
		969.11*	16.60	6.16120E-001	3.49705E-001

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

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

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

Spectrum File:YEL7810

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

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40	0.986	1.822799E+001	1.964767E+000
TL-208	0.469	2.704277E-001	8.924424E-002
Pb-212 @	0.575	6.922025E-001	2.375413E-001
Bi-214	0.710	4.664574E-001	1.389962E-001
Ac-228	0.997	7.672347E-001	1.972334E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.70	3.9242E-001	23.69
5	351.80	1.7334E-001	41.16

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:YEL7810
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.2353E-001	9.29E-002	-1.3030E-002
	1332.49	100.00	9.2929E-002		6.5386E-002
Nb-94	702.63	100.00	1.1792E-001	9.70E-002	-9.7200E-002
	871.10	100.00	9.6980E-002		5.1852E-002
Ag-108m	79.20	7.10	9.4117E+000	1.32E-001	-6.4098E+000
	433.93	89.90	1.4606E-001		-4.2947E-002
	614.37	90.40	1.5707E-001		-4.9029E-002
	722.95	90.50	1.3193E-001		1.3040E-003
Sb-125	176.33	6.89	2.8418E+000	4.31E-001	6.9414E-001
	427.89	29.33	4.3058E-001		1.1217E-001
	463.38	10.35	1.2760E+000		4.0347E-001
	600.56	17.80	6.4553E-001		-1.9462E-001
	606.64	5.02	3.0388E+000		-1.4132E+000
	635.90	11.32	1.0879E+000		9.8778E-002
Cs-134	563.23	8.38	1.3204E+000	1.35E-001	-6.1041E-001
	569.32	15.43	7.4022E-001		8.6918E-002
	604.70	97.60	1.4776E-001		-2.8338E-002
	795.84	85.40	1.3522E-001		1.1464E-001
	801.93	8.73	1.2818E+000		1.6326E-001
Cs-137	661.65	85.12	1.4154E-001	1.42E-001	-7.9445E-003
Eu-152	121.78	28.40	1.0164E+000	4.09E-001	-2.0293E-001
	244.69	7.49	2.2902E+000		-2.5554E+000
	344.27	26.50	4.9959E-001		-1.5892E-001
	778.89	12.74	8.3560E-001		-8.7684E-001
	867.32	4.16	2.4256E+000		-2.6674E+000
	964.01	14.40	9.1336E-001		3.4673E-001
	1085.78	10.00	1.0634E+000		-6.6833E-001
	1112.02	13.30	8.2343E-001		1.0481E+000
	1407.95	20.70	4.0899E-001		2.4666E-001
Eu-154	123.07	40.50	7.0187E-001	2.97E-001	-2.3744E-001
	247.94	6.60	2.5538E+000		1.5926E-001
	591.81	4.83	2.5597E+000		1.1764E+000
	723.30	19.70	6.0227E-001		-5.4702E-002
	756.87	4.33	2.6293E+000		-5.9301E-001
	873.19	11.50	8.6140E-001		3.0094E-001
	996.32	10.30	9.7133E-001		-5.8147E-001
	1004.76	17.90	6.0277E-001		-1.6242E-001
	1274.45	35.50	2.9747E-001		-6.7227E-002
Eu-155	86.54	30.90	1.6516E+000	1.65E+000	1.5148E+000
	105.31	20.70	1.7686E+000		-1.0330E-001
Am-241	59.54	35.90	3.5037E+000	3.50E+000	6.8455E-001
Cm-243	228.19	10.56	1.6894E+000	1.12E+000	-2.4313E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1177E+000	1.12E+000	4.9960E-001

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

Report Generated On 6/27/2006 2:25:37 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: YEL7810

Spectrum File: YEL7810
Sample ID: NOL-03-02-126-F-
Sample Title: NOL-03-02-126-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 2:15:35 PM
Live Time: 600.0 seconds
Real Time: 600.9 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7810Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: YEL7810
Log Number: NOL-03-02-126-F-
Title: NOL-03-02-126-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	296-	309	300.49	75.15	1.45	3.97E+002	119.60	1.19E+003
	2	948-	961	954.17	238.58	0.56	1.29E+002	62.83	3.24E+002
	3	1401-	1414	1406.88	351.77	1.44	1.32E+002	42.41	1.21E+002
	4	2322-	2340	2332.31	583.15	1.34	1.19E+002	38.91	8.09E+001
	5	2429-	2446	2436.89	609.29	1.48	1.42E+002	35.43	5.70E+001
	6	3635-	3652	3644.84	911.31	1.06	7.12E+001	30.42	5.18E+001
M	7	3854-	3883	3860.76	965.30	1.59	3.15E+001	15.10	3.55E+001
m	8	3854-	3883	3875.72	969.04	1.59	5.56E+001	19.74	5.16E+001
	9	5831-	5858	5844.78	1461.35	2.15	8.33E+002	58.19	1.06E+001

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: YEL7810

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.990	1460.81*	10.67	1.92534E+001	2.05846E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.64041E-001	9.28867E-002
		860.37	12.46		
Pb-212	0.576	74.81* @	10.70	1.23157E+001	4.42780E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	3.99115E-001	2.03896E-001
Bi-214	0.407	609.31*	46.30	5.82948E-001	1.62155E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.627	338.32	11.40		
		911.07*	27.70	5.40197E-001	2.39042E-001
		969.11*	16.60	7.14121E-001	2.64492E-001

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

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

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

Spectrum File:YEL7810

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

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40	0.990	1.925337E+001	2.058457E+000
TL-208	0.470	2.640408E-001	9.288669E-002
Pb-212 @	0.576	3.991148E-001	2.038960E-001
Bi-214	0.407	5.829480E-001	1.621549E-001
Ac-228	0.627	6.183908E-001	1.773449E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
3	351.77	2.1931E-001	32.23
M 7	965.30	5.2441E-002	47.99

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:YEL7810
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.1837E-001	9.90E-002	-5.0643E-002
	1332.49	100.00	9.8997E-002		5.4178E-002
Nb-94	702.63	100.00	1.1716E-001	1.09E-001	1.1330E-001
	871.10	100.00	1.0947E-001		1.5397E-001
Ag-108m	79.20	7.10	9.2063E+000	1.40E-001	-6.1148E+000
	433.93	89.90	1.4788E-001		9.5284E-003
	614.37	90.40	1.5255E-001		1.8691E-003
	722.95	90.50	1.3967E-001		-4.0154E-002
Sb-125	176.33	6.89	2.7696E+000	4.06E-001	-6.3266E-001
	427.89	29.33	4.0585E-001		-2.7669E-001
	463.38	10.35	1.2760E+000		3.7412E-001
	600.56	17.80	6.3557E-001		-1.5728E-001
	606.64	5.02	3.0335E+000		-3.6542E-001
	635.90	11.32	1.0319E+000		-5.1934E-002
Cs-134	563.23	8.38	1.3572E+000	1.33E-001	-4.7580E-001
	569.32	15.43	8.1536E-001		6.8690E-001
	604.70	97.60	1.4370E-001		-4.8630E-002
	795.84	85.40	1.3329E-001		-4.6892E-003
	801.93	8.73	1.1312E+000		-1.5915E+000
Cs-137	661.65	85.12	1.5297E-001	1.53E-001	-3.3414E-002
Eu-152	121.78	28.40	9.7301E-001	4.32E-001	4.2431E-001
	244.69	7.49	2.2902E+000		-6.5630E-001
	344.27	26.50	5.0109E-001		-4.3069E-001
	778.89	12.74	8.1088E-001		-8.3480E-001
	867.32	4.16	2.7038E+000		-4.7828E+000
	964.01	14.40	9.8124E-001		-2.0643E-001
	1085.78	10.00	1.1479E+000		3.1787E-001
	1112.02	13.30	8.4229E-001		4.8732E-001
	1407.95	20.70	4.3188E-001		8.6759E-002
Eu-154	123.07	40.50	6.6510E-001	2.75E-001	-2.7081E-001
	247.94	6.60	2.4085E+000		-1.7615E+000
	591.81	4.83	2.4154E+000		-1.6245E+000
	723.30	19.70	6.4170E-001		-1.0913E-001
	756.87	4.33	2.5528E+000		6.0083E-002
	873.19	11.50	9.4053E-001		1.2229E-001
	996.32	10.30	9.7646E-001		-5.4658E-001
	1004.76	17.90	6.0823E-001		4.6987E-001
	1274.45	35.50	2.7518E-001		-2.7823E-001
Eu-155	86.54	30.90	1.6610E+000	1.66E+000	2.2950E+000
	105.31	20.70	1.7837E+000		9.4852E-001
Am-241	59.54	35.90	3.4113E+000	3.41E+000	-6.8503E-001
Cm-243	228.19	10.56	1.6219E+000	1.08E+000	-3.3024E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0792E+000	1.08E+000	-6.1318E-001

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

Report Generated On 6/27/2006 2:09:23 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: YEL7810

Spectrum File: YEL7810
Sample ID: NOL-03-02-127-F-
Sample Title: NOL-03-02-127-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 1:59:20 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7810Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: YEL7810
Log Number: NOL-03-02-127-F-
Title: NOL-03-02-127-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	308	291.52	72.90	1.41	2.34E+002	59.30	1.21E+003
m	2	284-	308	300.08	75.04	1.42	4.87E+002	66.79	1.95E+003
	3	889-	897	892.82	223.24	0.67	4.71E+001	42.40	1.97E+002
	4	948-	962	954.27	238.61	1.15	1.78E+002	63.17	2.97E+002
	5	1401-	1418	1408.19	352.10	1.15	1.13E+002	50.75	1.71E+002
	6	2324-	2342	2332.61	583.22	1.17	1.28E+002	39.37	8.16E+001
	7	2429-	2445	2436.55	609.21	1.62	1.08E+002	36.24	7.47E+001
	8	3634-	3653	3644.75	911.29	0.77	8.82E+001	31.40	4.78E+001
	9	4475-	4486	4480.25	1120.18	0.68	2.48E+001	19.88	3.12E+001
	10	5831-	5858	5844.62	1461.31	1.99	8.74E+002	58.95	6.86E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: YEL7810

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.991	1460.81*	10.67	2.01941E+001	2.12784E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.84774E-001	9.48762E-002
		860.37	12.46		
Pb-212	0.576	74.81* @	10.70	1.51867E+001	3.63235E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.48510E-001	2.13248E-001
Bi-214	0.711	609.31*	46.30	4.44508E-001	1.58464E-001
		1120.29*	15.10	3.62679E-001	2.93232E-001
		1764.49	15.80		

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

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

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

Spectrum File:YEL7810

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

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40	0.991	2.019407E+001	2.127844E+000
TL-208	0.470	2.847741E-001	9.487615E-002
Pb-212 @	0.576	5.485098E-001	2.132483E-001
Bi-214	0.711	4.260121E-001	1.394101E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.90	3.8965E-001	25.37
3	223.24	7.8429E-002	90.10
5	352.10	1.8905E-001	44.75
8	911.29	1.4708E-001	35.58

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

Errors quoted at 1.960 sigma

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

Spectrum File:YEL7810
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.2353E-001	9.64E-002	5.9521E-002
	1332.49	100.00	9.6351E-002		2.4308E-002
Nb-94	702.63	100.00	1.1366E-001	1.14E-001	1.3968E-002
	871.10	100.00	1.1855E-001		2.5803E-002
Ag-108m	79.20	7.10	9.3469E+000	1.34E-001	-3.9594E+000
	433.93	89.90	1.4180E-001		3.4227E-002
	614.37	90.40	1.5707E-001		1.9190E-002
	722.95	90.50	1.3443E-001		6.1282E-002
Sb-125	176.33	6.89	2.8444E+000	4.25E-001	1.4551E+000
	427.89	29.33	4.2474E-001		5.5917E-002
	463.38	10.35	1.2760E+000		-7.8516E-001
	600.56	17.80	6.7072E-001		-3.2029E-001
	606.64	5.02	3.1013E+000		5.9606E+000
	635.90	11.32	1.0092E+000		-7.6854E-001
Cs-134	563.23	8.38	1.4729E+000	1.39E-001	4.6405E-001
	569.32	15.43	7.9523E-001		2.0727E-001
	604.70	97.60	1.5031E-001		-1.9251E-002
	795.84	85.40	1.3948E-001		7.0342E-002
	801.93	8.73	1.3621E+000		-6.3416E-001
Cs-137	661.65	85.12	1.5760E-001	1.58E-001	2.7731E-001
Eu-152	121.78	28.40	1.0195E+000	4.54E-001	8.2987E-001
	244.69	7.49	2.2968E+000		3.4319E-001
	344.27	26.50	5.2378E-001		-1.1039E+000
	778.89	12.74	9.1503E-001		-2.1873E-001
	867.32	4.16	2.8070E+000		-1.4142E+000
	964.01	14.40	9.9126E-001		8.4088E-001
	1085.78	10.00	1.1090E+000		-4.8445E-001
	1112.02	13.30	9.0676E-001		7.9926E-001
	1407.95	20.70	4.5353E-001		1.3168E-001
Eu-154	123.07	40.50	7.0825E-001	3.06E-001	4.8281E-001
	247.94	6.60	2.4693E+000		-1.4066E+000
	591.81	4.83	2.5664E+000		1.4021E+000
	723.30	19.70	6.1760E-001		2.6552E-001
	756.87	4.33	2.5914E+000		-1.0597E+000
	873.19	11.50	1.0634E+000		1.3489E+000
	996.32	10.30	1.1144E+000		-6.3574E-001
	1004.76	17.90	6.2430E-001		9.2550E-002
	1274.45	35.50	3.0558E-001		-9.1686E-003
Eu-155	86.54	30.90	1.6795E+000	1.68E+000	1.6103E+000
	105.31	20.70	1.8114E+000		8.7766E-001
Am-241	59.54	35.90	3.5225E+000	3.52E+000	1.2317E+000
Cm-243	228.19	10.56	1.7280E+000	1.12E+000	-1.3440E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1240E+000	1.12E+000	7.0329E-001

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

Report Generated On 6/27/2006 4:27:40 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: ORG7829

Spectrum File: ORG7829
Sample ID: NOL-03-02-128-F-
Sample Title: NOL-03-02-128-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 4:17:39 PM
Live Time: 600.0 seconds
Real Time: 600.9 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: ORG7829
Log Number: NOL-03-02-128-F-
Title: NOL-03-02-128-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	305	300.24	75.06	0.93	1.69E+002	96.86	9.53E+002
2	833-	845	838.40	209.61	0.75	4.82E+001	54.33	2.73E+002
3	948-	961	953.87	238.48	1.24	2.07E+002	62.60	2.91E+002
4	1346-	1364	1353.29	338.34	1.44	8.40E+001	49.36	1.62E+002
5	1399-	1413	1406.78	351.72	1.18	1.07E+002	42.61	1.27E+002
6	2033-	2046	2039.30	509.86	0.98	7.94E+001	35.54	9.06E+001
7	2321-	2338	2330.22	582.60	1.70	1.70E+002	39.38	7.18E+001
8	2426-	2444	2434.69	608.72	1.32	1.19E+002	37.08	7.06E+001
9	3170-	3182	3175.58	793.95	0.40	2.45E+001	21.45	3.55E+001
10	3632-	3650	3640.87	910.28	0.88	1.15E+002	32.36	4.66E+001
11	3864-	3881	3871.92	968.05	1.34	5.14E+001	31.55	6.36E+001
12	5827-	5851	5839.46	1459.97	1.84	7.27E+002	54.67	1.25E+001

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: ORG7829

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
ANN	0.958	511.00*	100.00	1.42503E-001	6.66561E-002
K-40	0.977	1460.81*	10.67	1.65085E+001	1.82477E+000
TL-208	0.741	277.35	6.80		
		510.84*	21.60	6.59737E-001	3.13261E-001
		583.14*	84.20	3.79693E-001	1.00835E-001
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	6.58945E+000	3.98366E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.74540E-001	2.30064E-001
Bi-214	0.396	609.31*	46.30	4.91699E-001	1.64315E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.979	338.32*	11.40	1.16680E+000	7.09564E-001
		911.07*	27.70	8.77944E-001	2.66242E-001
		969.11*	16.60	6.63907E-001	4.13162E-001

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

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

I N T E R 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	0.958	6.048959E-002	7.007333E-002
K-40	0.977	1.650854E+001	1.824773E+000
TL-208	0.741	3.796929E-001	1.000727E-001
Pb-212 @	0.593	6.745402E-001	2.300639E-001
Bi-214	0.396	4.916993E-001	1.643154E-001
Ac-228	0.979	8.469602E-001	2.134349E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	209.61	8.0334E-002	112.72
5	351.72	1.7807E-001	39.88
9	793.95	4.0833E-002	87.54

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

Errors quoted at 1.960 sigma

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

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.1813E-001	1.00E-001	3.3188E-002
	1332.49	100.00	1.0011E-001		1.0693E-001
Nb-94	702.63	100.00	1.1947E-001	1.08E-001	1.3121E-001
	871.10	100.00	1.0837E-001		-3.4645E-002
Ag-108m	79.20	7.10	1.0864E+001	1.43E-001	-1.8555E+001
	433.93	89.90	1.5090E-001		6.4432E-003
	614.37	90.40	1.5376E-001		-6.5081E-002
	722.95	90.50	1.4327E-001		1.2787E-001
Sb-125	176.33	6.89	3.0820E+000	4.55E-001	3.0158E+000
	427.89	29.33	4.5544E-001		-3.8729E-001
	463.38	10.35	1.2528E+000		1.0048E+000
	600.56	17.80	6.8155E-001		4.7860E-001
	606.64	5.02	3.0834E+000		3.9845E+000
	635.90	11.32	1.0776E+000		-2.2507E-001
Cs-134	563.23	8.38	1.4925E+000	1.45E-001	5.0170E-001
	569.32	15.43	8.0338E-001		3.4096E-001
	604.70	97.60	1.5869E-001		7.2139E-002
	795.84	85.40	1.4517E-001		2.0231E-001
	801.93	8.73	1.2839E+000		4.5162E-001
Cs-137	661.65	85.12	1.5095E-001	1.51E-001	8.5499E-002
Eu-152	121.78	28.40	1.0536E+000	3.81E-001	-1.1700E+000
	244.69	7.49	2.2572E+000		-2.5909E+000
	344.27	26.50	5.3100E-001		-2.6109E-002
	778.89	12.74	9.4732E-001		2.8702E-001
	867.32	4.16	2.6677E+000		-5.4568E-001
	964.01	14.40	1.0280E+000		-1.6114E-001
	1085.78	10.00	1.1329E+000		-8.6666E-001
	1112.02	13.30	8.3070E-001		-1.8055E+000
	1407.95	20.70	3.8063E-001		-3.0435E-001
Eu-154	123.07	40.50	7.4300E-001	3.01E-001	3.0332E-001
	247.94	6.60	2.5418E+000		-1.2061E+000
	591.81	4.83	2.5198E+000		2.9065E-001
	723.30	19.70	6.6528E-001		8.3907E-001
	756.87	4.33	2.7063E+000		3.3930E-001
	873.19	11.50	9.8569E-001		2.4813E-001
	996.32	10.30	1.1117E+000		1.6676E-001
	1004.76	17.90	6.7651E-001		7.3969E-001
	1274.45	35.50	3.0147E-001		-1.2681E-001
Eu-155	86.54	30.90	1.8873E+000	1.83E+000	3.3642E+000
	105.31	20.70	1.8312E+000		-1.7942E+000
Am-241	59.54	35.90	4.3767E+000	4.38E+000	-1.0831E+000
Cm-243	228.19	10.56	1.6597E+000	1.12E+000	-1.0685E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1204E+000	1.12E+000	-5.8503E-001

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

Report Generated On 6/27/2006 4:12:41 PM

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

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

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: NOL-03-02-129-F-
Sample Title: NOL-03-02-129-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 4:02:38 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: ORG7829
Log Number: NOL-03-02-129-F-
Title: NOL-03-02-129-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	307	291.69	72.92	1.13	2.38E+002	51.43	1.10E+003
m	2	282-	307	300.02	75.01	1.13	3.57E+002	58.52	1.18E+003
	3	946-	959	953.92	238.49	1.56	2.80E+002	62.87	2.72E+002
	4	1399-	1411	1406.54	351.66	1.17	1.01E+002	42.77	1.42E+002
	5	2032-	2050	2040.75	510.22	0.65	8.80E+001	46.40	1.37E+002
	6	2319-	2338	2330.23	582.60	1.33	1.57E+002	41.08	8.05E+001
	7	2424-	2445	2434.81	608.74	0.85	1.35E+002	39.62	7.22E+001
	8	3633-	3651	3641.83	910.52	1.36	1.44E+002	33.76	4.54E+001
M	9	3850-	3881	3855.09	963.84	1.08	1.76E+001	12.47	3.06E+001
m	10	3850-	3881	3872.90	968.29	1.08	6.77E+001	18.69	2.62E+001
	11	4472-	4484	4477.67	1119.50	0.77	2.90E+001	22.31	3.80E+001
	12	5827-	5851	5839.31	1459.93	1.92	8.11E+002	57.51	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: ORG7829

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
ANN	0.980	511.00*	100.00	1.57948E-001	8.60217E-002
K-40	0.975	1460.81*	10.67	1.84216E+001	1.98303E+000
TL-208	0.744	277.35	6.80		
		510.84*	21.60	7.31242E-001	4.02701E-001
		583.14*	84.20	3.51427E-001	1.02467E-001
		860.37	12.46		
Pb-212	0.594	74.81* @	10.70	1.39115E+001	3.55591E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	9.12725E-001	2.50155E-001
Bi-214	0.695	609.31*	46.30	5.55443E-001	1.76988E-001
		1120.29*	15.10	4.27837E-001	3.32197E-001
		1764.49	15.80		
Ac-228	0.621	338.32	11.40		
		911.07*	27.70	1.09272E+000	2.86076E-001
		969.11*	16.60	8.74108E-001	2.58118E-001

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

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

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

Spectrum File:ORG7829

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

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
ANN	0.980	8.203995E-002	8.878890E-002
K-40	0.975	1.842156E+001	1.983035E+000
TL-208	0.744	3.514273E-001	1.018246E-001
Pb-212 @	0.594	9.127249E-001	2.501554E-001
Bi-214	0.695	5.272295E-001	1.562019E-001
Ac-228	0.621	9.722102E-001	1.916408E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.92	3.9610E-001	21.64
4	351.66	1.6874E-001	42.24
M 9	963.84	2.9254E-002	71.05

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

Errors quoted at 1.960 sigma

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

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.2936E-001	9.28E-002	-1.4911E-002
	1332.49	100.00	9.2759E-002		-6.6930E-003
Nb-94	702.63	100.00	1.2674E-001	1.09E-001	-2.3603E-002
	871.10	100.00	1.0928E-001		6.0279E-002
Ag-108m	79.20	7.10	1.0845E+001	1.44E-001	-5.6452E+000
	433.93	89.90	1.4356E-001		-1.4217E-001
	614.37	90.40	1.5539E-001		-2.3200E-003
	722.95	90.50	1.4365E-001		5.8053E-002
Sb-125	176.33	6.89	2.9981E+000	4.51E-001	-4.1259E-001
	427.89	29.33	4.5134E-001		2.8692E-001
	463.38	10.35	1.2999E+000		1.3360E+000
	600.56	17.80	7.2181E-001		-4.0623E-001
	606.64	5.02	3.1301E+000		2.2828E+000
	635.90	11.32	1.0591E+000		-3.9691E-001
Cs-134	563.23	8.38	1.4999E+000	1.43E-001	-1.6772E+000
	569.32	15.43	8.6260E-001		6.0301E-001
	604.70	97.60	1.6525E-001		3.0980E-004
	795.84	85.40	1.4337E-001		1.2204E-001
	801.93	8.73	1.2839E+000		2.6698E-001
Cs-137	661.65	85.12	1.4814E-001	1.48E-001	1.3119E-001
Eu-152	121.78	28.40	1.0915E+000	4.05E-001	4.1964E-001
	244.69	7.49	2.4061E+000		-1.2014E+000
	344.27	26.50	5.8769E-001		-7.4028E-001
	778.89	12.74	8.9056E-001		-9.2561E-001
	867.32	4.16	2.6353E+000		2.3797E-001
	964.01	14.40	1.0133E+000		-1.8544E-001
	1085.78	10.00	1.1230E+000		-3.0194E-002
	1112.02	13.30	8.7926E-001		-9.3686E-001
	1407.95	20.70	4.0475E-001		-7.1674E-002
Eu-154	123.07	40.50	7.5898E-001	3.08E-001	3.0869E-001
	247.94	6.60	2.6949E+000		-4.0805E-001
	591.81	4.83	2.7238E+000		-4.8810E-001
	723.30	19.70	6.5823E-001		2.0173E-001
	756.87	4.33	2.7873E+000		1.5791E-001
	873.19	11.50	9.3078E-001		-4.6737E-001
	996.32	10.30	1.0656E+000		1.0339E-001
	1004.76	17.90	6.0634E-001		3.9645E-001
	1274.45	35.50	3.0792E-001		-1.2424E-001
Eu-155	86.54	30.90	1.8861E+000	1.88E+000	1.6889E+000
	105.31	20.70	1.8809E+000		1.0314E+000
Am-241	59.54	35.90	4.3497E+000	4.35E+000	-2.3041E+000
Cm-243	228.19	10.56	1.6708E+000	1.19E+000	-2.4461E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1897E+000	1.19E+000	8.3984E-001

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

Report Generated On 6/27/2006 3:57:10 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: ORG7829

Spectrum File: ORG7829
Sample ID: NOL-03-02-130-F-
Sample Title: NOL-03-02-130-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 3:47:06 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: ORG7829
Log Number: NOL-03-02-130-F-
Title: NOL-03-02-130-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	309	292.02	73.01	1.20	2.93E+002	55.34	1.03E+003
m	2	285-	309	300.46	75.12	1.21	5.26E+002	62.96	1.24E+003
	3	899-	914	909.69	227.43	0.25	5.25E+001	61.48	3.09E+002
	4	947-	964	954.21	238.57	1.10	2.44E+002	73.66	3.58E+002
	5	1396-	1413	1406.98	351.77	1.14	1.21E+002	47.56	1.44E+002
	6	2035-	2048	2040.80	510.23	0.39	8.98E+001	35.60	8.52E+001
	7	2322-	2338	2330.69	582.71	1.08	1.57E+002	37.68	6.79E+001
	8	2426-	2443	2434.54	608.68	1.66	9.71E+001	39.05	9.09E+001
	9	2901-	2913	2906.27	726.62	0.69	2.51E+001	24.35	4.69E+001
	10	3633-	3652	3641.30	910.39	1.01	1.16E+002	30.79	3.72E+001
	11	3864-	3879	3872.89	968.29	0.85	4.43E+001	29.02	5.67E+001
	12	4471-	4483	4476.65	1119.24	0.90	3.75E+001	21.73	3.25E+001
	13	5827-	5851	5839.76	1460.05	2.03	7.91E+002	58.59	2.49E+001
	14	7047-	7060	7053.50	1763.50	1.63	2.90E+001	13.62	7.00E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: ORG7829

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
ANN	0.981	511.00*	100.00	1.61202E-001	6.75590E-002
K-40	0.981	1460.81*	10.67	1.79771E+001	1.97256E+000
TL-208	0.747	277.35	6.80		
		510.84*	21.60	7.46308E-001	3.18656E-001
		583.14*	84.20	3.50463E-001	9.56800E-002
		860.37	12.46		
Bi-212	0.990	727.17*	11.80	4.26225E-001	4.16442E-001
Pb-212	0.594	74.81* @	10.70	2.04116E+001	4.68773E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.96637E-001	2.70947E-001
Bi-214	0.978	609.31*	46.30	4.00086E-001	1.68248E-001
		1120.29*	15.10	5.53061E-001	3.25856E-001
		1764.49*	15.80	4.71489E-001	2.26423E-001
Ac-228	0.619	338.32	11.40		
		911.07*	27.70	8.81407E-001	2.55350E-001
		969.11*	16.60	5.71429E-001	3.79413E-001

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

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

I N T E R 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	0.981	8.550234E-002	7.060636E-002
K-40	0.981	1.797713E+001	1.972565E+000
TL-208	0.747	3.504634E-001	9.499584E-002
Bi-212	0.990	4.262248E-001	4.164417E-001
Pb-212 @	0.594	7.966373E-001	2.709467E-001
Bi-214	0.978	4.441863E-001	1.247568E-001
Ac-228	0.619	7.847735E-001	2.118416E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.01	4.8767E-001	18.91
3	227.43	8.7523E-002	117.07
5	351.77	2.0192E-001	39.26

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

Errors quoted at 1.960 sigma

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

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.2104E-001	9.95E-002	4.5876E-002
	1332.49	100.00	9.9464E-002		5.8371E-002
Nb-94	702.63	100.00	1.2059E-001	1.15E-001	7.3121E-002
	871.10	100.00	1.1460E-001		4.5241E-002
Ag-108m	79.20	7.10	1.1610E+001	1.42E-001	-1.0558E+001
	433.93	89.90	1.4244E-001		7.5689E-002
	614.37	90.40	1.5572E-001		-2.3864E-002
	722.95	90.50	1.4670E-001		6.0138E-003
Sb-125	176.33	6.89	3.1515E+000	4.28E-001	8.7761E-001
	427.89	29.33	4.2845E-001		-2.5294E-001
	463.38	10.35	1.2090E+000		4.4362E-001
	600.56	17.80	7.0015E-001		-2.5775E-002
	606.64	5.02	3.2264E+000		5.8064E+000
	635.90	11.32	1.0929E+000		3.6465E-001
Cs-134	563.23	8.38	1.4625E+000	1.35E-001	-1.4939E-001
	569.32	15.43	7.9514E-001		1.1575E-001
	604.70	97.60	1.6396E-001		-3.7180E-003
	795.84	85.40	1.3543E-001		-5.6394E-002
	801.93	8.73	1.3734E+000		1.0395E+000
Cs-137	661.65	85.12	1.4486E-001	1.45E-001	-6.1178E-002
Eu-152	121.78	28.40	1.1348E+000	3.59E-001	3.7922E-001
	244.69	7.49	2.3256E+000		-3.1000E+000
	344.27	26.50	5.5323E-001		-5.1055E-002
	778.89	12.74	8.8729E-001		-1.1097E-001
	867.32	4.16	2.7417E+000		-1.1237E+000
	964.01	14.40	1.0084E+000		7.3478E-001
	1085.78	10.00	1.0510E+000		-1.9882E-001
	1112.02	13.30	8.5348E-001		-4.1512E-001
	1407.95	20.70	3.5918E-001		-2.2440E-001
Eu-154	123.07	40.50	7.8551E-001	2.81E-001	7.0076E-001
	247.94	6.60	2.6100E+000		-9.7374E-001
	591.81	4.83	2.6598E+000		5.0523E-002
	723.30	19.70	6.6877E-001		-2.0294E-001
	756.87	4.33	2.5941E+000		1.1337E+000
	873.19	11.50	9.9705E-001		-2.8522E-002
	996.32	10.30	1.0369E+000		-3.7411E-002
	1004.76	17.90	5.9801E-001		-2.4726E-001
	1274.45	35.50	2.8117E-001		-9.3419E-002
Eu-155	86.54	30.90	2.0070E+000	2.01E+000	2.1382E+000
	105.31	20.70	2.0066E+000		4.2960E-001
Am-241	59.54	35.90	4.6306E+000	4.63E+000	-4.8200E+000
Cm-243	228.19	10.56	1.7805E+000	1.21E+000	1.1717E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2123E+000	1.21E+000	-4.9927E-001

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

Report Generated On 6/27/2006 3:36:33 PM

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

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

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: NOL-03-02-131-F-
Sample Title: NOL-03-02-131-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 3:26:29 PM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: ORG7829
Log Number: NOL-03-02-131-F-
Title: NOL-03-02-131-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	297-	305	300.35	75.09	0.69	3.15E+002	90.20	8.38E+002
2	335-	345	339.16	84.79	1.56	1.68E+002	98.88	9.82E+002
3	945-	963	953.92	238.49	0.96	1.97E+002	85.39	5.03E+002
4	1173-	1189	1180.30	295.09	0.82	9.97E+001	57.23	2.40E+002
5	1399-	1412	1406.16	351.56	1.68	1.16E+002	43.25	1.35E+002
6	2036-	2054	2042.55	510.67	0.79	7.66E+001	47.75	1.51E+002
7	2322-	2338	2330.57	582.68	1.19	1.67E+002	39.10	7.39E+001
8	2427-	2446	2434.29	608.61	0.77	1.21E+002	39.12	7.92E+001
9	3632-	3651	3641.79	910.51	1.70	1.36E+002	34.18	4.77E+001
10	3864-	3880	3872.29	968.14	0.72	6.97E+001	28.29	4.33E+001
11	4280-	4291	4285.26	1071.39	1.14	1.29E+001	16.21	2.01E+001
12	5827-	5853	5839.70	1460.03	1.80	8.55E+002	59.15	1.30E+001
13	7049-	7063	7055.12	1763.91	1.33	4.29E+001	15.21	6.14E+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: ORG7829

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.980	1460.81*	10.67	1.94279E+001	2.06897E+000
TL-208	0.748	277.35	6.80		
		510.84*	21.60	6.36630E-001	4.09592E-001
		583.14*	84.20	3.72915E-001	9.98490E-002
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	1.22569E+001	4.24907E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.43332E-001	2.96385E-001
Bi-214	0.685	609.31*	46.30	4.97620E-001	1.72405E-001
		1120.29	15.10		
		1764.49*	15.80	6.96831E-001	2.56919E-001
PB-214	0.625	74.82* @	6.21	2.11191E+001	7.48006E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	7.95520E-001	4.75878E-001
		351.92*	37.20	4.99371E-001	2.03696E-001
Ac-228	0.618	338.32	11.40		
		911.07*	27.70	1.03763E+000	2.86220E-001
		969.11*	16.60	8.99680E-001	3.77203E-001

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

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

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

Spectrum File:ORG7829

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

	Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
X	ANN		0.996		
	K-40		0.980	1.942792E+001	2.068971E+000
	TL-208		0.748	3.877079E-001	9.700812E-002
	Pb-212	@	0.593	6.433322E-001	2.963853E-001
	Bi-214		0.685	5.594731E-001	1.431593E-001
	PB-214	@	0.625	5.452292E-001	1.872617E-001
	Ac-228		0.618	9.872226E-001	2.280095E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
2	84.79	2.7996E-001	58.87
11	1071.39	2.1528E-002	125.50

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.2710E-001	9.68E-002	-1.3450E-002
	1332.49	100.00	9.6842E-002		1.0780E-001
Nb-94	702.63	100.00	1.2744E-001	1.13E-001	-2.3546E-002
	871.10	100.00	1.1329E-001		-8.7623E-002
Ag-108m	79.20	7.10	1.1910E+001	1.46E-001	-1.0907E+001
	433.93	89.90	1.5275E-001		-1.9091E-002
	614.37	90.40	1.6143E-001		1.7300E-002
	722.95	90.50	1.4594E-001		-1.2970E-002
Sb-125	176.33	6.89	3.3589E+000	4.70E-001	-2.0371E+000
	427.89	29.33	4.6992E-001		-7.6417E-002
	463.38	10.35	1.3047E+000		-3.7613E-001
	600.56	17.80	6.7967E-001		-5.6480E-001
	606.64	5.02	3.1506E+000		5.6298E+000
	635.90	11.32	1.1049E+000		7.0316E-001
Cs-134	563.23	8.38	1.7131E+000	1.40E-001	7.2116E-001
	569.32	15.43	8.9801E-001		9.0312E-002
	604.70	97.60	1.6108E-001		2.6678E-002
	795.84	85.40	1.4016E-001		3.5315E-002
	801.93	8.73	1.2985E+000		1.1510E-001
Cs-137	661.65	85.12	1.4610E-001	1.46E-001	-2.7991E-002
Eu-152	121.78	28.40	1.1580E+000	4.35E-001	-1.4374E+000
	244.69	7.49	2.5245E+000		2.2060E-001
	344.27	26.50	5.7528E-001		-2.0545E-001
	778.89	12.74	9.2255E-001		-1.3045E+000
	867.32	4.16	2.9425E+000		6.9405E-001
	964.01	14.40	1.0890E+000		4.1128E-001
	1085.78	10.00	1.2317E+000		6.3069E-001
	1112.02	13.30	8.8288E-001		-2.9692E-001
	1407.95	20.70	4.3467E-001		2.4119E-001
Eu-154	123.07	40.50	8.0516E-001	3.14E-001	-3.5481E-001
	247.94	6.60	2.8065E+000		-8.0460E-001
	591.81	4.83	2.5875E+000		1.3304E+000
	723.30	19.70	6.7915E-001		4.5691E-001
	756.87	4.33	2.9509E+000		1.6415E+000
	873.19	11.50	1.0120E+000		4.5986E-001
	996.32	10.30	1.1942E+000		1.6038E-001
	1004.76	17.90	6.1183E-001		-3.4344E-001
	1274.45	35.50	3.1423E-001		2.1549E-001
Eu-155	86.54	30.90	2.0833E+000	2.04E+000	3.1222E+000
	105.31	20.70	2.0421E+000		-8.3832E-001
Am-241	59.54	35.90	4.7408E+000	4.74E+000	-3.8565E-001
Cm-243	228.19	10.56	1.8628E+000	1.26E+000	2.6669E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2562E+000	1.26E+000	-6.6141E-001

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

Report Generated On 6/27/2006 3:14:27 PM

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

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

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: NOL-03-02-132-F-
Sample Title: NOL-03-02-132-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 3:04:24 PM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: ORG7829
Log Number: NOL-03-02-132-F-
Title: NOL-03-02-132-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	306	291.58	72.90	1.13	2.42E+002	55.18	1.33E+003
m	2	282-	306	300.49	75.12	1.13	4.82E+002	64.84	1.30E+003
	3	333-	344	340.36	85.09	0.28	1.24E+002	102.75	1.04E+003
	4	945-	961	954.27	238.58	1.26	3.04E+002	76.72	3.93E+002
	5	1401-	1414	1406.19	351.57	0.56	7.23E+001	48.83	1.95E+002
	6	2031-	2050	2041.38	510.38	1.63	1.25E+002	45.76	1.20E+002
	7	2321-	2337	2330.01	582.54	0.50	1.21E+002	38.55	8.50E+001
	8	2426-	2441	2435.32	608.87	0.59	1.41E+002	32.73	4.60E+001
	9	3632-	3651	3640.52	910.19	1.37	1.30E+002	34.62	5.09E+001
	10	3864-	3880	3872.13	968.10	0.82	5.42E+001	27.58	4.58E+001
	11	5826-	5851	5839.40	1459.95	1.67	8.40E+002	59.59	1.96E+001
	12	6343-	6356	6349.37	1587.46	1.00	2.39E+001	12.05	5.07E+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: 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	0.987	511.00*		100.00	2.24430E-001	8.76312E-002
K-40	0.976	1460.81*		10.67	1.90956E+001	2.05520E+000
TL-208	0.744	277.35		6.80		
		510.84*		21.60	1.03903E+000	4.14479E-001
		583.14*		84.20	2.69988E-001	9.29236E-002
		860.37		12.46		
Pb-212	0.594	74.81*	@	10.70	1.86799E+001	4.44203E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	9.92271E-001	2.94815E-001
Bi-214	0.399	609.31*		46.30	5.81033E-001	1.52666E-001
		1120.29		15.10		
		1764.49		15.80		
Ac-228	0.610	338.32		11.40		
		911.07*		27.70	9.90213E-001	2.87105E-001
		969.11*		16.60	6.99545E-001	3.63445E-001

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

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

I N T E R 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	0.987	1.661128E-001	8.988033E-002
K-40	0.976	1.909564E+001	2.055197E+000
TL-208	0.744	2.699876E-001	9.250607E-002
Pb-212 @	0.594	9.922707E-001	2.948149E-001
Bi-214	0.399	5.810328E-001	1.526665E-001
Ac-228	0.610	8.785250E-001	2.252909E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.90	4.0393E-001	22.77
3	85.09	2.0608E-001	83.10
5	351.57	1.2055E-001	67.51
12	1587.46	3.9885E-002	50.35

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

Errors quoted at 1.960 sigma

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

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.3245E-001	1.14E-001	1.0111E-001
	1332.49	100.00	1.1386E-001		1.1422E-001
Nb-94	702.63	100.00	1.1984E-001	1.07E-001	-7.6348E-002
	871.10	100.00	1.0698E-001		-7.9949E-002
Ag-108m	79.20	7.10	1.1973E+001	1.56E-001	-1.4811E+001
	433.93	89.90	1.5585E-001		2.3498E-002
	614.37	90.40	1.5955E-001		-1.6391E-001
	722.95	90.50	1.5686E-001		1.1674E-001
Sb-125	176.33	6.89	3.4228E+000	4.50E-001	-6.2597E-001
	427.89	29.33	4.4968E-001		-5.5857E-002
	463.38	10.35	1.3662E+000		1.1559E+000
	600.56	17.80	7.2536E-001		-1.4685E-002
	606.64	5.02	3.1043E+000		2.9777E+000
	635.90	11.32	1.1138E+000		9.7766E-002
Cs-134	563.23	8.38	1.6608E+000	1.42E-001	2.2404E+000
	569.32	15.43	8.6640E-001		3.8434E-004
	604.70	97.60	1.6292E-001		-6.8239E-002
	795.84	85.40	1.4246E-001		1.6198E-001
	801.93	8.73	1.3365E+000		3.7089E-002
Cs-137	661.65	85.12	1.6094E-001	1.61E-001	5.8911E-003
Eu-152	121.78	28.40	1.2154E+000	4.16E-001	5.6209E-001
	244.69	7.49	2.5295E+000		-1.5104E+000
	344.27	26.50	5.8014E-001		-9.3184E-001
	778.89	12.74	9.5644E-001		-8.7825E-001
	867.32	4.16	2.7417E+000		1.3276E-001
	964.01	14.40	9.7317E-001		3.7049E-001
	1085.78	10.00	1.1329E+000		-6.2346E-001
	1112.02	13.30	9.1476E-001		-1.1878E+000
	1407.95	20.70	4.1624E-001		-2.6353E-001
Eu-154	123.07	40.50	8.3675E-001	3.10E-001	-4.9073E-001
	247.94	6.60	2.8511E+000		1.2880E+000
	591.81	4.83	2.8413E+000		-1.0590E+000
	723.30	19.70	7.1746E-001		4.6092E-001
	756.87	4.33	2.5941E+000		-2.5982E+000
	873.19	11.50	9.7805E-001		4.9163E-002
	996.32	10.30	1.0124E+000		-9.2760E-001
	1004.76	17.90	5.7516E-001		1.1969E-001
	1274.45	35.50	3.0951E-001		1.6258E-002
Eu-155	86.54	30.90	2.0797E+000	2.06E+000	2.1972E+000
	105.31	20.70	2.0550E+000		-9.9324E-001
Am-241	59.54	35.90	4.8635E+000	4.86E+000	7.0626E-001
Cm-243	228.19	10.56	1.9585E+000	1.30E+000	-3.8555E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.3035E+000	1.30E+000	-8.1130E-003

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

Report Generated On 6/27/2006 1:01:03 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: YEL7810

Spectrum File: YEL7810
Sample ID: NOL-03-02-133-F-
Sample Title: NOL-03-02-133-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 12:51:03 PM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7810Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: YEL7810
Log Number: NOL-03-02-133-F-
Title: NOL-03-02-133-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-	308	299.91	75.00	0.65	3.46E+002	121.11	1.31E+003
2	946-	962	955.12	238.82	0.48	2.09E+002	75.92	4.12E+002
3	1401-	1417	1407.12	351.83	0.66	1.05E+002	51.42	1.86E+002
4	2031-	2048	2043.34	510.90	0.38	4.50E+001	46.29	1.56E+002
5	2324-	2341	2333.11	583.35	1.26	1.30E+002	41.20	9.59E+001
6	2427-	2447	2437.58	609.47	1.14	1.39E+002	41.31	8.41E+001
7	3635-	3654	3644.74	911.29	1.29	1.01E+002	32.67	5.02E+001
8	3869-	3882	3876.31	969.18	1.44	3.38E+001	25.07	4.72E+001
9	5833-	5860	5846.30	1461.73	1.87	7.93E+002	56.89	1.07E+001
10	7055-	7068	7061.84	1765.64	0.55	2.91E+001	11.53	1.87E+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: YEL7810

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.970	1460.81*	10.67	1.83285E+001	1.98235E+000
TL-208	0.750	277.35	6.80		
		510.84*	21.60	3.69112E-001	3.84315E-001
		583.14*	84.20	2.88574E-001	9.88079E-002
		860.37	12.46		
Pb-212	0.575	74.81* @	10.70	1.08015E+001	4.33326E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.45998E-001	2.55496E-001
Bi-214	0.685	609.31*	46.30	5.70076E-001	1.83515E-001
		1120.29	15.10		
		1764.49*	15.80	4.95939E-001	2.02532E-001
Ac-228	0.627	338.32	11.40		
		911.07*	27.70	7.64519E-001	2.63002E-001
		969.11*	16.60	4.34836E-001	3.25361E-001

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

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

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

Spectrum File:YEL7810

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

	Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
X	ANN		1.000		
	K-40		0.970	1.832853E+001	1.982347E+000
	TL-208		0.750	2.935679E-001	9.569572E-002
	Pb-212	@	0.575	6.459976E-001	2.554962E-001
	Bi-214		0.685	5.366506E-001	1.359922E-001
	Ac-228		0.627	6.342318E-001	2.045351E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.83	1.7559E-001	48.80

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

Errors quoted at 1.960 sigma

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

Spectrum File:YEL7810
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.2670E-001	1.14E-001	-5.5203E-002
	1332.49	100.00	1.1351E-001		5.5503E-002
Nb-94	702.63	100.00	1.2949E-001	1.06E-001	-4.1703E-002
	871.10	100.00	1.0579E-001		4.0353E-002
Ag-108m	79.20	7.10	9.6955E+000	1.41E-001	-1.0027E+001
	433.93	89.90	1.4917E-001		-2.8534E-002
	614.37	90.40	1.6841E-001		4.1090E-003
	722.95	90.50	1.4124E-001		5.1823E-002
Sb-125	176.33	6.89	3.0803E+000	4.77E-001	2.0299E+000
	427.89	29.33	4.7682E-001		4.9551E-002
	463.38	10.35	1.3636E+000		8.7825E-001
	600.56	17.80	7.3924E-001		5.6439E-001
	606.64	5.02	3.2862E+000		1.0674E+000
	635.90	11.32	1.1029E+000		-1.3937E-002
Cs-134	563.23	8.38	1.4840E+000	1.32E-001	8.8474E-001
	569.32	15.43	8.2719E-001		-3.2988E-001
	604.70	97.60	1.5851E-001		1.4692E-002
	795.84	85.40	1.3231E-001		-2.9256E-002
	801.93	8.73	1.3483E+000		8.3961E-002
Cs-137	661.65	85.12	1.6897E-001	1.69E-001	1.8020E-001
Eu-152	121.78	28.40	1.0610E+000	4.43E-001	5.5252E-001
	244.69	7.49	2.3653E+000		-1.9835E+000
	344.27	26.50	5.3230E-001		-8.3665E-001
	778.89	12.74	9.6419E-001		-8.1187E-001
	867.32	4.16	2.6073E+000		-1.9217E+000
	964.01	14.40	9.8124E-001		8.8361E-002
	1085.78	10.00	1.1761E+000		-7.9286E-001
	1112.02	13.30	8.6796E-001		-5.1670E-002
	1407.95	20.70	4.4285E-001		1.2352E-001
Eu-154	123.07	40.50	7.3508E-001	2.89E-001	-2.3565E-001
	247.94	6.60	2.5634E+000		-2.0455E+000
	591.81	4.83	2.4783E+000		-1.0898E+000
	723.30	19.70	6.5784E-001		3.5436E-001
	756.87	4.33	2.9057E+000		-1.7977E+000
	873.19	11.50	9.2851E-001		-2.5747E-001
	996.32	10.30	1.1054E+000		1.1193E-001
	1004.76	17.90	6.3994E-001		6.0704E-001
	1274.45	35.50	2.8912E-001		-1.3845E-001
Eu-155	86.54	30.90	1.7584E+000	1.76E+000	2.4514E+000
	105.31	20.70	1.8499E+000		-1.2404E+000
Am-241	59.54	35.90	3.6334E+000	3.63E+000	-1.7596E+000
Cm-243	228.19	10.56	1.7088E+000	1.11E+000	-6.5919E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1104E+000	1.11E+000	-2.1701E-001

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

Report Generated On 6/27/2006 1:17:20 PM

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

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

Detector ID: YEL7810

Spectrum File: YEL7810
Sample ID: NOL-03-02-134-F-
Sample Title: NOL-03-02-134-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 1:07:18 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7810Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: YEL7810
Log Number: NOL-03-02-134-F-
Title: NOL-03-02-134-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	945-	963	955.33	238.87	1.41	2.76E+002	78.81	3.97E+002
2	1399-	1415	1407.70	351.97	0.79	1.65E+002	47.37	1.34E+002
3	2323-	2342	2333.31	583.40	1.46	1.35E+002	43.66	1.03E+002
4	2428-	2447	2436.74	609.26	2.34	1.13E+002	39.93	8.64E+001
5	2640-	2651	2646.55	661.72	0.35	3.03E+001	19.87	2.87E+001
6	3638-	3655	3646.25	911.66	0.80	8.48E+001	31.04	5.02E+001
7	3869-	3883	3875.93	969.09	1.06	5.47E+001	26.40	4.33E+001
8	5832-	5859	5845.90	1461.63	1.88	7.70E+002	57.14	1.76E+001

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: YEL7810

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.976	1460.81*		10.67	1.78000E+001	1.95435E+000
Cs-137	1.000	661.65*		85.12	6.99573E-002	4.65487E-002
TL-208	0.468	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	3.00052E-001	1.04434E-001
		860.37		12.46		
Pb-212	0.419	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	8.53275E-001	2.77856E-001
Bi-214	0.407	609.31*		46.30	4.61981E-001	1.73454E-001
		1120.29		15.10		
		1764.49		15.80		
Ac-228	0.622	338.32		11.40		
		911.07*		27.70	6.43679E-001	2.46925E-001
		969.11*		16.60	7.03226E-001	3.47122E-001

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

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

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

Spectrum File:YEL7810

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

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40	0.976	1.779995E+001	1.954352E+000
Cs-137	1.000	6.995730E-002	4.654868E-002
TL-208	0.468	3.000521E-001	1.044340E-001
Pb-212 @	0.419	8.532751E-001	2.778556E-001
Bi-214	0.407	4.619808E-001	1.734543E-001
Ac-228	0.622	6.636867E-001	2.012100E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
2	351.97	2.7502E-001	28.71

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

Errors quoted at 1.960 sigma

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

Spectrum File:YEL7810
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
	Co-60	1173.22	100.00	1.1545E-001	9.96E-002	-4.2180E-002
		1332.49	100.00	9.9647E-002		6.4982E-002
	Nb-94	702.63	100.00	1.2810E-001	1.01E-001	1.6954E-001
		871.10	100.00	1.0050E-001		2.6534E-002
	Ag-108m	79.20	7.10	9.5819E+000	1.42E-001	-3.7650E+001
		433.93	89.90	1.4207E-001		-2.4155E-002
		614.37	90.40	1.4516E-001		7.4487E-003
		722.95	90.50	1.4202E-001		-8.4735E-002
	Sb-125	176.33	6.89	3.0406E+000	4.41E-001	1.0411E+000
		427.89	29.33	4.4120E-001		-4.7551E-002
		463.38	10.35	1.2616E+000		-5.7566E-001
		600.56	17.80	6.6500E-001		7.5928E-002
		606.64	5.02	3.0598E+000		-1.8047E-001
		635.90	11.32	1.0477E+000		1.1901E-001
	Cs-134	563.23	8.38	1.3890E+000	1.39E-001	1.8817E-001
		569.32	15.43	7.6399E-001		-4.5710E-001
		604.70	97.60	1.4632E-001		-3.5686E-002
		795.84	85.40	1.3948E-001		7.1621E-002
		801.93	8.73	1.2916E+000		-2.5503E+000
+	Cs-137	661.65*	85.12	7.0798E-002	7.08E-002	6.9957E-002
	Eu-152	121.78	28.40	1.0347E+000	3.85E-001	-3.5892E-001
		244.69	7.49	2.3411E+000		4.9599E-001
		344.27	26.50	5.2450E-001		-5.7498E-001
		778.89	12.74	9.2446E-001		4.7096E-001
		867.32	4.16	2.4491E+000		-4.6966E+000
		964.01	14.40	9.9126E-001		5.1099E-001
		1085.78	10.00	9.9371E-001		-5.4872E-001
		1112.02	13.30	8.6071E-001		-6.4354E-002
		1407.95	20.70	3.8462E-001		-2.0456E-001
	Eu-154	123.07	40.50	7.2136E-001	3.07E-001	3.1327E-001
		247.94	6.60	2.5769E+000		-3.5618E-001
		591.81	4.83	2.4989E+000		1.1600E-001
		723.30	19.70	6.6313E-001		-9.8799E-002
		756.87	4.33	2.6387E+000		2.0355E+000
		873.19	11.50	8.9141E-001		-7.0214E-001
		996.32	10.30	1.1054E+000		9.8559E-001
		1004.76	17.90	6.1094E-001		1.7803E-001
		1274.45	35.50	3.0718E-001		-6.7686E-002
	Eu-155	86.54	30.90	1.7587E+000	1.76E+000	2.6792E+000
		105.31	20.70	1.8364E+000		4.3080E-002
	Am-241	59.54	35.90	3.5653E+000	3.57E+000	-8.1629E-001
	Cm-243	228.19	10.56	1.7343E+000	1.15E+000	-1.1616E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1478E+000	1.15E+000	4.1558E-001

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

Report Generated On 6/27/2006 1:32:24 PM

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

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

Detector ID: YEL7810

Spectrum File: YEL7810
Sample ID: NOL-03-02-135-F-
Sample Title: NOL-03-02-135-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 1:22:22 PM
Live Time: 600.0 seconds
Real Time: 600.9 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7810Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: YEL7810
Log Number: NOL-03-02-135-F-
Title: NOL-03-02-135-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	296-	310	301.42	75.38	1.23	1.91E+002	126.98	1.38E+003
2	948-	961	955.46	238.90	1.32	2.03E+002	60.50	2.72E+002
3	1399-	1418	1408.30	352.12	1.03	1.56E+002	51.45	1.52E+002
4	2032-	2051	2043.80	511.01	0.80	1.13E+002	40.37	8.78E+001
5	2324-	2341	2333.10	583.35	1.30	1.16E+002	40.38	9.46E+001
6	2429-	2449	2437.98	609.57	1.47	1.32E+002	40.31	8.01E+001
7	2902-	2916	2909.54	727.47	0.99	3.89E+001	26.84	5.11E+001
8	3638-	3654	3645.63	911.51	1.17	1.14E+002	29.52	3.59E+001
9	3870-	3886	3878.16	969.65	0.38	5.31E+001	23.40	2.79E+001
10	5835-	5860	5846.56	1461.79	1.88	8.05E+002	57.90	1.73E+001

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: YEL7810

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
ANN	1.000	511.00*	100.00	2.00633E-001	7.65476E-002
K-40	0.966	1460.81*	10.67	1.85925E+001	2.01380E+000
TL-208	0.750	277.35	6.80		
		510.84*	21.60	9.28855E-001	3.62415E-001
		583.14*	84.20	2.58220E-001	9.56733E-002
		860.37	12.46		
Bi-212	0.997	727.17*	11.80	6.60996E-001	4.62222E-001
Pb-212	0.573	74.81* @	10.70	5.88385E+000	4.07071E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.28012E-001	2.11289E-001
Bi-214	0.405	609.31*	46.30	5.41451E-001	1.78373E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.622	338.32	11.40		
		911.07*	27.70	8.66023E-001	2.45124E-001
		969.11*	16.60	6.81737E-001	3.09021E-001

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

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

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

Spectrum File:YEL7810

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

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
ANN	1.000	1.448571E-001	7.926725E-002
K-40	0.966	1.859252E+001	2.013800E+000
TL-208	0.750	2.582202E-001	9.530246E-002
Bi-212	0.997	6.609963E-001	4.622218E-001
Pb-212 @	0.573	6.280122E-001	2.112893E-001
Bi-214	0.405	5.414512E-001	1.783728E-001
Ac-228	0.622	7.948507E-001	1.920426E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	352.12	2.5943E-001	33.05

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

Errors quoted at 1.960 sigma

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

Spectrum File:YEL7810
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.2214E-001	9.29E-002	-4.3411E-002
	1332.49	100.00	9.2929E-002		5.6100E-002
Nb-94	702.63	100.00	1.1326E-001	1.10E-001	3.6562E-002
	871.10	100.00	1.1037E-001		1.6911E-002
Ag-108m	79.20	7.10	9.2440E+000	1.40E-001	1.6921E+000
	433.93	89.90	1.4500E-001		7.6012E-003
	614.37	90.40	1.6300E-001		4.2775E-002
	722.95	90.50	1.3967E-001		-1.2453E-001
Sb-125	176.33	6.89	2.7908E+000	4.31E-001	5.8555E-001
	427.89	29.33	4.3140E-001		-4.4941E-003
	463.38	10.35	1.2784E+000		7.0283E-001
	600.56	17.80	6.2133E-001		-2.0100E-001
	606.64	5.02	3.0335E+000		-5.8410E-001
	635.90	11.32	1.0818E+000		-7.0920E-002
Cs-134	563.23	8.38	1.4580E+000	1.37E-001	-1.6042E-001
	569.32	15.43	7.7455E-001		-8.9915E-002
	604.70	97.60	1.3706E-001		-6.7312E-002
	795.84	85.40	1.3854E-001		6.4621E-002
	801.93	8.73	1.2867E+000		3.7049E-001
Cs-137	661.65	85.12	1.4614E-001	1.46E-001	9.8112E-003
Eu-152	121.78	28.40	9.5595E-001	3.85E-001	7.1486E-002
	244.69	7.49	2.1355E+000		-1.9594E+000
	344.27	26.50	4.9959E-001		-6.6899E-001
	778.89	12.74	7.9640E-001		-2.3277E-001
	867.32	4.16	2.6290E+000		-4.0593E+000
	964.01	14.40	8.6597E-001		1.3684E-001
	1085.78	10.00	1.0839E+000		2.8041E-001
	1112.02	13.30	8.4971E-001		-3.1941E-001
	1407.95	20.70	3.8462E-001		2.6337E-002
Eu-154	123.07	40.50	6.6810E-001	2.91E-001	2.1027E-001
	247.94	6.60	2.3100E+000		-1.8100E+000
	591.81	4.83	2.4012E+000		-2.7001E+000
	723.30	19.70	6.3805E-001		-4.4563E-001
	756.87	4.33	2.6009E+000		-1.2886E+000
	873.19	11.50	9.7182E-001		4.7075E-001
	996.32	10.30	1.0359E+000		-1.4548E+000
	1004.76	17.90	5.8889E-001		8.9984E-002
	1274.45	35.50	2.9081E-001		-3.1665E-001
Eu-155	86.54	30.90	1.6259E+000	1.63E+000	2.0893E+000
	105.31	20.70	1.7223E+000		8.4744E-001
Am-241	59.54	35.90	3.4386E+000	3.44E+000	-2.0392E+000
Cm-243	228.19	10.56	1.6687E+000	1.04E+000	3.0192E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0448E+000	1.04E+000	-7.5666E-001

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

Report Generated On 6/27/2006 1:51:44 PM

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

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

Detector ID: YEL7810

Spectrum File: YEL7810
Sample ID: NOL-03-02-136-F-
Sample Title: NOL-03-02-136-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 1:41:42 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7810Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: YEL7810
Log Number: NOL-03-02-136-F-
Title: NOL-03-02-136-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	296-	305	300.39	75.12	0.34	1.72E+002	99.84	1.07E+003
2	947-	960	954.51	238.67	1.25	1.54E+002	63.34	3.23E+002
3	1404-	1415	1408.23	352.11	0.64	6.89E+001	39.41	1.32E+002
4	2324-	2356	2332.25	583.13	1.07	1.12E+002	53.88	1.23E+002
5	2429-	2445	2437.96	609.56	1.05	9.67E+001	37.49	8.53E+001
6	2901-	2913	2906.37	726.68	0.78	2.52E+001	22.60	3.98E+001
7	3636-	3656	3644.50	911.22	1.33	1.05E+002	35.74	6.26E+001
8	3870-	3885	3877.03	969.36	0.67	5.98E+001	24.14	3.02E+001
9	4474-	4489	4481.47	1120.49	1.68	4.47E+001	25.31	4.03E+001
10	5831-	5858	5845.07	1461.42	2.23	7.50E+002	57.97	2.78E+001
11	7055-	7068	7061.42	1765.54	0.79	3.31E+001	12.20	1.91E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: YEL7810

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.987	1460.81*	10.67	1.73315E+001	1.93980E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.48933E-001	1.23815E-001
		860.37	12.46		
Bi-212	0.991	727.17*	11.80	4.27516E-001	3.86744E-001
Pb-212	0.576	74.81* @	10.70	5.33526E+000	3.27318E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	4.77108E-001	2.09465E-001
Bi-214	0.990	609.31*	46.30	3.96883E-001	1.61446E-001
		1120.29*	15.10	6.53875E-001	3.76475E-001
		1764.49*	15.80	5.63410E-001	2.15235E-001
Ac-228	0.627	338.32	11.40		
		911.07*	27.70	8.00109E-001	2.86361E-001
		969.11*	16.60	7.68106E-001	3.20443E-001

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

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

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

Spectrum File:YEL7810

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

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40		0.987	1.733153E+001	1.939797E+000
TL-208		0.470	2.489332E-001	1.238151E-001
Bi-212		0.991	4.275156E-001	3.867445E-001
Pb-212	@	0.576	4.771078E-001	2.094647E-001
Bi-214		0.990	4.775885E-001	1.221625E-001
Ac-228		0.627	7.858992E-001	2.135241E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
3	352.11	1.1477E-001	57.22

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

Errors quoted at 1.960 sigma

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

Spectrum File:YEL7810
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.2168E-001	1.11E-001	5.1946E-002
	1332.49	100.00	1.1065E-001		9.0612E-002
Nb-94	702.63	100.00	1.2880E-001	1.13E-001	5.3894E-002
	871.10	100.00	1.1302E-001		-1.3007E-002
Ag-108m	79.20	7.10	9.5692E+000	1.42E-001	-1.7057E+001
	433.93	89.90	1.4234E-001		2.5298E-002
	614.37	90.40	1.5353E-001		-1.1911E-001
	722.95	90.50	1.4202E-001		5.2901E-002
Sb-125	176.33	6.89	3.0370E+000	4.26E-001	-3.1539E-001
	427.89	29.33	4.2558E-001		-2.9337E-001
	463.38	10.35	1.2123E+000		-1.3789E-001
	600.56	17.80	6.3557E-001		2.4252E-001
	606.64	5.02	3.0124E+000		4.1879E+000
	635.90	11.32	1.0939E+000		-2.4503E-002
Cs-134	563.23	8.38	1.3692E+000	1.35E-001	7.8974E-001
	569.32	15.43	7.7455E-001		-5.1836E-001
	604.70	97.60	1.3981E-001		-2.2734E-002
	795.84	85.40	1.3522E-001		4.8650E-002
	801.93	8.73	1.2867E+000		6.4692E-002
Cs-137	661.65	85.12	1.3500E-001	1.35E-001	-9.5252E-002
Eu-152	121.78	28.40	1.0585E+000	3.97E-001	8.2169E-001
	244.69	7.49	2.3621E+000		-1.2159E-001
	344.27	26.50	5.0853E-001		-8.6402E-001
	778.89	12.74	8.3560E-001		-7.8687E-001
	867.32	4.16	2.7765E+000		-4.0009E+000
	964.01	14.40	9.5573E-001		-4.0743E-003
	1085.78	10.00	1.1479E+000		-6.1268E-001
	1112.02	13.30	8.6796E-001		3.9773E-001
	1407.95	20.70	3.9701E-001		2.1655E-001
Eu-154	123.07	40.50	7.3270E-001	2.80E-001	-4.6806E-002
	247.94	6.60	2.5634E+000		-1.2914E+000
	591.81	4.83	2.3652E+000		1.0927E+000
	723.30	19.70	6.6489E-001		8.3322E-001
	756.87	4.33	2.5528E+000		-1.0123E-001
	873.19	11.50	9.9085E-001		9.8677E-001
	996.32	10.30	9.7133E-001		-1.7293E+000
	1004.76	17.90	5.8889E-001		-2.0746E-001
	1274.45	35.50	2.8050E-001		3.0006E-002
Eu-155	86.54	30.90	1.7714E+000	1.77E+000	3.0463E+000
	105.31	20.70	1.8905E+000		7.6714E-001
Am-241	59.54	35.90	3.6324E+000	3.63E+000	1.8119E+000
Cm-243	228.19	10.56	1.7375E+000	1.14E+000	-6.2774E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1417E+000	1.14E+000	1.0205E-001

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

Report Generated On 6/27/2006 1:42:12 PM

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

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

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: NOL-03-02-137-F-
Sample Title: NOL-03-02-137-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 1:32:09 PM
Live Time: 600.0 seconds
Real Time: 600.9 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: ORG7829
Log Number: NOL-03-02-137-F-
Title: NOL-03-02-137-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	304	291.82	72.95	1.07	1.82E+002	47.68	9.31E+002
m	2	282-	304	300.17	75.04	1.07	3.98E+002	57.41	8.41E+002
	3	943-	961	953.80	238.46	1.09	1.59E+002	75.38	3.91E+002
	4	1347-	1358	1352.17	338.06	0.35	2.98E+001	35.21	1.16E+002
	5	1400-	1416	1406.36	351.61	0.37	8.39E+001	46.95	1.55E+002
	6	2322-	2339	2330.72	582.72	0.91	1.04E+002	40.24	9.58E+001
	7	2424-	2445	2434.52	608.67	0.89	1.35E+002	39.24	7.08E+001
	8	3632-	3652	3641.33	910.40	1.10	1.16E+002	32.71	4.51E+001
	9	3867-	3882	3873.18	968.36	1.71	6.24E+001	24.82	3.26E+001
	10	5827-	5853	5839.74	1460.04	2.03	7.39E+002	55.84	1.67E+001
	11	7049-	7062	7055.25	1763.94	0.79	3.68E+001	15.65	9.19E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: ORG7829

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.981	1460.81*	10.67	1.68007E+001	1.86021E+000
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.32571E-001	9.47681E-002
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	1.54847E+001	3.76931E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.19959E-001	2.59151E-001
Bi-214	0.687	609.31*	46.30	5.56727E-001	1.75602E-001
		1120.29	15.10		
		1764.49*	15.80	5.98508E-001	2.61405E-001
Ac-228	0.987	338.32*	11.40	4.14128E-001	4.93227E-001
		911.07*	27.70	8.82327E-001	2.68866E-001
		969.11*	16.60	8.05104E-001	3.31293E-001

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

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

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

Spectrum File:ORG7829

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

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40		0.981	1.680071E+001	1.860213E+000
TL-208		0.468	2.325706E-001	9.476808E-002
Pb-212	@	0.593	5.199587E-001	2.591506E-001
Bi-214		0.687	5.697186E-001	1.457662E-001
Ac-228		0.987	7.851859E-001	1.922536E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.95	3.0369E-001	26.17
5	351.61	1.3991E-001	55.92

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

Errors quoted at 1.960 sigma

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

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.1615E-001	9.35E-002	-7.4263E-003
	1332.49	100.00	9.3452E-002		1.4689E-002
Nb-94	702.63	100.00	1.1369E-001	1.07E-001	1.2343E-002
	871.10	100.00	1.0652E-001		-5.7775E-002
Ag-108m	79.20	7.10	1.0652E+001	1.42E-001	-2.5297E+001
	433.93	89.90	1.4188E-001		-2.6249E-001
	614.37	90.40	1.5539E-001		3.7170E-002
	722.95	90.50	1.4442E-001		1.6254E-002
Sb-125	176.33	6.89	2.9175E+000	4.69E-001	1.9389E+000
	427.89	29.33	4.6913E-001		2.9858E-001
	463.38	10.35	1.2528E+000		3.9865E-001
	600.56	17.80	7.1107E-001		5.3341E-001
	606.64	5.02	3.1558E+000		4.3324E+000
	635.90	11.32	1.0401E+000		1.3769E-001
Cs-134	563.23	8.38	1.4999E+000	1.42E-001	-4.7493E-001
	569.32	15.43	7.8681E-001		-1.1711E+000
	604.70	97.60	1.6448E-001		6.8600E-002
	795.84	85.40	1.4246E-001		1.0163E-001
	801.93	8.73	1.2341E+000		-1.1641E+000
Cs-137	661.65	85.12	1.4361E-001	1.44E-001	1.3087E-001
Eu-152	121.78	28.40	1.0518E+000	4.42E-001	4.4822E-001
	244.69	7.49	2.2778E+000		1.6183E+000
	344.27	26.50	5.3553E-001		-8.5147E-002
	778.89	12.74	8.2266E-001		-1.0571E+000
	867.32	4.16	2.6784E+000		-3.3126E+000
	964.01	14.40	9.9094E-001		-2.2948E-001
	1085.78	10.00	1.1230E+000		2.2643E-001
	1112.02	13.30	8.6831E-001		-7.7343E-001
	1407.95	20.70	4.4181E-001		-2.7981E-001
Eu-154	123.07	40.50	7.3209E-001	3.01E-001	8.2271E-001
	247.94	6.60	2.5483E+000		-1.0230E+000
	591.81	4.83	2.5471E+000		-9.0470E-001
	723.30	19.70	6.6528E-001		8.3715E-002
	756.87	4.33	2.8574E+000		-1.5342E+000
	873.19	11.50	9.3078E-001		-1.3034E-001
	996.32	10.30	1.0562E+000		3.2123E-001
	1004.76	17.90	6.2800E-001		-3.5901E-001
	1274.45	35.50	3.0147E-001		8.5062E-002
Eu-155	86.54	30.90	1.8315E+000	1.79E+000	3.1460E+000
	105.31	20.70	1.7866E+000		-1.0151E+000
Am-241	59.54	35.90	4.2882E+000	4.29E+000	-1.1259E+000
Cm-243	228.19	10.56	1.6246E+000	1.12E+000	-1.9497E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1193E+000	1.12E+000	3.4804E-001

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

Report Generated On 6/27/2006 1:57:29 PM

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

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

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: NOL-03-02-138-F-
Sample Title: NOL-03-02-138-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 1:47:26 PM
Live Time: 600.0 seconds
Real Time: 600.9 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: ORG7829
Log Number: NOL-03-02-138-F-
Title: NOL-03-02-138-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	309	291.72	72.93	1.29	1.91E+002	47.94	9.00E+002
m	2	283-	309	300.51	75.13	1.29	4.56E+002	57.95	1.08E+003
	3	948-	960	953.85	238.48	1.34	1.78E+002	56.96	2.47E+002
	4	1171-	1189	1179.73	294.95	0.37	8.22E+001	50.32	1.71E+002
	5	1343-	1356	1351.86	337.99	0.90	3.80E+001	40.15	1.38E+002
	6	1397-	1411	1406.23	351.58	1.22	1.07E+002	45.24	1.48E+002
	7	2030-	2053	2042.32	510.62	0.48	1.21E+002	48.22	1.20E+002
	8	2324-	2338	2330.38	582.63	0.38	1.16E+002	34.98	7.05E+001
	9	2427-	2447	2435.13	608.82	1.22	1.40E+002	38.36	6.60E+001
	10	3632-	3651	3640.94	910.30	1.07	1.02E+002	28.21	3.00E+001
	11	3864-	3880	3873.35	968.41	0.76	5.36E+001	25.51	3.64E+001
	12	4471-	4482	4476.35	1119.17	0.44	2.50E+001	20.34	3.30E+001
	13	5826-	5853	5840.24	1460.16	1.75	8.48E+002	59.70	1.76E+001

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: 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	2.16570E-001	9.14354E-002
K-40	0.986	1460.81*		10.67	1.92802E+001	2.06808E+000
TL-208	0.747	277.35		6.80		
		510.84*		21.60	1.00264E+000	4.31159E-001
		583.14*		84.20	2.57771E-001	8.49706E-002
		860.37		12.46		
Pb-212	0.593	74.81*	@	10.70	1.76685E+001	4.12833E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	5.81506E-001	2.07043E-001
Bi-214	0.692	609.31*		46.30	5.76862E-001	1.73274E-001
		1120.29*		15.10	3.68574E-001	3.02544E-001
		1764.49		15.80		
PB-214	0.625	74.82*	@	6.21	3.04432E+001	7.44862E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	6.56187E-001	4.16418E-001
		351.92*		37.20	4.59265E-001	2.08954E-001
Ac-228	0.985	338.32*		11.40	5.27232E-001	5.63574E-001
		911.07*		27.70	7.76202E-001	2.32550E-001
		969.11*		16.60	6.91886E-001	3.37146E-001

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

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

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

Spectrum File:ORG7829

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

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
ANN		0.995	1.608910E-001	9.324164E-002
K-40		0.986	1.928024E+001	2.068081E+000
TL-208		0.747	2.577713E-001	8.455434E-002
Pb-212	@	0.593	5.815064E-001	2.070431E-001
Bi-214		0.692	5.254158E-001	1.503604E-001
PB-214	@	0.625	4.988751E-001	1.867605E-001
Ac-228		0.985	7.260778E-001	1.812578E-001

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

Errors quoted at 1.960 sigma

U N I D E N T I F 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	3.1773E-001	25.15

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

Errors quoted at 1.960 sigma

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

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.2573E-001	9.28E-002	1.1607E-001
	1332.49	100.00	9.2759E-002		6.4173E-002
Nb-94	702.63	100.00	1.1795E-001	1.11E-001	-7.1355E-003
	871.10	100.00	1.1108E-001		6.5679E-002
Ag-108m	79.20	7.10	1.0297E+001	1.39E-001	-5.3721E+000
	433.93	89.90	1.4495E-001		1.3873E-002
	614.37	90.40	1.6049E-001		-2.0168E-002
	722.95	90.50	1.3936E-001		1.1168E-001
Sb-125	176.33	6.89	2.9233E+000	4.34E-001	2.9271E+000
	427.89	29.33	4.3365E-001		-4.1456E-002
	463.38	10.35	1.2578E+000		1.4645E+000
	600.56	17.80	6.5655E-001		-3.1230E-002
	606.64	5.02	3.0834E+000		3.6549E+000
	635.90	11.32	1.0077E+000		2.7799E-001
Cs-134	563.23	8.38	1.4888E+000	1.45E-001	1.5145E+000
	569.32	15.43	8.2959E-001		1.9621E-001
	604.70	97.60	1.5788E-001		-4.8596E-002
	795.84	85.40	1.4517E-001		8.5497E-002
	801.93	8.73	1.2083E+000		-5.5266E-001
Cs-137	661.65	85.12	1.3718E-001	1.37E-001	-7.0131E-003
Eu-152	121.78	28.40	9.9365E-001	3.89E-001	4.8429E-001
	244.69	7.49	2.2534E+000		-2.3843E+000
	344.27	26.50	5.2797E-001		-4.8135E-001
	778.89	12.74	9.0028E-001		-8.8524E-001
	867.32	4.16	2.6244E+000		-1.3428E+000
	964.01	14.40	9.8590E-001		8.1005E-001
	1085.78	10.00	1.0018E+000		-8.1256E-001
	1112.02	13.30	8.1121E-001		-5.6270E-001
	1407.95	20.70	3.8885E-001		-1.0544E-001
Eu-154	123.07	40.50	6.8623E-001	3.00E-001	-2.0479E-001
	247.94	6.60	2.4738E+000		-4.4222E-001
	591.81	4.83	2.4003E+000		-6.0138E-001
	723.30	19.70	6.4931E-001		8.5986E-001
	756.87	4.33	2.6131E+000		2.0105E+000
	873.19	11.50	9.4681E-001		1.7492E-001
	996.32	10.30	1.0173E+000		-9.2873E-002
	1004.76	17.90	6.1727E-001		4.1929E-001
	1274.45	35.50	2.9983E-001		2.6057E-001
Eu-155	86.54	30.90	1.7334E+000	1.73E+000	1.2781E+000
	105.31	20.70	1.7342E+000		-8.9002E-001
Am-241	59.54	35.90	4.1463E+000	4.15E+000	-1.1047E+000
Cm-243	228.19	10.56	1.5795E+000	1.15E+000	-1.0137E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1534E+000	1.15E+000	7.2947E-001

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

Report Generated On 6/27/2006 2:14:41 PM

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

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

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: NOL-03-02-139-F-
Sample Title: NOL-03-02-139-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 2:04:39 PM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: ORG7829
Log Number: NOL-03-02-139-F-
Title: NOL-03-02-139-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	306	300.78	75.20	0.57	1.80E+002	95.44	9.15E+002
2	335-	344	339.48	84.87	1.01	1.37E+002	80.78	6.86E+002
3	949-	961	954.12	238.54	1.21	2.02E+002	60.49	2.76E+002
4	1175-	1188	1180.47	295.14	1.20	6.40E+001	47.52	1.89E+002
5	1400-	1414	1406.80	351.72	1.57	1.13E+002	45.00	1.44E+002
6	2032-	2052	2042.10	510.56	1.40	1.00E+002	47.16	1.30E+002
7	2322-	2339	2331.02	582.79	0.98	1.57E+002	39.84	7.87E+001
8	2426-	2446	2434.84	608.75	1.50	1.57E+002	38.91	6.40E+001
9	3633-	3652	3642.12	910.59	1.57	1.09E+002	30.45	3.76E+001
10	3866-	3883	3872.78	968.26	0.83	6.88E+001	29.24	4.72E+001
11	4474-	4485	4479.35	1119.92	0.84	1.70E+001	21.10	3.90E+001
12	5829-	5853	5840.79	1460.30	1.91	8.62E+002	60.70	2.41E+001
13	7049-	7062	7055.65	1764.04	0.31	3.53E+001	14.23	5.69E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: ORG7829

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
ANN	0.994	511.00*		100.00	1.79613E-001	8.81180E-002
K-40	0.992	1460.81*		10.67	1.95868E+001	2.10177E+000
TL-208	0.750	277.35		6.80		
		510.84*		21.60	8.31543E-001	4.13567E-001
		583.14*		84.20	3.51005E-001	9.99632E-002
		860.37		12.46		
Pb-212	0.593	74.81*	@	10.70	6.94738E+000	3.93320E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.60846E-001	2.22963E-001
Bi-214	0.992	609.31*		46.30	6.46561E-001	1.78994E-001
		1120.29*		15.10	2.50761E-001	3.12318E-001
		1764.49*		15.80	5.74148E-001	2.38328E-001
PB-214	0.626	74.82*	@	6.21	1.19705E+001	6.83250E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	5.10728E-001	3.88835E-001
		351.92*		37.20	4.87085E-001	2.09773E-001
Ac-228	0.622	338.32		11.40		
		911.07*		27.70	8.32714E-001	2.50775E-001
		969.11*		16.60	8.88628E-001	3.88787E-001

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

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

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

Spectrum File:ORG7829

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

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
ANN		0.994	1.037963E-001	9.069123E-002
K-40		0.992	1.958680E+001	2.101774E+000
TL-208		0.750	3.510045E-001	9.930657E-002
Pb-212	@	0.593	6.608459E-001	2.229631E-001
Bi-214		0.992	5.562846E-001	1.301123E-001
PB-214	@	0.626	4.924148E-001	1.846200E-001
Ac-228		0.622	8.491418E-001	2.107391E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
2	84.87	2.2820E-001	59.00

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

Errors quoted at 1.960 sigma

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

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.2846E-001	1.02E-001	-9.9036E-002
	1332.49	100.00	1.0202E-001		7.9621E-002
Nb-94	702.63	100.00	1.2059E-001	1.12E-001	-8.2840E-002
	871.10	100.00	1.1153E-001		-8.2960E-002
Ag-108m	79.20	7.10	1.1193E+001	1.42E-001	2.5522E+000
	433.93	89.90	1.4159E-001		-4.2741E-002
	614.37	90.40	1.6174E-001		-4.7915E-002
	722.95	90.50	1.4745E-001		5.6166E-002
Sb-125	176.33	6.89	3.0765E+000	4.33E-001	-2.7133E-001
	427.89	29.33	4.3279E-001		-2.5623E-001
	463.38	10.35	1.3095E+000		-4.5745E-001
	600.56	17.80	7.4109E-001		2.8861E-001
	606.64	5.02	3.2562E+000		4.8973E+000
	635.90	11.32	1.0684E+000		4.6305E-002
Cs-134	563.23	8.38	1.6101E+000	1.41E-001	-9.0763E-001
	569.32	15.43	8.7018E-001		6.4199E-001
	604.70	97.60	1.6831E-001		-5.4591E-004
	795.84	85.40	1.4062E-001		5.4543E-002
	801.93	8.73	1.2888E+000		4.5851E-001
Cs-137	661.65	85.12	1.4022E-001	1.40E-001	7.4351E-002
Eu-152	121.78	28.40	1.0654E+000	4.01E-001	1.1820E-001
	244.69	7.49	2.2907E+000		8.2870E-001
	344.27	26.50	5.2491E-001		-4.8010E-001
	778.89	12.74	9.3502E-001		-8.1230E-001
	867.32	4.16	2.6784E+000		-3.4648E+000
	964.01	14.40	1.0636E+000		1.7780E-001
	1085.78	10.00	1.1763E+000		-5.5134E-002
	1112.02	13.30	8.9720E-001		-4.7274E-001
	1407.95	20.70	4.0084E-001		-6.5386E-001
Eu-154	123.07	40.50	7.4034E-001	2.88E-001	1.1399E-001
	247.94	6.60	2.5483E+000		-1.4210E+000
	591.81	4.83	2.6856E+000		3.8495E-001
	723.30	19.70	6.7571E-001		1.8106E-001
	756.87	4.33	2.8917E+000		-1.4292E+000
	873.19	11.50	1.0083E+000		1.0088E+000
	996.32	10.30	1.1027E+000		5.2407E-003
	1004.76	17.90	6.5655E-001		1.0497E-001
	1274.45	35.50	2.8811E-001		-3.3026E-002
Eu-155	86.54	30.90	1.8659E+000	1.84E+000	1.5324E+000
	105.31	20.70	1.8360E+000		-6.8148E-001
Am-241	59.54	35.90	4.4337E+000	4.43E+000	1.1629E+000
Cm-243	228.19	10.56	1.7134E+000	1.14E+000	7.7758E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1353E+000	1.14E+000	2.4375E-001

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

Report Generated On 6/27/2006 2:34:11 PM

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

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

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: NOL-03-02-140-F-
Sample Title: NOL-03-02-140-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 2:24:09 PM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: ORG7829
Log Number: NOL-03-02-140-F-
Title: NOL-03-02-140-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	309	292.36	73.09	1.25	2.47E+002	56.60	1.20E+003
m	2	284-	309	300.43	75.11	1.26	4.99E+002	65.35	1.48E+003
	3	331-	348	339.96	84.99	0.77	1.70E+002	145.21	1.63E+003
	4	947-	961	954.52	238.64	1.36	2.25E+002	68.62	3.47E+002
	5	1175-	1184	1179.81	294.97	0.43	3.14E+001	34.80	1.26E+002
	6	1348-	1363	1352.71	338.20	0.85	7.93E+001	47.22	1.65E+002
	7	1399-	1412	1405.95	351.51	0.99	9.65E+001	41.70	1.30E+002
	8	2032-	2048	2041.68	510.45	0.29	5.33E+001	41.74	1.28E+002
	9	2320-	2340	2330.47	582.66	1.58	1.49E+002	46.63	1.15E+002
	10	2428-	2443	2434.29	608.61	1.55	1.36E+002	35.94	6.51E+001
	11	2901-	2913	2907.72	726.98	1.02	4.12E+001	26.91	5.58E+001
	12	3632-	3652	3641.78	910.51	1.12	1.60E+002	33.11	3.43E+001
M	13	3848-	3881	3854.93	963.80	1.89	4.14E+001	16.21	3.54E+001
m	14	3848-	3881	3871.87	968.04	1.89	8.43E+001	20.77	4.94E+001
	15	4472-	4483	4477.15	1119.37	0.39	2.53E+001	20.19	3.17E+001
	16	5322-	5333	5327.64	1332.01	0.84	2.14E+001	13.93	1.16E+001
	17	5827-	5852	5839.53	1459.99	2.00	9.06E+002	62.11	2.29E+001
	18	7049-	7062	7055.70	1764.05	0.37	2.87E+001	16.39	1.43E+001

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: ORG7829

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.978	1460.81*		10.67	2.05898E+001	2.18416E+000
TL-208	0.747	277.35		6.80		
		510.84*		21.60	4.42917E-001	3.54015E-001
		583.14*		84.20	3.32216E-001	1.12697E-001
		860.37		12.46		
Bi-212	0.999	727.17*		11.80	7.00265E-001	4.64390E-001
Pb-212	0.594	74.81*	@	10.70	1.93667E+001	4.56564E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.33824E-001	2.51806E-001
Bi-214	0.984	609.31*		46.30	5.59819E-001	1.63312E-001
		1120.29*		15.10	3.72729E-001	3.00367E-001
		1764.49*		15.80	4.66996E-001	2.70538E-001
PB-214	0.624	74.82*	@	6.21	3.33693E+001	8.23123E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.50311E-001	2.80819E-001
		351.92*		37.20	4.14538E-001	1.92088E-001
Ac-228	0.983	338.32*		11.40	1.10068E+000	6.78123E-001
		911.07*		27.70	1.21502E+000	2.88237E-001
		969.11*		16.60	1.08849E+000	2.91404E-001

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

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

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

Spectrum File:ORG7829

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

	Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
X	ANN		0.990		
	K-40		0.978	2.058982E+001	2.184158E+000
	TL-208		0.747	3.424022E-001	1.073869E-001
	Bi-212		0.999	7.002648E-001	4.643897E-001
	Pb-212	@	0.594	7.338237E-001	2.518056E-001
	Bi-214		0.984	5.061261E-001	1.267538E-001
	PB-214	@	0.624	3.621906E-001	1.585450E-001
	Ac-228		0.983	1.148113E+000	1.961635E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.09	4.1231E-001	22.88
3	84.99	2.8407E-001	85.20
M 13	963.80	6.9036E-002	39.14
16	1332.01	3.5631E-002	65.18

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

Errors quoted at 1.960 sigma

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

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.2665E-001	1.06E-001	1.3244E-002
	1332.49	100.00	1.0632E-001		3.8278E-003
Nb-94	702.63	100.00	1.1984E-001	1.20E-001	-3.8181E-002
	871.10	100.00	1.2804E-001		3.8653E-002
Ag-108m	79.20	7.10	1.2003E+001	1.55E-001	-5.5781E+000
	433.93	89.90	1.5457E-001		1.1646E-001
	614.37	90.40	1.6843E-001		-5.0310E-002
	722.95	90.50	1.5721E-001		7.2838E-002
Sb-125	176.33	6.89	3.2484E+000	4.88E-001	-1.2330E+000
	427.89	29.33	4.8778E-001		-2.4862E-001
	463.38	10.35	1.3287E+000		6.5015E-001
	600.56	17.80	7.1467E-001		2.7640E-003
	606.64	5.02	3.2413E+000		5.8382E+000
	635.90	11.32	1.1856E+000		8.2506E-001
Cs-134	563.23	8.38	1.6101E+000	1.60E-001	1.0195E+000
	569.32	15.43	8.3748E-001		-1.0715E-001
	604.70	97.60	1.6474E-001		-1.6343E-001
	795.84	85.40	1.6003E-001		2.0056E-001
	801.93	8.73	1.3688E+000		-1.6928E+000
Cs-137	661.65	85.12	1.5253E-001	1.53E-001	-1.3306E-002
Eu-152	121.78	28.40	1.1588E+000	4.45E-001	-1.2922E+000
	244.69	7.49	2.3474E+000		-4.7120E-001
	344.27	26.50	5.7108E-001		3.7038E-001
	778.89	12.74	9.5341E-001		-1.4008E-001
	867.32	4.16	3.1748E+000		-2.7894E+000
	964.01	14.40	1.1160E+000		-9.3765E-002
	1085.78	10.00	1.1572E+000		8.2957E-001
	1112.02	13.30	9.1128E-001		-9.9381E-001
	1407.95	20.70	4.4533E-001		1.4607E-001
Eu-154	123.07	40.50	8.1620E-001	3.26E-001	7.6607E-002
	247.94	6.60	2.6826E+000		-2.2144E+000
	591.81	4.83	2.7301E+000		-1.5974E+000
	723.30	19.70	7.2871E-001		4.4453E-001
	756.87	4.33	2.8487E+000		5.7627E-001
	873.19	11.50	1.0868E+000		-7.3448E-001
	996.32	10.30	1.1162E+000		-2.1389E-001
	1004.76	17.90	6.6411E-001		3.3399E-001
	1274.45	35.50	3.2646E-001		8.7561E-002
Eu-155	86.54	30.90	2.1031E+000	2.08E+000	7.9507E-002
	105.31	20.70	2.0841E+000		3.9615E-001
Am-241	59.54	35.90	4.7979E+000	4.80E+000	1.2392E+000
Cm-243	228.19	10.56	1.8057E+000	1.23E+000	3.8903E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2334E+000	1.23E+000	6.3053E-001

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

Report Generated On 6/27/2006 2:54:41 PM

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

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

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: NOL-03-02-141-F-
Sample Title: NOL-03-02-141-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 2:44:39 PM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: ORG7829
Log Number: NOL-03-02-141-F-
Title: NOL-03-02-141-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	306	291.82	72.95	1.02	2.30E+002	55.21	1.09E+003
m	2	285-	306	300.60	75.15	1.03	4.69E+002	65.99	1.34E+003
	3	334-	344	339.54	84.89	0.67	9.16E+001	98.03	1.01E+003
	4	946-	960	953.90	238.49	1.09	2.20E+002	69.92	3.66E+002
	5	1399-	1411	1406.14	351.56	0.90	8.40E+001	45.36	1.72E+002
	6	2323-	2339	2330.93	582.77	1.19	1.46E+002	39.01	7.93E+001
	7	2426-	2443	2435.01	608.79	0.93	1.18E+002	39.73	9.00E+001
	8	3632-	3649	3641.38	910.41	0.92	9.55E+001	31.80	5.15E+001
	9	3865-	3880	3872.23	968.13	1.13	6.30E+001	27.38	4.40E+001
	10	4473-	4485	4479.00	1119.83	0.37	2.52E+001	21.05	3.38E+001
	11	5826-	5852	5839.97	1460.10	1.81	8.50E+002	60.05	2.03E+001
	12	7048-	7061	7054.87	1763.84	0.47	2.96E+001	14.97	1.04E+001

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: 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	0.983	1460.81*	10.67	1.93093E+001	2.07503E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.25170E-001	9.68125E-002
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	1.81702E+001	4.38417E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.19497E-001	2.54572E-001
Bi-214	0.990	609.31*	46.30	4.86094E-001	1.74260E-001
		1120.29*	15.10	3.71196E-001	3.12998E-001
		1764.49*	15.80	4.81679E-001	2.48117E-001
Ac-228	0.616	338.32	11.40		
		911.07*	27.70	7.27124E-001	2.56061E-001
		969.11*	16.60	8.13204E-001	3.63526E-001

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

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

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

Spectrum File:ORG7829

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

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40	0.983	1.930928E+001	2.075029E+000
TL-208	0.469	3.251695E-001	9.681255E-002
Pb-212 @	0.593	7.194967E-001	2.545720E-001
Bi-214	0.990	4.651363E-001	1.297693E-001
Ac-228	0.616	7.556700E-001	2.093418E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.95	3.8411E-001	23.96
3	84.89	1.5266E-001	107.03
5	351.56	1.4001E-001	54.00

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

Errors quoted at 1.960 sigma

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

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.3157E-001	1.08E-001	1.4652E-001
	1332.49	100.00	1.0811E-001		5.8457E-002
Nb-94	702.63	100.00	1.3360E-001	1.06E-001	-4.3257E-002
	871.10	100.00	1.0558E-001		-1.2367E-001
Ag-108m	79.20	7.10	1.2177E+001	1.47E-001	-1.2719E+001
	433.93	89.90	1.5713E-001		-6.0870E-002
	614.37	90.40	1.6205E-001		-7.1959E-002
	722.95	90.50	1.4707E-001		-7.8757E-003
Sb-125	176.33	6.89	3.3361E+000	4.76E-001	1.6036E+000
	427.89	29.33	4.7621E-001		1.0839E-001
	463.38	10.35	1.3311E+000		8.4979E-001
	600.56	17.80	7.6823E-001		-9.9615E-002
	606.64	5.02	3.3053E+000		3.5909E+000
	635.90	11.32	1.1911E+000		1.4274E+000
Cs-134	563.23	8.38	1.6740E+000	1.53E-001	3.2090E-001
	569.32	15.43	9.3728E-001		4.2497E-001
	604.70	97.60	1.6982E-001		-3.8168E-002
	795.84	85.40	1.5258E-001		1.1549E-001
	801.93	8.73	1.3411E+000		-5.5916E-001
Cs-137	661.65	85.12	1.5565E-001	1.56E-001	-3.9520E-002
Eu-152	121.78	28.40	1.1960E+000	4.01E-001	1.3643E-001
	244.69	7.49	2.5262E+000		-1.3836E+000
	344.27	26.50	5.8495E-001		-3.3715E-001
	778.89	12.74	9.5037E-001		-1.4645E+000
	867.32	4.16	2.4898E+000		-5.6441E+000
	964.01	14.40	1.0207E+000		2.2666E-001
	1085.78	10.00	1.1279E+000		-5.7513E-001
	1112.02	13.30	9.3539E-001		-4.1160E-001
	1407.95	20.70	4.0084E-001		1.4461E-001
Eu-154	123.07	40.50	8.2249E-001	3.00E-001	-5.3781E-001
	247.94	6.60	2.8511E+000		9.8411E-001
	591.81	4.83	2.8109E+000		-3.7423E-001
	723.30	19.70	6.7743E-001		2.5093E-002
	756.87	4.33	2.7245E+000		8.9230E-001
	873.19	11.50	9.2673E-001		-4.0582E-001
	996.32	10.30	1.1296E+000		-4.0353E-001
	1004.76	17.90	6.5400E-001		-1.4061E-001
	1274.45	35.50	2.9983E-001		-7.3335E-002
Eu-155	86.54	30.90	2.0822E+000	2.08E+000	2.3763E+000
	105.31	20.70	2.0943E+000		3.9087E-002
Am-241	59.54	35.90	4.8194E+000	4.82E+000	1.0903E+000
Cm-243	228.19	10.56	1.8760E+000	1.24E+000	-8.3994E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2386E+000	1.24E+000	-6.0264E-001

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

Report Generated On 6/27/2006 11:49:03 AM

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

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

Detector ID: YEL7810

Spectrum File: YEL7810
Sample ID: NOL-03-02-142-F-
Sample Title: NOL-03-02-142-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 11:39:00 AM
Live Time: 600.0 seconds
Real Time: 601.0 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7810Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: YEL7810
Log Number: NOL-03-02-142-F-
Title: NOL-03-02-142-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	307	300.60	75.17	0.84	2.36E+002	127.94	1.52E+003
2	945-	963	955.11	238.81	0.91	2.26E+002	82.37	4.55E+002
3	1345-	1357	1352.11	338.08	1.35	8.11E+001	41.56	1.40E+002
4	1402-	1416	1407.55	351.93	0.87	1.11E+002	47.93	1.68E+002
5	2036-	2054	2043.37	510.91	0.89	9.25E+001	45.65	1.33E+002
6	2322-	2343	2332.07	583.09	1.56	1.41E+002	48.52	1.26E+002
7	2426-	2447	2437.52	609.45	1.49	1.36E+002	43.20	9.34E+001
8	2828-	2838	2832.58	708.23	0.68	1.85E+001	18.67	2.95E+001
9	3632-	3655	3644.95	911.34	1.34	1.66E+002	35.14	3.88E+001
10	3869-	3884	3876.90	969.33	0.42	3.83E+001	27.31	5.08E+001
11	4542-	4554	4547.52	1137.00	0.32	1.66E+001	16.48	2.04E+001
12	5832-	5859	5845.77	1461.60	2.19	8.57E+002	58.91	1.05E+001

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: YEL7810

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
ANN	1.000	511.00*		100.00	1.63950E-001	8.39143E-002
K-40	0.978	1460.81*		10.67	1.97893E+001	2.10231E+000
TL-208	0.751	277.35		6.80		
		510.84*		21.60	7.59029E-001	3.93406E-001
		583.14*		84.20	3.13210E-001	1.15071E-001
		860.37		12.46		
Pb-212	0.575	74.81*	@	10.70	7.32485E+000	4.21850E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.99456E-001	2.77115E-001
Bi-214	0.406	609.31*		46.30	5.56618E-001	1.90082E-001
		1120.29		15.10		
		1764.49		15.80		
Ac-228	0.998	338.32*		11.40	1.08644E+000	5.82402E-001
		911.07*		27.70	1.26128E+000	3.03521E-001
		969.11*		16.60	4.91484E-001	3.54654E-001

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

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

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

Spectrum File:YEL7810

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

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
ANN	1.000	9.629695E-002	8.749020E-002
K-40	0.978	1.978928E+001	2.102312E+000
TL-208	0.751	3.132097E-001	1.146177E-001
Pb-212 @	0.575	6.994562E-001	2.771152E-001
Bi-214	0.406	5.566178E-001	1.900821E-001
Ac-228	0.998	9.562397E-001	2.144055E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
4	351.93	1.8447E-001	43.31
8	708.23	3.0885E-002	100.73
11	1137.00	2.7691E-002	99.18

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

Errors quoted at 1.960 sigma

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

Spectrum File:YEL7810
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.2121E-001	9.83E-002	-7.8843E-003
	1332.49	100.00	9.8343E-002		9.3699E-002
Nb-94	702.63	100.00	1.2457E-001	1.13E-001	3.4734E-002
	871.10	100.00	1.1258E-001		2.2466E-002
Ag-108m	79.20	7.10	1.0077E+001	1.42E-001	-8.6991E+000
	433.93	89.90	1.5247E-001		-2.4984E-002
	614.37	90.40	1.6330E-001		-3.6965E-002
	722.95	90.50	1.4202E-001		-9.6336E-002
Sb-125	176.33	6.89	3.1064E+000	4.81E-001	4.6979E-001
	427.89	29.33	4.8052E-001		1.0110E-001
	463.38	10.35	1.3636E+000		3.3322E-001
	600.56	17.80	7.2187E-001		3.9055E-001
	606.64	5.02	3.2668E+000		6.2716E-002
	635.90	11.32	1.1265E+000		-3.1847E-001
Cs-134	563.23	8.38	1.5022E+000	1.50E-001	-1.3254E+000
	569.32	15.43	8.2914E-001		-6.2544E-001
	604.70	97.60	1.5529E-001		4.0488E-003
	795.84	85.40	1.4977E-001		1.1020E-002
	801.93	8.73	1.3390E+000		-1.2703E+000
Cs-137	661.65	85.12	1.5912E-001	1.59E-001	1.6977E-001
Eu-152	121.78	28.40	1.0960E+000	4.05E-001	1.7004E-001
	244.69	7.49	2.5146E+000		1.2569E+000
	344.27	26.50	5.5368E-001		-1.1396E+000
	778.89	12.74	8.6629E-001		-5.5032E-001
	867.32	4.16	2.8472E+000		-3.4803E-001
	964.01	14.40	9.9622E-001		2.4770E-001
	1085.78	10.00	1.1526E+000		-6.6247E-001
	1112.02	13.30	8.8582E-001		2.9553E-001
	1407.95	20.70	4.0504E-001		-7.1538E-002
Eu-154	123.07	40.50	7.5701E-001	3.09E-001	-4.4235E-002
	247.94	6.60	2.7166E+000		9.0922E-002
	591.81	4.83	2.6896E+000		-1.2156E+000
	723.30	19.70	6.6137E-001		6.4596E-002
	756.87	4.33	2.9810E+000		9.4584E-001
	873.19	11.50	9.7566E-001		8.6818E-001
	996.32	10.30	1.1009E+000		-2.9572E-001
	1004.76	17.90	6.8702E-001		7.6510E-001
	1274.45	35.50	3.0876E-001		-1.0816E-001
Eu-155	86.54	30.90	1.8330E+000	1.83E+000	1.2831E+000
	105.31	20.70	1.9217E+000		-3.9657E-001
Am-241	59.54	35.90	3.8182E+000	3.82E+000	-2.4773E+000
Cm-243	228.19	10.56	1.7996E+000	1.19E+000	3.0063E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1910E+000	1.19E+000	-4.2565E-002

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

Report Generated On 6/27/2006 10:48:16 AM

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

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

Detector ID: YEL7810

Spectrum File: YEL7810
Sample ID: NOL-03-02-143-F-
Sample Title: NOL-03-02-143-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 10:38:12 AM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7810Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: YEL7810
Log Number: NOL-03-02-143-F-
Title: NOL-03-02-143-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	309	300.64	75.18	1.26	3.95E+002	140.61	1.64E+003
2	948-	962	954.81	238.74	1.15	2.49E+002	73.91	4.05E+002
3	1397-	1417	1407.52	351.93	1.02	1.26E+002	58.66	2.12E+002
4	2324-	2342	2333.18	583.37	1.33	1.83E+002	44.61	9.82E+001
5	2429-	2446	2437.62	609.48	0.36	1.57E+002	37.93	6.70E+001
6	3638-	3654	3646.11	911.63	0.42	1.09E+002	30.40	4.21E+001
7	3869-	3885	3876.88	969.33	1.10	7.17E+001	26.32	3.43E+001
8	4947-	4960	4954.20	1238.68	0.36	2.67E+001	17.53	1.93E+001
9	5832-	5859	5846.32	1461.73	2.13	8.12E+002	59.03	2.10E+001

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: YEL7810

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.970	1460.81*	10.67	1.87600E+001	2.04126E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	4.05464E-001	1.12148E-001
		860.37	12.46		
Pb-212	0.575	74.81* @	10.70	1.22566E+001	4.97594E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.69901E-001	2.58277E-001
Bi-214	0.406	609.31*	46.30	6.44479E-001	1.74733E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.622	338.32	11.40		
		911.07*	27.70	8.26216E-001	2.49490E-001
		969.11*	16.60	9.20781E-001	3.51716E-001

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

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

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

Spectrum File:YEL7810

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

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40	0.970	1.876000E+001	2.041263E+000
TL-208	0.469	4.054638E-001	1.121484E-001
Pb-212 @	0.575	7.699011E-001	2.582766E-001
Bi-214	0.406	6.444788E-001	1.747328E-001
Ac-228	0.622	8.578707E-001	2.034923E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
3	351.93	2.0955E-001	46.65
8	1238.68	4.4484E-002	65.69

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

Errors quoted at 1.960 sigma

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

Spectrum File:YEL7810
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.2759E-001	9.57E-002	9.1354E-002
	1332.49	100.00	9.5677E-002		2.6484E-002
Nb-94	702.63	100.00	1.3356E-001	1.15E-001	6.8344E-002
	871.10	100.00	1.1475E-001		2.9078E-002
Ag-108m	79.20	7.10	1.0097E+001	1.43E-001	-5.6669E+000
	433.93	89.90	1.5196E-001		-1.1765E-001
	614.37	90.40	1.6022E-001		-6.8008E-002
	722.95	90.50	1.4280E-001		-3.8099E-002
Sb-125	176.33	6.89	3.0394E+000	4.68E-001	1.6704E+000
	427.89	29.33	4.6779E-001		-1.0865E-001
	463.38	10.35	1.3159E+000		2.0492E-001
	600.56	17.80	7.7767E-001		5.4100E-001
	606.64	5.02	3.3152E+000		-1.6356E+000
	635.90	11.32	1.1410E+000		-5.9749E-001
Cs-134	563.23	8.38	1.5799E+000	1.45E-001	-5.1907E-001
	569.32	15.43	8.6729E-001		-1.3086E-002
	604.70	97.60	1.5984E-001		-1.9621E-003
	795.84	85.40	1.4495E-001		8.8759E-002
	801.93	8.73	1.3712E+000		-1.9051E+000
Cs-137	661.65	85.12	1.5987E-001	1.60E-001	1.7463E-001
Eu-152	121.78	28.40	1.0797E+000	4.05E-001	3.9563E-001
	244.69	7.49	2.3781E+000		-1.4037E+000
	344.27	26.50	5.5839E-001		-5.9482E-001
	778.89	12.74	9.2133E-001		-4.6533E-001
	867.32	4.16	2.8472E+000		-3.8009E+000
	964.01	14.40	9.6089E-001		2.9521E-001
	1085.78	10.00	1.1808E+000		-6.9807E-001
	1112.02	13.30	8.8228E-001		-3.7519E-001
	1407.95	20.70	4.0504E-001		2.3996E-001
Eu-154	123.07	40.50	7.3830E-001	3.18E-001	-4.8001E-001
	247.94	6.60	2.5615E+000		-8.1488E-001
	591.81	4.83	2.6960E+000		-1.5822E+000
	723.30	19.70	6.5251E-001		-4.3194E-001
	756.87	4.33	2.8716E+000		-4.0817E-001
	873.19	11.50	1.0021E+000		1.1474E+000
	996.32	10.30	1.1188E+000		2.0323E-001
	1004.76	17.90	6.0002E-001		2.5358E-001
	1274.45	35.50	3.1811E-001		-6.9092E-002
Eu-155	86.54	30.90	1.7855E+000	1.79E+000	3.0933E+000
	105.31	20.70	1.9076E+000		-7.9113E-001
Am-241	59.54	35.90	3.6505E+000	3.65E+000	-2.2995E+000
Cm-243	228.19	10.56	1.7238E+000	1.15E+000	-6.2125E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1519E+000	1.15E+000	-4.5707E-001

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

Report Generated On 6/27/2006 11:06:52 AM

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

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

Detector ID: YEL7810

Spectrum File: YEL7810
Sample ID: NOL-03-02-144-F-
Sample Title: NOL-03-02-144-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 10:56:49 AM
Live Time: 600.0 seconds
Real Time: 600.9 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7810Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: YEL7810
Log Number: NOL-03-02-144-F-
Title: NOL-03-02-144-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	306	292.03	73.03	1.26	2.07E+002	56.47	1.19E+003
m	2	286-	306	300.37	75.11	1.26	4.21E+002	64.26	1.66E+003
	3	948-	963	954.69	238.71	1.36	2.00E+002	68.71	3.37E+002
	4	1175-	1184	1179.95	295.03	0.78	4.05E+001	34.55	1.18E+002
	5	1401-	1416	1408.37	352.14	1.12	1.23E+002	47.20	1.52E+002
	6	2297-	2307	2302.40	575.67	0.82	2.22E+001	19.45	3.18E+001
	7	2328-	2341	2333.23	583.38	1.74	1.11E+002	34.87	7.35E+001
	8	2429-	2443	2437.68	609.49	1.10	1.14E+002	33.23	6.02E+001
	9	3634-	3654	3645.90	911.58	1.25	1.21E+002	31.11	3.61E+001
	10	3870-	3884	3877.11	969.39	0.82	5.48E+001	25.87	4.13E+001
	11	4476-	4488	4482.22	1120.68	0.38	2.85E+001	21.01	3.15E+001
	12	5833-	5859	5846.18	1461.70	1.89	7.31E+002	55.19	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: YEL7810

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.972	1460.81*	10.67	1.68939E+001	1.86999E+000
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.45164E-001	8.36819E-002
		860.37	12.46		
Pb-212	0.576	74.81* @	10.70	1.30794E+001	3.24957E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.16311E-001	2.33229E-001
Bi-214	0.709	609.31*	46.30	4.67267E-001	1.48009E-001
		1120.29*	15.10	4.17306E-001	3.10401E-001
		1764.49	15.80		
PB-214	0.614	74.82* @	6.21	2.25361E+001	5.83320E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	3.09771E-001	2.69140E-001
		351.92*	37.20	5.11596E-001	2.14011E-001
Ac-228	0.623	338.32	11.40		
		911.07*	27.70	9.17729E-001	2.58588E-001
		969.11*	16.60	7.03506E-001	3.40538E-001

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

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

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

Spectrum File:YEL7810

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

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40		0.972	1.689391E+001	1.869991E+000
TL-208		0.468	2.451642E-001	8.368194E-002
Pb-212	@	0.576	6.163114E-001	2.332293E-001
Bi-214		0.709	4.580114E-001	1.335986E-001
PB-214	@	0.614	4.334164E-001	1.675085E-001
Ac-228		0.623	8.393812E-001	2.059425E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.03	3.4479E-001	27.30
6	575.67	3.6968E-002	87.71

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

Errors quoted at 1.960 sigma

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

Spectrum File:YEL7810
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.1040E-001	9.36E-002	-5.9146E-002
	1332.49	100.00	9.3624E-002		-9.6546E-004
Nb-94	702.63	100.00	1.1943E-001	1.09E-001	-9.9907E-002
	871.10	100.00	1.0856E-001		-1.9992E-002
Ag-108m	79.20	7.10	9.5310E+000	1.28E-001	-1.4946E+001
	433.93	89.90	1.3343E-001		7.1512E-003
	614.37	90.40	1.5865E-001		-1.9548E-001
	722.95	90.50	1.2766E-001		4.6865E-002
Sb-125	176.33	6.89	2.8092E+000	4.23E-001	-3.1173E+000
	427.89	29.33	4.2306E-001		3.1975E-001
	463.38	10.35	1.1869E+000		4.4849E-001
	600.56	17.80	6.4751E-001		-5.0946E-001
	606.64	5.02	3.0230E+000		4.6916E+000
	635.90	11.32	1.0540E+000		2.3719E-001
Cs-134	563.23	8.38	1.3811E+000	1.28E-001	-2.0151E-001
	569.32	15.43	7.6612E-001		3.0128E-001
	604.70	97.60	1.4545E-001		-3.7566E-002
	795.84	85.40	1.2831E-001		3.4439E-002
	801.93	8.73	1.2219E+000		-1.0217E+000
Cs-137	661.65	85.12	1.4899E-001	1.49E-001	3.6321E-002
Eu-152	121.78	28.40	1.0247E+000	4.13E-001	5.7468E-001
	244.69	7.49	2.2382E+000		1.3603E+000
	344.27	26.50	5.3581E-001		-1.9159E-001
	778.89	12.74	8.9909E-001		-5.2979E-001
	867.32	4.16	2.5963E+000		-1.1223E+000
	964.01	14.40	9.7366E-001		7.3712E-002
	1085.78	10.00	1.0582E+000		-2.7442E-001
	1112.02	13.30	8.0019E-001		2.1398E-001
	1407.95	20.70	4.1290E-001		1.9534E-001
Eu-154	123.07	40.50	7.0895E-001	2.75E-001	1.8830E-001
	247.94	6.60	2.4370E+000		-1.7212E+000
	591.81	4.83	2.3797E+000		-1.2230E+000
	723.30	19.70	5.8452E-001		6.2865E-002
	756.87	4.33	2.5818E+000		4.6639E-001
	873.19	11.50	9.7182E-001		5.6219E-001
	996.32	10.30	1.0549E+000		-1.2393E+000
	1004.76	17.90	5.8608E-001		-3.5981E-001
	1274.45	35.50	2.7518E-001		1.2910E-002
Eu-155	86.54	30.90	1.6897E+000	1.69E+000	8.6834E-001
	105.31	20.70	1.8224E+000		1.3749E+000
Am-241	59.54	35.90	3.5368E+000	3.54E+000	-7.3626E-001
Cm-243	228.19	10.56	1.6621E+000	1.05E+000	-1.4690E-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	2.9480E-002

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

Report Generated On 6/27/2006 11:27:08 AM

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

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

Detector ID: YEL7810

Spectrum File: YEL7810
Sample ID: NOL-03-02-145-F-
Sample Title: NOL-03-02-145-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 11:17:06 AM
Live Time: 600.0 seconds
Real Time: 600.9 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7810Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: YEL7810
Log Number: NOL-03-02-145-F-
Title: NOL-03-02-145-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	309	291.01	72.78	1.49	3.11E+002	61.63	1.24E+003
m	2	284-	309	300.61	75.18	1.49	6.02E+002	70.02	2.08E+003
	3	948-	961	954.20	238.59	1.08	1.59E+002	63.43	3.21E+002
	4	1343-	1374	1354.17	338.59	1.36	8.86E+001	79.35	3.01E+002
	5	1399-	1415	1408.05	352.06	1.01	9.27E+001	47.96	1.60E+002
	6	2277-	2286	2281.88	570.54	1.01	1.44E+001	17.44	2.86E+001
	7	2326-	2340	2332.41	583.17	1.35	1.31E+002	35.79	7.05E+001
	8	2430-	2446	2437.85	609.54	0.50	1.06E+002	37.52	8.30E+001
	9	3635-	3654	3645.12	911.38	0.76	8.95E+001	34.27	6.05E+001
	10	3870-	3886	3876.19	969.15	1.50	5.86E+001	28.43	4.74E+001
	11	5832-	5859	5846.08	1461.67	2.17	8.21E+002	58.28	1.40E+001
	12	7053-	7070	7062.82	1765.89	0.77	5.30E+001	14.27	0.00E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: YEL7810

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.974	1460.81*	10.67	1.89687E+001	2.04238E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.89471E-001	8.78771E-002
		860.37	12.46		
Pb-212	0.576	74.81* @	10.70	1.86572E+001	4.25241E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	4.90527E-001	2.10492E-001
Bi-214	0.680	609.31*	46.30	4.35021E-001	1.63058E-001
		1120.29	15.10		
		1764.49*	15.80	9.02413E-001	2.59162E-001
Ac-228	0.998	338.32*	11.40	1.18749E+000	1.07999E+000
		911.07*	27.70	6.79106E-001	2.71522E-001
		969.11*	16.60	7.53224E-001	3.73734E-001

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

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

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

Spectrum File:YEL7810

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

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40	0.974	1.896871E+001	2.042384E+000
TL-208	0.470	2.894708E-001	8.787706E-002
Pb-212 @	0.576	4.905274E-001	2.104916E-001
Bi-214	0.680	5.675716E-001	1.380136E-001
Ac-228	0.998	7.238918E-001	2.152615E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.78	5.1876E-001	19.80
5	352.06	1.5453E-001	51.72
6	570.54	2.4012E-002	121.05

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

Errors quoted at 1.960 sigma

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

Spectrum File:YEL7810
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.1740E-001	9.36E-002	-5.0786E-002
	1332.49	100.00	9.3624E-002		-1.8981E-002
Nb-94	702.63	100.00	1.1754E-001	1.10E-001	2.4880E-002
	871.10	100.00	1.0992E-001		-2.7575E-002
Ag-108m	79.20	7.10	9.7776E+000	1.42E-001	-6.6198E+000
	433.93	89.90	1.4261E-001		-1.1426E-001
	614.37	90.40	1.6239E-001		-1.7886E-002
	722.95	90.50	1.4163E-001		1.1592E-001
Sb-125	176.33	6.89	2.9684E+000	4.36E-001	7.9713E-001
	427.89	29.33	4.3633E-001		8.2168E-002
	463.38	10.35	1.2879E+000		4.1823E-001
	600.56	17.80	6.5922E-001		2.4723E-001
	606.64	5.02	3.0545E+000		-1.0214E+000
	635.90	11.32	1.0634E+000		1.1096E-001
Cs-134	563.23	8.38	1.5058E+000	1.32E-001	1.1187E+000
	569.32	15.43	7.8289E-001		4.3456E-001
	604.70	97.60	1.4102E-001		-1.2650E-001
	795.84	85.40	1.3182E-001		-4.6870E-003
	801.93	8.73	1.2572E+000		-7.5179E-001
Cs-137	661.65	85.12	1.5949E-001	1.59E-001	9.7976E-002
Eu-152	121.78	28.40	1.0636E+000	3.93E-001	1.8063E-002
	244.69	7.49	2.2836E+000		-2.4518E+000
	344.27	26.50	5.3651E-001		2.3493E-001
	778.89	12.74	8.8285E-001		-5.8117E-001
	867.32	4.16	2.8769E+000		-2.2941E+000
	964.01	14.40	9.3215E-001		-8.1526E-001
	1085.78	10.00	9.9371E-001		1.6186E-001
	1112.02	13.30	8.4229E-001		-2.3960E-001
	1407.95	20.70	3.9293E-001		1.5343E-001
Eu-154	123.07	40.50	7.3491E-001	2.92E-001	1.1635E-001
	247.94	6.60	2.4733E+000		4.0232E-001
	591.81	4.83	2.5463E+000		5.0007E-001
	723.30	19.70	6.5607E-001		6.5924E-001
	756.87	4.33	2.5038E+000		-6.5929E-001
	873.19	11.50	9.3654E-001		-1.1769E+000
	996.32	10.30	1.0311E+000		5.1027E-002
	1004.76	17.90	6.1363E-001		5.0159E-002
	1274.45	35.50	2.9249E-001		1.5317E-001
Eu-155	86.54	30.90	1.7493E+000	1.75E+000	1.8148E+000
	105.31	20.70	1.8091E+000		-4.7690E-001
Am-241	59.54	35.90	3.6887E+000	3.69E+000	3.2109E-001
Cm-243	228.19	10.56	1.7110E+000	1.12E+000	1.6337E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1167E+000	1.12E+000	7.2817E-001

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

Report Generated On 6/27/2006 1:05:07 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: NOL-03-02-146-F-
Sample Title: NOL-03-02-146-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 12:55:04 PM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: ORG7829
Log Number: NOL-03-02-146-F-
Title: NOL-03-02-146-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	307	292.20	73.05	1.09	3.17E+002	57.46	9.40E+002
m	2	287-	307	300.41	75.10	1.09	4.98E+002	64.84	1.30E+003
	3	331-	344	339.17	84.79	0.67	2.03E+002	118.54	1.25E+003
	4	946-	962	953.98	238.51	1.01	2.48E+002	78.15	4.28E+002
	5	1346-	1357	1352.51	338.15	0.88	7.13E+001	37.12	1.15E+002
	6	1402-	1417	1406.84	351.73	0.60	9.74E+001	52.20	2.01E+002
	7	1842-	1854	1848.69	462.20	1.04	4.03E+001	33.38	9.17E+001
	8	2320-	2338	2329.92	582.52	1.24	1.52E+002	39.63	7.60E+001
	9	2426-	2443	2434.42	608.65	1.22	1.05E+002	38.00	8.06E+001
	10	2902-	2913	2907.08	726.82	1.14	1.74E+001	22.29	4.46E+001
	11	3432-	3443	3437.75	859.50	0.33	2.40E+001	16.32	1.80E+001
	12	3633-	3651	3640.78	910.26	1.02	8.84E+001	29.56	4.06E+001
	13	3865-	3880	3873.11	968.35	0.52	6.94E+001	25.88	3.46E+001
	14	5827-	5853	5839.77	1460.05	1.83	7.73E+002	57.82	2.27E+001
	15	7048-	7061	7054.53	1763.76	0.60	2.95E+001	13.32	5.53E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: ORG7829

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.981	1460.81*	10.67	1.75718E+001	1.93657E+000
TL-208	0.611	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.39252E-001	9.88439E-002
		860.37*	12.46	4.00632E-001	2.76841E-001
Bi-212	0.996	727.17*	11.80	2.95809E-001	3.80127E-001
Pb-212	0.593	74.81* @	10.70	1.93412E+001	4.55071E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.09507E-001	2.84885E-001
Bi-214	0.685	609.31*	46.30	4.34151E-001	1.65416E-001
		1120.29	15.10		
		1764.49*	15.80	4.79175E-001	2.21794E-001
Ac-228	0.983	338.32*	11.40	9.90663E-001	5.38407E-001
		911.07*	27.70	6.72356E-001	2.37918E-001
		969.11*	16.60	8.95423E-001	3.46984E-001

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

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

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

Spectrum File:ORG7829

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

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40		0.981	1.757185E+001	1.936566E+000
TL-208		0.611	3.461915E-001	9.308841E-002
Bi-212		0.996	2.958094E-001	3.801268E-001
Pb-212	@	0.593	8.095072E-001	2.848845E-001
Bi-214		0.685	4.502432E-001	1.325990E-001
Ac-228		0.983	7.726490E-001	1.843593E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.05	5.2902E-001	18.10
3	84.79	3.3856E-001	58.35
6	351.73	1.6236E-001	53.58
7	462.20	6.7197E-002	82.78

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

Errors quoted at 1.960 sigma

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

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.3631E-001	1.07E-001	-5.6197E-002
	1332.49	100.00	1.0692E-001		-3.6545E-002
Nb-94	702.63	100.00	1.3226E-001	1.17E-001	-1.3842E-002
	871.10	100.00	1.1716E-001		1.4651E-002
Ag-108m	79.20	7.10	1.2106E+001	1.39E-001	5.4512E-001
	433.93	89.90	1.6040E-001		1.6956E-002
	614.37	90.40	1.6328E-001		1.1121E-001
	722.95	90.50	1.3856E-001		1.0572E-001
Sb-125	176.33	6.89	3.3841E+000	4.81E-001	3.5057E-001
	427.89	29.33	4.8087E-001		-3.7154E-002
	463.38	10.35	1.4138E+000		3.7847E-001
	600.56	17.80	7.1646E-001		-6.5663E-001
	606.64	5.02	3.1659E+000		2.9855E+000
	635.90	11.32	1.1256E+000		-6.8779E-001
Cs-134	563.23	8.38	1.5894E+000	1.46E-001	1.3071E-002
	569.32	15.43	8.5879E-001		9.6016E-002
	604.70	97.60	1.6240E-001		-2.6884E-002
	795.84	85.40	1.4561E-001		3.5913E-002
	801.93	8.73	1.3271E+000		-4.5801E-001
Cs-137	661.65	85.12	1.5449E-001	1.54E-001	5.1906E-002
Eu-152	121.78	28.40	1.1862E+000	4.12E-001	-3.8186E-001
	244.69	7.49	2.5906E+000		-3.3776E-001
	344.27	26.50	5.5757E-001		-1.0534E+000
	778.89	12.74	1.0093E+000		-3.0078E-001
	867.32	4.16	2.7831E+000		7.8645E-001
	964.01	14.40	1.0613E+000		-1.6330E-001
	1085.78	10.00	1.2181E+000		-2.2395E-002
	1112.02	13.30	9.3539E-001		-1.5859E+000
	1407.95	20.70	4.1245E-001		-3.2203E-002
Eu-154	123.07	40.50	8.1898E-001	3.19E-001	-4.2143E-001
	247.94	6.60	2.8760E+000		2.4347E-002
	591.81	4.83	2.8834E+000		2.2405E+000
	723.30	19.70	6.4389E-001		6.9846E-001
	756.87	4.33	2.7873E+000		-4.1311E-001
	873.19	11.50	1.0267E+000		3.3754E-001
	996.32	10.30	1.1162E+000		-1.5355E+000
	1004.76	17.90	6.4114E-001		3.3830E-001
	1274.45	35.50	3.1888E-001		-9.2579E-002
Eu-155	86.54	30.90	2.1216E+000	2.09E+000	-1.2786E+000
	105.31	20.70	2.0871E+000		-1.3561E-001
Am-241	59.54	35.90	5.0449E+000	5.04E+000	-1.3237E+000
Cm-243	228.19	10.56	1.9064E+000	1.27E+000	-2.5698E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2674E+000	1.27E+000	9.3626E-002

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

Report Generated On 6/27/2006 1:24:47 PM

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

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

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: NOL-03-02-147-F-
Sample Title: NOL-03-02-147-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 1:14:44 PM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: ORG7829
Log Number: NOL-03-02-147-F-
Title: NOL-03-02-147-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	288-	305	291.90	72.98	0.91	1.53E+002	51.02	8.04E+002
m	2	288-	305	300.17	75.04	0.91	3.15E+002	60.02	1.10E+003
	3	331-	345	340.10	85.03	0.81	1.54E+002	121.73	1.27E+003
	4	949-	962	953.74	238.45	1.40	2.29E+002	66.33	3.27E+002
	5	1171-	1186	1179.61	294.92	1.26	6.39E+001	53.22	2.24E+002
	6	1346-	1357	1352.03	338.03	0.47	5.39E+001	40.43	1.48E+002
	7	1401-	1417	1406.74	351.71	1.21	1.10E+002	47.63	1.51E+002
	8	2319-	2338	2330.27	582.61	1.57	1.88E+002	42.55	8.13E+001
	9	2426-	2443	2434.35	608.63	1.58	1.00E+002	39.11	9.07E+001
	10	2637-	2649	2643.04	660.81	0.62	3.72E+001	24.82	4.58E+001
	11	3634-	3649	3641.35	910.40	1.65	1.18E+002	31.59	4.75E+001
	12	3864-	3882	3872.57	968.21	0.46	6.26E+001	32.01	6.04E+001
	13	4471-	4483	4477.27	1119.40	0.56	2.33E+001	22.40	4.07E+001
	14	4686-	4698	4691.48	1172.95	0.45	1.64E+001	17.96	2.56E+001
	15	5825-	5851	5839.75	1460.04	1.75	8.88E+002	63.73	3.94E+001
	16	7045-	7061	7054.04	1763.64	0.66	4.67E+001	19.34	1.63E+001

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: ORG7829

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.981	1460.81*		10.67	2.01697E+001	2.18266E+000
Cs-137	0.977	661.65*		85.12	8.57787E-002	5.80751E-002
TL-208	0.465	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	4.18825E-001	1.09504E-001
		860.37		12.46		
Pb-212	0.593	74.81*	@	10.70	1.22774E+001	3.35439E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.48459E-001	2.46246E-001
Bi-214	0.981	609.31*		46.30	4.13222E-001	1.68970E-001
		1120.29*		15.10	3.43890E-001	3.32442E-001
		1764.49*		15.80	7.59897E-001	3.23449E-001
PB-214	0.626	74.82*	@	6.21	2.11543E+001	5.98024E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	5.10084E-001	4.33224E-001
		351.92*		37.20	4.72261E-001	2.19321E-001
Ac-228	0.984	338.32*		11.40	7.47836E-001	5.73496E-001
		911.07*		27.70	8.94250E-001	2.61570E-001
		969.11*		16.60	8.08028E-001	4.21811E-001

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

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

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

Spectrum File:ORG7829

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

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40		0.981	2.016971E+001	2.182662E+000
Cs-137		0.977	8.577867E-002	5.807510E-002
TL-208		0.465	4.188248E-001	1.095038E-001
Pb-212	@	0.593	7.484589E-001	2.462465E-001
Bi-214		0.981	4.633103E-001	1.365491E-001
PB-214	@	0.626	4.799774E-001	1.956750E-001
Ac-228		0.984	8.543061E-001	2.072714E-001

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

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.98	2.5511E-001	33.33
3	85.03	2.5602E-001	79.25
14	1172.95	2.7321E-002	109.55

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

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
	Co-60	1173.22	100.00	1.3503E-001	1.09E-001	1.0234E-001
		1332.49	100.00	1.0929E-001		-2.9472E-004
	Nb-94	702.63	100.00	1.2709E-001	1.18E-001	3.1832E-002
		871.10	100.00	1.1800E-001		3.9698E-004
	Ag-108m	79.20	7.10	1.1646E+001	1.51E-001	-1.7182E+001
		433.93	89.90	1.5117E-001		-1.0813E-001
		614.37	90.40	1.6663E-001		5.4791E-002
		722.95	90.50	1.6204E-001		1.9401E-001
	Sb-125	176.33	6.89	3.2445E+000	4.33E-001	2.3375E+000
		427.89	29.33	4.3279E-001		-8.6877E-001
		463.38	10.35	1.3120E+000		8.4533E-002
		600.56	17.80	7.3064E-001		-3.2560E-001
		606.64	5.02	3.2661E+000		5.1613E+000
		635.90	11.32	1.1659E+000		9.8198E-001
	Cs-134	563.23	8.38	1.6340E+000	1.51E-001	9.1108E-001
		569.32	15.43	8.6640E-001		6.1914E-001
		604.70	97.60	1.6704E-001		7.0189E-003
		795.84	85.40	1.5087E-001		-4.3467E-003
		801.93	8.73	1.2888E+000		-1.5250E+000
+	Cs-137	661.65*	85.12	9.0352E-002	9.04E-002	8.5779E-002
	Eu-152	121.78	28.40	1.1441E+000	4.05E-001	-9.0880E-001
		244.69	7.49	2.4857E+000		-3.8164E-001
		344.27	26.50	5.8152E-001		-4.9658E-001
		778.89	12.74	9.8619E-001		3.3468E-001
		867.32	4.16	2.6784E+000		-3.6307E+000
		964.01	14.40	1.1093E+000		7.9177E-001
		1085.78	10.00	1.1620E+000		1.1436E+000
		1112.02	13.30	8.3070E-001		-3.8585E-001
		1407.95	20.70	4.0475E-001		-1.2694E-001
	Eu-154	123.07	40.50	7.9128E-001	3.03E-001	3.5544E-003
		247.94	6.60	2.7652E+000		-1.7658E-001
		591.81	4.83	2.7048E+000		-2.4035E+000
		723.30	19.70	7.4447E-001		9.5800E-001
		756.87	4.33	2.8574E+000		-5.4536E-001
		873.19	11.50	1.0447E+000		5.2064E-001
		996.32	10.30	1.1027E+000		-3.8635E-001
		1004.76	17.90	6.8627E-001		2.4568E-001
		1274.45	35.50	3.0310E-001		-2.7926E-001
	Eu-155	86.54	30.90	2.0486E+000	2.02E+000	1.6842E-001
		105.31	20.70	2.0172E+000		-2.0487E-001
	Am-241	59.54	35.90	4.6829E+000	4.68E+000	-4.1566E+000
	Cm-243	228.19	10.56	1.7851E+000	1.24E+000	-2.2375E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2407E+000	1.24E+000	-5.9582E-001

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

Report Generated On 6/27/2006 11:18:24 AM

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

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

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: NOL-03-02-148-F-
Sample Title: NOL-03-02-148-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 11:08:21 AM
Live Time: 600.0 seconds
Real Time: 601.2 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: ORG7829
Log Number: NOL-03-02-148-F-
Title: NOL-03-02-148-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	309	291.39	72.85	1.18	2.99E+002	57.96	1.36E+003
m	2	282-	309	300.14	75.04	1.18	5.31E+002	67.58	1.57E+003
	3	334-	345	340.19	85.05	0.54	2.36E+002	107.38	1.10E+003
	4	943-	961	954.05	238.53	1.36	2.40E+002	83.63	4.67E+002
	5	1176-	1188	1180.59	295.16	1.02	4.29E+001	49.04	2.20E+002
	6	1345-	1359	1352.78	338.22	0.73	6.26E+001	46.71	1.75E+002
	7	1395-	1413	1406.07	351.54	1.53	1.20E+002	54.07	1.90E+002
	8	2028-	2051	2040.23	510.09	1.03	1.72E+002	48.14	1.08E+002
	9	2322-	2342	2329.99	582.54	1.27	1.54E+002	42.48	8.71E+001
	10	2427-	2444	2434.65	608.70	1.20	1.08E+002	36.81	7.47E+001
	11	3632-	3651	3641.51	910.44	1.16	1.32E+002	32.31	3.99E+001
	12	3864-	3879	3872.42	968.17	0.75	6.50E+001	27.08	4.20E+001
	13	5828-	5853	5839.05	1459.87	1.99	7.94E+002	58.78	2.65E+001
	14	7048-	7061	7054.36	1763.72	0.33	1.94E+001	13.78	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: 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	0.973	511.00*		100.00	3.09202E-001	9.60670E-002
K-40	0.971	1460.81*		10.67	1.80311E+001	1.97862E+000
TL-208	0.741	277.35		6.80		
		510.84*		21.60	1.43149E+000	4.59862E-001
		583.14*		84.20	3.43467E-001	1.04816E-001
		860.37		12.46		
Pb-212	0.594	74.81*	@	10.70	2.06727E+001	4.83186E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.83360E-001	2.99303E-001
Bi-214	0.686	609.31*		46.30	4.46313E-001	1.61305E-001
		1120.29		15.10		
		1764.49*		15.80	3.14609E-001	2.26264E-001
PB-214	0.625	74.82*	@	6.21	3.56196E+001	8.71772E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	3.42486E-001	3.95596E-001
		351.92*		37.20	5.16275E-001	2.47806E-001
Ac-228	0.985	338.32*		11.40	8.69414E-001	6.62839E-001
		911.07*		27.70	1.00511E+000	2.71798E-001
		969.11*		16.60	8.39363E-001	3.60531E-001

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

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

I N T E R 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		0.973	2.350130E-001	9.866914E-002
K-40		0.971	1.803108E+001	1.978620E+000
TL-208		0.741	3.434667E-001	1.042163E-001
Pb-212	@	0.594	7.833603E-001	2.993025E-001
Bi-214		0.686	4.019322E-001	1.313449E-001
PB-214	@	0.625	4.672993E-001	2.100054E-001
Ac-228		0.985	9.377252E-001	2.062584E-001

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

Errors quoted at 1.960 sigma

U N I D E N T I F 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	4.9823E-001	19.39
3	85.05	3.9264E-001	45.58

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

Errors quoted at 1.960 sigma

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

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.2801E-001	1.16E-001	1.7980E-001
	1332.49	100.00	1.1608E-001		6.5764E-002
Nb-94	702.63	100.00	1.3056E-001	1.21E-001	5.0715E-002
	871.10	100.00	1.2090E-001		6.0321E-002
Ag-108m	79.20	7.10	1.2663E+001	1.50E-001	-3.2765E+000
	433.93	89.90	1.5789E-001		-1.2691E-001
	614.37	90.40	1.6482E-001		6.4572E-002
	722.95	90.50	1.4967E-001		-5.8669E-002
Sb-125	176.33	6.89	3.3678E+000	4.69E-001	-3.3548E+000
	427.89	29.33	4.6913E-001		-6.6597E-002
	463.38	10.35	1.3754E+000		6.2901E-001
	600.56	17.80	7.4626E-001		2.0111E-001
	606.64	5.02	3.1404E+000		2.2276E+000
	635.90	11.32	1.1517E+000		-3.4782E-001
Cs-134	563.23	8.38	1.6541E+000	1.48E-001	1.0498E+000
	569.32	15.43	9.0890E-001		5.5559E-001
	604.70	97.60	1.6135E-001		-3.5109E-002
	795.84	85.40	1.4826E-001		5.1535E-002
	801.93	8.73	1.4137E+000		4.1816E-001
Cs-137	661.65	85.12	1.5945E-001	1.59E-001	8.9826E-002
Eu-152	121.78	28.40	1.2136E+000	4.01E-001	-3.2913E-001
	244.69	7.49	2.6166E+000		-9.9379E-001
	344.27	26.50	5.7806E-001		-4.2860E-001
	778.89	12.74	9.5644E-001		-5.0290E-001
	867.32	4.16	2.8540E+000		-2.3904E+000
	964.01	14.40	1.0328E+000		1.2861E+000
	1085.78	10.00	1.1230E+000		6.7377E-001
	1112.02	13.30	9.0427E-001		-1.0701E+000
	1407.95	20.70	4.0084E-001		-1.9742E-001
Eu-154	123.07	40.50	8.4127E-001	3.26E-001	-1.9394E-001
	247.94	6.60	2.9493E+000		-1.4128E+000
	591.81	4.83	2.7863E+000		1.0497E+000
	723.30	19.70	6.8597E-001		-1.4672E-001
	756.87	4.33	3.0088E+000		1.0287E+000
	873.19	11.50	1.0194E+000		-7.2023E-001
	996.32	10.30	1.0889E+000		5.4054E-001
	1004.76	17.90	6.3065E-001		-1.8019E-001
	1274.45	35.50	3.2646E-001		1.8055E-001
Eu-155	86.54	30.90	2.1559E+000	2.16E+000	2.0627E+000
	105.31	20.70	2.1784E+000		3.0990E-001
Am-241	59.54	35.90	5.0420E+000	5.04E+000	2.4057E+000
Cm-243	228.19	10.56	1.8956E+000	1.26E+000	5.4267E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2562E+000	1.26E+000	-7.3552E-001

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

Report Generated On 6/27/2006 10:55:54 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: NOL-03-02-149-F-
Sample Title: NOL-03-02-149-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 10:45:51 AM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: ORG7829
Log Number: NOL-03-02-149-F-
Title: NOL-03-02-149-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	305	292.17	73.04	1.14	2.55E+002	56.60	1.07E+003
m	2	286-	305	300.65	75.16	1.14	3.76E+002	62.22	1.27E+003
	3	943-	961	953.59	238.41	1.29	1.83E+002	84.59	4.96E+002
	4	1344-	1358	1351.86	337.99	1.29	4.88E+001	44.15	1.58E+002
	5	1399-	1414	1406.19	351.57	1.13	9.49E+001	48.12	1.69E+002
	6	2029-	2048	2040.67	510.20	2.02	1.53E+002	46.99	1.21E+002
	7	2322-	2340	2330.65	582.70	1.28	1.38E+002	39.86	8.16E+001
	8	2426-	2445	2434.90	608.77	1.55	1.15E+002	41.76	9.68E+001
	9	3632-	3650	3642.31	910.64	1.01	1.32E+002	31.62	3.80E+001
	10	3864-	3880	3872.60	968.22	1.08	8.37E+001	31.21	5.43E+001
	11	4471-	4486	4476.99	1119.33	0.58	4.90E+001	21.84	2.50E+001
	12	5824-	5852	5839.86	1460.07	2.01	7.96E+002	56.45	7.25E+000
	13	7046-	7059	7052.70	1763.30	0.67	2.81E+001	16.10	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: 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	0.979	511.00*	100.00	2.74583E-001	9.22159E-002
K-40	0.982	1460.81*	10.67	1.80825E+001	1.94645E+000
TL-208	0.746	277.35	6.80		
		510.84*	21.60	1.27122E+000	4.39367E-001
		583.14*	84.20	3.08757E-001	9.76139E-002
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	1.45628E+001	3.73531E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.96592E-001	2.91475E-001
Bi-214	0.979	609.31*	46.30	4.74365E-001	1.81698E-001
		1120.29*	15.10	7.22282E-001	3.31185E-001
		1764.49*	15.80	4.56764E-001	2.65695E-001
Ac-228	0.988	338.32*	11.40	6.77543E-001	6.22229E-001
		911.07*	27.70	1.00460E+000	2.66999E-001
		969.11*	16.60	1.07995E+000	4.18553E-001

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

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

I N T E R 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	0.979	2.078916E-001	9.457069E-002
K-40	0.982	1.808252E+001	1.946449E+000
TL-208	0.746	3.087574E-001	9.709393E-002
Pb-212 @	0.593	5.965919E-001	2.914751E-001
Bi-214	0.979	5.119023E-001	1.366244E-001
Ac-228	0.988	9.860208E-001	2.116739E-001

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

Errors quoted at 1.960 sigma

U N I D E N T I 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	4.2441E-001	22.23
5	351.57	1.5812E-001	50.72

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

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.1615E-001	9.62E-002	2.3883E-002
	1332.49	100.00	9.6174E-002		-2.0226E-002
Nb-94	702.63	100.00	1.2460E-001	1.18E-001	1.0784E-001
	871.10	100.00	1.1800E-001		-3.7446E-002
Ag-108m	79.20	7.10	1.1999E+001	1.44E-001	-2.1436E+001
	433.93	89.90	1.4384E-001		-1.3595E-002
	614.37	90.40	1.5986E-001		-6.5870E-002
	722.95	90.50	1.4782E-001		7.3054E-002
Sb-125	176.33	6.89	3.2484E+000	4.32E-001	-1.1250E+000
	427.89	29.33	4.3192E-001		-1.3632E-003
	463.38	10.35	1.2852E+000		2.9038E-001
	600.56	17.80	6.8719E-001		-1.9131E-001
	606.64	5.02	3.1761E+000		6.0079E+000
	635.90	11.32	1.0653E+000		4.0354E-001
Cs-134	563.23	8.38	1.6033E+000	1.52E-001	1.5829E+000
	569.32	15.43	8.7394E-001		2.3280E-001
	604.70	97.60	1.6082E-001		-1.0097E-002
	795.84	85.40	1.5215E-001		2.4205E-002
	801.93	8.73	1.3458E+000		2.2653E-001
Cs-137	661.65	85.12	1.3979E-001	1.40E-001	1.3737E-001
Eu-152	121.78	28.40	1.1949E+000	4.01E-001	7.4920E-001
	244.69	7.49	2.4874E+000		3.4965E-001
	344.27	26.50	5.7178E-001		1.2059E-001
	778.89	12.74	9.1307E-001		3.9902E-002
	867.32	4.16	2.8640E+000		-8.1677E-001
	964.01	14.40	1.1071E+000		-4.3245E-001
	1085.78	10.00	1.0294E+000		-4.3834E-001
	1112.02	13.30	8.0327E-001		-9.6617E-001
	1407.95	20.70	4.0084E-001		-1.2754E-002
Eu-154	123.07	40.50	8.3002E-001	3.10E-001	5.0895E-001
	247.94	6.60	2.6989E+000		-3.0185E-001
	591.81	4.83	2.7801E+000		2.2447E-001
	723.30	19.70	6.8257E-001		4.0532E-001
	756.87	4.33	2.8138E+000		1.0311E+000
	873.19	11.50	1.0045E+000		1.4003E-002
	996.32	10.30	1.0321E+000		-7.1278E-001
	1004.76	17.90	5.7516E-001		-5.7015E-001
	1274.45	35.50	3.0951E-001		6.1302E-002
Eu-155	86.54	30.90	2.0837E+000	2.04E+000	2.8660E+000
	105.31	20.70	2.0382E+000		-3.5617E-001
Am-241	59.54	35.90	4.8025E+000	4.80E+000	-4.4081E+000
Cm-243	228.19	10.56	1.7874E+000	1.21E+000	-9.4434E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2102E+000	1.21E+000	1.2842E+000

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

Report Generated On 6/27/2006 10:32:47 AM

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

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

Detector ID: YEL7810

Spectrum File: YEL7810
Sample ID: NOL-03-02-150-F-
Sample Title: NOL-03-02-150-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 10:22:43 AM
Live Time: 600.0 seconds
Real Time: 601.2 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7810Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: YEL7810
Log Number: NOL-03-02-150-F-
Title: NOL-03-02-150-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	292-	309	300.78	75.22	1.55	4.69E+002	163.21	1.99E+003
2	948-	960	954.82	238.74	1.27	2.50E+002	69.14	3.78E+002
3	1397-	1413	1407.24	351.86	0.53	1.18E+002	49.01	1.62E+002
4	2035-	2049	2043.74	511.00	0.70	5.79E+001	40.54	1.27E+002
5	2326-	2340	2332.36	583.16	1.27	1.11E+002	37.25	8.63E+001
6	2428-	2446	2437.42	609.43	1.56	1.35E+002	37.14	6.64E+001
7	3636-	3656	3645.61	911.50	0.45	1.17E+002	35.74	5.84E+001
8	3869-	3884	3875.58	969.00	1.29	6.74E+001	29.35	5.16E+001
9	4476-	4489	4482.13	1120.65	0.93	4.44E+001	20.51	2.36E+001
10	5832-	5858	5845.95	1461.64	2.25	8.32E+002	58.01	1.01E+001
11	7055-	7068	7061.07	1765.45	0.35	2.82E+001	12.33	3.77E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: YEL7810

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.976	1460.81*	10.67	1.92207E+001	2.05373E+000
TL-208	0.751	277.35	6.80		
		510.84*	21.60	4.75323E-001	3.41109E-001
		583.14*	84.20	2.45634E-001	8.85862E-002
		860.37	12.46		
Pb-212	0.575	74.81* @	10.70	1.45230E+001	5.79753E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.73353E-001	2.45615E-001
Bi-214	0.992	609.31*	46.30	5.52276E-001	1.66929E-001
		1120.29*	15.10	6.49124E-001	3.07656E-001
		1764.49*	15.80	4.80683E-001	2.15390E-001
Ac-228	0.625	338.32	11.40		
		911.07*	27.70	8.84807E-001	2.89696E-001
		969.11*	16.60	8.66310E-001	3.87827E-001

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

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

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

Spectrum File:YEL7810

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

	Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
X	ANN		1.000		
	K-40		0.976	1.922072E+001	2.053726E+000
	TL-208		0.751	2.601466E-001	8.574202E-002
	Pb-212	@	0.575	7.733527E-001	2.456145E-001
	Bi-214		0.992	5.446297E-001	1.212618E-001
	Ac-228		0.625	8.781827E-001	2.320937E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	351.86	1.9612E-001	41.65

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:YEL7810
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.1092E-001	9.96E-002	-1.0526E-001
	1332.49	100.00	9.9647E-002		3.5997E-002
Nb-94	702.63	100.00	1.2203E-001	1.20E-001	2.4606E-002
	871.10	100.00	1.2020E-001		2.3992E-002
Ag-108m	79.20	7.10	1.0471E+001	1.49E-001	-4.7370E+000
	433.93	89.90	1.4943E-001		-8.3169E-002
	614.37	90.40	1.6603E-001		-2.3607E-002
	722.95	90.50	1.4959E-001		1.1465E-001
Sb-125	176.33	6.89	3.0611E+000	4.72E-001	-3.3805E+000
	427.89	29.33	4.7233E-001		-2.2936E-002
	463.38	10.35	1.4009E+000		1.2646E+000
	600.56	17.80	7.3752E-001		2.3755E-001
	606.64	5.02	3.1524E+000		-2.5278E-001
	635.90	11.32	1.1381E+000		1.1823E-001
Cs-134	563.23	8.38	1.5521E+000	1.39E-001	4.9148E-002
	569.32	15.43	8.4078E-001		-2.4042E-001
	604.70	97.60	1.5227E-001		-2.5504E-002
	795.84	85.40	1.3901E-001		3.2117E-002
	801.93	8.73	1.3937E+000		3.2325E-001
Cs-137	661.65	85.12	1.6136E-001	1.61E-001	1.3179E-001
Eu-152	121.78	28.40	1.1078E+000	4.13E-001	8.3749E-002
	244.69	7.49	2.4842E+000		-2.4815E+000
	344.27	26.50	5.5570E-001		-6.8523E-001
	778.89	12.74	9.4301E-001		-7.1451E-001
	867.32	4.16	2.8868E+000		-2.7870E+000
	964.01	14.40	1.0279E+000		1.6153E-001
	1085.78	10.00	1.1479E+000		-1.2251E+000
	1112.02	13.30	8.7872E-001		-4.9024E-001
	1407.95	20.70	4.1290E-001		-4.6821E-002
Eu-154	123.07	40.50	7.5751E-001	3.13E-001	-7.8326E-001
	247.94	6.60	2.5883E+000		-1.2882E+000
	591.81	4.83	2.7460E+000		7.3064E-001
	723.30	19.70	6.8556E-001		6.1316E-001
	756.87	4.33	2.8802E+000		2.7375E+000
	873.19	11.50	1.0314E+000		1.8878E-001
	996.32	10.30	1.0643E+000		-3.3659E-001
	1004.76	17.90	6.3477E-001		5.8221E-001
	1274.45	35.50	3.1347E-001		6.3532E-002
Eu-155	86.54	30.90	1.8767E+000	1.88E+000	2.4918E+000
	105.31	20.70	1.9727E+000		-7.1139E-001
Am-241	59.54	35.90	3.8748E+000	3.87E+000	-6.3263E-001
Cm-243	228.19	10.56	1.8674E+000	1.22E+000	1.1073E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2154E+000	1.22E+000	7.4314E-001

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

Report Generated On 6/27/2006 10:19:01 AM

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

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

Detector ID: YEL7810

Spectrum File: YEL7810
Sample ID: NOL-03-02-151-F-
Sample Title: NOL-03-02-151-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 10:08:57 AM
Live Time: 600.0 seconds
Real Time: 601.1 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7810Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: YEL7810
Log Number: NOL-03-02-151-F-
Title: NOL-03-02-151-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	292-	305	300.95	75.26	1.46	3.87E+002	129.68	1.45E+003
M	2	332-	354	341.02	85.28	1.05	1.63E+002	52.44	1.36E+003
m	3	332-	354	348.97	87.27	1.05	1.16E+002	51.19	1.26E+003
	4	948-	963	954.62	238.69	1.02	1.95E+002	71.54	3.77E+002
	5	1401-	1415	1407.01	351.80	1.07	1.17E+002	44.44	1.37E+002
	6	2037-	2051	2043.22	510.87	1.17	1.05E+002	38.62	9.85E+001
	7	2325-	2340	2332.90	583.30	0.87	1.22E+002	39.59	9.55E+001
	8	2429-	2442	2437.16	609.36	0.89	8.85E+001	31.13	5.95E+001
	9	2806-	2819	2812.19	703.13	0.94	3.85E+001	18.95	1.95E+001
	10	3635-	3655	3644.63	911.26	0.92	1.16E+002	32.80	4.48E+001
	11	3866-	3885	3875.13	968.89	1.56	7.53E+001	32.01	5.47E+001
	12	5037-	5048	5042.37	1260.73	0.26	1.33E+001	12.53	1.07E+001
	13	5831-	5858	5844.94	1461.39	2.16	8.03E+002	56.59	6.88E+000

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: YEL7810

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
ANN	0.999	511.00*		100.00	1.85251E-001	7.29091E-002
K-40	0.988	1460.81*		10.67	1.85538E+001	1.99147E+000
TL-208	0.751	277.35		6.80		
		510.84*		21.60	8.57644E-001	3.44732E-001
		583.14*		84.20	2.69589E-001	9.45764E-002
		860.37		12.46		
Pb-212	0.723	74.81*	@	10.70	1.19563E+001	4.64108E+000
		77.11	@	18.00		
		87.30*	@	8.00	3.03968E+000	1.47215E+000
		238.63*		44.60	6.01548E-001	2.40290E-001
Bi-214	0.407	609.31*		46.30	3.63210E-001	1.35346E-001
		1120.29		15.10		
		1764.49		15.80		
PB-214	0.302	74.82*	@	6.21	2.06011E+001	8.13535E+000
		77.11	@	10.50		
		87.30*	@	4.67	5.20716E+000	2.55238E+000
		241.98		7.49		
		295.21		19.20		
		351.92*		37.20	4.85465E-001	2.01711E-001
Ac-228	0.627	338.32		11.40		
		911.07*		27.70	8.81445E-001	2.68763E-001
		969.11*		16.60	9.67494E-001	4.23578E-001

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

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

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

Spectrum File:YEL7810

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

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
ANN		0.999	1.270200E-001	7.569318E-002
K-40		0.988	1.855383E+001	1.991470E+000
TL-208		0.751	2.695886E-001	9.416748E-002
Pb-212	@	0.723	6.015484E-001	2.402905E-001
Bi-214		0.407	3.632100E-001	1.353458E-001
PB-214	@	0.302	4.854651E-001	1.998259E-001
Ac-228		0.627	9.061444E-001	2.269356E-001

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

Errors quoted at 1.960 sigma

U N I D E N T 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	85.28	2.7109E-001	32.24
9	703.13	6.4088E-002	49.27
12	1260.73	2.2135E-002	94.36

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:YEL7810
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.2399E-001	1.09E-001	4.3103E-002
	1332.49	100.00	1.0890E-001		5.7077E-002
Nb-94	702.63	100.00	1.1561E-001	1.10E-001	-7.0200E-002
	871.10	100.00	1.1037E-001		-3.5650E-002
Ag-108m	79.20	7.10	9.6973E+000	1.46E-001	-1.4464E+001
	433.93	89.90	1.4553E-001		-8.8849E-002
	614.37	90.40	1.4991E-001		-2.0516E-001
	722.95	90.50	1.5032E-001		9.6427E-002
Sb-125	176.33	6.89	2.8470E+000	4.55E-001	1.2522E+000
	427.89	29.33	4.5470E-001		1.4216E-002
	463.38	10.35	1.3297E+000		1.0137E+000
	600.56	17.80	7.0765E-001		2.3174E-001
	606.64	5.02	2.9370E+000		2.4051E+000
	635.90	11.32	1.2054E+000		7.7258E-001
Cs-134	563.23	8.38	1.4468E+000	1.41E-001	5.3373E-001
	569.32	15.43	8.0737E-001		5.3896E-001
	604.70	97.60	1.4719E-001		-4.1721E-002
	795.84	85.40	1.4086E-001		1.2005E-001
	801.93	8.73	1.2770E+000		-1.1412E+000
Cs-137	661.65	85.12	1.5336E-001	1.53E-001	7.1159E-002
Eu-152	121.78	28.40	1.0270E+000	4.01E-001	4.1349E-001
	244.69	7.49	2.2802E+000		-3.1691E-001
	344.27	26.50	5.1074E-001		-8.1361E-001
	778.89	12.74	9.5215E-001		-5.6683E-001
	867.32	4.16	2.6614E+000		-4.2766E+000
	964.01	14.40	9.8876E-001		-3.6982E-002
	1085.78	10.00	1.1286E+000		-2.2779E-001
	1112.02	13.30	9.1704E-001		8.3784E-002
	1407.95	20.70	4.0105E-001		8.7407E-002
Eu-154	123.07	40.50	7.0895E-001	2.77E-001	-4.6569E-001
	247.94	6.60	2.4370E+000		-2.0403E+000
	591.81	4.83	2.5796E+000		9.3949E-002
	723.30	19.70	6.8895E-001		2.7672E-001
	756.87	4.33	2.9810E+000		2.0790E+000
	873.19	11.50	9.9835E-001		1.7389E-001
	996.32	10.30	1.0359E+000		2.3419E-001
	1004.76	17.90	5.6300E-001		1.9069E-001
	1274.45	35.50	2.7697E-001		-2.3249E-001
Eu-155	86.54	30.90	1.7244E+000	1.72E+000	-3.6513E-001
	105.31	20.70	1.8114E+000		-1.9607E+000
Am-241	59.54	35.90	3.6334E+000	3.63E+000	-6.0460E-001
Cm-243	228.19	10.56	1.6599E+000	1.11E+000	2.7009E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1050E+000	1.11E+000	2.2270E-001

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

Report Generated On 6/27/2006 10:02:55 AM

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

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

Detector ID: YEL7810

Spectrum File: YEL7810
Sample ID: NOL-03-02-152-F-
Sample Title: NOL-03-02-152-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 9:52:53 AM
Live Time: 600.0 seconds
Real Time: 601.2 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7810Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: YEL7810
Log Number: NOL-03-02-152-F-
Title: NOL-03-02-152-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	293-	308	300.39	75.12	0.78	3.16E+002	151.00	1.87E+003
2	336-	347	339.67	84.94	1.55	2.04E+002	113.50	1.25E+003
3	945-	962	954.16	238.58	1.20	1.79E+002	81.61	4.75E+002
4	1401-	1414	1406.71	351.73	1.09	9.49E+001	45.51	1.61E+002
5	2325-	2339	2332.00	583.07	1.53	1.55E+002	34.57	5.42E+001
6	2427-	2445	2436.88	609.29	0.79	1.54E+002	37.34	6.18E+001
7	2902-	2913	2908.03	727.09	0.79	2.02E+001	23.28	4.68E+001
8	3635-	3655	3645.75	911.54	1.61	1.16E+002	30.85	3.64E+001
9	3868-	3884	3875.07	968.87	1.03	6.63E+001	25.69	3.37E+001
10	4475-	4489	4481.58	1120.52	0.93	5.30E+001	22.15	2.60E+001
11	5831-	5856	5844.89	1461.38	2.07	8.33E+002	59.31	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: YEL7810

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.989	1460.81*	10.67	1.92326E+001	2.07409E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.43239E-001	8.87346E-002
		860.37	12.46		
Bi-212	1.000	727.17*	11.80	3.42229E-001	3.97220E-001
Pb-212	0.576	74.81* @	10.70	9.80669E+000	5.06974E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.54375E-001	2.66637E-001
Bi-214	0.711	609.31*	46.30	6.32824E-001	1.71931E-001
		1120.29*	15.10	7.74884E-001	3.34153E-001
		1764.49	15.80		
Ac-228	0.624	338.32	11.40		
		911.07*	27.70	8.77039E-001	2.54886E-001
		969.11*	16.60	8.52324E-001	3.41928E-001

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

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

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

Spectrum File:YEL7810

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

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40	0.989	1.923259E+001	2.074085E+000
TL-208	0.470	3.432388E-001	8.873460E-002
Bi-212	1.000	3.422293E-001	3.972202E-001
Pb-212 @	0.576	5.543748E-001	2.666370E-001
Bi-214	0.711	6.625606E-001	1.528814E-001
Ac-228	0.624	8.682109E-001	2.043554E-001

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

Errors quoted at 1.960 sigma

U N I D E N 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	84.94	3.3952E-001	55.72
4	351.73	1.5810E-001	47.97

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:YEL7810
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.2214E-001	1.04E-001	1.0209E-002
	1332.49	100.00	1.0408E-001		8.1851E-003
Nb-94	702.63	100.00	1.2845E-001	1.16E-001	-9.7304E-003
	871.10	100.00	1.1646E-001		1.7626E-002
Ag-108m	79.20	7.10	1.0246E+001	1.43E-001	-6.5837E+000
	433.93	89.90	1.4917E-001		-7.5276E-002
	614.37	90.40	1.6239E-001		-5.0136E-002
	722.95	90.50	1.4280E-001		1.5180E-002
Sb-125	176.33	6.89	3.1358E+000	4.48E-001	-4.9899E-001
	427.89	29.33	4.4840E-001		-3.5240E-001
	463.38	10.35	1.3411E+000		7.3801E-001
	600.56	17.80	6.8759E-001		1.9201E-001
	606.64	5.02	3.1218E+000		5.0654E+000
	635.90	11.32	1.0939E+000		9.3351E-002
Cs-134	563.23	8.38	1.4240E+000	1.42E-001	9.0820E-001
	569.32	15.43	7.7455E-001		-4.4734E-001
	604.70	97.60	1.5003E-001		-3.2426E-002
	795.84	85.40	1.4224E-001		1.6176E-002
	801.93	8.73	1.3060E+000		-1.4347E+000
Cs-137	661.65	85.12	1.5949E-001	1.59E-001	-2.1366E-002
Eu-152	121.78	28.40	1.1129E+000	4.28E-001	-2.8885E-001
	244.69	7.49	2.4597E+000		-4.4937E-001
	344.27	26.50	5.4344E-001		-7.5163E-001
	778.89	12.74	9.4301E-001		-4.3587E-001
	867.32	4.16	2.7456E+000		-1.7118E+000
	964.01	14.40	9.5831E-001		2.0943E-001
	1085.78	10.00	1.1900E+000		-2.3658E-001
	1112.02	13.30	8.1576E-001		-7.4048E-001
	1407.95	20.70	4.2816E-001		3.1019E-001
Eu-154	123.07	40.50	7.6619E-001	2.87E-001	-4.1780E-002
	247.94	6.60	2.7039E+000		-2.4682E+000
	591.81	4.83	2.4989E+000		-9.0669E-002
	723.30	19.70	6.5961E-001		1.7228E-001
	756.87	4.33	2.6199E+000		1.1803E-001
	873.19	11.50	1.0242E+000		6.4387E-001
	996.32	10.30	1.0549E+000		-3.8045E-001
	1004.76	17.90	6.5519E-001		6.7287E-002
	1274.45	35.50	2.8741E-001		6.4860E-002
Eu-155	86.54	30.90	1.8460E+000	1.85E+000	1.9858E+000
	105.31	20.70	1.9884E+000		3.3953E-001
Am-241	59.54	35.90	3.7306E+000	3.73E+000	-1.8310E+000
Cm-243	228.19	10.56	1.7678E+000	1.17E+000	-1.0285E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1691E+000	1.17E+000	5.4059E-001

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

Report Generated On 6/27/2006 11:55:24 AM

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

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

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: NOL-03-02-153-F-
Sample Title: NOL-03-02-153-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 11:45:20 AM
Live Time: 600.0 seconds
Real Time: 601.2 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

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

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

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

Filename: ORG7829
Log Number: NOL-03-02-153-F-
Title: NOL-03-02-153-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	309	291.57	72.89	1.17	3.06E+002	57.85	1.27E+003
m	2	283-	309	300.14	75.04	1.17	5.19E+002	65.91	1.48E+003
	3	331-	343	339.05	84.77	0.33	1.51E+002	116.75	1.29E+003
	4	950-	961	954.06	238.53	1.18	1.87E+002	60.25	2.98E+002
	5	1399-	1416	1405.79	351.47	1.26	1.61E+002	46.97	1.27E+002
	6	2029-	2046	2041.73	510.47	0.93	6.39E+001	47.44	1.60E+002
	7	2322-	2339	2330.95	582.78	1.28	1.26E+002	39.16	8.35E+001
	8	2427-	2446	2434.76	608.73	1.53	1.43E+002	43.41	9.86E+001
	9	3633-	3652	3641.00	910.31	1.37	1.36E+002	35.69	5.61E+001
M	10	3851-	3881	3855.98	964.06	1.44	2.75E+001	13.63	2.51E+001
m	11	3851-	3881	3873.93	968.55	1.44	5.24E+001	18.36	4.49E+001
	12	5321-	5332	5326.47	1331.71	0.80	1.91E+001	14.58	1.39E+001
	13	5827-	5852	5840.14	1460.14	1.78	8.07E+002	60.28	3.25E+001

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

Errors quoted at 1.960 sigma

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

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

Spectrum File: ORG7829

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

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.985	1460.81*	10.67	1.83498E+001	2.02075E+000
TL-208	0.749	277.35	6.80		
		510.84*	21.60	5.31118E-001	4.03277E-001
		583.14*	84.20	2.82286E-001	9.48147E-002
		860.37	12.46		
Pb-212	0.594	74.81* @	10.70	2.02028E+001	4.71916E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.11159E-001	2.18759E-001
Bi-214	0.396	609.31*	46.30	5.90592E-001	1.93040E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.620	338.32	11.40		
		911.07*	27.70	1.03428E+000	2.96599E-001
		969.11*	16.60	6.75977E-001	2.47368E-001

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

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

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
X	ANN		0.991		
	K-40		0.985	1.834976E+001	2.020754E+000
	TL-208		0.749	2.953197E-001	9.229801E-002
	Pb-212	@	0.594	6.111593E-001	2.187594E-001
	Bi-214		0.396	5.905923E-001	1.930396E-001
	Ac-228		0.620	8.229627E-001	1.899695E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F 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	5.0971E-001	18.92
3	84.77	2.5231E-001	77.12
5	351.47	2.6794E-001	29.22
M 10	964.06	4.5859E-002	49.54
12	1331.71	3.1894E-002	76.17

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:ORG7829
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.3923E-001	1.07E-001	1.8329E-001
	1332.49	100.00	1.0692E-001		6.7729E-002
Nb-94	702.63	100.00	1.2709E-001	1.16E-001	4.1742E-002
	871.10	100.00	1.1589E-001		5.1192E-002
Ag-108m	79.20	7.10	1.2402E+001	1.46E-001	-8.6676E+000
	433.93	89.90	1.5713E-001		3.2144E-002
	614.37	90.40	1.7515E-001		5.0795E-002
	722.95	90.50	1.4556E-001		4.5307E-002
Sb-125	176.33	6.89	3.2926E+000	4.91E-001	6.4335E-001
	427.89	29.33	4.9081E-001		-4.7368E-002
	463.38	10.35	1.4271E+000		2.6437E-001
	600.56	17.80	7.7156E-001		1.8360E-001
	606.64	5.02	3.4434E+000		3.7505E+000
	635.90	11.32	1.1315E+000		5.1237E-002
Cs-134	563.23	8.38	1.5894E+000	1.45E-001	8.9173E-001
	569.32	15.43	8.9068E-001		6.3371E-001
	604.70	97.60	1.7668E-001		7.6697E-002
	795.84	85.40	1.4517E-001		9.0699E-002
	801.93	8.73	1.3688E+000		3.5355E-002
Cs-137	661.65	85.12	1.5487E-001	1.55E-001	1.4505E-002
Eu-152	121.78	28.40	1.2431E+000	3.97E-001	1.1538E-001
	244.69	7.49	2.5111E+000		-5.0656E-001
	344.27	26.50	5.7806E-001		-4.4879E-001
	778.89	12.74	9.9494E-001		1.7706E-001
	867.32	4.16	2.8838E+000		-1.5270E+000
	964.01	14.40	1.0133E+000		-3.2820E-001
	1085.78	10.00	1.1279E+000		-9.9603E-001
	1112.02	13.30	9.1476E-001		-1.1323E+000
	1407.95	20.70	3.9689E-001		3.7357E-001
Eu-154	123.07	40.50	8.5503E-001	3.32E-001	4.4324E-001
	247.94	6.60	2.8836E+000		-3.1153E-001
	591.81	4.83	2.7925E+000		9.5430E-001
	723.30	19.70	6.6177E-001		-2.4921E-001
	756.87	4.33	3.1681E+000		-4.8364E-001
	873.19	11.50	1.0083E+000		4.6832E-001
	996.32	10.30	1.1515E+000		4.8256E-001
	1004.76	17.90	6.7651E-001		3.2244E-001
	1274.45	35.50	3.3240E-001		2.0316E-001
Eu-155	86.54	30.90	2.1780E+000	2.10E+000	-6.6419E-001
	105.31	20.70	2.1015E+000		-1.3361E+000
Am-241	59.54	35.90	4.9951E+000	5.00E+000	1.0140E+000
Cm-243	228.19	10.56	1.8529E+000	1.29E+000	-5.9810E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2866E+000	1.29E+000	-9.0856E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/27/2006 11:35:55 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: ORG7829
Sample ID: NOL-03-02-154-F-
Sample Title: NOL-03-02-154-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 11:25:52 AM
Live Time: 600.0 seconds
Real Time: 601.2 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: ORG7829
Log Number: NOL-03-02-154-F-
Title: NOL-03-02-154-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	309	291.42	72.85	1.22	2.90E+002	59.18	1.43E+003
m	2	282-	309	300.28	75.07	1.22	6.10E+002	69.43	1.63E+003
	3	948-	959	954.14	238.55	0.82	1.76E+002	62.05	3.30E+002
	4	1342-	1357	1351.15	337.81	1.05	6.08E+001	50.22	1.98E+002
	5	1399-	1415	1406.41	351.63	1.36	1.13E+002	52.87	1.96E+002
	6	2033-	2050	2038.63	509.69	2.01	1.32E+002	44.96	1.21E+002
	7	2320-	2338	2330.35	582.63	1.30	1.39E+002	45.66	1.19E+002
	8	2425-	2444	2434.85	608.75	0.73	1.29E+002	42.65	9.77E+001
	9	3633-	3649	3641.08	910.33	1.42	8.37E+001	33.55	6.63E+001
	10	3866-	3880	3872.20	968.12	0.61	5.36E+001	24.47	3.54E+001
	11	5826-	5852	5839.55	1459.99	1.81	8.74E+002	58.92	6.73E+000
	12	7046-	7060	7053.67	1763.55	0.38	3.90E+001	13.15	1.98E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
ANN	0.945	511.00*	100.00	2.36309E-001	8.68268E-002
K-40	0.978	1460.81*	10.67	1.98664E+001	2.09277E+000
TL-208	0.739	277.35	6.80		
		510.84*	21.60	1.09403E+000	4.11786E-001
		583.14*	84.20	3.09933E-001	1.09593E-001
		860.37	12.46		
Pb-212	0.594	74.81* @	10.70	2.37166E+001	5.37576E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.74364E-001	2.21635E-001
Bi-214	0.685	609.31*	46.30	5.32581E-001	1.87562E-001
		1120.29	15.10		
		1764.49*	15.80	6.34374E-001	2.23007E-001
Ac-228	0.980	338.32*	11.40	8.43786E-001	7.09714E-001
		911.07*	27.70	6.36644E-001	2.65657E-001
		969.11*	16.60	6.91665E-001	3.24120E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R 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	0.945	1.693639E-001	8.996949E-002
K-40	0.978	1.986636E+001	2.092774E+000
TL-208	0.739	3.099328E-001	1.091268E-001
Pb-212 @	0.594	5.743639E-001	2.216348E-001
Bi-214	0.685	5.747544E-001	1.435424E-001
Ac-228	0.980	6.730619E-001	1.973578E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F 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	4.8253E-001	20.44
5	351.63	1.8794E-001	46.89

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:ORG7829
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.2573E-001	1.23E-001	-1.2305E-001
	1332.49	100.00	1.2299E-001		7.4108E-002
Nb-94	702.63	100.00	1.2744E-001	1.25E-001	2.0902E-002
	871.10	100.00	1.2452E-001		-3.3594E-002
Ag-108m	79.20	7.10	1.2675E+001	1.60E-001	-1.4247E+001
	433.93	89.90	1.6626E-001		-1.4031E-002
	614.37	90.40	1.7255E-001		-9.3758E-003
	722.95	90.50	1.5964E-001		1.9050E-001
Sb-125	176.33	6.89	3.5036E+000	5.10E-001	1.6294E-001
	427.89	29.33	5.1010E-001		1.4768E-001
	463.38	10.35	1.4337E+000		1.2833E+000
	600.56	17.80	7.9119E-001		-3.7256E-001
	606.64	5.02	3.4106E+000		5.6355E+000
	635.90	11.32	1.1856E+000		-7.8106E-002
Cs-134	563.23	8.38	1.5998E+000	1.57E-001	-7.7330E-001
	569.32	15.43	8.6640E-001		7.8387E-003
	604.70	97.60	1.7835E-001		-1.1940E-001
	795.84	85.40	1.5717E-001		-2.6827E-002
	801.93	8.73	1.4571E+000		-6.9260E-001
Cs-137	661.65	85.12	1.6498E-001	1.65E-001	3.5372E-002
Eu-152	121.78	28.40	1.2687E+000	3.85E-001	5.6608E-001
	244.69	7.49	2.6359E+000		-6.5431E-002
	344.27	26.50	5.9849E-001		-5.1360E-001
	778.89	12.74	9.8326E-001		-1.7532E-001
	867.32	4.16	3.1025E+000		-1.4096E+000
	964.01	14.40	1.0133E+000		6.2044E-002
	1085.78	10.00	1.0721E+000		-1.3812E+000
	1112.02	13.30	9.2169E-001		-5.5039E-001
	1407.95	20.70	3.8477E-001		-2.9828E-001
Eu-154	123.07	40.50	8.7362E-001	3.06E-001	1.5989E-001
	247.94	6.60	2.9419E+000		4.3640E-001
	591.81	4.83	2.7301E+000		-2.6483E+000
	723.30	19.70	7.2871E-001		4.7718E-001
	756.87	4.33	2.9675E+000		6.3832E-002
	873.19	11.50	1.0834E+000		-6.1257E-001
	996.32	10.30	1.1942E+000		1.7942E-001
	1004.76	17.90	7.2620E-001		6.8315E-001
	1274.45	35.50	3.0632E-001		-1.3078E-001
Eu-155	86.54	30.90	2.2030E+000	2.20E+000	4.0146E+000
	105.31	20.70	2.2569E+000		7.0120E-001
Am-241	59.54	35.90	5.0112E+000	5.01E+000	-3.2269E+000
Cm-243	228.19	10.56	1.9720E+000	1.27E+000	4.3842E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2654E+000	1.27E+000	5.0579E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/27/2006 10:38:40 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: NOL-03-02-155-F-
Sample Title: NOL-03-02-155-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 10:28:38 AM
Live Time: 600.0 seconds
Real Time: 601.2 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: ORG7829
Log Number: NOL-03-02-155-F-
Title: NOL-03-02-155-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	294-	306	300.73	75.18	1.01	4.56E+002	127.01	1.42E+003
2	335-	345	340.11	85.03	0.41	1.38E+002	105.33	1.15E+003
3	943-	961	954.15	238.55	1.37	2.66E+002	81.40	4.32E+002
4	1170-	1186	1179.78	294.96	1.30	8.08E+001	56.33	2.38E+002
5	1344-	1358	1352.04	338.03	0.86	5.46E+001	43.43	1.50E+002
6	1395-	1415	1406.91	351.75	1.77	1.61E+002	59.29	2.08E+002
7	2319-	2342	2329.97	582.53	1.18	1.97E+002	44.37	7.93E+001
8	2427-	2443	2434.79	608.74	1.32	1.38E+002	37.34	7.21E+001
9	3634-	3652	3641.72	910.49	1.06	1.20E+002	32.40	4.55E+001
10	3863-	3882	3873.43	968.43	1.21	9.10E+001	33.00	5.50E+001
11	4469-	4485	4476.55	1119.22	0.47	4.64E+001	25.07	3.66E+001
12	5826-	5852	5839.42	1459.96	1.83	7.78E+002	57.70	2.03E+001
13	7048-	7062	7054.37	1763.72	0.34	3.81E+001	14.88	6.88E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.976	1460.81*	10.67	1.76725E+001	1.94065E+000
TL-208	0.463	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	4.38907E-001	1.14316E-001
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	1.76389E+001	6.00821E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.68033E-001	2.98499E-001
Bi-214	0.982	609.31*	46.30	5.68216E-001	1.68999E-001
		1120.29*	15.10	6.84103E-001	3.76889E-001
		1764.49*	15.80	6.19733E-001	2.49670E-001
PB-214	0.626	74.82* @	6.21	3.03922E+001	1.05848E+001
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	6.44960E-001	4.62370E-001
		351.92*	37.20	6.93546E-001	2.79880E-001
Ac-228	0.989	338.32*	11.40	7.58772E-001	6.14730E-001
		911.07*	27.70	9.16876E-001	2.68256E-001
		969.11*	16.60	1.17473E+000	4.43477E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40		0.976	1.767252E+001	1.940654E+000
TL-208		0.463	4.389074E-001	1.143162E-001
Pb-212	@	0.593	8.680326E-001	2.984994E-001
Bi-214		0.982	5.964848E-001	1.311983E-001
PB-214	@	0.626	6.805174E-001	2.394318E-001
Ac-228		0.989	9.581516E-001	2.150300E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
2	85.03	2.2974E-001	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:ORG7829
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.3882E-001	1.00E-001	1.1842E-001
	1332.49	100.00	1.0011E-001		7.1589E-002
Nb-94	702.63	100.00	1.2849E-001	1.11E-001	-5.9664E-003
	871.10	100.00	1.1064E-001		-1.1474E-002
Ag-108m	79.20	7.10	1.3048E+001	1.53E-001	-1.0273E+001
	433.93	89.90	1.6262E-001		5.3143E-002
	614.37	90.40	1.6451E-001		-1.4230E-002
	722.95	90.50	1.5259E-001		9.7537E-002
Sb-125	176.33	6.89	3.5326E+000	4.91E-001	9.4089E-001
	427.89	29.33	4.9081E-001		-5.8221E-002
	463.38	10.35	1.4071E+000		6.2945E-001
	600.56	17.80	7.7980E-001		1.6631E-001
	606.64	5.02	3.3727E+000		4.6041E+000
	635.90	11.32	1.1631E+000		1.0315E-001
Cs-134	563.23	8.38	1.5471E+000	1.47E-001	1.2019E-001
	569.32	15.43	8.2561E-001		-1.5583E-001
	604.70	97.60	1.7620E-001		-6.3023E-002
	795.84	85.40	1.4739E-001		3.7036E-002
	801.93	8.73	1.3176E+000		-1.4923E+000
Cs-137	661.65	85.12	1.5832E-001	1.58E-001	3.7146E-002
Eu-152	121.78	28.40	1.2687E+000	4.01E-001	-2.8920E-001
	244.69	7.49	2.5178E+000		-9.5207E-001
	344.27	26.50	5.5468E-001		-2.4858E-001
	778.89	12.74	9.5644E-001		-8.7402E-001
	867.32	4.16	2.7417E+000		-1.3006E-001
	964.01	14.40	1.1271E+000		5.1430E-001
	1085.78	10.00	1.1997E+000		-1.2729E-001
	1112.02	13.30	8.3454E-001		1.6716E-002
	1407.95	20.70	4.0084E-001		-1.2841E-001
Eu-154	123.07	40.50	8.7829E-001	3.03E-001	8.3684E-001
	247.94	6.60	2.8893E+000		-1.3466E+000
	591.81	4.83	2.7364E+000		-6.1727E-001
	723.30	19.70	6.9941E-001		5.9891E-001
	756.87	4.33	2.5064E+000		-3.2096E+000
	873.19	11.50	9.8949E-001		1.3649E-001
	996.32	10.30	1.0609E+000		8.3850E-002
	1004.76	17.90	6.2266E-001		-2.2360E-001
	1274.45	35.50	3.0310E-001		-1.1098E-001
Eu-155	86.54	30.90	2.2337E+000	2.23E+000	3.6021E+000
	105.31	20.70	2.2313E+000		1.3535E+000
Am-241	59.54	35.90	5.1275E+000	5.13E+000	-5.8292E-001
Cm-243	228.19	10.56	1.8705E+000	1.24E+000	-7.7118E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2376E+000	1.24E+000	3.4043E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/26/2006 4:03:50 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-156-F-
Sample Title: NOL-03-02-156-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/26/2006 3:53:38 PM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-156-F-
Title: NOL-03-02-156-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	305	291.62	72.73	1.15	6.57E+002	86.04	2.45E+003
m	2	285-	305	300.13	74.86	1.15	1.14E+003	99.50	2.74E+003
M	3	331-	353	339.36	84.67	1.28	4.85E+002	82.40	2.74E+003
m	4	331-	353	348.79	87.03	1.28	2.31E+002	75.93	2.73E+003
	5	452-	461	455.93	113.82	0.73	9.08E+001	100.03	1.11E+003
	6	945-	961	954.61	238.53	0.83	3.11E+002	87.91	5.44E+002
	7	1076-	1084	1080.29	269.96	0.50	3.49E+001	41.71	1.95E+002
	8	1400-	1417	1406.89	351.64	1.04	1.82E+002	59.70	2.27E+002
	9	2031-	2053	2042.27	510.53	1.80	2.12E+002	57.52	1.67E+002
	10	2322-	2339	2331.40	582.83	1.69	2.02E+002	47.90	1.21E+002
	11	2424-	2446	2435.21	608.79	1.50	1.85E+002	50.91	1.26E+002
	12	3635-	3654	3643.27	910.90	1.28	1.75E+002	37.48	5.44E+001
	13	3867-	3883	3874.79	968.80	0.85	7.63E+001	28.00	4.07E+001
	14	4945-	4957	4950.80	1237.88	0.85	3.16E+001	23.28	4.14E+001
	15	5828-	5855	5842.52	1460.88	1.90	1.16E+003	73.66	5.60E+001
	16	7048-	7065	7056.73	1764.52	0.85	5.54E+001	19.63	1.36E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.992	511.00*	100.00	2.88944E-001	8.76806E-002
K-40	1.000	1460.81*	10.67	1.94561E+001	2.00188E+000
Eu-155	0.328	86.54*	30.90	9.31447E-001	3.56415E-001
		105.31	20.70		
TL-208	0.749	277.35	6.80		
		510.84*	21.60	1.33771E+000	4.20372E-001
		583.14*	84.20	3.41313E-001	9.24334E-002
		860.37	12.46		
Pb-212	0.677	74.81* @	10.70	1.63754E+001	3.51173E+000
		77.11 @	18.00		
		87.30* @	8.00	3.59772E+000	1.37665E+000
		238.63*	44.60	7.55843E-001	2.44360E-001
Bi-214	0.693	609.31*	46.30	5.76529E-001	1.74096E-001
		1120.29	15.10		
		1764.49*	15.80	6.50686E-001	2.39571E-001
Ac-228	0.632	338.32	11.40		
		911.07*	27.70	9.99448E-001	2.43399E-001
		969.11*	16.60	7.41650E-001	2.83080E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.992	2.152207E-001	8.989297E-002
K-40		1.000	1.945613E+001	2.001883E+000
Eu-155		0.328	7.357597E-001	3.619863E-001
TL-208		0.749	3.413134E-001	9.176169E-002
Pb-212	@	0.677	7.558428E-001	2.443601E-001
Bi-214		0.693	6.021568E-001	1.408361E-001
Ac-228		0.632	8.898697E-001	1.845573E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F 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	1.0951E+000	13.09
M 3	84.67	8.0824E-001	16.99
5	113.82	1.5127E-001	110.22
7	269.96	5.8083E-002	119.69
8	351.64	3.0250E-001	32.89
14	1237.88	5.2705E-002	73.63

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	1.1141E-001	9.02E-002	3.5334E-002
		1332.49	100.00	9.0156E-002		1.1358E-001
	Nb-94	702.63	100.00	1.0831E-001	1.02E-001	-1.3396E-002
		871.10	100.00	1.0166E-001		-2.5019E-002
	Ag-108m	79.20	7.10	6.1697E+000	1.24E-001	-1.7784E+001
		433.93	89.90	1.3061E-001		-1.7017E-002
		614.37	90.40	1.3272E-001		-2.5220E-002
		722.95	90.50	1.2421E-001		8.3281E-002
	Sb-125	176.33	6.89	2.6436E+000	3.93E-001	-1.9523E+000
		427.89	29.33	3.9251E-001		7.2082E-002
		463.38	10.35	1.1842E+000		8.0491E-001
		600.56	17.80	6.2368E-001		1.1262E-001
		606.64	5.02	2.7807E+000		-7.2197E-002
		635.90	11.32	9.2906E-001		2.5564E-001
	Cs-134	563.23	8.38	1.3187E+000	1.33E-001	3.1686E-002
		569.32	15.43	7.1744E-001		4.4499E-001
		604.70	97.60	1.3607E-001		-4.2481E-002
		795.84	85.40	1.3334E-001		2.1739E-001
		801.93	8.73	1.1485E+000		-1.1748E+000
	Cs-137	661.65	85.12	1.3314E-001	1.33E-001	-1.3210E-002
	Eu-152	121.78	28.40	9.0240E-001	3.11E-001	-5.2888E-001
		244.69	7.49	2.0080E+000		-1.1489E+000
		344.27	26.50	4.6616E-001		-2.4489E-001
		778.89	12.74	8.2129E-001		-5.4483E-001
		867.32	4.16	2.4151E+000		-3.2296E+000
		964.01	14.40	8.8111E-001		4.5065E-001
		1085.78	10.00	9.4022E-001		-7.8520E-001
		1112.02	13.30	6.8587E-001		-7.1746E-001
		1407.95	20.70	3.1123E-001		-3.4443E-001
	Eu-154	123.07	40.50	6.2977E-001	2.60E-001	1.4238E-002
		247.94	6.60	2.2511E+000		1.8890E+000
		591.81	4.83	2.3173E+000		-7.1563E-001
		723.30	19.70	5.7297E-001		1.7324E-001
		756.87	4.33	2.3136E+000		-8.2089E-002
		873.19	11.50	8.8676E-001		5.2590E-001
		996.32	10.30	9.8108E-001		-4.1024E-001
		1004.76	17.90	5.5416E-001		7.4412E-002
		1274.45	35.50	2.5989E-001		-4.4010E-002
+	Eu-155	86.54*	30.90	9.9126E-001	9.91E-001	9.3145E-001
		105.31	20.70	1.5445E+000		-6.5388E-001
	Am-241	59.54	35.90	1.6993E+000	1.70E+000	1.0473E+000
	Cm-243	228.19	10.56	1.4487E+000	1.02E+000	-5.3314E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0231E+000	1.02E+000	3.7191E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/27/2006 2:04:33 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-157-F-
Sample Title: NOL-03-02-157-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 1:54:30 PM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-157-F-
Title: NOL-03-02-157-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	308	292.05	72.84	1.23	6.97E+002	90.50	3.05E+003
m	2	284-	308	300.50	74.95	1.23	1.17E+003	101.93	3.50E+003
M	3	331-	357	339.44	84.69	1.26	4.44E+002	84.58	2.94E+003
m	4	331-	357	350.09	87.36	1.27	1.57E+002	75.68	3.23E+003
	5	947-	963	954.58	238.52	1.05	2.78E+002	88.25	5.58E+002
	6	1345-	1363	1353.15	338.20	1.28	1.11E+002	60.75	2.51E+002
	7	1401-	1415	1407.04	351.67	1.09	1.38E+002	50.11	1.78E+002
	8	2035-	2053	2045.09	511.23	1.12	1.40E+002	53.16	1.76E+002
	9	2321-	2343	2332.05	582.99	1.63	2.33E+002	54.13	1.37E+002
	10	2429-	2444	2435.44	608.85	1.05	1.50E+002	41.02	9.46E+001
	11	3633-	3655	3644.62	911.24	1.26	1.88E+002	38.66	5.18E+001
	12	3867-	3883	3875.73	969.03	1.25	7.71E+001	29.33	4.69E+001
	13	4474-	4489	4481.41	1120.50	0.71	5.28E+001	25.42	3.82E+001
	14	5829-	5858	5844.69	1461.42	2.25	1.18E+003	71.16	2.98E+001
	15	7054-	7071	7061.83	1765.80	0.80	6.45E+001	18.10	6.47E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.998	511.00*	100.00	1.90965E-001	7.69951E-002
K-40	0.987	1460.81*	10.67	1.97461E+001	1.99512E+000
Eu-155	0.319	86.54*	30.90	6.27845E-001	3.27528E-001
		105.31	20.70		
TL-208	0.750	277.35	6.80		
		510.84*	21.60	8.84098E-001	3.63697E-001
		583.14*	84.20	3.94645E-001	1.05025E-001
		860.37	12.46		
Pb-212	0.677	74.81* @	10.70	1.66910E+001	3.58141E+000
		77.11 @	18.00		
		87.30* @	8.00	2.42505E+000	1.26508E+000
		238.63*	44.60	6.74705E-001	2.39193E-001
Bi-214	0.983	609.31*	46.30	4.69409E-001	1.40511E-001
		1120.29*	15.10	5.89087E-001	2.90192E-001
		1764.49*	15.80	7.58222E-001	2.25768E-001
Ac-228	0.999	338.32*	11.40	1.16235E+000	6.63801E-001
		911.07*	27.70	1.07745E+000	2.53625E-001
		969.11*	16.60	7.50092E-001	2.95839E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.998	1.057219E-001	8.021936E-002
K-40		0.987	1.974608E+001	1.995115E+000
Eu-155		0.319	4.531643E-001	3.333315E-001
TL-208		0.750	3.946449E-001	1.042342E-001
Pb-212	@	0.677	6.747046E-001	2.391928E-001
Bi-214		0.983	5.556890E-001	1.103349E-001
Ac-228		0.999	9.561267E-001	1.849278E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.84	1.1609E+000	12.99
M 3	84.69	7.3956E-001	19.06
7	351.67	2.3015E-001	36.29

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	9.9204E-002	8.24E-002	-8.3588E-002
		1332.49	100.00	8.2357E-002		3.0033E-002
	Nb-94	702.63	100.00	1.0521E-001	8.68E-002	-8.3378E-002
		871.10	100.00	8.6849E-002		4.4437E-002
	Ag-108m	79.20	7.10	6.2747E+000	1.24E-001	-5.3187E+000
		433.93	89.90	1.3078E-001		-1.2254E-002
		614.37	90.40	1.3097E-001		-3.3515E-002
		722.95	90.50	1.2370E-001		9.4125E-002
	Sb-125	176.33	6.89	2.7729E+000	4.07E-001	-4.0992E-001
		427.89	29.33	4.0700E-001		-3.4414E-002
		463.38	10.35	1.1292E+000		1.2902E+000
		600.56	17.80	6.2368E-001		4.3922E-001
		606.64	5.02	2.7608E+000		5.7448E+000
		635.90	11.32	8.7673E-001		2.6272E-001
	Cs-134	563.23	8.38	1.3042E+000	1.23E-001	1.4935E+000
		569.32	15.43	6.9477E-001		-4.8581E-001
		604.70	97.60	1.3749E-001		-3.5070E-002
		795.84	85.40	1.2305E-001		7.3095E-002
		801.93	8.73	1.0950E+000		-2.3903E-002
	Cs-137	661.65	85.12	1.2709E-001	1.27E-001	1.1352E-002
	Eu-152	121.78	28.40	9.4334E-001	3.43E-001	-5.1619E-002
		244.69	7.49	2.0667E+000		-3.2630E-001
		344.27	26.50	4.6022E-001		-1.3367E-001
		778.89	12.74	8.3902E-001		-4.2460E-001
		867.32	4.16	2.0937E+000		-4.1317E+000
		964.01	14.40	8.4862E-001		4.1868E-002
		1085.78	10.00	9.8294E-001		7.3225E-001
		1112.02	13.30	7.0157E-001		-4.6875E-001
		1407.95	20.70	3.4274E-001		-1.5880E-001
	Eu-154	123.07	40.50	6.6218E-001	2.58E-001	1.0953E+000
		247.94	6.60	2.2416E+000		5.3983E-001
		591.81	4.83	2.2744E+000		-4.5895E-001
		723.30	19.70	5.6833E-001		4.7260E-001
		756.87	4.33	2.4317E+000		2.5187E-001
		873.19	11.50	7.8311E-001		4.4848E-001
		996.32	10.30	9.3080E-001		-4.6691E-001
		1004.76	17.90	5.3162E-001		1.3672E-001
		1274.45	35.50	2.5777E-001		4.4104E-002
+	Eu-155	86.54*	30.90	1.0713E+000	1.07E+000	6.2785E-001
		105.31	20.70	1.5666E+000		-7.4682E-002
	Am-241	59.54	35.90	1.6461E+000	1.65E+000	-1.3148E+000
	Cm-243	228.19	10.56	1.5264E+000	1.03E+000	-1.0674E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0343E+000	1.03E+000	6.1683E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/27/2006 3:24:22 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: YEL7810

Spectrum File: YEL7810
Sample ID: NOL-03-02-158-F-
Sample Title: NOL-03-02-158-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 3:14:19 PM
Live Time: 600.0 seconds
Real Time: 601.2 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7810Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: YEL7810
Log Number: NOL-03-02-158-F-
Title: NOL-03-02-158-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	309	291.12	72.80	1.34	3.07E+002	65.43	1.35E+003
m	2	287-	309	300.48	75.14	1.35	6.01E+002	73.59	2.36E+003
	3	944-	961	954.56	238.68	1.27	3.00E+002	84.23	4.73E+002
	4	1174-	1188	1182.37	295.64	0.42	9.96E+001	52.98	2.19E+002
	5	1344-	1361	1351.78	337.99	0.76	7.30E+001	54.38	2.14E+002
	6	1401-	1414	1407.23	351.86	0.40	8.22E+001	46.54	1.74E+002
	7	2324-	2343	2331.82	583.02	1.20	1.33E+002	40.15	8.18E+001
	8	2428-	2447	2435.89	609.04	0.70	1.83E+002	37.26	5.13E+001
	9	3634-	3655	3644.30	911.18	1.81	1.36E+002	36.09	5.31E+001
	10	3869-	3884	3876.42	969.21	1.11	7.64E+001	25.86	3.26E+001
	11	5831-	5856	5844.84	1461.36	2.08	8.06E+002	58.95	2.29E+001
	12	7055-	7068	7061.61	1765.58	1.22	3.48E+001	15.54	1.02E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: YEL7810

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.989	1460.81*	10.67	1.86215E+001	2.03162E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.95296E-001	9.69971E-002
		860.37	12.46		
Pb-212	0.576	74.81* @	10.70	1.86487E+001	4.31018E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	9.26703E-001	2.98016E-001
Bi-214	0.685	609.31*	46.30	7.49737E-001	1.78620E-001
		1120.29	15.10		
		1764.49*	15.80	5.92103E-001	2.71146E-001
PB-214	0.613	74.82* @	6.21	3.21323E+001	7.78425E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	7.61544E-001	4.24862E-001
		351.92*	37.20	3.41771E-001	2.01684E-001
Ac-228	0.999	338.32*	11.40	9.78269E-001	7.44673E-001
		911.07*	27.70	1.03142E+000	2.98466E-001
		969.11*	16.60	9.81053E-001	3.47861E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:YEL7810

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40		0.989	1.862149E+001	2.031622E+000
TL-208		0.469	2.952963E-001	9.699709E-002
Pb-212	@	0.576	9.267033E-001	2.980156E-001
Bi-214		0.685	7.020317E-001	1.491628E-001
PB-214	@	0.613	4.189686E-001	1.821972E-001
Ac-228		0.999	1.007370E+000	2.167122E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.80	5.1192E-001	21.30

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:YEL7810
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.2714E-001	1.16E-001	4.9037E-002
	1332.49	100.00	1.1574E-001		1.1189E-001
Nb-94	702.63	100.00	1.2949E-001	1.13E-001	-8.5780E-002
	871.10	100.00	1.1302E-001		5.8009E-002
Ag-108m	79.20	7.10	1.0778E+001	1.48E-001	-6.7884E+000
	433.93	89.90	1.4840E-001		-3.5991E-002
	614.37	90.40	1.6053E-001		-1.3308E-001
	722.95	90.50	1.4811E-001		-1.4129E-002
Sb-125	176.33	6.89	3.3826E+000	4.70E-001	-6.0619E-001
	427.89	29.33	4.7007E-001		8.4001E-002
	463.38	10.35	1.3725E+000		5.5199E-001
	600.56	17.80	7.0042E-001		-1.4167E-001
	606.64	5.02	3.2521E+000		-7.0400E-001
	635.90	11.32	1.1059E+000		-4.5838E-001
Cs-134	563.23	8.38	1.4803E+000	1.54E-001	1.8684E-001
	569.32	15.43	8.2914E-001		3.7729E-002
	604.70	97.60	1.5718E-001		-9.0073E-003
	795.84	85.40	1.5445E-001		9.7577E-002
	801.93	8.73	1.4114E+000		-6.3323E-001
Cs-137	661.65	85.12	1.5530E-001	1.55E-001	-5.6966E-002
Eu-152	121.78	28.40	1.1943E+000	4.21E-001	1.7273E+000
	244.69	7.49	2.6353E+000		-2.0198E+000
	344.27	26.50	5.8838E-001		2.0271E-002
	778.89	12.74	8.9263E-001		-8.1861E-001
	867.32	4.16	2.7559E+000		-3.3205E+000
	964.01	14.40	1.0747E+000		3.8771E-001
	1085.78	10.00	1.1090E+000		-1.3675E-001
	1112.02	13.30	8.6796E-001		9.0004E-002
	1407.95	20.70	4.2061E-001		4.4353E-002
Eu-154	123.07	40.50	8.2411E-001	3.26E-001	1.4377E-001
	247.94	6.60	2.8734E+000		-1.1030E+000
	591.81	4.83	2.6642E+000		3.0073E+000
	723.30	19.70	6.9231E-001		2.3074E-001
	756.87	4.33	2.7577E+000		2.1693E+000
	873.19	11.50	9.8707E-001		5.6011E-001
	996.32	10.30	1.0017E+000		-8.4023E-001
	1004.76	17.90	6.0277E-001		-7.1976E-001
	1274.45	35.50	3.2568E-001		4.9810E-002
Eu-155	86.54	30.90	1.9795E+000	1.98E+000	2.2129E+000
	105.31	20.70	2.0706E+000		-4.2737E-001
Am-241	59.54	35.90	4.0970E+000	4.10E+000	6.3576E-001
Cm-243	228.19	10.56	1.8596E+000	1.23E+000	-7.8715E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2317E+000	1.23E+000	-1.0679E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/27/2006 9:47:09 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: YEL7810

Spectrum File: YEL7810
Sample ID: NOL-03-02-159-F-
Sample Title: NOL-03-02-159-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 9:37:08 AM
Live Time: 600.0 seconds
Real Time: 601.2 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7810Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: YEL7810
Log Number: NOL-03-02-159-F-
Title: NOL-03-02-159-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	292-	306	300.98	75.27	1.14	4.96E+002	149.34	1.84E+003
2	948-	963	954.76	238.73	1.36	1.82E+002	75.73	4.35E+002
3	1174-	1188	1178.98	294.79	0.47	5.95E+001	53.32	2.35E+002
4	1397-	1414	1407.33	351.88	0.39	1.18E+002	54.59	2.03E+002
5	2325-	2340	2332.20	583.12	1.34	1.22E+002	36.65	7.58E+001
6	2428-	2446	2437.17	609.36	1.11	1.49E+002	39.36	7.44E+001
7	3636-	3654	3645.03	911.36	0.45	9.10E+001	35.32	6.90E+001
8	3868-	3886	3876.29	969.18	0.95	5.82E+001	30.98	5.68E+001
9	4476-	4491	4482.78	1120.82	0.63	4.71E+001	24.04	3.39E+001
10	5831-	5857	5844.82	1461.36	2.07	7.46E+002	55.60	1.35E+001
11	7057-	7070	7063.03	1765.94	0.81	1.76E+001	14.50	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: YEL7810

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.989	1460.81*	10.67	1.72226E+001	1.89576E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.71071E-001	8.86177E-002
		860.37	12.46		
Pb-212	0.575	74.81* @	10.70	1.53293E+001	5.50430E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.61305E-001	2.49963E-001
Bi-214	0.983	609.31*	46.30	6.09745E-001	1.78134E-001
		1120.29*	15.10	6.88288E-001	3.58963E-001
		1764.49*	15.80	3.00442E-001	2.48634E-001
PB-214	0.613	74.82* @	6.21	2.64128E+001	9.67594E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	4.54645E-001	4.14440E-001
		351.92*	37.20	4.88295E-001	2.41084E-001
Ac-228	0.627	338.32	11.40		
		911.07*	27.70	6.90547E-001	2.79502E-001
		969.11*	16.60	7.48274E-001	4.05692E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:YEL7810

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40		0.989	1.722260E+001	1.895759E+000
TL-208		0.470	2.710715E-001	8.861774E-002
Pb-212	@	0.575	5.613047E-001	2.499628E-001
Bi-214		0.983	5.305072E-001	1.342901E-001
PB-214	@	0.613	4.797873E-001	2.083902E-001
Ac-228		0.627	7.091276E-001	2.301653E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:YEL7810
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.2759E-001	9.90E-002	6.7402E-002
	1332.49	100.00	9.8997E-002		7.2218E-002
Nb-94	702.63	100.00	1.2599E-001	1.22E-001	-5.5465E-002
	871.10	100.00	1.2223E-001		-1.1514E-002
Ag-108m	79.20	7.10	1.0715E+001	1.47E-001	-1.4921E+001
	433.93	89.90	1.5221E-001		-3.5200E-002
	614.37	90.40	1.6663E-001		7.0926E-002
	722.95	90.50	1.4699E-001		1.1733E-001
Sb-125	176.33	6.89	3.2868E+000	4.62E-001	1.2396E+000
	427.89	29.33	4.6168E-001		2.2608E-001
	463.38	10.35	1.4031E+000		9.6075E-001
	600.56	17.80	7.0042E-001		2.2707E-001
	606.64	5.02	3.2324E+000		-9.3439E-001
	635.90	11.32	1.0787E+000		-6.5600E-001
Cs-134	563.23	8.38	1.6206E+000	1.49E-001	1.5868E+000
	569.32	15.43	8.3498E-001		6.6371E-001
	604.70	97.60	1.5254E-001		-7.2479E-002
	795.84	85.40	1.4891E-001		2.0917E-002
	801.93	8.73	1.3249E+000		-8.9576E-001
Cs-137	661.65	85.12	1.5722E-001	1.57E-001	-1.1415E-001
Eu-152	121.78	28.40	1.1481E+000	3.63E-001	-2.4410E-001
	244.69	7.49	2.5070E+000		1.6133E+000
	344.27	26.50	5.6637E-001		-7.3913E-001
	778.89	12.74	8.8612E-001		-1.0915E+000
	867.32	4.16	2.8966E+000		-3.4629E+000
	964.01	14.40	9.8876E-001		2.4115E-001
	1085.78	10.00	1.2173E+000		1.2697E-002
	1112.02	13.30	9.1020E-001		3.3553E-001
	1407.95	20.70	3.6295E-001		-5.0617E-002
Eu-154	123.07	40.50	7.9576E-001	2.99E-001	5.2391E-001
	247.94	6.60	2.7776E+000		9.8754E-001
	591.81	4.83	2.6642E+000		-3.8190E-001
	723.30	19.70	6.6838E-001		3.8334E-001
	756.87	4.33	2.7667E+000		-2.0175E+000
	873.19	11.50	1.0350E+000		-4.8727E-001
	996.32	10.30	1.0782E+000		2.1229E-001
	1004.76	17.90	6.3736E-001		6.0691E-001
	1274.45	35.50	2.9911E-001		1.4514E-001
Eu-155	86.54	30.90	1.9241E+000	1.92E+000	3.5842E+000
	105.31	20.70	2.0306E+000		9.1190E-001
Am-241	59.54	35.90	3.9758E+000	3.98E+000	-2.4101E+000
Cm-243	228.19	10.56	1.8635E+000	1.20E+000	-2.2102E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1989E+000	1.20E+000	-4.4069E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/27/2006 9:22:55 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-160-F-
Sample Title: NOL-03-02-160-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 9:12:53 PM
Live Time: 600.0 seconds
Real Time: 601.9 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-160-F-
Title: NOL-03-02-160-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	308	291.83	72.79	1.08	7.03E+002	89.91	2.96E+003
m	2	284-	308	300.16	74.87	1.09	1.22E+003	102.67	3.21E+003
	3	331-	345	339.59	84.73	1.32	5.83E+002	180.79	2.75E+003
	4	945-	959	953.75	238.32	1.22	3.52E+002	87.22	5.66E+002
	5	1175-	1189	1179.86	294.86	1.20	8.35E+001	62.89	3.28E+002
	6	1345-	1361	1351.71	337.84	1.19	1.60E+002	60.32	2.51E+002
	7	1399-	1414	1406.43	351.52	1.15	1.59E+002	61.00	2.69E+002
	8	2032-	2052	2041.33	510.29	1.15	1.53E+002	64.95	2.60E+002
	9	2323-	2337	2330.49	582.60	1.06	2.22E+002	46.14	1.15E+002
	10	2427-	2443	2434.52	608.62	1.71	1.93E+002	45.67	1.11E+002
	11	2638-	2654	2643.53	660.89	0.78	8.61E+001	38.16	9.29E+001
	12	2897-	2911	2905.53	726.41	1.39	5.01E+001	31.66	7.29E+001
	13	3633-	3650	3642.51	910.71	1.28	2.01E+002	38.07	5.40E+001
	14	3865-	3882	3873.01	968.35	1.17	1.06E+002	39.83	9.44E+001
	15	4471-	4485	4478.11	1119.67	1.47	6.07E+001	31.26	6.73E+001
	16	4679-	4700	4692.08	1173.18	0.43	8.39E+001	35.52	6.51E+001
	17	5319-	5336	5327.58	1332.10	0.49	7.00E+001	28.17	4.20E+001
	18	5825-	5854	5840.90	1460.47	2.16	1.32E+003	74.39	2.58E+001
	19	7046-	7065	7055.78	1764.28	1.03	7.60E+001	18.97	4.96E+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: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.983	511.00*		100.00	2.08580E-001	9.29607E-002
K-40	0.996	1460.81*		10.67	2.21249E+001	2.18293E+000
Co-60	0.997	1173.22*		100.00	1.43074E-001	6.16276E-002
		1332.49*		100.00	1.23042E-001	5.04505E-002
Cs-137	0.980	661.65*		85.12	1.50211E-001	6.89014E-002
TL-208	0.743	277.35		6.80		
		510.84*		21.60	9.65647E-001	4.37539E-001
		583.14*		84.20	3.76388E-001	9.21751E-002
		860.37		12.46		
Bi-212	0.980	727.17*		11.80	6.42411E-001	4.13073E-001
Pb-212	0.519	74.81*	@	10.70	1.75255E+001	3.73642E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	8.54835E-001	2.50785E-001
Bi-214	0.987	609.31*		46.30	6.02136E-001	1.60713E-001
		1120.29*		15.10	6.76901E-001	3.55736E-001
		1764.49*		15.80	8.93306E-001	2.40064E-001
PB-214	0.579	74.82*	@	6.21	3.01969E+001	6.80092E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	5.00934E-001	3.86628E-001
		351.92*		37.20	5.18769E-001	2.16720E-001
Ac-228	0.990	338.32*		11.40	1.67771E+000	6.86014E-001
		911.07*		27.70	1.15017E+000	2.54960E-001
		969.11*		16.60	1.02629E+000	4.01827E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.983	1.272800E-001	9.503201E-002
K-40		0.996	2.212489E+001	2.182927E+000
Co-60		0.997	1.310802E-001	3.903786E-002
Cs-137		0.980	1.502105E-001	6.890143E-002
TL-208		0.743	3.763875E-001	9.135530E-002
Bi-212		0.980	6.424107E-001	4.130727E-001
Pb-212	@	0.519	8.548352E-001	2.507846E-001
Bi-214		0.987	6.903500E-001	1.250286E-001
PB-214	@	0.579	5.145048E-001	1.890460E-001
Ac-228		0.990	1.165094E+000	2.054047E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F 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	1.1716E+000	12.79
3	84.73	9.7201E-001	31.00

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
+	Co-60	1173.22*	100.00	9.2392E-002	7.23E-002	1.4307E-001
		1332.49*	100.00	7.2345E-002		1.2304E-001
	Nb-94	702.63	100.00	1.2030E-001	1.10E-001	-2.6518E-002
		871.10	100.00	1.0980E-001		-1.3759E-002
	Ag-108m	79.20	7.10	6.4696E+000	1.38E-001	-9.0566E+000
		433.93	89.90	1.5102E-001		-1.0256E-002
		614.37	90.40	1.4254E-001		-7.2777E-002
		722.95	90.50	1.3783E-001		8.2524E-002
	Sb-125	176.33	6.89	2.9089E+000	4.66E-001	1.4856E+000
		427.89	29.33	4.6630E-001		4.2068E-001
		463.38	10.35	1.2483E+000		1.0846E-001
		600.56	17.80	6.8091E-001		-1.7734E-001
		606.64	5.02	2.9942E+000		5.3569E+000
		635.90	11.32	1.0490E+000		2.5978E-003
	Cs-134	563.23	8.38	1.4381E+000	1.38E-001	7.8229E-001
		569.32	15.43	8.0505E-001		3.0104E-001
		604.70	97.60	1.5098E-001		-3.2096E-002
		795.84	85.40	1.3845E-001		2.3537E-002
		801.93	8.73	1.2542E+000		6.3941E-001
+	Cs-137	661.65*	85.12	1.0299E-001	1.03E-001	1.5021E-001
	Eu-152	121.78	28.40	9.9486E-001	4.04E-001	2.5196E-002
		244.69	7.49	2.3149E+000		1.4729E+000
		344.27	26.50	5.3052E-001		5.6609E-002
		778.89	12.74	8.7893E-001		-3.5751E-001
		867.32	4.16	2.6371E+000		-3.0883E+000
		964.01	14.40	1.0182E+000		-2.2325E-001
		1085.78	10.00	1.1400E+000		1.2928E-001
		1112.02	13.30	8.3772E-001		-2.5539E-001
		1407.95	20.70	4.0423E-001		-5.9663E-003
	Eu-154	123.07	40.50	6.9149E-001	2.79E-001	-4.0711E-002
		247.94	6.60	2.5215E+000		5.8170E-001
		591.81	4.83	2.6012E+000		2.4483E+000
		723.30	19.70	6.3737E-001		4.4071E-001
		756.87	4.33	2.7292E+000		-1.9344E+000
		873.19	11.50	9.5081E-001		5.0412E-001
		996.32	10.30	1.0178E+000		-3.2279E-001
		1004.76	17.90	5.8868E-001		3.2921E-001
		1274.45	35.50	2.7916E-001		-8.1506E-002
	Eu-155	86.54	30.90	1.3822E+000	1.38E+000	-1.5493E-001
		105.31	20.70	1.6437E+000		5.7735E-001
	Am-241	59.54	35.90	1.7294E+000	1.73E+000	9.0817E-001
	Cm-243	228.19	10.56	1.6200E+000	1.15E+000	-2.0955E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1457E+000	1.15E+000	5.2328E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/27/2006 9:39:14 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-161-F-
Sample Title: NOL-03-02-161-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 9:29:12 PM
Live Time: 600.0 seconds
Real Time: 601.7 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-161-F-
Title: NOL-03-02-161-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	305	292.19	72.88	1.01	6.07E+002	85.32	2.85E+003
m	2	284-	305	299.94	74.82	1.02	1.11E+003	100.23	2.76E+003
	3	332-	344	339.04	84.59	1.41	4.57E+002	158.09	2.29E+003
	4	947-	959	953.93	238.36	0.98	3.26E+002	75.58	4.41E+002
	5	1175-	1187	1179.55	294.78	0.69	7.94E+001	54.51	2.60E+002
	6	1346-	1361	1351.08	337.68	1.70	1.06E+002	59.07	2.67E+002
	7	1397-	1416	1406.10	351.44	1.48	1.79E+002	65.29	2.65E+002
	8	2031-	2052	2041.25	510.27	1.01	1.68E+002	59.64	2.02E+002
	9	2320-	2339	2330.70	582.66	1.21	2.07E+002	53.03	1.50E+002
	10	2428-	2442	2435.07	608.76	1.78	2.01E+002	41.83	8.83E+001
	11	2636-	2654	2642.92	660.74	1.52	6.63E+001	40.19	1.05E+002
	12	3632-	3651	3642.33	910.66	1.62	1.58E+002	41.26	8.12E+001
	13	3864-	3881	3872.73	968.28	0.54	8.84E+001	36.38	7.86E+001
	14	4682-	4698	4689.41	1172.51	1.97	6.55E+001	31.67	6.25E+001
	15	5318-	5336	5326.09	1331.73	1.19	9.07E+001	29.15	3.83E+001
	16	5825-	5853	5840.70	1460.42	2.15	1.18E+003	70.21	2.18E+001
M	17	7013-	7061	7019.65	1755.25	1.46	6.61E+000	7.21	6.10E+000
m	18	7013-	7061	7054.09	1763.86	1.47	3.39E+001	14.46	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: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.982	511.00*	100.00	2.28899E-001	8.70380E-002
K-40	0.995	1460.81*	10.67	1.98281E+001	1.99086E+000
Co-60	0.982	1173.22*	100.00	1.11771E-001	5.47288E-002
		1332.49*	100.00	1.59445E-001	5.27437E-002
Cs-137	0.971	661.65*	85.12	1.15749E-001	7.14297E-002
TL-208	0.744	277.35	6.80		
		510.84*	21.60	1.05972E+000	4.12143E-001
		583.14*	84.20	3.50232E-001	1.00651E-001
		860.37	12.46		
Pb-212	0.519	74.81* @	10.70	1.59774E+001	3.44541E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.92035E-001	2.21727E-001
Bi-214	0.689	609.31*	46.30	6.26715E-001	1.51705E-001
		1120.29	15.10		
		1764.49*	15.80	3.98699E-001	1.74507E-001
PB-214	0.577	74.82* @	6.21	2.75295E+001	6.26388E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	4.76096E-001	3.36643E-001
		351.92*	37.20	5.81925E-001	2.33749E-001
Ac-228	0.987	338.32*	11.40	1.11717E+000	6.44684E-001
		911.07*	27.70	9.02745E-001	2.57986E-001
		969.11*	16.60	8.59443E-001	3.64904E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.982	1.532492E-001	8.967828E-002
K-40		0.995	1.982813E+001	1.990856E+000
Co-60		0.982	1.364883E-001	3.797782E-002
Cs-137		0.971	1.157494E-001	7.142968E-002
TL-208		0.744	3.502318E-001	1.000021E-001
Pb-212	@	0.519	7.920352E-001	2.217269E-001
Bi-214		0.689	5.285667E-001	1.144905E-001
PB-214	@	0.577	5.474997E-001	1.920024E-001
Ac-228		0.987	9.103917E-001	2.002370E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.88	1.0121E+000	14.05
3	84.59	7.6165E-001	34.59
M 17	1755.25	1.1011E-002	109.13

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:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
+	Co-60	1173.22*	100.00	8.3095E-002	7.08E-002	1.1177E-001
		1332.49*	100.00	7.0819E-002		1.5945E-001
	Nb-94	702.63	100.00	1.1579E-001	1.06E-001	1.3876E-001
		871.10	100.00	1.0568E-001		7.1860E-002
	Ag-108m	79.20	7.10	6.3349E+000	1.36E-001	-8.0897E+000
		433.93	89.90	1.4497E-001		3.9555E-002
		614.37	90.40	1.3866E-001		-5.8400E-002
		722.95	90.50	1.3577E-001		1.6653E-001
	Sb-125	176.33	6.89	2.7654E+000	4.51E-001	1.8772E+000
		427.89	29.33	4.5092E-001		-2.1634E-001
		463.38	10.35	1.2512E+000		9.6909E-001
		600.56	17.80	6.2133E-001		-4.6956E-001
		606.64	5.02	2.9416E+000		6.9029E+000
		635.90	11.32	9.8997E-001		-4.3648E-001
	Cs-134	563.23	8.38	1.4137E+000	1.30E-001	-8.0591E-002
		569.32	15.43	7.9803E-001		5.2958E-001
		604.70	97.60	1.4756E-001		-8.0203E-002
		795.84	85.40	1.3028E-001		9.5744E-003
		801.93	8.73	1.1608E+000		-9.4724E-001
+	Cs-137	661.65*	85.12	1.1273E-001	1.13E-001	1.1575E-001
	Eu-152	121.78	28.40	9.3848E-001	3.60E-001	7.5673E-002
		244.69	7.49	2.1686E+000		4.3013E-001
		344.27	26.50	4.9894E-001		-1.2323E-001
		778.89	12.74	8.6772E-001		-6.1230E-001
		867.32	4.16	2.5064E+000		-6.6667E-001
		964.01	14.40	9.3665E-001		1.4141E-001
		1085.78	10.00	1.0481E+000		-5.1814E-001
		1112.02	13.30	8.2035E-001		-1.4004E+000
		1407.95	20.70	3.5976E-001		-1.5826E-001
	Eu-154	123.07	40.50	6.5093E-001	2.81E-001	4.0774E-001
		247.94	6.60	2.3217E+000		-1.0303E+000
		591.81	4.83	2.4735E+000		1.8080E+000
		723.30	19.70	6.1846E-001		5.6436E-001
		756.87	4.33	2.7948E+000		1.9994E+000
		873.19	11.50	9.2165E-001		6.6028E-001
		996.32	10.30	1.0122E+000		3.2847E-001
		1004.76	17.90	5.4561E-001		-1.1918E-002
		1274.45	35.50	2.8111E-001		3.2732E-002
	Eu-155	86.54	30.90	1.3441E+000	1.34E+000	1.5110E-001
		105.31	20.70	1.5563E+000		3.1720E-002
	Am-241	59.54	35.90	1.6967E+000	1.70E+000	-1.2339E-001
	Cm-243	228.19	10.56	1.4965E+000	1.05E+000	-9.7796E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0530E+000	1.05E+000	-2.1787E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/27/2006 9:55:33 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-162-F-
Sample Title: NOL-03-02-162-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 9:45:30 PM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-162-F-
Title: NOL-03-02-162-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	306	291.46	72.69	1.12	6.75E+002	86.28	2.86E+003
m	2	283-	306	300.10	74.85	1.13	1.22E+003	101.53	2.99E+003
M	3	331-	356	338.99	84.58	1.24	4.77E+002	82.19	2.51E+003
m	4	331-	356	349.77	87.27	1.24	1.64E+002	74.55	2.92E+003
	5	948-	962	953.59	238.28	0.99	3.34E+002	80.44	4.66E+002
	6	1175-	1187	1179.55	294.78	0.71	4.64E+001	51.27	2.42E+002
	7	1348-	1358	1352.50	338.03	1.41	4.87E+001	42.28	1.73E+002
	8	1396-	1416	1406.08	351.43	1.14	1.65E+002	62.43	2.34E+002
	9	1829-	1838	1833.01	458.20	0.53	3.15E+001	26.63	6.75E+001
	10	2031-	2051	2040.66	510.13	1.34	1.59E+002	57.18	1.90E+002
	11	2310-	2340	2330.51	582.61	1.51	2.26E+002	66.73	1.89E+002
	12	2425-	2442	2434.79	608.69	1.33	1.84E+002	44.07	9.89E+001
	13	3170-	3182	3176.43	794.15	0.64	3.73E+001	25.28	4.88E+001
	14	3632-	3651	3642.30	910.66	1.44	1.39E+002	40.95	8.49E+001
	15	3866-	3882	3872.47	968.22	0.59	9.37E+001	33.69	6.43E+001
	16	4470-	4484	4477.23	1119.45	0.40	5.37E+001	24.87	3.73E+001
	17	5320-	5335	5327.66	1332.12	1.50	4.85E+001	23.93	3.35E+001
	18	5827-	5854	5840.21	1460.30	1.85	1.16E+003	68.24	1.31E+001
	19	7047-	7065	7056.24	1764.40	1.87	5.37E+001	17.39	7.26E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.974	511.00*	100.00	2.16666E-001	8.33114E-002
K-40	0.991	1460.81*	10.67	1.93856E+001	1.94247E+000
Eu-155	0.322	86.54*	30.90	6.57433E-001	3.25942E-001
		105.31	20.70		
TL-208	0.742	277.35	6.80		
		510.84*	21.60	1.00308E+000	3.94304E-001
		583.14*	84.20	3.81728E-001	1.23359E-001
		860.37	12.46		
Pb-212	0.675	74.81* @	10.70	1.75209E+001	3.72935E+000
		77.11 @	18.00		
		87.30* @	8.00	2.53933E+000	1.25895E+000
		238.63*	44.60	8.10597E-001	2.33161E-001
Bi-214	0.987	609.31*	46.30	5.74704E-001	1.54721E-001
		1120.29*	15.10	5.98144E-001	2.84367E-001
		1764.49*	15.80	6.31383E-001	2.13834E-001
PB-214	0.665	74.82* @	6.21	3.01890E+001	6.78919E+000
		77.11 @	10.50		
		87.30* @	4.67	4.35004E+000	2.18156E+000
		241.98	7.49		
		295.21*	19.20	2.78239E-001	3.11088E-001
		351.92*	37.20	5.36281E-001	2.22148E-001
Ac-228	0.988	338.32*	11.40	5.11544E-001	4.51400E-001
		911.07*	27.70	7.96011E-001	2.51614E-001
		969.11*	16.60	9.10627E-001	3.41102E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.974	1.342124E-001	8.742742E-002
K-40		0.991	1.938559E+001	1.942467E+000
Eu-155		0.322	3.795446E-001	3.325934E-001
TL-208		0.742	3.817279E-001	1.227298E-001
Pb-212	@	0.675	8.105973E-001	2.331610E-001
Bi-214		0.987	5.948257E-001	1.147006E-001
PB-214	@	0.665	4.500995E-001	1.795117E-001
Ac-228		0.988	7.819830E-001	1.847491E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.69	1.1245E+000	12.79
M 3	84.58	7.9418E-001	17.25
9	458.20	5.2500E-002	84.54
13	794.15	6.2083E-002	67.87
17	1332.12	8.0838E-002	49.33

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	1.1489E-001	1.05E-001	3.5121E-002
		1332.49	100.00	1.0527E-001		1.5738E-001
	Nb-94	702.63	100.00	1.1290E-001	1.03E-001	2.8582E-002
		871.10	100.00	1.0301E-001		2.9328E-002
	Ag-108m	79.20	7.10	6.1115E+000	1.28E-001	-8.9951E+000
		433.93	89.90	1.3008E-001		7.0445E-002
		614.37	90.40	1.2987E-001		-4.3789E-002
		722.95	90.50	1.2818E-001		4.9596E-002
	Sb-125	176.33	6.89	2.6393E+000	4.06E-001	-5.3182E-001
		427.89	29.33	4.0647E-001		2.7190E-001
		463.38	10.35	1.1765E+000		6.9016E-001
		600.56	17.80	5.9106E-001		7.8386E-002
		606.64	5.02	2.7441E+000		5.8147E+000
		635.90	11.32	9.4915E-001		-9.4002E-001
	Cs-134	563.23	8.38	1.3211E+000	1.32E-001	4.9316E-001
		569.32	15.43	7.2397E-001		-2.5794E-001
		604.70	97.60	1.3802E-001		-6.6409E-003
		795.84	85.40	1.3196E-001		4.7827E-002
		801.93	8.73	1.1908E+000		1.7819E-002
	Cs-137	661.65	85.12	1.4135E-001	1.41E-001	1.4207E-001
	Eu-152	121.78	28.40	9.0851E-001	3.60E-001	-2.6144E-001
		244.69	7.49	1.9880E+000		-7.7654E-001
		344.27	26.50	4.7203E-001		1.9872E-001
		778.89	12.74	8.4096E-001		-7.4246E-001
		867.32	4.16	2.4935E+000		1.7203E-001
		964.01	14.40	9.5296E-001		2.1751E-001
		1085.78	10.00	1.0360E+000		-1.0294E+000
		1112.02	13.30	7.0416E-001		1.7027E-001
		1407.95	20.70	3.5976E-001		3.3429E-002
	Eu-154	123.07	40.50	6.2945E-001	2.70E-001	7.5133E-002
		247.94	6.60	2.2321E+000		-1.5052E+000
		591.81	4.83	2.3552E+000		1.0796E+000
		723.30	19.70	5.8779E-001		-7.6494E-002
		756.87	4.33	2.3437E+000		8.8342E-002
		873.19	11.50	9.1017E-001		1.3368E-001
		996.32	10.30	9.9252E-001		3.2680E-001
		1004.76	17.90	5.4905E-001		1.1961E-001
		1274.45	35.50	2.7021E-001		2.6847E-001
+	Eu-155	86.54*	30.90	1.0205E+000	1.02E+000	6.5743E-001
		105.31	20.70	1.5196E+000		-1.9293E-001
	Am-241	59.54	35.90	1.6707E+000	1.67E+000	5.0394E-001
	Cm-243	228.19	10.56	1.4409E+000	1.02E+000	-3.8576E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0224E+000	1.02E+000	5.5920E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/27/2006 9:49:01 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: NOL-03-02-163-F-
Sample Title: NOL-03-02-163-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 9:38:57 AM
Live Time: 600.0 seconds
Real Time: 601.2 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: ORG7829
Log Number: NOL-03-02-163-F-
Title: NOL-03-02-163-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	223-	239	231.40	57.85	0.84	1.81E+002	114.94	1.04E+003
2	296-	309	300.52	75.13	1.10	4.01E+002	134.23	1.54E+003
3	948-	960	953.81	238.47	0.63	1.68E+002	63.55	3.35E+002
4	1398-	1412	1406.14	351.56	0.61	1.38E+002	44.00	1.27E+002
5	1684-	1693	1688.45	422.14	0.42	2.21E+001	26.83	7.29E+001
6	2033-	2048	2042.69	510.71	1.28	1.18E+002	42.30	1.16E+002
7	2320-	2341	2330.89	582.76	1.00	1.55E+002	42.70	8.53E+001
8	2427-	2443	2435.45	608.90	1.79	1.05E+002	36.58	7.77E+001
9	3435-	3446	3440.43	860.17	0.71	2.95E+001	20.08	2.95E+001
10	3634-	3650	3641.68	910.49	1.13	1.32E+002	32.60	4.63E+001
11	3867-	3881	3872.91	968.30	0.94	5.73E+001	27.83	4.97E+001
12	4470-	4485	4477.36	1119.42	0.90	4.68E+001	24.21	3.52E+001
13	5828-	5854	5839.80	1460.06	1.64	7.30E+002	56.28	2.23E+001
14	7048-	7062	7054.57	1763.77	0.85	3.93E+001	13.87	3.75E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
ANN	0.997	511.00*	100.00	2.12216E-001	8.12355E-002
K-40	0.981	1460.81*	10.67	1.65807E+001	1.85409E+000
TL-208	0.900	277.35	6.80		
		510.84*	21.60	9.82484E-001	3.84554E-001
		583.14*	84.20	3.45269E-001	1.05370E-001
		860.37*	12.46	4.92317E-001	3.40661E-001
Pb-212	0.593	74.81* @	10.70	1.55606E+001	6.03337E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.48260E-001	2.24503E-001
Bi-214	0.988	609.31*	46.30	4.33796E-001	1.59893E-001
		1120.29*	15.10	6.90141E-001	3.64545E-001
		1764.49*	15.80	6.38166E-001	2.34303E-001
Ac-228	0.621	338.32	11.40		
		911.07*	27.70	1.00254E+000	2.73674E-001
		969.11*	16.60	7.40164E-001	3.67485E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
ANN	0.997	1.348881E-001	8.406522E-002
K-40	0.981	1.658068E+001	1.854090E+000
TL-208	0.900	3.580015E-001	1.001288E-001
Pb-212 @	0.593	5.482598E-001	2.245034E-001
Bi-214	0.988	5.209388E-001	1.241728E-001
Ac-228	0.621	9.089385E-001	2.194939E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	57.85	3.0219E-001	63.39
4	351.56	2.2919E-001	32.00
5	422.14	3.6904E-002	121.16

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:ORG7829
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.3245E-001	1.14E-001	6.9269E-002
	1332.49	100.00	1.1442E-001		1.8102E-002
Nb-94	702.63	100.00	1.3360E-001	1.21E-001	-9.4520E-003
	871.10	100.00	1.2131E-001		-5.1243E-002
Ag-108m	79.20	7.10	1.2970E+001	1.54E-001	-3.6863E+000
	433.93	89.90	1.5353E-001		-9.0318E-002
	614.37	90.40	1.6451E-001		-4.7111E-003
	722.95	90.50	1.6305E-001		6.7825E-002
Sb-125	176.33	6.89	3.5469E+000	4.92E-001	-1.6985E-001
	427.89	29.33	4.9157E-001		1.1873E-001
	463.38	10.35	1.3592E+000		-1.0340E+000
	600.56	17.80	7.7321E-001		-6.3293E-002
	606.64	5.02	3.2064E+000		2.4420E+000
	635.90	11.32	1.1716E+000		6.3036E-001
Cs-134	563.23	8.38	1.6740E+000	1.56E-001	6.9190E-001
	569.32	15.43	8.9068E-001		8.8791E-002
	604.70	97.60	1.6806E-001		-1.1308E-002
	795.84	85.40	1.5635E-001		4.7911E-002
	801.93	8.73	1.4225E+000		1.2143E+000
Cs-137	661.65	85.12	1.6606E-001	1.66E-001	1.8749E-001
Eu-152	121.78	28.40	1.2916E+000	4.05E-001	8.7832E-001
	244.69	7.49	2.5512E+000		-2.9497E+000
	344.27	26.50	5.8837E-001		-1.9167E-001
	778.89	12.74	9.8326E-001		-4.4658E-001
	867.32	4.16	2.8238E+000		3.7011E-001
	964.01	14.40	1.1293E+000		7.2484E-002
	1085.78	10.00	1.1427E+000		-3.8032E-001
	1112.02	13.30	8.7926E-001		-3.2859E-001
	1407.95	20.70	4.0475E-001		-6.6003E-002
Eu-154	123.07	40.50	8.9148E-001	3.05E-001	-3.6148E-004
	247.94	6.60	2.9100E+000		4.1572E-001
	591.81	4.83	2.7677E+000		-2.3707E-001
	723.30	19.70	7.3978E-001		-1.6461E-002
	756.87	4.33	2.9088E+000		6.6343E-002
	873.19	11.50	1.0519E+000		-3.3124E-001
	996.32	10.30	1.1983E+000		8.8368E-001
	1004.76	17.90	6.7405E-001		-1.3949E-001
	1274.45	35.50	3.0471E-001		-2.7337E-001
Eu-155	86.54	30.90	2.2455E+000	2.25E+000	3.8959E+000
	105.31	20.70	2.2558E+000		8.3777E-001
Am-241	59.54	35.90	5.5955E+000	5.60E+000	-4.4738E-001
Cm-243	228.19	10.56	1.8978E+000	1.29E+000	1.3391E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2876E+000	1.29E+000	7.5533E-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 6/27/2006 10:06:14 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: ORG7829

Spectrum File: ORG7829
Sample ID: NOL-03-02-164-F-
Sample Title: NOL-03-02-164-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 9:56:12 AM
Live Time: 600.0 seconds
Real Time: 601.2 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: ORG7829
Log Number: NOL-03-02-164-F-
Title: NOL-03-02-164-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	307	291.46	72.87	0.96	2.09E+002	56.44	1.12E+003
m	2	286-	307	300.38	75.10	0.96	3.84E+002	65.59	1.40E+003
	3	332-	345	339.60	84.90	0.79	1.41E+002	124.32	1.41E+003
	4	943-	962	953.80	238.46	1.37	2.92E+002	83.17	4.30E+002
	5	1176-	1185	1180.22	295.07	0.59	3.89E+001	40.86	1.73E+002
	6	1399-	1412	1406.14	351.56	0.92	7.50E+001	44.36	1.58E+002
	7	2322-	2338	2329.72	582.47	1.81	1.48E+002	37.43	6.85E+001
	8	2422-	2441	2434.71	608.72	0.72	1.44E+002	38.10	6.68E+001
	9	3633-	3652	3641.05	910.33	1.74	1.22E+002	33.21	4.60E+001
	10	3865-	3881	3872.40	968.17	0.90	5.69E+001	28.67	5.01E+001
	11	4469-	4484	4475.35	1118.92	0.94	4.75E+001	20.74	2.15E+001
	12	5827-	5852	5839.47	1459.97	1.74	8.19E+002	60.06	2.85E+001
	13	7046-	7059	7052.09	1763.15	0.33	3.47E+001	16.26	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: ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.977	1460.81*	10.67	1.86212E+001	2.03355E+000
TL-208	0.462	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.29108E-001	9.38767E-002
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	1.49014E+001	3.87579E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	9.54180E-001	3.09933E-001
Bi-214	0.969	609.31*	46.30	5.94088E-001	1.73190E-001
		1120.29*	15.10	7.00329E-001	3.14853E-001
		1764.49*	15.80	5.63642E-001	2.70295E-001
PB-214	0.625	74.82* @	6.21	2.56755E+001	6.93331E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	3.10287E-001	3.30173E-001
		351.92*	37.20	3.22080E-001	1.98037E-001
Ac-228	0.615	338.32	11.40		
		911.07*	27.70	9.28768E-001	2.74425E-001
		969.11*	16.60	7.34529E-001	3.78055E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40		0.977	1.862123E+001	2.033554E+000
TL-208		0.462	3.291084E-001	9.387670E-002
Pb-212	@	0.593	9.541801E-001	3.099326E-001
Bi-214		0.969	6.055559E-001	1.323207E-001
PB-214	@	0.625	3.189596E-001	1.698303E-001
Ac-228		0.615	8.617394E-001	2.220840E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.87	3.4810E-001	27.02
3	84.90	2.3497E-001	88.18

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:ORG7829
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.3331E-001	1.04E-001	1.0890E-001
	1332.49	100.00	1.0388E-001		-2.8121E-002
Nb-94	702.63	100.00	1.3916E-001	1.22E-001	4.3399E-002
	871.10	100.00	1.2212E-001		-3.7464E-002
Ag-108m	79.20	7.10	1.2908E+001	1.60E-001	-4.5694E+000
	433.93	89.90	1.5990E-001		1.2551E-002
	614.37	90.40	1.6873E-001		-4.4943E-002
	722.95	90.50	1.6573E-001		1.1580E-001
Sb-125	176.33	6.89	3.4339E+000	4.80E-001	-2.2095E-001
	427.89	29.33	4.8010E-001		-2.8431E-001
	463.38	10.35	1.3662E+000		1.9869E-001
	600.56	17.80	7.8144E-001		2.1235E-001
	606.64	5.02	3.2612E+000		4.4170E+000
	635.90	11.32	1.1373E+000		-2.4798E-001
Cs-134	563.23	8.38	1.5998E+000	1.49E-001	-1.0381E+000
	569.32	15.43	8.8142E-001		6.4854E-001
	604.70	97.60	1.7205E-001		3.4120E-002
	795.84	85.40	1.4914E-001		-1.1971E-003
	801.93	8.73	1.4137E+000		1.4885E-001
Cs-137	661.65	85.12	1.6750E-001	1.67E-001	1.1518E-001
Eu-152	121.78	28.40	1.2297E+000	4.24E-001	-1.0342E-001
	244.69	7.49	2.5677E+000		-1.6720E+000
	344.27	26.50	6.2018E-001		-1.0863E-001
	778.89	12.74	1.0347E+000		5.8022E-001
	867.32	4.16	3.0283E+000		-3.9291E+000
	964.01	14.40	1.0752E+000		5.4789E-001
	1085.78	10.00	1.1329E+000		8.5096E-001
	1112.02	13.30	9.3539E-001		6.9787E-001
	1407.95	20.70	4.2372E-001		6.4475E-002
Eu-154	123.07	40.50	8.5059E-001	3.28E-001	-3.9276E-001
	247.94	6.60	2.9044E+000		-3.1688E+000
	591.81	4.83	2.9886E+000		2.1129E+000
	723.30	19.70	7.5836E-001		4.6123E-001
	756.87	4.33	2.9425E+000		1.0315E+000
	873.19	11.50	1.0868E+000		-2.8367E-002
	996.32	10.30	1.1602E+000		-1.5932E+000
	1004.76	17.90	6.3592E-001		-1.5112E-001
	1274.45	35.50	3.2796E-001		-7.7367E-002
Eu-155	86.54	30.90	2.1906E+000	2.18E+000	1.5914E+000
	105.31	20.70	2.1836E+000		4.3453E-001
Am-241	59.54	35.90	5.1489E+000	5.15E+000	9.5196E-001
Cm-243	228.19	10.56	1.8869E+000	1.29E+000	2.4168E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2896E+000	1.29E+000	8.6982E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/27/2006 10:23:38 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: ORG7829
Sample ID: NOL-03-02-165-F-
Sample Title: NOL-03-02-165-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 10:13:36 AM
Live Time: 600.0 seconds
Real Time: 601.2 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: ORG7829
Log Number: NOL-03-02-165-F-
Title: NOL-03-02-165-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	306	291.31	72.83	1.16	2.67E+002	57.85	1.35E+003
m	2	283-	306	300.35	75.09	1.16	4.52E+002	67.20	1.58E+003
	3	944-	960	954.12	238.54	1.33	1.91E+002	74.92	4.05E+002
	4	1172-	1186	1180.14	295.05	0.76	6.41E+001	51.40	2.16E+002
	5	1397-	1414	1405.58	351.42	1.60	9.24E+001	54.29	2.06E+002
	6	2029-	2051	2041.14	510.32	0.37	1.19E+002	50.54	1.41E+002
	7	2322-	2342	2330.81	582.74	1.23	1.50E+002	45.20	1.05E+002
	8	2425-	2442	2434.27	608.61	0.64	1.35E+002	37.87	7.25E+001
	9	3633-	3651	3642.33	910.65	0.67	1.02E+002	33.16	5.44E+001
	10	3863-	3878	3871.95	968.06	0.57	3.80E+001	29.00	6.00E+001
	11	4472-	4485	4478.34	1119.67	0.85	4.24E+001	22.39	3.06E+001
	12	5824-	5852	5839.47	1459.97	1.96	8.18E+002	60.02	2.56E+001
	13	7048-	7062	7054.41	1763.73	0.59	3.70E+001	14.65	5.98E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
ANN	0.985	511.00*		100.00	2.13996E-001	9.52834E-002
K-40	0.977	1460.81*		10.67	1.85973E+001	2.03156E+000
TL-208	0.748	277.35		6.80		
		510.84*		21.60	9.90722E-001	4.48485E-001
		583.14*		84.20	3.33908E-001	1.09834E-001
		860.37		12.46		
Pb-212	0.594	74.81*	@	10.70	1.75542E+001	4.31938E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.23159E-001	2.63336E-001
Bi-214	0.984	609.31*		46.30	5.58087E-001	1.70469E-001
		1120.29*		15.10	6.24744E-001	3.36867E-001
		1764.49*		15.80	6.01863E-001	2.45672E-001
PB-214	0.623	74.82*	@	6.21	3.02463E+001	7.75954E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	5.11741E-001	4.19093E-001
		351.92*		37.20	3.96930E-001	2.42455E-001
Ac-228	0.619	338.32		11.40		
		911.07*		27.70	7.73610E-001	2.67615E-001
		969.11*		16.60	4.90100E-001	3.77786E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R 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		0.985	1.418719E-001	9.816434E-002
K-40		0.977	1.859729E+001	2.031565E+000
TL-208		0.748	3.339079E-001	1.092939E-001
Pb-212	@	0.594	6.231588E-001	2.633359E-001
Bi-214		0.984	5.800411E-001	1.293228E-001
PB-214	@	0.623	4.257204E-001	2.098657E-001
Ac-228		0.619	6.788801E-001	2.183760E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.83	4.4452E-001	21.69

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:ORG7829
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.3715E-001	1.10E-001	2.1105E-002
	1332.49	100.00	1.1045E-001		8.4499E-002
Nb-94	702.63	100.00	1.2243E-001	1.19E-001	-6.8067E-002
	871.10	100.00	1.1884E-001		1.5320E-002
Ag-108m	79.20	7.10	1.2773E+001	1.55E-001	-8.2108E+000
	433.93	89.90	1.5534E-001		-9.6201E-002
	614.37	90.40	1.6267E-001		-3.9293E-002
	722.95	90.50	1.5686E-001		5.7871E-002
Sb-125	176.33	6.89	3.4079E+000	4.83E-001	-2.1082E-001
	427.89	29.33	4.8318E-001		1.3056E-001
	463.38	10.35	1.3592E+000		-5.2936E-001
	600.56	17.80	7.3936E-001		-7.5512E-001
	606.64	5.02	3.3295E+000		4.8385E+000
	635.90	11.32	1.1546E+000		-2.8121E-002
Cs-134	563.23	8.38	1.6474E+000	1.54E-001	6.4353E-001
	569.32	15.43	8.6450E-001		-6.1612E-001
	604.70	97.60	1.7007E-001		-5.5586E-002
	795.84	85.40	1.5426E-001		2.9186E-002
	801.93	8.73	1.4356E+000		-4.4175E-001
Cs-137	661.65	85.12	1.5680E-001	1.57E-001	-9.1724E-002
Eu-152	121.78	28.40	1.2071E+000	4.20E-001	-4.9456E-001
	244.69	7.49	2.5111E+000		-1.5662E+000
	344.27	26.50	5.5757E-001		-3.7054E-001
	778.89	12.74	8.8729E-001		-2.6689E-001
	867.32	4.16	2.7933E+000		-8.0082E-001
	964.01	14.40	1.0376E+000		9.3163E-001
	1085.78	10.00	1.1180E+000		-1.6714E-001
	1112.02	13.30	9.1128E-001		2.4422E-002
	1407.95	20.70	4.2000E-001		3.2913E-002
Eu-154	123.07	40.50	8.3621E-001	3.25E-001	3.1421E-001
	247.94	6.60	2.7731E+000		-2.6511E-001
	591.81	4.83	3.0058E+000		1.3611E+000
	723.30	19.70	7.1421E-001		1.1342E-001
	756.87	4.33	2.9003E+000		-3.7105E+000
	873.19	11.50	1.0267E+000		-2.1848E-001
	996.32	10.30	1.1688E+000		-6.1404E-001
	1004.76	17.90	6.7158E-001		-1.7445E-001
	1274.45	35.50	3.2496E-001		-5.2343E-002
Eu-155	86.54	30.90	2.1654E+000	2.16E+000	3.4042E-001
	105.31	20.70	2.1596E+000		-4.4943E-001
Am-241	59.54	35.90	4.9640E+000	4.96E+000	-4.2777E+000
Cm-243	228.19	10.56	1.8261E+000	1.21E+000	-7.1852E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2112E+000	1.21E+000	-3.6926E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/26/2006 3:45:53 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-166-F-
Sample Title: NOL-03-02-166-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/26/2006 3:35:51 PM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-166-F-
Title: NOL-03-02-166-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	308	291.72	72.76	1.17	6.71E+002	86.90	2.83E+003
m	2	283-	308	300.19	74.88	1.17	1.27E+003	101.88	3.31E+003
	3	332-	345	339.91	84.81	0.88	4.08E+002	167.62	2.50E+003
	4	944-	959	954.01	238.38	1.17	4.04E+002	82.92	4.62E+002
	5	1346-	1358	1353.49	338.28	0.95	4.22E+001	48.65	2.17E+002
	6	1399-	1416	1406.43	351.52	1.17	2.04E+002	56.98	1.97E+002
	7	2032-	2048	2043.34	510.80	1.20	1.38E+002	51.08	1.73E+002
	8	2321-	2342	2331.13	582.76	0.64	2.07E+002	48.02	1.05E+002
	9	2428-	2446	2435.14	608.78	1.19	1.76E+002	43.70	9.49E+001
	10	2901-	2914	2906.83	726.73	0.96	4.28E+001	29.07	6.42E+001
	11	3633-	3652	3642.80	910.78	1.23	1.64E+002	37.42	5.74E+001
	12	3865-	3884	3874.01	968.60	1.49	9.68E+001	35.35	6.52E+001
	13	4475-	4490	4480.88	1120.36	0.57	5.05E+001	27.12	4.65E+001
	14	5324-	5338	5330.38	1332.80	0.38	3.86E+001	18.90	1.84E+001
	15	5827-	5855	5842.69	1460.92	2.05	1.10E+003	70.76	4.31E+001
	16	6346-	6359	6352.68	1588.46	0.29	2.34E+001	10.32	1.60E+000
	17	7051-	7065	7057.77	1764.78	1.25	3.20E+001	17.00	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: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.999	511.00*	100.00	1.87990E-001	7.41766E-002
K-40	1.000	1460.81*	10.67	1.85325E+001	1.91303E+000
TL-208	0.748	277.35	6.80		
		510.84*	21.60	8.70323E-001	3.50688E-001
		583.14*	84.20	3.50876E-001	9.32264E-002
		860.37	12.46		
Bi-212	0.993	727.17*	11.80	5.48568E-001	3.78439E-001
Pb-212	0.519	74.81* @	10.70	1.81234E+001	3.84005E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	9.82202E-001	2.53650E-001
Bi-214	0.993	609.31*	46.30	5.49669E-001	1.52312E-001
		1120.29*	15.10	5.63261E-001	3.08171E-001
		1764.49*	15.80	3.75966E-001	2.03279E-001
Ac-228	0.996	338.32*	11.40	4.43559E-001	5.15944E-001
		911.07*	27.70	9.36082E-001	2.39735E-001
		969.11*	16.60	9.40812E-001	3.57496E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.999	1.122004E-001	7.682163E-002
K-40		1.000	1.853246E+001	1.913028E+000
TL-208		0.748	3.508765E-001	9.252244E-002
Bi-212		0.993	5.485681E-001	3.784392E-001
Pb-212	@	0.519	9.822020E-001	2.536498E-001
Bi-214		0.993	4.975015E-001	1.133475E-001
Ac-228		0.996	8.735156E-001	1.857575E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F 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	1.1177E+000	12.96
3	84.81	6.7970E-001	41.10
6	351.52	3.3985E-001	27.94
14	1332.80	6.4386E-002	48.92
16	1588.46	3.9000E-002	44.10

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0902E-001	9.21E-002	-4.1903E-002
	1332.49	100.00	9.2093E-002		1.2790E-001
Nb-94	702.63	100.00	1.0641E-001	1.03E-001	-3.3456E-002
	871.10	100.00	1.0301E-001		-1.6575E-002
Ag-108m	79.20	7.10	6.2727E+000	1.27E-001	-3.6243E-001
	433.93	89.90	1.2721E-001		3.3233E-002
	614.37	90.40	1.3119E-001		1.1792E-002
	722.95	90.50	1.3012E-001		-6.5821E-002
Sb-125	176.33	6.89	2.6548E+000	3.94E-001	2.6696E-001
	427.89	29.33	3.9414E-001		-2.0892E-001
	463.38	10.35	1.1703E+000		-1.1774E-001
	600.56	17.80	6.1181E-001		2.9428E-002
	606.64	5.02	2.7103E+000		-1.1774E+000
	635.90	11.32	8.8745E-001		1.3921E-001
Cs-134	563.23	8.38	1.3566E+000	1.28E-001	-1.8406E-001
	569.32	15.43	7.4067E-001		-2.1190E-001
	604.70	97.60	1.3767E-001		-5.2409E-002
	795.84	85.40	1.2830E-001		8.5277E-002
	801.93	8.73	1.1577E+000		-6.0163E-002
Cs-137	661.65	85.12	1.3159E-001	1.32E-001	-1.1290E-001
Eu-152	121.78	28.40	9.1413E-001	3.14E-001	1.9788E-001
	244.69	7.49	2.0220E+000		-9.8473E-001
	344.27	26.50	4.9526E-001		7.9760E-002
	778.89	12.74	8.1529E-001		-7.6954E-001
	867.32	4.16	2.3884E+000		-4.3344E+000
	964.01	14.40	9.1240E-001		2.3108E-001
	1085.78	10.00	9.3684E-001		2.9186E-001
	1112.02	13.30	7.2446E-001		-6.7439E-001
	1407.95	20.70	3.1399E-001		4.6038E-002
Eu-154	123.07	40.50	6.3726E-001	2.55E-001	2.3621E-001
	247.94	6.60	2.1991E+000		-9.8946E-001
	591.81	4.83	2.2787E+000		9.7046E-001
	723.30	19.70	5.9783E-001		1.6474E-001
	756.87	4.33	2.4317E+000		6.2292E-001
	873.19	11.50	9.1937E-001		1.1761E+000
	996.32	10.30	9.9536E-001		6.4699E-001
	1004.76	17.90	5.2268E-001		2.4215E-001
	1274.45	35.50	2.5456E-001		-6.6232E-002
Eu-155	86.54	30.90	1.3291E+000	1.33E+000	2.3652E-001
	105.31	20.70	1.5399E+000		7.6307E-001
Am-241	59.54	35.90	1.7079E+000	1.71E+000	7.4258E-001
Cm-243	228.19	10.56	1.4425E+000	1.03E+000	-3.3855E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0329E+000	1.03E+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 6/27/2006 2:22:42 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-167-F-
Sample Title: NOL-03-02-167-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 2:12:39 PM
Live Time: 600.0 seconds
Real Time: 601.8 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-167-F-
Title: NOL-03-02-167-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	307	291.73	72.76	1.08	6.65E+002	90.25	3.09E+003
m	2	284-	307	300.07	74.85	1.08	1.34E+003	106.88	3.40E+003
	3	331-	345	339.81	84.79	1.11	2.58E+002	186.85	3.06E+003
	4	945-	960	954.40	238.48	0.66	2.58E+002	88.00	5.86E+002
	5	1400-	1417	1406.83	351.62	1.29	1.72E+002	60.43	2.38E+002
	6	1846-	1860	1851.18	462.74	0.79	4.89E+001	39.88	1.24E+002
	7	2032-	2053	2042.75	510.65	1.48	1.90E+002	55.38	1.62E+002
	8	2323-	2340	2331.53	582.86	1.13	1.78E+002	47.74	1.28E+002
	9	2430-	2444	2436.56	609.13	1.26	1.60E+002	42.97	1.11E+002
	10	3174-	3185	3179.04	794.81	0.60	3.18E+001	24.05	4.72E+001
	11	3435-	3448	3440.72	860.25	0.38	2.33E+001	25.56	5.27E+001
	12	3634-	3655	3644.09	911.10	1.73	1.83E+002	41.17	6.85E+001
	13	3867-	3884	3875.89	969.07	1.08	7.09E+001	35.35	7.81E+001
	14	4472-	4487	4480.53	1120.28	0.52	4.90E+001	28.91	5.60E+001
	15	5829-	5857	5843.86	1461.21	2.00	1.16E+003	73.13	5.05E+001
	16	6516-	6529	6522.47	1630.92	0.53	7.52E+000	9.92	5.48E+000
	17	7050-	7071	7060.14	1765.37	1.43	7.55E+001	18.01	2.51E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.996	511.00*	100.00	2.58733E-001	8.32753E-002
K-40	0.994	1460.81*	10.67	1.94322E+001	1.99496E+000
TL-208	0.901	277.35	6.80		
		510.84*	21.60	1.19784E+000	3.97751E-001
		583.14*	84.20	3.01745E-001	8.98355E-002
		860.37*	12.46	2.92866E-001	3.23089E-001
Pb-212	0.520	74.81* @	10.70	1.91681E+001	4.05699E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.28298E-001	2.35494E-001
Bi-214	0.994	609.31*	46.30	4.99435E-001	1.47606E-001
		1120.29*	15.10	5.46770E-001	3.27432E-001
		1764.49*	15.80	8.86990E-001	2.29426E-001
Ac-228	0.634	338.32	11.40		
		911.07*	27.70	1.05021E+000	2.64812E-001
		969.11*	16.60	6.89677E-001	3.51238E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.996	1.936927E-001	8.532508E-002
K-40		0.994	1.943224E+001	1.994958E+000
TL-208		0.901	3.011147E-001	8.606618E-002
Pb-212	@	0.520	6.282982E-001	2.354938E-001
Bi-214		0.994	6.045821E-001	1.160724E-001
Ac-228		0.634	9.195438E-001	2.114494E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F 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	1.1090E+000	13.56
3	84.79	4.3040E-001	72.36
5	351.62	2.8589E-001	35.23
6	462.74	8.1457E-002	81.60
10	794.81	5.2975E-002	75.66
16	1630.92	1.2532E-002	131.99

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0781E-001	8.98E-002	4.7851E-002
	1332.49	100.00	8.9763E-002		4.7044E-002
Nb-94	702.63	100.00	1.0665E-001	9.60E-002	-4.8991E-002
	871.10	100.00	9.6020E-002		-6.4600E-002
Ag-108m	79.20	7.10	6.6087E+000	1.28E-001	-5.5139E+000
	433.93	89.90	1.3865E-001		9.1542E-002
	614.37	90.40	1.3741E-001		-3.1425E-002
	722.95	90.50	1.2794E-001		1.1652E-001
Sb-125	176.33	6.89	2.8502E+000	4.24E-001	2.1902E+000
	427.89	29.33	4.2402E-001		8.1980E-002
	463.38	10.35	1.1842E+000		1.0368E+000
	600.56	17.80	6.4106E-001		3.9443E-001
	606.64	5.02	2.8623E+000		3.4989E+000
	635.90	11.32	9.1472E-001		5.6420E-001
Cs-134	563.23	8.38	1.2797E+000	1.28E-001	-9.1217E-001
	569.32	15.43	7.2527E-001		4.0887E-001
	604.70	97.60	1.4236E-001		-9.5932E-002
	795.84	85.40	1.2773E-001		1.2453E-001
	801.93	8.73	1.1268E+000		7.4212E-002
Cs-137	661.65	85.12	1.2923E-001	1.29E-001	1.4484E-001
Eu-152	121.78	28.40	9.7094E-001	3.33E-001	-9.9780E-003
	244.69	7.49	2.1664E+000		-2.1574E-001
	344.27	26.50	4.7590E-001		-3.9867E-001
	778.89	12.74	8.1930E-001		-8.0795E-001
	867.32	4.16	2.2992E+000		1.5058E+000
	964.01	14.40	8.9846E-001		-4.5432E-001
	1085.78	10.00	9.8615E-001		-4.7660E-001
	1112.02	13.30	7.4175E-001		-5.5701E-001
	1407.95	20.70	3.3260E-001		-1.8563E-002
Eu-154	123.07	40.50	6.7804E-001	2.80E-001	1.8856E-001
	247.94	6.60	2.3620E+000		-9.0409E-001
	591.81	4.83	2.1994E+000		-1.4233E-001
	723.30	19.70	5.8553E-001		1.7277E-001
	756.87	4.33	2.4259E+000		5.9647E-001
	873.19	11.50	8.5285E-001		-2.3318E-001
	996.32	10.30	9.1236E-001		4.5301E-001
	1004.76	17.90	5.3866E-001		2.2575E-001
	1274.45	35.50	2.8013E-001		-8.3111E-002
Eu-155	86.54	30.90	1.3909E+000	1.39E+000	3.4440E-001
	105.31	20.70	1.6325E+000		1.3032E-001
Am-241	59.54	35.90	1.7799E+000	1.78E+000	-8.8271E-001
Cm-243	228.19	10.56	1.6311E+000	1.07E+000	-2.8663E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0694E+000	1.07E+000	-5.0805E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/27/2006 1:40:54 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-168-F-
Sample Title: NOL-03-02-168-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 1:30:51 PM
Live Time: 600.0 seconds
Real Time: 601.8 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-168-F-
Title: NOL-03-02-168-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	306	291.90	72.80	1.36	8.36E+002	97.96	3.53E+003
m	2	284-	306	300.49	74.95	1.36	1.20E+003	107.26	4.02E+003
	3	948-	961	954.88	238.60	1.35	2.27E+002	82.12	5.46E+002
	4	1398-	1416	1407.25	351.73	0.57	1.28E+002	63.33	2.71E+002
	5	2034-	2053	2042.46	510.58	1.34	1.87E+002	55.96	1.79E+002
	6	2325-	2343	2331.63	582.89	0.65	1.44E+002	50.68	1.54E+002
	7	2426-	2446	2437.83	609.45	1.02	2.15E+002	46.34	9.46E+001
	8	2904-	2917	2910.21	727.58	0.83	4.19E+001	31.89	8.01E+001
	9	3634-	3657	3643.90	911.06	1.69	1.89E+002	42.61	7.12E+001
	10	3870-	3885	3875.71	969.03	1.42	6.99E+001	31.12	6.01E+001
	11	4473-	4490	4481.88	1120.62	0.95	5.33E+001	30.46	5.67E+001
	12	5829-	5860	5845.03	1461.51	2.04	1.20E+003	70.67	2.04E+001
	13	7054-	7067	7060.85	1765.55	0.58	4.10E+001	17.49	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: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.994	511.00*	100.00	2.54612E-001	8.37520E-002
K-40	0.983	1460.81*	10.67	2.00724E+001	2.01151E+000
TL-208	0.750	277.35	6.80		
		510.84*	21.60	1.17876E+000	3.99512E-001
		583.14*	84.20	2.43564E-001	9.14279E-002
		860.37	12.46		
Bi-212	0.994	727.17*	11.80	5.37659E-001	4.14073E-001
Pb-212	0.520	74.81* @	10.70	1.72212E+001	3.70747E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.50898E-001	2.17524E-001
Bi-214	0.991	609.31*	46.30	6.72606E-001	1.66745E-001
		1120.29*	15.10	5.93923E-001	3.45370E-001
		1764.49*	15.80	4.81748E-001	2.11053E-001
Ac-228	0.634	338.32	11.40		
		911.07*	27.70	1.08083E+000	2.73754E-001
		969.11*	16.60	6.79647E-001	3.10846E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN	0.994	2.020026E-001	8.603170E-002
K-40	0.983	2.007245E+001	2.011509E+000
TL-208	0.750	2.435636E-001	9.108267E-002
Bi-212	0.994	5.376592E-001	4.140727E-001
Pb-212 @	0.520	5.508984E-001	2.175236E-001
Bi-214	0.991	5.985876E-001	1.223523E-001
Ac-228	0.634	9.055887E-001	2.054422E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.80	1.3927E+000	11.72
4	351.73	2.1342E-001	49.46

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1574E-001	9.40E-002	4.1038E-002
	1332.49	100.00	9.3987E-002		1.1421E-001
Nb-94	702.63	100.00	1.0924E-001	1.04E-001	-1.5303E-002
	871.10	100.00	1.0382E-001		2.4223E-002
Ag-108m	79.20	7.10	6.5737E+000	1.34E-001	-1.0965E+001
	433.93	89.90	1.3443E-001		-8.2710E-002
	614.37	90.40	1.3845E-001		-3.0285E-002
	722.95	90.50	1.4141E-001		1.3133E-002
Sb-125	176.33	6.89	2.9441E+000	4.14E-001	3.3482E+000
	427.89	29.33	4.1379E-001		1.6493E-001
	463.38	10.35	1.1857E+000		2.7664E-001
	600.56	17.80	6.1778E-001		-1.6901E-002
	606.64	5.02	2.8104E+000		-8.2134E-001
	635.90	11.32	1.0218E+000		7.2975E-001
Cs-134	563.23	8.38	1.3519E+000	1.30E-001	-3.9843E-001
	569.32	15.43	7.1085E-001		-1.2012E-001
	604.70	97.60	1.3535E-001		-4.7355E-002
	795.84	85.40	1.2972E-001		9.3989E-002
	801.93	8.73	1.2457E+000		4.5746E-001
Cs-137	661.65	85.12	1.4111E-001	1.41E-001	1.1084E-001
Eu-152	121.78	28.40	9.8998E-001	3.64E-001	-5.4735E-001
	244.69	7.49	2.2103E+000		-1.4780E+000
	344.27	26.50	4.9664E-001		-1.2926E-001
	778.89	12.74	8.2922E-001		-1.0098E+000
	867.32	4.16	2.4018E+000		-4.3650E+000
	964.01	14.40	8.6177E-001		-2.4272E-001
	1085.78	10.00	9.1634E-001		1.4563E-002
	1112.02	13.30	8.1594E-001		6.0457E-001
	1407.95	20.70	3.6447E-001		4.5528E-001
Eu-154	123.07	40.50	6.8559E-001	2.83E-001	-3.2654E-001
	247.94	6.60	2.3966E+000		-3.3561E-001
	591.81	4.83	2.3594E+000		3.1111E-001
	723.30	19.70	6.5572E-001		2.2459E-001
	756.87	4.33	2.4259E+000		9.5435E-001
	873.19	11.50	9.2846E-001		4.5194E-001
	996.32	10.30	9.6658E-001		1.8755E-001
	1004.76	17.90	5.6425E-001		4.6683E-003
	1274.45	35.50	2.8304E-001		-9.3108E-002
Eu-155	86.54	30.90	1.3912E+000	1.39E+000	3.1909E+000
	105.31	20.70	1.6473E+000		-5.1346E-002
Am-241	59.54	35.90	1.7537E+000	1.75E+000	6.4767E-002
Cm-243	228.19	10.56	1.5566E+000	1.10E+000	-1.2998E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0961E+000	1.10E+000	2.1319E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/27/2006 9:50:46 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: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-169-F-
Sample Title: NOL-03-02-169-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 9:40:43 AM
Live Time: 600.0 seconds
Real Time: 601.8 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-169-F-
Title: NOL-03-02-169-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	295-	308	301.14	75.11	1.16	8.07E+002	196.43	3.33E+003
2	332-	346	339.39	84.68	0.97	3.72E+002	183.72	2.92E+003
3	945-	963	954.63	238.54	1.48	2.31E+002	99.90	7.01E+002
4	1345-	1359	1352.57	338.05	0.65	7.94E+001	50.34	2.02E+002
5	1398-	1414	1408.33	351.99	1.06	1.80E+002	55.86	2.02E+002
6	2325-	2343	2332.96	583.22	1.68	1.56E+002	47.42	1.26E+002
7	2428-	2447	2437.09	609.26	1.24	1.79E+002	45.80	1.05E+002
8	2904-	2917	2910.28	727.60	0.95	5.34E+001	26.44	4.66E+001
9	3634-	3657	3646.15	911.62	1.54	1.46E+002	41.51	7.52E+001
10	5833-	5861	5846.56	1461.89	2.12	1.20E+003	70.18	1.76E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.960	1460.81*	10.67	2.01702E+001	2.01313E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.63822E-001	8.72983E-002
		860.37	12.46		
Bi-212	0.994	727.17*	11.80	6.84722E-001	3.48661E-001
Pb-212	0.520	74.81* @	10.70	1.15023E+001	3.59506E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.62131E-001	2.58357E-001
Bi-214	0.398	609.31*	46.30	5.60006E-001	1.58789E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.535	338.32*	11.40	8.34133E-001	5.44853E-001
		911.07*	27.70	8.34474E-001	2.56237E-001
		969.11	16.60		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.960	2.017022E+001	2.013127E+000
TL-208	0.471	2.638216E-001	8.729835E-002
Bi-212	0.994	6.847219E-001	3.486613E-001
Pb-212 @	0.520	5.621309E-001	2.583569E-001
Bi-214	0.398	5.600063E-001	1.587888E-001
Ac-228	0.535	8.344119E-001	2.318752E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	84.68	6.2068E-001	49.33
5	351.99	3.0006E-001	31.03

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1258E-001	9.32E-002	4.7388E-002
	1332.49	100.00	9.3234E-002		5.0998E-002
Nb-94	702.63	100.00	1.1177E-001	9.49E-002	1.3063E-002
	871.10	100.00	9.4851E-002		2.6340E-003
Ag-108m	79.20	7.10	6.5625E+000	1.19E-001	-5.6214E+000
	433.93	89.90	1.3357E-001		7.8006E-003
	614.37	90.40	1.3824E-001		5.2547E-002
	722.95	90.50	1.1852E-001		-5.6345E-002
Sb-125	176.33	6.89	2.9073E+000	4.06E-001	3.7728E-001
	427.89	29.33	4.0647E-001		2.5764E-001
	463.38	10.35	1.1468E+000		-1.0582E+000
	600.56	17.80	5.9478E-001		-2.1486E-001
	606.64	5.02	2.7574E+000		2.3109E-001
	635.90	11.32	9.2089E-001		-1.0912E-001
Cs-134	563.23	8.38	1.3519E+000	1.25E-001	3.5329E-001
	569.32	15.43	7.0286E-001		9.9961E-002
	604.70	97.60	1.3281E-001		8.3098E-003
	795.84	85.40	1.2453E-001		3.2598E-002
	801.93	8.73	1.1424E+000		-1.0725E+000
Cs-137	661.65	85.12	1.3694E-001	1.37E-001	4.3180E-002
Eu-152	121.78	28.40	9.7123E-001	3.67E-001	2.7727E-001
	244.69	7.49	2.1643E+000		-2.9983E-001
	344.27	26.50	4.6862E-001		-1.4234E-003
	778.89	12.74	8.0316E-001		-1.6263E-001
	867.32	4.16	2.2992E+000		-2.2478E+000
	964.01	14.40	8.4530E-001		-3.1089E-001
	1085.78	10.00	9.9253E-001		5.8775E-001
	1112.02	13.30	8.1594E-001		3.0690E-001
	1407.95	20.70	3.6680E-001		3.8570E-002
Eu-154	123.07	40.50	6.7424E-001	2.67E-001	2.5690E-001
	247.94	6.60	2.3543E+000		-1.4407E+000
	591.81	4.83	2.3002E+000		1.5839E+000
	723.30	19.70	5.4815E-001		-8.2824E-002
	756.87	4.33	2.5165E+000		5.3786E-001
	873.19	11.50	8.2005E-001		-3.3240E-001
	996.32	10.30	8.6445E-001		-1.3046E+000
	1004.76	17.90	5.2087E-001		-1.4072E-001
	1274.45	35.50	2.6716E-001		-3.1037E-001
Eu-155	86.54	30.90	1.3667E+000	1.37E+000	1.3471E-001
	105.31	20.70	1.5996E+000		-4.6326E-001
Am-241	59.54	35.90	1.7636E+000	1.76E+000	7.1219E-001
Cm-243	228.19	10.56	1.5660E+000	1.07E+000	-4.0468E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0673E+000	1.07E+000	8.6160E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/28/2006 12:11:23 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-170-F-
Sample Title: NOL-03-02-170-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/28/2006 12:01:19 AM
Live Time: 600.0 seconds
Real Time: 602.1 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-170-F-
Title: NOL-03-02-170-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	306	291.54	72.71	1.07	7.80E+002	96.40	3.26E+003
m	2	284-	306	300.13	74.86	1.08	1.49E+003	113.97	3.67E+003
	3	331-	345	339.18	84.63	1.33	5.57E+002	196.84	3.30E+003
	4	946-	961	953.89	238.35	1.03	3.40E+002	101.87	7.84E+002
	5	1170-	1188	1178.87	294.61	1.38	1.04E+002	81.87	4.86E+002
	6	1302-	1319	1309.86	327.37	0.75	5.75E+001	65.26	3.21E+002
	7	1398-	1416	1405.95	351.40	0.94	2.67E+002	72.42	3.25E+002
	8	2032-	2049	2040.90	510.19	0.78	1.28E+002	60.25	2.50E+002
	9	2321-	2339	2330.30	582.56	1.49	2.33E+002	52.71	1.45E+002
	10	2425-	2442	2434.51	608.62	1.58	2.48E+002	50.79	1.30E+002
	11	3631-	3652	3641.77	910.52	1.82	2.27E+002	49.85	1.12E+002
M	12	3852-	3881	3857.39	964.44	1.43	4.29E+001	17.69	4.61E+001
m	13	3852-	3881	3872.48	968.22	1.43	1.44E+002	26.64	6.81E+001
	14	5319-	5335	5325.70	1331.63	1.43	5.53E+001	22.00	2.27E+001
	15	5825-	5854	5839.78	1460.19	2.10	1.39E+003	76.66	3.00E+001
	16	7044-	7063	7054.34	1763.93	0.80	6.90E+001	19.99	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: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.977	511.00*		100.00	1.73975E-001	8.54693E-002
K-40	0.987	1460.81*		10.67	2.32614E+001	2.28024E+000
TL-208	0.741	277.35		6.80		
		510.84*		21.60	8.05440E-001	4.01121E-001
		583.14*		84.20	3.94233E-001	1.02907E-001
		860.37		12.46		
Pb-212	0.519	74.81*	@	10.70	2.13490E+001	4.49152E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	8.26301E-001	2.79437E-001
Bi-214	0.686	609.31*		46.30	7.75278E-001	1.85112E-001
		1120.29		15.10		
		1764.49*		15.80	8.10601E-001	2.48434E-001
PB-214	0.575	74.82*	@	6.21	3.67849E+001	8.18675E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	6.24754E-001	5.02151E-001
		351.92*		37.20	8.68726E-001	2.76897E-001
Ac-228	0.620	338.32		11.40		
		911.07*		27.70	1.29822E+000	3.22068E-001
		969.11*		16.60	1.40034E+000	2.97725E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.977	8.882073E-002	8.826883E-002
K-40		0.987	2.326139E+001	2.280243E+000
TL-208		0.741	3.942330E-001	1.021017E-001
Pb-212	@	0.519	8.263013E-001	2.794374E-001
Bi-214		0.686	7.878883E-001	1.484366E-001
PB-214	@	0.575	8.118393E-001	2.424756E-001
Ac-228		0.620	1.353283E+000	2.186235E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F 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	1.3007E+000	12.35
3	84.63	9.2891E-001	35.32
6	327.37	9.5842E-002	113.49
M 12	964.44	7.1504E-002	41.23
14	1331.63	9.2196E-002	39.78

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:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.2208E-001	1.04E-001	1.4474E-001
	1332.49	100.00	1.0393E-001		1.2542E-001
Nb-94	702.63	100.00	1.2382E-001	1.05E-001	3.5721E-002
	871.10	100.00	1.0462E-001		-2.6216E-003
Ag-108m	79.20	7.10	6.9716E+000	1.44E-001	-8.7050E+000
	433.93	89.90	1.4980E-001		4.5868E-002
	614.37	90.40	1.4354E-001		-7.1794E-002
	722.95	90.50	1.5080E-001		1.2244E-001
Sb-125	176.33	6.89	3.1984E+000	4.45E-001	5.4245E-002
	427.89	29.33	4.4519E-001		-5.2766E-001
	463.38	10.35	1.3188E+000		8.2817E-001
	600.56	17.80	6.7768E-001		1.9276E-001
	606.64	5.02	3.2160E+000		6.0536E+000
	635.90	11.32	1.0929E+000		2.6504E-001
Cs-134	563.23	8.38	1.5274E+000	1.38E-001	-4.5865E-001
	569.32	15.43	7.9449E-001		-9.5967E-001
	604.70	97.60	1.6362E-001		2.1310E-002
	795.84	85.40	1.3845E-001		2.7859E-002
	801.93	8.73	1.2315E+000		-5.6134E-001
Cs-137	661.65	85.12	1.5514E-001	1.55E-001	4.5723E-002
Eu-152	121.78	28.40	1.0715E+000	3.40E-001	1.0182E-001
	244.69	7.49	2.5367E+000		1.2592E+000
	344.27	26.50	5.4539E-001		-7.7189E-001
	778.89	12.74	9.1705E-001		-1.0487E+000
	867.32	4.16	2.6004E+000		-1.9740E-001
	964.01	14.40	1.0223E+000		-1.0689E-002
	1085.78	10.00	1.0176E+000		-1.4221E+000
	1112.02	13.30	8.2908E-001		-1.8194E+000
	1407.95	20.70	3.4024E-001		-1.0979E-001
Eu-154	123.07	40.50	7.4146E-001	2.85E-001	-3.6520E-001
	247.94	6.60	2.7607E+000		-9.0393E-001
	591.81	4.83	2.5011E+000		3.2160E-001
	723.30	19.70	6.9091E-001		8.1428E-001
	756.87	4.33	2.7036E+000		1.9874E+000
	873.19	11.50	8.9149E-001		-7.0955E-002
	996.32	10.30	1.0821E+000		9.4955E-001
	1004.76	17.90	6.1056E-001		-2.1792E-001
	1274.45	35.50	2.8496E-001		3.3711E-001
Eu-155	86.54	30.90	1.4776E+000	1.48E+000	-3.8196E-002
	105.31	20.70	1.7700E+000		-8.5611E-001
Am-241	59.54	35.90	1.8103E+000	1.81E+000	9.1284E-001
Cm-243	228.19	10.56	1.7720E+000	1.23E+000	9.7030E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2271E+000	1.23E+000	7.2740E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/27/2006 10:56:40 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-171-F-
Sample Title: NOL-03-02-171-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 10:46:38 PM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-171-F-
Title: NOL-03-02-171-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	307	291.52	72.71	1.01	5.99E+002	84.55	2.57E+003
m	2	283-	307	300.10	74.85	1.01	1.08E+003	97.49	2.78E+003
	3	333-	345	339.63	84.74	0.84	3.04E+002	153.97	2.21E+003
	4	948-	961	953.82	238.33	1.14	3.09E+002	72.17	3.79E+002
	5	1347-	1358	1351.75	337.85	0.54	7.37E+001	45.03	1.79E+002
	6	1397-	1414	1406.12	351.44	0.92	1.09E+002	58.69	2.42E+002
	7	2033-	2049	2042.63	510.62	1.06	1.18E+002	52.31	1.89E+002
	8	2321-	2337	2330.66	582.65	1.02	1.75E+002	45.18	1.14E+002
	9	2424-	2444	2435.42	608.85	1.05	1.96E+002	49.35	1.21E+002
	10	3633-	3653	3642.01	910.58	0.59	1.60E+002	40.71	7.54E+001
	11	3865-	3881	3873.30	968.42	0.81	9.16E+001	34.19	6.64E+001
	12	5319-	5337	5326.84	1331.92	0.63	7.76E+001	23.13	1.84E+001
	13	5827-	5855	5840.48	1460.37	1.99	1.19E+003	71.42	3.11E+001
	14	6359-	6372	6365.80	1591.74	0.32	9.81E+000	12.91	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: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.995	511.00*		100.00	1.60421E-001	7.45749E-002
K-40	0.993	1460.81*		10.67	1.99221E+001	2.00901E+000
TL-208	0.746	277.35		6.80		
		510.84*		21.60	7.42688E-001	3.50541E-001
		583.14*		84.20	2.96019E-001	8.56095E-002
		860.37		12.46		
Pb-212	0.519	74.81*	@	10.70	1.53992E+001	3.32567E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.50044E-001	2.11178E-001
Bi-214	0.393	609.31*		46.30	6.12791E-001	1.71568E-001
		1120.29		15.10		
		1764.49		15.80		
Ac-228	0.989	338.32*		11.40	7.74482E-001	4.88334E-001
		911.07*		27.70	9.13443E-001	2.55613E-001
		969.11*		16.60	8.90626E-001	3.45196E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN	0.995	9.648043E-002	7.680506E-002
K-40	0.993	1.992214E+001	2.009011E+000
TL-208	0.746	2.960192E-001	8.506425E-002
Pb-212 @	0.519	7.500439E-001	2.111781E-001
Bi-214	0.393	6.127911E-001	1.715677E-001
Ac-228	0.989	8.856845E-001	1.893527E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F 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	9.9905E-001	14.10
3	84.74	5.0611E-001	50.70
6	351.44	1.8127E-001	53.96
12	1331.92	1.2937E-001	29.80
14	1591.74	1.6345E-002	131.68

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1631E-001	1.06E-001	1.3829E-001
	1332.49	100.00	1.0593E-001		1.0500E-001
Nb-94	702.63	100.00	1.1200E-001	1.01E-001	1.1886E-002
	871.10	100.00	1.0111E-001		-5.3513E-002
Ag-108m	79.20	7.10	6.0880E+000	1.31E-001	1.0380E+000
	433.93	89.90	1.3357E-001		-7.0723E-002
	614.37	90.40	1.3119E-001		-4.5708E-002
	722.95	90.50	1.3577E-001		9.7031E-002
Sb-125	176.33	6.89	2.5384E+000	4.09E-001	-5.0609E-001
	427.89	29.33	4.0910E-001		-1.8548E-002
	463.38	10.35	1.1452E+000		4.8261E-001
	600.56	17.80	6.0336E-001		-4.5430E-001
	606.64	5.02	2.8430E+000		3.4035E+000
	635.90	11.32	9.3513E-001		-1.6922E-001
Cs-134	563.23	8.38	1.2945E+000	1.32E-001	8.9079E-002
	569.32	15.43	7.3173E-001		-1.9785E-001
	604.70	97.60	1.4524E-001		-5.3241E-002
	795.84	85.40	1.3168E-001		9.4200E-002
	801.93	8.73	1.1516E+000		-4.8699E-001
Cs-137	661.65	85.12	1.4111E-001	1.41E-001	2.2704E-001
Eu-152	121.78	28.40	8.8380E-001	3.67E-001	-7.1348E-001
	244.69	7.49	2.0278E+000		2.2260E-001
	344.27	26.50	4.7494E-001		1.5597E-001
	778.89	12.74	8.2724E-001		-7.4994E-001
	867.32	4.16	2.4999E+000		-1.8500E+000
	964.01	14.40	9.3065E-001		5.3991E-001
	1085.78	10.00	1.0689E+000		-2.9403E-001
	1112.02	13.30	8.2254E-001		-1.4177E+000
	1407.95	20.70	3.6680E-001		5.2896E-002
Eu-154	123.07	40.50	6.2023E-001	2.71E-001	5.5039E-002
	247.94	6.60	2.2484E+000		-1.6032E-001
	591.81	4.83	2.2830E+000		7.2247E-001
	723.30	19.70	6.2799E-001		5.2166E-001
	756.87	4.33	2.4603E+000		-5.9201E-001
	873.19	11.50	9.0322E-001		6.8361E-001
	996.32	10.30	9.4886E-001		1.7745E-001
	1004.76	17.90	5.6757E-001		-2.3202E-001
	1274.45	35.50	2.7122E-001		3.3441E-001
Eu-155	86.54	30.90	1.2883E+000	1.29E+000	3.2158E-001
	105.31	20.70	1.4840E+000		1.1847E+000
Am-241	59.54	35.90	1.7326E+000	1.73E+000	-2.4436E-002
Cm-243	228.19	10.56	1.4456E+000	1.01E+000	9.2174E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0131E+000	1.01E+000	1.6974E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/27/2006 8:14:36 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-172-F-
Sample Title: NOL-03-02-172-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 8:14:13 PM
Live Time: 21.5 seconds
Real Time: 21.6 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-172-F-
Title: NOL-03-02-172-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	304	300.84	75.04	0.73	2.99E+001	29.55	8.91E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	75.04	1.3903E+000	98.83

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0939E+000	5.89E-001	-3.0869E-001
	1332.49	100.00	5.8903E-001		1.9615E-001
Nb-94	702.63	100.00	7.8952E-001	7.29E-001	2.5603E-001
	871.10	100.00	7.2942E-001		3.9394E-001
Ag-108m	79.20	7.10	3.9609E+001	8.11E-001	-3.4076E+000
	433.93	89.90	9.4279E-001		2.0048E-002
	614.37	90.40	8.1140E-001		-6.9137E-002
	722.95	90.50	8.4537E-001		2.9660E-001
Sb-125	176.33	6.89	1.5721E+001	2.61E+000	-8.1913E+000
	427.89	29.33	2.6077E+000		-1.9114E-002
	463.38	10.35	6.9339E+000		2.7104E+000
	600.56	17.80	3.7577E+000		-3.0630E+000
	606.64	5.02	1.6137E+001		5.5727E+000
	635.90	11.32	5.4261E+000		4.1297E-001
Cs-134	563.23	8.38	9.1352E+000	5.42E-001	-8.2059E-001
	569.32	15.43	5.1408E+000		2.0537E+000
	604.70	97.60	8.0301E-001		-1.1494E-001
	795.84	85.40	5.4194E-001		-4.1533E-001
	801.93	8.73	6.4661E+000		-1.2084E+000
Cs-137	661.65	85.12	1.1193E+000	1.12E+000	6.0864E-001
Eu-152	121.78	28.40	5.9600E+000	2.58E+000	1.1014E+000
	244.69	7.49	1.2918E+001		2.4403E+000
	344.27	26.50	3.0450E+000		1.5524E+000
	778.89	12.74	4.7390E+000		-6.4405E-001
	867.32	4.16	1.6680E+001		2.0369E+000
	964.01	14.40	5.2020E+000		-1.0145E+000
	1085.78	10.00	6.9870E+000		3.2571E+000
	1112.02	13.30	5.5893E+000		8.8071E-001
	1407.95	20.70	2.5776E+000		7.1833E-001
Eu-154	123.07	40.50	4.0907E+000	1.79E+000	3.5298E+000
	247.94	6.60	1.4366E+001		-2.8581E+000
	591.81	4.83	2.0286E+001		1.8194E+001
	723.30	19.70	4.0309E+000		1.5570E+000
	756.87	4.33	1.5597E+001		-3.1950E+000
	873.19	11.50	6.0418E+000		5.1170E-001
	996.32	10.30	6.6164E+000		7.7108E-001
	1004.76	17.90	4.0325E+000		-2.4622E+000
	1274.45	35.50	1.7920E+000		6.8346E-001
Eu-155	86.54	30.90	7.9839E+000	7.98E+000	4.2400E+000
	105.31	20.70	9.1400E+000		-5.4694E+000
Am-241	59.54	35.90	1.0850E+001	1.08E+001	1.1644E+000
Cm-243	228.19	10.56	9.3928E+000	7.08E+000	5.2314E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	7.0803E+000	7.08E+000	1.8017E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/27/2006 10:27:02 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-173-F-
Sample Title: NOL-03-02-173-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 10:16:59 PM
Live Time: 600.0 seconds
Real Time: 602.1 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-173-F-
Title: NOL-03-02-173-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	307	291.58	72.72	1.06	7.66E+002	90.38	2.86E+003
m	2	283-	307	300.06	74.84	1.06	1.22E+003	103.22	3.07E+003
	3	332-	344	339.18	84.63	1.24	2.81E+002	161.37	2.47E+003
	4	946-	961	953.99	238.38	1.38	3.13E+002	84.70	5.17E+002
	5	1175-	1184	1179.68	294.81	1.19	3.39E+001	39.47	1.64E+002
	6	1347-	1359	1352.16	337.95	0.59	5.80E+001	45.50	1.81E+002
	7	1399-	1414	1406.14	351.45	0.64	1.76E+002	54.67	2.00E+002
	8	2030-	2052	2041.54	510.35	1.53	1.74E+002	55.08	1.57E+002
	9	2322-	2338	2330.71	582.66	0.92	1.66E+002	44.06	1.08E+002
	10	2427-	2443	2434.61	608.64	1.47	1.46E+002	43.72	1.12E+002
	11	3632-	3652	3641.76	910.52	1.13	1.55E+002	42.81	8.88E+001
	12	3864-	3881	3872.95	968.34	1.81	8.54E+001	34.42	6.86E+001
	13	4470-	4486	4477.25	1119.46	0.51	5.56E+001	26.23	3.94E+001
	14	5827-	5855	5840.23	1460.31	2.17	1.19E+003	70.41	2.11E+001
	15	7049-	7064	7056.14	1764.37	0.80	4.19E+001	19.28	1.81E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.985	511.00*		100.00	2.37873E-001	8.17297E-002
K-40	0.991	1460.81*		10.67	2.00405E+001	2.00678E+000
TL-208	0.745	277.35		6.80		
		510.84*		21.60	1.10126E+000	3.88920E-001
		583.14*		84.20	2.80049E-001	8.29918E-002
		860.37		12.46		
Pb-212	0.519	74.81*	@	10.70	1.74260E+001	3.72187E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.61657E-001	2.37986E-001
Bi-214	0.986	609.31*		46.30	4.54209E-001	1.47522E-001
		1120.29*		15.10	6.19155E-001	2.99636E-001
		1764.49*		15.80	4.91867E-001	2.31804E-001
PB-214	0.578	74.82*	@	6.21	3.00255E+001	6.77318E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.03418E-001	2.39212E-001
		351.92*		37.20	5.72298E-001	2.02065E-001
Ac-228	0.988	338.32*		11.40	6.09463E-001	4.87420E-001
		911.07*		27.70	8.87836E-001	2.65441E-001
		969.11*		16.60	8.30242E-001	3.45777E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.985	1.773820E-001	8.364935E-002
K-40		0.991	2.004048E+001	2.006785E+000
TL-208		0.745	2.800488E-001	8.248846E-002
Pb-212	@	0.519	7.616568E-001	2.379865E-001
Bi-214		0.986	4.877371E-001	1.149359E-001
PB-214	@	0.578	4.186927E-001	1.543633E-001
Ac-228		0.988	8.260621E-001	1.932907E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.72	1.2774E+000	11.79
3	84.63	4.6835E-001	57.42

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1827E-001	9.84E-002	1.1190E-001
	1332.49	100.00	9.8378E-002		1.1421E-001
Nb-94	702.63	100.00	1.0545E-001	9.97E-002	6.4532E-002
	871.10	100.00	9.9721E-002		4.2362E-002
Ag-108m	79.20	7.10	6.4897E+000	1.20E-001	-3.1900E+000
	433.93	89.90	1.3409E-001		5.3464E-002
	614.37	90.40	1.2042E-001		-6.5221E-002
	722.95	90.50	1.2319E-001		8.2279E-002
Sb-125	176.33	6.89	2.7405E+000	3.90E-001	-1.2538E+000
	427.89	29.33	3.9031E-001		-9.4596E-002
	463.38	10.35	1.1562E+000		7.9377E-001
	600.56	17.80	5.9106E-001		-3.0884E-001
	606.64	5.02	2.7373E+000		5.8834E+000
	635.90	11.32	9.2498E-001		7.6741E-001
Cs-134	563.23	8.38	1.3283E+000	1.19E-001	8.2487E-001
	569.32	15.43	6.6139E-001		-6.2982E-001
	604.70	97.60	1.3732E-001		-2.6784E-002
	795.84	85.40	1.1879E-001		-1.5321E-002
	801.93	8.73	1.1608E+000		-2.4274E-001
Cs-137	661.65	85.12	1.3416E-001	1.34E-001	-5.5453E-002
Eu-152	121.78	28.40	9.6809E-001	3.45E-001	7.0353E-001
	244.69	7.49	2.0848E+000		-2.9430E-001
	344.27	26.50	4.7397E-001		9.5387E-002
	778.89	12.74	8.0925E-001		-6.6858E-001
	867.32	4.16	2.4284E+000		-2.7666E+000
	964.01	14.40	9.4262E-001		3.1965E-001
	1085.78	10.00	9.8615E-001		2.9503E-003
	1112.02	13.30	7.2196E-001		1.5614E-001
	1407.95	20.70	3.4523E-001		8.5840E-002
Eu-154	123.07	40.50	6.6412E-001	2.71E-001	3.4140E-001
	247.94	6.60	2.2280E+000		-1.0997E+000
	591.81	4.83	2.1123E+000		-2.0976E+000
	723.30	19.70	5.6482E-001		2.4156E-001
	756.87	4.33	2.4432E+000		-1.6489E+000
	873.19	11.50	8.4789E-001		-1.0463E+000
	996.32	10.30	9.6071E-001		-3.4501E-001
	1004.76	17.90	5.5076E-001		3.4789E-001
	1274.45	35.50	2.7122E-001		7.4674E-002
Eu-155	86.54	30.90	1.3507E+000	1.35E+000	2.4766E-001
	105.31	20.70	1.5616E+000		-1.0792E+000
Am-241	59.54	35.90	1.7311E+000	1.73E+000	-1.6714E+000
Cm-243	228.19	10.56	1.5033E+000	9.99E-001	-4.8276E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.9945E-001	9.99E-001	-1.6845E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/27/2006 10:13:59 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: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-174-F-
Sample Title: NOL-03-02-174-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 10:03:56 PM
Live Time: 600.0 seconds
Real Time: 601.9 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-174-F-
Title: NOL-03-02-174-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	306	291.48	72.70	1.07	6.47E+002	87.22	2.61E+003
m	2	284-	306	300.17	74.87	1.08	9.55E+002	97.55	2.97E+003
	3	331-	345	338.87	84.55	0.72	3.00E+002	173.38	2.61E+003
	4	946-	959	954.19	238.43	1.23	2.72E+002	68.19	3.41E+002
	5	1174-	1187	1179.43	294.75	0.63	5.61E+001	52.37	2.38E+002
	6	1345-	1357	1351.89	337.88	1.27	6.52E+001	43.99	1.67E+002
	7	1399-	1415	1406.91	351.64	0.63	1.10E+002	55.32	2.19E+002
	8	2035-	2052	2041.16	510.25	1.19	1.32E+002	47.30	1.38E+002
	9	2321-	2337	2330.06	582.50	1.56	1.67E+002	47.19	1.32E+002
	10	2424-	2441	2435.43	608.85	0.96	1.33E+002	45.24	1.23E+002
	11	2897-	2913	2906.10	726.55	1.03	5.78E+001	31.36	6.22E+001
	12	3632-	3651	3641.30	910.41	1.92	1.47E+002	36.82	5.81E+001
	13	3865-	3880	3872.54	968.23	1.27	8.32E+001	34.93	7.78E+001
	14	4469-	4485	4477.35	1119.48	0.82	4.59E+001	28.18	5.11E+001
	15	5318-	5335	5326.54	1331.84	0.69	4.38E+001	23.09	2.92E+001
	16	5826-	5854	5840.34	1460.33	1.81	1.14E+003	70.82	3.60E+001
	17	7047-	7062	7055.46	1764.20	2.08	4.49E+001	15.60	6.06E+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: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.981	511.00*		100.00	1.80402E-001	6.89719E-002
K-40	0.992	1460.81*		10.67	1.91201E+001	1.95115E+000
TL-208	0.740	277.35		6.80		
		510.84*		21.60	8.35193E-001	3.26518E-001
		583.14*		84.20	2.82947E-001	8.79265E-002
		860.37		12.46		
Bi-212	0.987	727.17*		11.80	7.40969E-001	4.11613E-001
Pb-212	0.520	74.81*	@	10.70	1.36756E+001	3.02258E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.60444E-001	1.95429E-001
Bi-214	0.991	609.31*		46.30	4.15509E-001	1.50220E-001
		1120.29*		15.10	5.11225E-001	3.18722E-001
		1764.49*		15.80	5.27921E-001	1.90721E-001
PB-214	0.579	74.82*	@	6.21	2.35635E+001	5.48170E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	3.36486E-001	3.19238E-001
		351.92*		37.20	3.59156E-001	1.89870E-001
Ac-228	0.983	338.32*		11.40	6.85185E-001	4.74388E-001
		911.07*		27.70	8.40647E-001	2.31871E-001
		969.11*		16.60	8.08641E-001	3.50014E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.981	1.192851E-001	7.151124E-002
K-40		0.992	1.912009E+001	1.951148E+000
TL-208		0.740	2.829470E-001	8.744164E-002
Bi-212		0.987	7.409693E-001	4.116133E-001
Pb-212	@	0.520	6.604445E-001	1.954287E-001
Bi-214		0.991	4.648980E-001	1.106680E-001
PB-214	@	0.579	3.532322E-001	1.631879E-001
Ac-228		0.983	8.101381E-001	1.790114E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.70	1.0780E+000	13.49
3	84.55	4.9969E-001	57.83
15	1331.84	7.2940E-002	52.77

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:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0719E-001	9.73E-002	3.4414E-002
	1332.49	100.00	9.7300E-002		1.1600E-001
Nb-94	702.63	100.00	1.0350E-001	9.40E-002	5.4731E-003
	871.10	100.00	9.3964E-002		-6.7704E-002
Ag-108m	79.20	7.10	6.2706E+000	1.19E-001	-6.3778E+000
	433.93	89.90	1.1934E-001		-2.1378E-002
	614.37	90.40	1.2695E-001		-9.0687E-002
	722.95	90.50	1.2769E-001		2.5243E-002
Sb-125	176.33	6.89	2.4920E+000	3.72E-001	-5.1813E-001
	427.89	29.33	3.7170E-001		-4.7143E-002
	463.38	10.35	1.0385E+000		-3.2747E-001
	600.56	17.80	5.7595E-001		2.0363E-001
	606.64	5.02	2.6829E+000		5.1135E+000
	635.90	11.32	8.8532E-001		-3.4591E-001
Cs-134	563.23	8.38	1.1977E+000	1.22E-001	-4.8189E-001
	569.32	15.43	6.6424E-001		6.0727E-001
	604.70	97.60	1.3281E-001		-4.6935E-002
	795.84	85.40	1.2215E-001		7.0429E-002
	801.93	8.73	1.1393E+000		2.8733E-002
Cs-137	661.65	85.12	1.3743E-001	1.37E-001	1.8991E-001
Eu-152	121.78	28.40	8.6463E-001	3.33E-001	-5.2358E-001
	244.69	7.49	1.8762E+000		5.3927E-001
	344.27	26.50	4.4136E-001		-8.1112E-002
	778.89	12.74	7.7407E-001		-6.0611E-001
	867.32	4.16	2.2781E+000		-8.7069E-001
	964.01	14.40	9.3815E-001		-2.1294E-002
	1085.78	10.00	9.7649E-001		-6.0654E-001
	1112.02	13.30	7.8208E-001		-3.2615E-001
	1407.95	20.70	3.3260E-001		-7.0389E-002
Eu-154	123.07	40.50	6.0057E-001	2.62E-001	-4.0367E-001
	247.94	6.60	2.0482E+000		9.9359E-002
	591.81	4.83	2.1216E+000		-8.1297E-001
	723.30	19.70	5.7757E-001		-2.9388E-002
	756.87	4.33	2.2954E+000		-1.4125E+000
	873.19	11.50	8.4789E-001		4.7500E-001
	996.32	10.30	8.9034E-001		-4.0791E-001
	1004.76	17.90	5.4041E-001		-5.4732E-002
	1274.45	35.50	2.6199E-001		-7.2137E-002
Eu-155	86.54	30.90	1.2833E+000	1.28E+000	-3.5325E-002
	105.31	20.70	1.5237E+000		2.8882E-001
Am-241	59.54	35.90	1.7490E+000	1.75E+000	2.4274E-001
Cm-243	228.19	10.56	1.4115E+000	9.57E-001	2.8812E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.5727E-001	9.57E-001	8.7563E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/27/2006 6:45:44 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-175-F-
Sample Title: NOL-03-02-175-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 6:35:41 PM
Live Time: 600.0 seconds
Real Time: 601.5 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-175-F-
Title: NOL-03-02-175-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	307	291.60	72.73	1.08	5.89E+002	84.82	2.92E+003
m	2	283-	307	300.22	74.89	1.08	1.08E+003	98.76	2.84E+003
	3	331-	344	339.52	84.71	1.38	3.57E+002	161.34	2.33E+003
M	4	947-	974	954.30	238.45	1.19	2.90E+002	43.81	3.77E+002
m	5	947-	974	965.95	241.37	1.19	7.41E+001	31.43	4.17E+002
	6	1397-	1415	1406.62	351.57	1.14	1.57E+002	58.67	2.19E+002
	7	2034-	2050	2041.72	510.39	1.56	1.25E+002	50.48	1.72E+002
	8	2324-	2339	2331.54	582.87	1.28	1.61E+002	44.25	1.16E+002
	9	2425-	2443	2435.83	608.95	1.35	1.86E+002	42.63	8.51E+001
	10	2638-	2651	2644.61	661.16	0.88	3.40E+001	31.92	8.40E+001
	11	2900-	2914	2908.32	727.11	1.02	6.02E+001	27.76	4.88E+001
	12	3172-	3184	3178.65	794.71	0.34	3.41E+001	22.27	3.59E+001
	13	3632-	3653	3643.94	911.07	1.07	1.57E+002	40.11	6.86E+001
	14	3794-	3805	3799.36	949.93	0.32	1.64E+001	19.93	3.26E+001
	15	3867-	3881	3874.48	968.72	0.54	8.94E+001	30.96	5.56E+001
	16	4471-	4486	4478.10	1119.67	0.25	5.03E+001	26.41	4.38E+001
	17	5323-	5337	5329.42	1332.56	0.29	4.23E+001	17.41	1.27E+001
	18	5829-	5857	5842.21	1460.80	1.95	1.17E+003	70.95	3.09E+001
	19	7053-	7068	7059.86	1765.30	0.57	4.03E+001	16.42	9.69E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.987	511.00*	100.00	1.71006E-001	7.26294E-002
K-40	1.000	1460.81*	10.67	1.96588E+001	1.98725E+000
Cs-137	0.992	661.65*	85.12	5.93348E-002	5.61345E-002
TL-208	0.749	277.35	6.80		
		510.84*	21.60	7.91695E-001	3.42407E-001
		583.14*	84.20	2.72435E-001	8.28625E-002
		860.37	12.46		
Bi-212	1.000	727.17*	11.80	7.72907E-001	3.67555E-001
Pb-212	0.520	74.81* @	10.70	1.54892E+001	3.34896E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.05946E-001	1.53604E-001
Bi-214	0.990	609.31*	46.30	5.80312E-001	1.51069E-001
		1120.29*	15.10	5.60086E-001	3.00321E-001
		1764.49*	15.80	4.73627E-001	1.98642E-001
PB-214	0.356	74.82* @	6.21	2.66884E+001	6.08690E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98*	7.49	1.07658E+000	4.90340E-001
		295.21	19.20		
		351.92*	37.20	5.12313E-001	2.09348E-001
Ac-228	0.632	338.32	11.40		
		911.07*	27.70	9.00741E-001	2.51848E-001
		969.11*	16.60	8.69187E-001	3.14448E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.987	1.121602E-001	7.477765E-002
K-40		1.000	1.965877E+001	1.987253E+000
Cs-137		0.992	5.933483E-002	5.613455E-002
TL-208		0.749	2.724346E-001	8.238548E-002
Bi-212		1.000	7.729074E-001	3.675545E-001
Pb-212	@	0.520	7.059455E-001	1.536040E-001
Bi-214		0.990	5.438256E-001	1.116303E-001
PB-214	@	0.356	5.993104E-001	1.925343E-001
Ac-228		0.632	8.884103E-001	1.965718E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F 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	9.8216E-001	14.39
3	84.71	5.9576E-001	45.14
12	794.71	5.6762E-002	65.39
14	949.93	2.7364E-002	121.40
17	1332.56	7.0508E-002	41.15

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	1.0658E-001	9.05E-002	4.2195E-002
		1332.49	100.00	9.0547E-002		5.6896E-002
	Nb-94	702.63	100.00	1.0878E-001	9.80E-002	-4.0713E-003
		871.10	100.00	9.8031E-002		5.6099E-002
	Ag-108m	79.20	7.10	6.1747E+000	1.24E-001	-2.4486E+000
		433.93	89.90	1.2538E-001		-7.1942E-002
		614.37	90.40	1.2943E-001		-1.1226E-002
		722.95	90.50	1.2370E-001		-7.9688E-003
	Sb-125	176.33	6.89	2.5823E+000	3.63E-001	-8.9934E-001
		427.89	29.33	3.6292E-001		-1.1166E-001
		463.38	10.35	1.1292E+000		3.5177E-001
		600.56	17.80	5.9601E-001		-3.1342E-001
		606.64	5.02	2.7137E+000		5.2247E+000
		635.90	11.32	8.9170E-001		-3.7654E-001
	Cs-134	563.23	8.38	1.2622E+000	1.18E-001	8.2201E-001
		569.32	15.43	6.5853E-001		-4.6697E-001
		604.70	97.60	1.3802E-001		3.7661E-002
		795.84	85.40	1.1817E-001		-1.6283E-002
		801.93	8.73	1.1205E+000		-1.7682E-001
+	Cs-137	661.65*	85.12	9.2016E-002	9.20E-002	5.9335E-002
	Eu-152	121.78	28.40	8.7924E-001	3.53E-001	-3.9268E-001
		244.69	7.49	1.9559E+000		2.8299E-001
		344.27	26.50	4.4757E-001		-3.6989E-001
		778.89	12.74	7.7618E-001		-2.4800E-001
		867.32	4.16	2.3476E+000		-1.2961E+000
		964.01	14.40	8.8904E-001		-8.8447E-002
		1085.78	10.00	9.7000E-001		-1.2469E+000
		1112.02	13.30	7.1692E-001		-8.0636E-001
		1407.95	20.70	3.5258E-001		-1.2977E-001
	Eu-154	123.07	40.50	6.1120E-001	2.56E-001	-3.8983E-001
		247.94	6.60	2.0764E+000		3.5708E-001
		591.81	4.83	2.1169E+000		-8.6781E-001
		723.30	19.70	5.6949E-001		3.2431E-001
		756.87	4.33	2.3497E+000		-1.5932E+000
		873.19	11.50	8.3535E-001		-1.5123E-004
		996.32	10.30	8.9985E-001		-4.6401E-001
		1004.76	17.90	5.4041E-001		-1.3258E-001
		1274.45	35.50	2.5563E-001		1.1352E-001
	Eu-155	86.54	30.90	1.2849E+000	1.28E+000	1.1251E-001
		105.31	20.70	1.5067E+000		4.4465E-001
	Am-241	59.54	35.90	1.6597E+000	1.66E+000	-1.6598E+000
	Cm-243	228.19	10.56	1.3397E+000	9.93E-001	-2.2250E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.9291E-001	9.93E-001	4.0424E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/26/2006 3:29:50 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-176-F-
Sample Title: NOL-03-02-176-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/26/2006 3:19:48 PM
Live Time: 600.0 seconds
Real Time: 601.8 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-176-F-
Title: NOL-03-02-176-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	308	291.59	72.73	1.12	6.86E+002	91.22	3.28E+003
m	2	283-	308	300.24	74.89	1.13	1.26E+003	104.57	3.53E+003
	3	948-	960	954.16	238.42	0.97	2.76E+002	73.70	4.30E+002
	4	1396-	1414	1407.14	351.70	1.48	1.45E+002	62.60	2.59E+002
	5	2325-	2340	2331.78	582.93	1.12	1.69E+002	45.14	1.19E+002
	6	2429-	2444	2435.69	608.91	1.47	1.53E+002	40.81	9.34E+001
	7	3635-	3653	3643.17	910.87	2.08	1.52E+002	39.78	7.70E+001
	8	3866-	3885	3874.30	968.68	0.47	1.06E+002	34.47	5.83E+001
	9	4322-	4334	4328.38	1082.23	0.83	2.03E+001	19.65	2.98E+001
	10	5324-	5336	5329.44	1332.57	0.52	2.12E+001	19.64	2.98E+001
	11	5828-	5855	5842.56	1460.89	2.10	1.22E+003	72.77	3.51E+001
	12	7050-	7066	7058.53	1764.97	0.42	5.44E+001	17.71	8.55E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	1.000	1460.81*	10.67	2.04603E+001	2.05762E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.85224E-001	8.49380E-002
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	1.79692E+001	3.82687E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.71371E-001	2.07772E-001
Bi-214	0.693	609.31*	46.30	4.76353E-001	1.40289E-001
		1120.29	15.10		
		1764.49*	15.80	6.39725E-001	2.17645E-001
Ac-228	0.631	338.32	11.40		
		911.07*	27.70	8.70050E-001	2.48703E-001
		969.11*	16.60	1.02776E+000	3.51967E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	1.000	2.046032E+001	2.057616E+000
TL-208	0.470	2.852236E-001	8.493802E-002
Pb-212 @	0.520	6.713711E-001	2.077723E-001
Bi-214	0.693	5.243065E-001	1.179159E-001
Ac-228	0.631	9.225708E-001	2.031126E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F 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	1.1434E+000	13.30
4	351.70	2.4160E-001	43.18
9	1082.23	3.3750E-002	97.06
10	1332.57	3.5359E-002	92.58

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:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1111E-001	9.62E-002	-6.2023E-002
	1332.49	100.00	9.6209E-002		1.3539E-001
Nb-94	702.63	100.00	1.1491E-001	9.77E-002	-1.0365E-002
	871.10	100.00	9.7746E-002		-6.4356E-002
Ag-108m	79.20	7.10	6.5896E+000	1.26E-001	-6.9378E+000
	433.93	89.90	1.3409E-001		-1.6161E-002
	614.37	90.40	1.3229E-001		-4.6102E-002
	722.95	90.50	1.2621E-001		-2.7161E-003
Sb-125	176.33	6.89	2.7313E+000	4.11E-001	-5.1392E-001
	427.89	29.33	4.1067E-001		3.0821E-001
	463.38	10.35	1.1499E+000		4.5628E-001
	600.56	17.80	6.0214E-001		-5.6652E-001
	606.64	5.02	2.7774E+000		5.0936E+000
	635.90	11.32	9.4117E-001		5.2586E-001
Cs-134	563.23	8.38	1.3283E+000	1.28E-001	-6.4862E-001
	569.32	15.43	7.2397E-001		3.6665E-001
	604.70	97.60	1.3767E-001		-1.6603E-002
	795.84	85.40	1.2773E-001		1.8048E-001
	801.93	8.73	1.1393E+000		-8.1285E-001
Cs-137	661.65	85.12	1.3644E-001	1.36E-001	9.5570E-002
Eu-152	121.78	28.40	9.6408E-001	3.55E-001	-7.1324E-001
	244.69	7.49	2.1183E+000		1.6744E+000
	344.27	26.50	4.7300E-001		-3.6172E-001
	778.89	12.74	7.6340E-001		-8.5617E-001
	867.32	4.16	2.4084E+000		-1.9652E+000
	964.01	14.40	9.1240E-001		4.5592E-001
	1085.78	10.00	1.0114E+000		4.2265E-001
	1112.02	13.30	7.0673E-001		-1.1780E+000
	1407.95	20.70	3.5499E-001		1.4646E-001
Eu-154	123.07	40.50	6.6575E-001	2.81E-001	-1.6542E-001
	247.94	6.60	2.2780E+000		-1.0154E+000
	591.81	4.83	2.2700E+000		1.8089E-001
	723.30	19.70	5.7872E-001		-1.2525E-001
	756.87	4.33	2.4144E+000		-2.6972E+000
	873.19	11.50	8.3788E-001		-5.6062E-001
	996.32	10.30	9.3988E-001		1.2669E-001
	1004.76	17.90	5.3866E-001		-2.7622E-001
	1274.45	35.50	2.8111E-001		-2.3996E-001
Eu-155	86.54	30.90	1.3720E+000	1.37E+000	1.8335E+000
	105.31	20.70	1.6033E+000		-3.3767E-001
Am-241	59.54	35.90	1.7809E+000	1.78E+000	1.9290E-001
Cm-243	228.19	10.56	1.5190E+000	1.06E+000	8.1836E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0639E+000	1.06E+000	6.6402E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/26/2006 3:10:17 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-177-F-
Sample Title: NOL-03-02-177-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/26/2006 3:00:15 PM
Live Time: 600.0 seconds
Real Time: 601.9 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-177-F-
Title: NOL-03-02-177-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	308	291.61	72.73	1.20	7.06E+002	94.64	3.04E+003
m	2	285-	308	300.21	74.88	1.21	1.57E+003	111.51	3.86E+003
	3	332-	344	339.86	84.80	0.95	5.22E+002	168.24	2.60E+003
	4	944-	961	954.21	238.43	1.24	1.95E+002	97.58	7.02E+002
	5	1345-	1362	1352.49	338.03	0.80	6.42E+001	63.51	3.01E+002
	6	1401-	1412	1407.48	351.78	1.23	1.35E+002	45.66	1.63E+002
	7	2034-	2051	2041.87	510.43	1.63	1.70E+002	51.00	1.56E+002
	8	2321-	2339	2331.14	582.77	1.79	1.99E+002	49.89	1.33E+002
	9	2426-	2444	2435.94	608.98	1.40	1.89E+002	45.27	1.02E+002
	10	2902-	2917	2908.34	727.11	0.80	4.64E+001	34.48	8.66E+001
	11	3173-	3187	3179.91	795.02	0.49	4.11E+001	28.40	5.69E+001
	12	3634-	3653	3643.09	910.85	1.32	1.82E+002	39.81	6.62E+001
	13	3867-	3885	3873.11	968.38	1.14	1.03E+002	31.76	4.67E+001
	14	4471-	4488	4479.39	1119.99	0.67	6.85E+001	29.72	4.95E+001
	15	5325-	5338	5330.27	1332.78	0.27	3.57E+001	19.84	2.23E+001
	16	5829-	5855	5842.68	1460.92	1.83	1.21E+003	72.96	4.05E+001
	17	7050-	7067	7057.90	1764.81	0.43	5.90E+001	17.79	6.96E+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: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.989	511.00*	100.00	2.32484E-001	7.63554E-002
K-40	1.000	1460.81*	10.67	2.02697E+001	2.04712E+000
TL-208	0.747	277.35	6.80		
		510.84*	21.60	1.07631E+000	3.64262E-001
		583.14*	84.20	3.36692E-001	9.51308E-002
		860.37	12.46		
Bi-212	1.000	727.17*	11.80	5.95260E-001	4.47909E-001
Pb-212	0.520	74.81* @	10.70	2.24931E+001	4.68880E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	4.75072E-001	2.48603E-001
Bi-214	0.996	609.31*	46.30	5.89984E-001	1.58935E-001
		1120.29*	15.10	7.63564E-001	3.41059E-001
		1764.49*	15.80	6.93680E-001	2.20185E-001
Ac-228	0.993	338.32*	11.40	6.74784E-001	6.75526E-001
		911.07*	27.70	1.04056E+000	2.57412E-001
		969.11*	16.60	1.00457E+000	3.26224E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.989	1.597583E-001	7.903647E-002
K-40		1.000	2.026971E+001	2.047115E+000
TL-208		0.747	3.366916E-001	9.449593E-002
Bi-212		1.000	5.952601E-001	4.479087E-001
Pb-212	@	0.520	4.750719E-001	2.486031E-001
Bi-214		0.996	6.427534E-001	1.205508E-001
Ac-228		0.993	9.978426E-001	1.936018E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F 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	1.1775E+000	13.40
3	84.80	8.6930E-001	32.26
6	351.78	2.2531E-001	33.77
11	795.02	6.8427E-002	69.17
15	1332.78	5.9476E-002	55.59

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0439E-001	9.47E-002	-2.4510E-003
	1332.49	100.00	9.4734E-002		1.0415E-001
Nb-94	702.63	100.00	1.1535E-001	1.03E-001	9.2851E-002
	871.10	100.00	1.0274E-001		7.5356E-003
Ag-108m	79.20	7.10	6.7140E+000	1.34E-001	-3.9196E+000
	433.93	89.90	1.3580E-001		8.2866E-002
	614.37	90.40	1.3380E-001		3.8555E-002
	722.95	90.50	1.3461E-001		-5.0503E-002
Sb-125	176.33	6.89	2.8693E+000	4.16E-001	1.0212E+000
	427.89	29.33	4.1585E-001		2.5876E-002
	463.38	10.35	1.2009E+000		1.2677E-002
	600.56	17.80	6.3648E-001		3.4196E-001
	606.64	5.02	2.8332E+000		6.0037E+000
	635.90	11.32	8.9804E-001		-4.7086E-001
Cs-134	563.23	8.38	1.3496E+000	1.36E-001	5.3793E-001
	569.32	15.43	7.4194E-001		1.4824E-001
	604.70	97.60	1.4440E-001		-2.2165E-002
	795.84	85.40	1.3605E-001		1.2977E-001
	801.93	8.73	1.1819E+000		5.6537E-001
Cs-137	661.65	85.12	1.3743E-001	1.37E-001	-3.6977E-002
Eu-152	121.78	28.40	9.9082E-001	3.62E-001	-3.4413E-002
	244.69	7.49	2.1944E+000		-1.2575E+000
	344.27	26.50	5.0351E-001		9.7418E-002
	778.89	12.74	8.9729E-001		1.6065E-001
	867.32	4.16	2.4935E+000		-1.8467E+000
	964.01	14.40	8.8588E-001		-1.0007E-001
	1085.78	10.00	1.0269E+000		1.1275E-001
	1112.02	13.30	8.0929E-001		1.7057E-002
	1407.95	20.70	3.6212E-001		3.2279E-001
Eu-154	123.07	40.50	6.8747E-001	3.00E-001	-2.3438E-001
	247.94	6.60	2.4369E+000		9.1274E-001
	591.81	4.83	2.3173E+000		1.7461E+000
	723.30	19.70	6.2059E-001		5.2487E-002
	756.87	4.33	2.6777E+000		-1.6116E+000
	873.19	11.50	8.6268E-001		-1.1059E-001
	996.32	10.30	1.0010E+000		2.7132E-001
	1004.76	17.90	5.3691E-001		2.0545E-001
	1274.45	35.50	2.9986E-001		2.5324E-001
Eu-155	86.54	30.90	1.4096E+000	1.41E+000	-5.7233E-001
	105.31	20.70	1.6551E+000		-3.6790E-001
Am-241	59.54	35.90	1.8084E+000	1.81E+000	-3.8429E-001
Cm-243	228.19	10.56	1.6038E+000	1.06E+000	4.0583E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0639E+000	1.06E+000	-1.1486E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/27/2006 10:13:22 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: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-178-F-
Sample Title: NOL-03-02-178-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 10:03:21 AM
Live Time: 600.0 seconds
Real Time: 601.8 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-178-F-
Title: NOL-03-02-178-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	307	292.32	72.91	1.21	6.73E+002	93.70	3.20E+003
m	2	285-	307	300.53	74.96	1.22	1.22E+003	107.29	3.97E+003
	3	332-	346	340.29	84.91	0.85	3.33E+002	185.58	2.99E+003
	4	740-	747	743.38	185.71	1.21	7.51E+001	57.85	3.94E+002
	5	948-	963	954.08	238.40	0.75	2.43E+002	87.89	5.87E+002
	6	1396-	1416	1406.72	351.59	1.08	2.09E+002	70.75	3.01E+002
	7	2326-	2340	2332.29	583.06	1.83	1.57E+002	42.18	1.06E+002
	8	2430-	2448	2436.45	609.10	1.65	1.71E+002	49.01	1.34E+002
	9	3638-	3655	3644.97	911.32	2.11	1.02E+002	39.68	9.40E+001
	10	3866-	3884	3875.71	969.03	1.08	8.43E+001	39.16	9.27E+001
	11	4475-	4489	4481.53	1120.53	1.36	4.14E+001	29.93	6.46E+001
	12	5321-	5337	5329.30	1332.53	0.70	5.00E+001	25.46	3.80E+001
	13	5829-	5858	5844.89	1461.47	2.39	1.10E+003	67.57	1.92E+001
	14	6348-	6361	6354.26	1588.85	0.33	1.78E+001	14.19	1.12E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.985	1460.81*	10.67	1.83815E+001	1.87068E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.64990E-001	7.92876E-002
		860.37	12.46		
Pb-212	0.519	74.81* @	10.70	1.74179E+001	3.74263E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.89686E-001	2.32764E-001
Bi-214	0.698	609.31*	46.30	5.34297E-001	1.66574E-001
		1120.29*	15.10	4.61294E-001	3.37231E-001
		1764.49	15.80		
Ac-228	0.632	338.32	11.40		
		911.07*	27.70	5.83663E-001	2.36825E-001
		969.11*	16.60	8.19239E-001	3.90319E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.985	1.838151E+001	1.870683E+000
TL-208	0.471	2.649900E-001	7.928759E-002
Pb-212 @	0.519	5.896865E-001	2.327636E-001
Bi-214	0.698	5.199790E-001	1.493480E-001
Ac-228	0.632	6.470521E-001	2.024707E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.91	1.1222E+000	13.92
3	84.91	5.5498E-001	55.73
4	185.71	1.2519E-001	77.01
6	351.59	3.4753E-001	33.93
12	1332.53	8.3295E-002	50.95
14	1588.85	2.9626E-002	79.84

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1052E-001	1.04E-001	2.0899E-002
	1332.49	100.00	1.0393E-001		1.7404E-001
Nb-94	702.63	100.00	1.0971E-001	1.01E-001	-4.4358E-002
	871.10	100.00	1.0138E-001		-7.2751E-002
Ag-108m	79.20	7.10	6.6860E+000	1.40E-001	-4.6588E+000
	433.93	89.90	1.4046E-001		3.8348E-003
	614.37	90.40	1.4334E-001		-9.4802E-002
	722.95	90.50	1.4250E-001		1.4179E-001
Sb-125	176.33	6.89	2.9394E+000	4.24E-001	2.2456E+000
	427.89	29.33	4.2351E-001		8.6270E-002
	463.38	10.35	1.2396E+000		-9.4830E-002
	600.56	17.80	6.5013E-001		-8.0584E-001
	606.64	5.02	2.9634E+000		-1.4033E+000
	635.90	11.32	9.8807E-001		-1.4925E-001
Cs-134	563.23	8.38	1.3519E+000	1.27E-001	-6.5140E-001
	569.32	15.43	7.5698E-001		4.5432E-001
	604.70	97.60	1.4338E-001		-5.9773E-002
	795.84	85.40	1.2657E-001		-3.5920E-002
	801.93	8.73	1.1878E+000		-3.6764E-001
Cs-137	661.65	85.12	1.4351E-001	1.44E-001	8.9326E-003
Eu-152	121.78	28.40	9.7450E-001	3.50E-001	-1.6807E-001
	244.69	7.49	2.2082E+000		-2.1965E+000
	344.27	26.50	4.9803E-001		5.1112E-003
	778.89	12.74	8.7148E-001		-4.9243E-001
	867.32	4.16	2.4677E+000		-2.6455E+000
	964.01	14.40	9.4113E-001		1.5619E-001
	1085.78	10.00	1.0083E+000		-1.9557E-001
	1112.02	13.30	7.2696E-001		-9.0647E-001
	1407.95	20.70	3.5015E-001		5.7513E-001
Eu-154	123.07	40.50	6.7974E-001	2.68E-001	1.4185E-001
	247.94	6.60	2.4218E+000		1.6387E-001
	591.81	4.83	2.3885E+000		2.2236E+000
	723.30	19.70	6.5270E-001		4.6926E-001
	756.87	4.33	2.6144E+000		-3.0467E+000
	873.19	11.50	9.1478E-001		-1.2928E-001
	996.32	10.30	9.8108E-001		1.5799E-001
	1004.76	17.90	5.4733E-001		-4.8280E-001
	1274.45	35.50	2.6818E-001		2.2669E-002
Eu-155	86.54	30.90	1.3849E+000	1.38E+000	2.3326E-001
	105.31	20.70	1.6463E+000		2.0072E-002
Am-241	59.54	35.90	1.7924E+000	1.79E+000	-5.7617E-001
Cm-243	228.19	10.56	1.5529E+000	1.12E+000	-6.4023E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1247E+000	1.12E+000	-1.6176E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/26/2006 1:07:40 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-179-F-
Sample Title: NOL-03-02-179-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/26/2006 12:57:50 PM
Live Time: 600.0 seconds
Real Time: 601.9 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-179-F-
Title: NOL-03-02-179-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	307	291.80	72.78	1.25	8.03E+002	95.57	3.25E+003
m	2	284-	307	300.05	74.84	1.26	1.32E+003	108.44	4.08E+003
	3	332-	347	340.00	84.83	1.39	5.64E+002	201.53	3.32E+003
	4	946-	964	954.81	238.58	1.04	2.26E+002	101.58	7.28E+002
	5	1398-	1418	1407.91	351.89	0.78	2.64E+002	66.48	2.44E+002
	6	2033-	2051	2042.90	510.69	0.59	1.58E+002	51.05	1.54E+002
	7	2325-	2340	2333.04	583.24	0.43	1.34E+002	45.01	1.31E+002
	8	2427-	2443	2437.39	609.34	0.90	1.82E+002	43.90	1.02E+002
	9	2641-	2654	2647.99	662.00	0.35	3.03E+001	35.64	1.09E+002
	10	3638-	3655	3644.24	911.14	1.51	9.46E+001	37.38	8.24E+001
	11	4473-	4489	4482.26	1120.71	0.40	5.67E+001	30.52	5.93E+001
	12	5830-	5860	5845.90	1461.72	2.13	1.28E+003	73.54	2.71E+001
	13	7053-	7068	7061.59	1765.74	1.42	4.44E+001	17.48	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: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.997	511.00*	100.00	2.15119E-001	7.54815E-002
K-40	0.971	1460.81*	10.67	2.14024E+001	2.12708E+000
Cs-137	0.996	661.65*	85.12	5.28248E-002	6.25369E-002
TL-208	0.751	277.35	6.80		
		510.84*	21.60	9.95919E-001	3.58791E-001
		583.14*	84.20	2.26610E-001	8.16982E-002
		860.37	12.46		
Pb-212	0.521	74.81* @	10.70	1.88684E+001	4.01130E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.49690E-001	2.61561E-001
Bi-214	0.988	609.31*	46.30	5.67034E-001	1.53845E-001
		1120.29*	15.10	6.31744E-001	3.46809E-001
		1764.49*	15.80	5.22044E-001	2.11890E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN	0.997	1.661708E-001	7.750044E-002
K-40	0.971	2.140241E+001	2.127081E+000
Cs-137	0.996	5.282483E-002	6.253693E-002
TL-208	0.751	2.266102E-001	8.136378E-002
Pb-212 @	0.521	5.496898E-001	2.615613E-001
Bi-214	0.988	5.606626E-001	1.171715E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.78	1.3380E+000	11.90
3	84.83	9.3969E-001	35.74
5	351.89	4.3961E-001	25.21
10	911.14	1.5762E-001	39.53

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:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	1.1287E-001	9.87E-002	1.2708E-002
		1332.49	100.00	9.8735E-002		8.6770E-002
	Nb-94	702.63	100.00	1.1402E-001	1.10E-001	-1.2631E-001
		871.10	100.00	1.0980E-001		5.3272E-002
	Ag-108m	79.20	7.10	6.7470E+000	1.39E-001	-7.2691E+000
		433.93	89.90	1.4209E-001		3.3385E-002
		614.37	90.40	1.4999E-001		-1.8564E-001
		722.95	90.50	1.3940E-001		8.7328E-002
	Sb-125	176.33	6.89	2.9503E+000	4.30E-001	5.4033E-001
		427.89	29.33	4.3003E-001		3.4561E-003
		463.38	10.35	1.1826E+000		6.8191E-001
		600.56	17.80	6.4675E-001		2.8611E-001
		606.64	5.02	2.8975E+000		6.0289E+000
		635.90	11.32	9.6100E-001		-3.7123E-001
	Cs-134	563.23	8.38	1.4248E+000	1.28E-001	4.6912E-001
		569.32	15.43	7.7899E-001		9.1147E-002
		604.70	97.60	1.3943E-001		1.0928E-003
		795.84	85.40	1.2801E-001		8.0912E-002
		801.93	8.73	1.1848E+000		-8.1391E-001
+	Cs-137	661.65*	85.12	1.0428E-001	1.04E-001	5.2825E-002
	Eu-152	121.78	28.40	9.9958E-001	3.22E-001	-8.3871E-003
		244.69	7.49	2.2617E+000		-7.9293E-001
		344.27	26.50	5.1342E-001		8.7476E-002
		778.89	12.74	8.6960E-001		-3.1840E-001
		867.32	4.16	2.6492E+000		-2.1224E-001
		964.01	14.40	9.1240E-001		4.1354E-001
		1085.78	10.00	9.8294E-001		2.0523E-001
		1112.02	13.30	8.1815E-001		1.5471E-001
		1407.95	20.70	3.2211E-001		-2.3215E-001
	Eu-154	123.07	40.50	6.8865E-001	2.80E-001	3.9468E-001
		247.94	6.60	2.4814E+000		6.5004E-001
		591.81	4.83	2.4374E+000		2.7672E+000
		723.30	19.70	6.4252E-001		6.5783E-001
		756.87	4.33	2.4432E+000		-1.3316E+000
		873.19	11.50	9.4416E-001		7.1069E-002
		996.32	10.30	9.8967E-001		4.3901E-001
		1004.76	17.90	5.5416E-001		-6.3064E-001
		1274.45	35.50	2.8013E-001		-4.5579E-002
	Eu-155	86.54	30.90	1.4452E+000	1.45E+000	2.5766E-001
		105.31	20.70	1.6741E+000		-1.2802E+000
	Am-241	59.54	35.90	1.8244E+000	1.82E+000	-1.1265E+000
	Cm-243	228.19	10.56	1.6325E+000	1.14E+000	8.7571E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1362E+000	1.14E+000	8.8598E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/27/2006 9:03:55 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-180-F-
Sample Title: NOL-03-02-180-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 8:53:53 PM
Live Time: 600.0 seconds
Real Time: 602.0 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-180-F-
Title: NOL-03-02-180-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	306	291.68	72.75	1.03	8.30E+002	96.54	2.73E+003
m	2	286-	306	300.39	74.93	1.03	1.35E+003	109.63	3.50E+003
	3	332-	345	339.19	84.63	0.71	4.32E+002	189.25	3.22E+003
	4	947-	962	954.02	238.38	1.21	3.50E+002	89.86	5.83E+002
	5	1173-	1190	1180.70	295.07	0.93	1.07E+002	68.71	3.43E+002
	6	1347-	1358	1352.18	337.95	0.44	8.95E+001	47.85	2.01E+002
	7	1399-	1416	1406.53	351.54	0.89	1.24E+002	60.08	2.50E+002
	8	2032-	2052	2041.03	510.22	0.81	1.87E+002	54.81	1.64E+002
	9	2323-	2341	2330.63	582.64	1.26	2.32E+002	49.86	1.22E+002
	10	2427-	2443	2435.07	608.76	0.87	1.52E+002	44.40	1.15E+002
	11	2638-	2651	2644.58	661.15	0.62	2.52E+001	30.61	7.68E+001
	12	3634-	3653	3642.86	910.80	1.20	1.84E+002	38.98	6.06E+001
M	13	3850-	3882	3857.23	964.40	1.79	4.41E+001	17.71	5.30E+001
m	14	3850-	3882	3872.84	968.31	1.79	1.08E+002	23.20	6.83E+001
	15	4472-	4487	4478.26	1119.71	0.59	5.56E+001	29.61	5.74E+001
	16	5504-	5515	5509.09	1377.49	0.39	1.62E+001	14.11	1.38E+001
	17	5827-	5855	5841.06	1460.51	2.20	1.23E+003	70.88	1.76E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.979	511.00*		100.00	2.54711E-001	8.23292E-002
K-40	0.997	1460.81*		10.67	2.06031E+001	2.04837E+000
Cs-137	0.991	661.65*		85.12	4.39107E-002	5.36699E-002
TL-208	0.744	277.35		6.80		
		510.84*		21.60	1.17922E+000	3.93131E-001
		583.14*		84.20	3.92268E-001	9.86264E-002
		860.37		12.46		
Pb-212	0.519	74.81*	@	10.70	1.93440E+001	4.10295E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	8.50216E-001	2.55883E-001
Bi-214	0.691	609.31*		46.30	4.74453E-001	1.50424E-001
		1120.29*		15.10	6.19767E-001	3.36518E-001
		1764.49		15.80		
PB-214	0.580	74.82*	@	6.21	3.33302E+001	7.47207E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	6.39579E-001	4.26140E-001
		351.92*		37.20	4.02802E-001	2.06873E-001
Ac-228	0.991	338.32*		11.40	9.40393E-001	5.23894E-001
		911.07*		27.70	1.05512E+000	2.54014E-001
		969.11*		16.60	1.05425E+000	2.51146E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.979	1.699811E-001	8.499587E-002
K-40		0.997	2.060311E+001	2.048372E+000
Cs-137		0.991	4.391071E-002	5.366987E-002
TL-208		0.744	3.922679E-001	9.779436E-002
Pb-212	@	0.519	8.502162E-001	2.558825E-001
Bi-214		0.691	4.986530E-001	1.373283E-001
PB-214	@	0.580	4.479611E-001	1.861029E-001
Ac-228		0.991	1.042780E+000	1.690401E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.75	1.3834E+000	11.63
3	84.63	7.2083E-001	43.76
M 13	964.40	7.3582E-002	40.11
16	1377.49	2.6944E-002	87.26

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:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	1.1992E-001	1.01E-001	1.5890E-002
		1332.49	100.00	1.0119E-001		8.7238E-002
	Nb-94	702.63	100.00	1.1688E-001	9.94E-002	9.6506E-002
		871.10	100.00	9.9441E-002		5.4927E-002
	Ag-108m	79.20	7.10	7.0474E+000	1.30E-001	-5.0012E+000
		433.93	89.90	1.3236E-001		-2.3174E-002
		614.37	90.40	1.3359E-001		-2.3873E-002
		722.95	90.50	1.3012E-001		9.8518E-002
	Sb-125	176.33	6.89	3.0131E+000	4.12E-001	-2.0297E-002
		427.89	29.33	4.1223E-001		-2.4953E-001
		463.38	10.35	1.1796E+000		5.3025E-001
		600.56	17.80	6.5238E-001		1.1722E-001
		606.64	5.02	2.8038E+000		4.1901E+000
		635.90	11.32	9.4716E-001		3.4506E-001
	Cs-134	563.23	8.38	1.2945E+000	1.25E-001	3.3453E-001
		569.32	15.43	7.1350E-001		-3.1683E-001
		604.70	97.60	1.4236E-001		-6.2071E-002
		795.84	85.40	1.2453E-001		8.3281E-002
		801.93	8.73	1.1362E+000		-8.8410E-002
+	Cs-137	661.65*	85.12	8.9641E-002	8.96E-002	4.3911E-002
	Eu-152	121.78	28.40	1.0336E+000	3.30E-001	-5.0817E-001
		244.69	7.49	2.2346E+000		-2.0416E+000
		344.27	26.50	4.9572E-001		-1.9501E-001
		778.89	12.74	7.6555E-001		-9.2156E-001
		867.32	4.16	2.3062E+000		-1.4334E+000
		964.01	14.40	9.4410E-001		-2.3639E-001
		1085.78	10.00	9.8294E-001		-1.4881E-002
		1112.02	13.30	7.7279E-001		-8.9521E-001
		1407.95	20.70	3.3001E-001		-5.3213E-002
	Eu-154	123.07	40.50	7.1545E-001	2.47E-001	-7.4499E-001
		247.94	6.60	2.5033E+000		-5.4219E-001
		591.81	4.83	2.3678E+000		4.0588E-001
		723.30	19.70	6.0223E-001		4.7122E-001
		756.87	4.33	2.4201E+000		-3.9583E-002
		873.19	11.50	8.3788E-001		-2.9435E-001
		996.32	10.30	9.9536E-001		4.0830E-001
		1004.76	17.90	5.2628E-001		-2.5082E-001
		1274.45	35.50	2.4690E-001		-1.9329E-001
	Eu-155	86.54	30.90	1.4966E+000	1.50E+000	6.7559E-001
		105.31	20.70	1.7350E+000		2.2180E-001
	Am-241	59.54	35.90	1.8377E+000	1.84E+000	1.3542E-001
	Cm-243	228.19	10.56	1.5961E+000	1.10E+000	8.3889E-003

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0954E+000	1.10E+000	-3.4034E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/27/2006 8:46:05 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-181-F-
Sample Title: NOL-03-02-181-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 8:36:02 PM
Live Time: 600.0 seconds
Real Time: 602.0 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-181-F-
Title: NOL-03-02-181-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	308	291.63	72.74	1.14	9.87E+002	99.28	3.47E+003
m	2	283-	308	300.15	74.87	1.14	1.61E+003	114.26	3.71E+003
	3	332-	345	340.00	84.83	0.94	4.15E+002	189.11	3.22E+003
	4	944-	960	954.17	238.42	1.08	3.85E+002	97.40	6.65E+002
	5	1344-	1359	1352.74	338.09	1.35	5.92E+001	59.16	2.83E+002
	6	1400-	1415	1406.41	351.52	0.75	1.55E+002	60.87	2.68E+002
	7	2030-	2051	2042.14	510.50	1.65	2.20E+002	61.17	2.01E+002
	8	2323-	2339	2331.17	582.77	1.13	1.86E+002	46.54	1.21E+002
	9	2426-	2446	2435.40	608.84	1.45	2.09E+002	51.85	1.34E+002
	10	3630-	3652	3642.38	910.68	1.77	1.98E+002	42.84	7.18E+001
	11	3866-	3881	3873.35	968.44	0.66	5.64E+001	35.11	8.76E+001
	12	4469-	4486	4477.92	1119.63	0.80	6.59E+001	31.01	5.51E+001
	13	5826-	5855	5841.41	1460.60	1.88	1.28E+003	73.14	2.26E+001
	14	7050-	7064	7056.66	1764.51	0.47	4.63E+001	16.54	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: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.991	511.00*	100.00	3.00535E-001	9.28279E-002
K-40	0.998	1460.81*	10.67	2.15414E+001	2.13221E+000
TL-208	0.748	277.35	6.80		
		510.84*	21.60	1.39137E+000	4.44527E-001
		583.14*	84.20	3.15132E-001	8.88018E-002
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	2.30867E+001	4.81175E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	9.35648E-001	2.78514E-001
Bi-214	0.992	609.31*	46.30	6.51001E-001	1.80663E-001
		1120.29*	15.10	7.34337E-001	3.54321E-001
		1764.49*	15.80	5.43639E-001	2.01739E-001
Ac-228	0.992	338.32*	11.40	6.22286E-001	6.29231E-001
		911.07*	27.70	1.13440E+000	2.77747E-001
		969.11*	16.60	5.48318E-001	3.46067E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN	0.991	2.324664E-001	9.476295E-002
K-40	0.998	2.154141E+001	2.132210E+000
TL-208	0.748	3.151322E-001	8.820592E-002
Pb-212 @	0.520	9.356478E-001	2.785144E-001
Bi-214	0.992	6.197519E-001	1.258141E-001
Ac-228	0.992	8.748568E-001	2.048147E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.74	1.6444E+000	10.06
3	84.83	6.9226E-001	45.53
6	351.52	2.5776E-001	39.36

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:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0872E-001	1.00E-001	5.1666E-002
	1332.49	100.00	1.0015E-001		3.4175E-002
Nb-94	702.63	100.00	1.1557E-001	1.08E-001	-2.3188E-002
	871.10	100.00	1.0801E-001		-1.8333E-002
Ag-108m	79.20	7.10	7.1382E+000	1.36E-001	-2.3164E+000
	433.93	89.90	1.4290E-001		-1.5696E-001
	614.37	90.40	1.4254E-001		9.0455E-003
	722.95	90.50	1.3554E-001		1.0902E-002
Sb-125	176.33	6.89	3.0560E+000	4.19E-001	1.2443E+000
	427.89	29.33	4.1945E-001		-1.4265E-001
	463.38	10.35	1.2925E+000		1.4988E+000
	600.56	17.80	6.4901E-001		3.6499E-001
	606.64	5.02	2.9850E+000		-9.1631E-002
	635.90	11.32	9.7075E-001		-1.3843E+000
Cs-134	563.23	8.38	1.4293E+000	1.30E-001	-1.8930E-003
	569.32	15.43	7.6929E-001		-3.1782E-002
	604.70	97.60	1.4707E-001		-6.8095E-002
	795.84	85.40	1.3028E-001		4.9877E-002
	801.93	8.73	1.1908E+000		-3.6237E-001
Cs-137	661.65	85.12	1.3892E-001	1.39E-001	3.4441E-002
Eu-152	121.78	28.40	1.0492E+000	3.43E-001	-7.8445E-001
	244.69	7.49	2.3390E+000		6.9118E-001
	344.27	26.50	5.1609E-001		-1.2172E-001
	778.89	12.74	8.3511E-001		-2.5042E-001
	867.32	4.16	2.5191E+000		2.9060E-001
	964.01	14.40	9.5296E-001		-2.7978E-002
	1085.78	10.00	1.0083E+000		-8.8599E-001
	1112.02	13.30	7.9807E-001		-4.0563E-001
	1407.95	20.70	3.4274E-001		-1.5880E-001
Eu-154	123.07	40.50	7.3624E-001	2.59E-001	3.3540E-001
	247.94	6.60	2.5419E+000		9.6124E-001
	591.81	4.83	2.4535E+000		-2.1785E-002
	723.30	19.70	6.2483E-001		2.0548E-002
	756.87	4.33	2.4716E+000		-1.9477E+000
	873.19	11.50	9.5081E-001		-5.0452E-003
	996.32	10.30	9.6365E-001		5.4497E-001
	1004.76	17.90	5.7741E-001		-5.6814E-002
	1274.45	35.50	2.5883E-001		2.0985E-001
Eu-155	86.54	30.90	1.4977E+000	1.50E+000	4.3702E-001
	105.31	20.70	1.7900E+000		1.3124E+000
Am-241	59.54	35.90	1.9004E+000	1.90E+000	-5.6973E-001
Cm-243	228.19	10.56	1.6991E+000	1.14E+000	1.9185E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1355E+000	1.14E+000	-1.8019E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/27/2006 8:25:32 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-182-F-
Sample Title: NOL-03-02-182-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 8:15:29 PM
Live Time: 600.0 seconds
Real Time: 602.0 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-182-F-
Title: NOL-03-02-182-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	308	291.32	72.66	1.07	8.48E+002	99.49	3.65E+003
m	2	283-	308	300.34	74.91	1.08	1.48E+003	113.36	3.66E+003
M	3	334-	356	339.70	84.76	1.24	5.84E+002	93.88	3.01E+003
m	4	334-	356	349.65	87.25	1.25	3.44E+002	86.80	3.76E+003
	5	947-	961	953.91	238.36	1.22	2.88E+002	89.19	6.17E+002
	6	1173-	1187	1180.01	294.90	0.98	8.80E+001	62.83	3.26E+002
	7	1346-	1357	1352.02	337.91	0.58	1.21E+002	48.50	1.96E+002
	8	1400-	1417	1406.84	351.62	0.54	1.23E+002	63.26	2.82E+002
	9	2034-	2050	2041.81	510.41	1.16	1.30E+002	54.28	2.03E+002
	10	2325-	2342	2331.17	582.78	1.31	1.97E+002	49.88	1.38E+002
	11	2422-	2446	2434.52	608.62	1.08	1.83E+002	58.53	1.72E+002
	12	2901-	2914	2906.39	726.62	0.75	4.59E+001	32.30	8.01E+001
	13	3634-	3653	3642.42	910.69	1.82	1.97E+002	40.93	6.77E+001
	14	3866-	3883	3873.48	968.47	0.58	8.90E+001	35.29	7.20E+001
	15	4471-	4487	4478.89	1119.87	1.38	6.90E+001	29.68	5.10E+001
	16	5322-	5334	5328.21	1332.26	0.56	4.00E+001	21.62	3.10E+001
	17	5826-	5854	5841.22	1460.55	1.99	1.17E+003	70.87	2.90E+001
	18	7050-	7063	7056.11	1764.37	0.73	4.09E+001	14.37	4.08E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.988	511.00*	100.00	1.76895E-001	7.78003E-002
K-40	0.998	1460.81*	10.67	1.96733E+001	1.98740E+000
Eu-155	0.323	86.54*	30.90	1.38184E+000	4.41576E-001
		105.31	20.70		
TL-208	0.748	277.35	6.80		
		510.84*	21.60	8.18959E-001	3.66343E-001
		583.14*	84.20	3.33290E-001	9.49095E-002
		860.37	12.46		
Bi-212	0.990	727.17*	11.80	5.89380E-001	4.20118E-001
Pb-212	0.675	74.81* @	10.70	2.11906E+001	4.45885E+000
		77.11 @	18.00		
		87.30* @	8.00	5.33736E+000	1.70559E+000
		238.63*	44.60	7.00132E-001	2.42975E-001
Bi-214	0.989	609.31*	46.30	5.72171E-001	1.95850E-001
		1120.29*	15.10	7.69112E-001	3.40740E-001
		1764.49*	15.80	4.80771E-001	1.75497E-001
PB-214	0.668	74.82* @	6.21	3.65121E+001	8.12707E+000
		77.11 @	10.50		
		87.30* @	4.67	9.14323E+000	3.00231E+000
		241.98	7.49		
		295.21*	19.20	5.27992E-001	3.87295E-001
		351.92*	37.20	4.00676E-001	2.16592E-001
Ac-228	0.992	338.32*	11.40	1.27440E+000	5.47300E-001
		911.07*	27.70	1.12900E+000	2.67851E-001
		969.11*	16.60	8.65166E-001	3.54821E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.988	1.049045E-001	8.042172E-002
K-40		0.998	1.967333E+001	1.987401E+000
Eu-155		0.323	1.135453E+000	4.469384E-001
TL-208		0.748	3.332903E-001	9.428596E-002
Bi-212		0.990	5.893804E-001	4.201178E-001
Pb-212	@	0.675	7.001323E-001	2.429749E-001
Bi-214		0.989	5.532384E-001	1.220308E-001
PB-214	@	0.668	4.309027E-001	1.880514E-001
Ac-228		0.992	1.065157E+000	1.991263E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.66	1.4129E+000	11.74
M 3	84.76	9.7374E-001	16.07
16	1332.26	6.6725E-002	54.00

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	1.1141E-001	1.04E-001	6.7340E-002
		1332.49	100.00	1.0427E-001		4.2941E-002
	Nb-94	702.63	100.00	1.1155E-001	1.09E-001	-2.5354E-002
		871.10	100.00	1.0904E-001		2.8657E-002
	Ag-108m	79.20	7.10	7.0597E+000	1.40E-001	-3.0980E+000
		433.93	89.90	1.4322E-001		-1.3553E-002
		614.37	90.40	1.4010E-001		-4.0342E-002
		722.95	90.50	1.4030E-001		-6.0305E-002
	Sb-125	176.33	6.89	3.0709E+000	4.39E-001	2.5733E-001
		427.89	29.33	4.3939E-001		-9.0623E-002
		463.38	10.35	1.2439E+000		-3.6297E-001
		600.56	17.80	6.7552E-001		8.7719E-002
		606.64	5.02	2.9819E+000		4.2644E-002
		635.90	11.32	9.9755E-001		-2.0982E-001
	Cs-134	563.23	8.38	1.4115E+000	1.39E-001	-1.2576E-001
		569.32	15.43	7.7051E-001		-1.5091E-001
		604.70	97.60	1.4640E-001		-2.5056E-002
		795.84	85.40	1.3898E-001		1.2625E-001
		801.93	8.73	1.2542E+000		-9.4136E-001
	Cs-137	661.65	85.12	1.4255E-001	1.43E-001	3.0057E-002
	Eu-152	121.78	28.40	1.0385E+000	3.62E-001	1.0437E-001
		244.69	7.49	2.2792E+000		-9.4068E-001
		344.27	26.50	5.4623E-001		4.5227E-001
		778.89	12.74	8.6016E-001		-2.1595E-001
		867.32	4.16	2.6188E+000		-3.7803E+000
		964.01	14.40	9.0623E-001		-2.9581E-001
		1085.78	10.00	1.0299E+000		1.7857E-001
		1112.02	13.30	7.3686E-001		-5.6260E-001
		1407.95	20.70	3.6212E-001		-1.0253E-001
	Eu-154	123.07	40.50	7.1875E-001	2.82E-001	-4.3702E-001
		247.94	6.60	2.5227E+000		-9.2652E-001
		591.81	4.83	2.4131E+000		9.3955E-001
		723.30	19.70	6.4252E-001		-1.0134E-002
		756.87	4.33	2.5768E+000		-1.4647E+000
		873.19	11.50	9.3971E-001		-4.0785E-001
		996.32	10.30	1.0451E+000		3.2669E-001
		1004.76	17.90	5.8066E-001		-2.0621E-001
		1274.45	35.50	2.8208E-001		9.6784E-002
+	Eu-155	86.54*	30.90	1.1576E+000	1.16E+000	1.3818E+000
		105.31	20.70	1.7526E+000		8.8921E-001
	Am-241	59.54	35.90	1.9248E+000	1.92E+000	5.6454E-001
	Cm-243	228.19	10.56	1.6790E+000	1.17E+000	1.3749E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1700E+000	1.17E+000	-3.4039E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/27/2006 7:19:57 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-183-F-
Sample Title: NOL-03-02-183-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 7:09:53 PM
Live Time: 600.0 seconds
Real Time: 601.7 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-183-F-
Title: NOL-03-02-183-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	306	291.53	72.71	1.07	7.19E+002	91.35	2.43E+003
m	2	286-	306	300.11	74.86	1.07	1.21E+003	103.91	3.13E+003
	3	331-	344	339.56	84.72	0.98	3.64E+002	171.60	2.65E+003
	4	948-	960	954.00	238.38	1.25	2.77E+002	69.87	3.77E+002
	5	1175-	1189	1179.80	294.85	0.70	1.18E+002	54.95	2.31E+002
	6	1346-	1356	1351.42	337.76	0.63	6.84E+001	40.37	1.50E+002
	7	1398-	1413	1406.38	351.51	1.12	1.35E+002	56.09	2.28E+002
	8	2034-	2052	2042.44	510.57	1.13	1.73E+002	55.81	1.89E+002
	9	2323-	2342	2330.93	582.72	1.49	2.00E+002	52.25	1.44E+002
	10	2424-	2442	2435.33	608.82	1.53	1.87E+002	45.44	1.04E+002
	11	2898-	2915	2906.61	726.68	0.33	7.73E+001	33.85	6.77E+001
	12	3634-	3653	3642.83	910.79	1.49	1.54E+002	39.33	7.12E+001
M	13	3852-	3884	3857.02	964.35	1.68	3.02E+001	16.30	4.80E+001
m	14	3852-	3884	3873.63	968.51	1.68	7.79E+001	20.99	6.90E+001
	15	4681-	4696	4688.11	1172.19	0.34	2.51E+001	25.53	4.79E+001
	16	5322-	5336	5328.45	1332.32	1.50	4.08E+001	21.68	2.82E+001
	17	5828-	5854	5841.65	1460.66	1.90	1.12E+003	71.46	4.72E+001
	18	7051-	7064	7057.69	1764.76	0.75	3.80E+001	17.14	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: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.994	511.00*		100.00	2.36423E-001	8.25875E-002
K-40	0.999	1460.81*		10.67	1.88316E+001	1.93932E+000
Co-60	0.981	1173.22*		100.00	4.27795E-002	4.36707E-002
		1332.49*		100.00	7.16823E-002	3.85205E-002
TL-208	0.747	277.35		6.80		
		510.84*		21.60	1.09455E+000	3.92659E-001
		583.14*		84.20	3.37942E-001	9.87570E-002
		860.37		12.46		
Bi-212	0.992	727.17*		11.80	9.91672E-001	4.49591E-001
Pb-212	0.519	74.81*	@	10.70	1.73577E+001	3.71341E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.74111E-001	2.00025E-001
Bi-214	0.693	609.31*		46.30	5.84410E-001	1.59091E-001
		1120.29		15.10		
		1764.49*		15.80	4.46459E-001	2.06301E-001
PB-214	0.579	74.82*	@	6.21	2.99078E+001	6.75662E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	7.10637E-001	3.50674E-001
		351.92*		37.20	4.41078E-001	1.96937E-001
Ac-228	0.993	338.32*		11.40	7.17948E-001	4.38696E-001
		911.07*		27.70	8.80057E-001	2.46823E-001
		969.11*		16.60	7.56880E-001	2.18925E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.994	1.634277E-001	8.526469E-002
K-40		0.999	1.883156E+001	1.939316E+000
Co-60		0.981	5.903492E-002	2.888822E-002
TL-208		0.747	3.379416E-001	9.814102E-002
Bi-212		0.992	9.916724E-001	4.495909E-001
Pb-212	@	0.519	6.741111E-001	2.000251E-001
Bi-214		0.693	5.329657E-001	1.259819E-001
PB-214	@	0.579	5.057097E-001	1.717118E-001
Ac-228		0.993	7.997191E-001	1.534376E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F 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	1.1976E+000	12.71
3	84.72	6.0647E-001	47.16
M 13	964.35	5.0400E-002	53.92

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:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
+	Co-60	1173.22*	100.00	7.2084E-002	5.70E-002	4.2780E-002
		1332.49*	100.00	5.6986E-002		7.1682E-002
	Nb-94	702.63	100.00	1.1601E-001	1.00E-001	4.6011E-002
		871.10	100.00	1.0000E-001		-3.1829E-002
	Ag-108m	79.20	7.10	6.5982E+000	1.29E-001	-3.5107E+000
		433.93	89.90	1.2883E-001		-1.5487E-002
		614.37	90.40	1.2987E-001		-1.8288E-001
		722.95	90.50	1.3108E-001		-2.3444E-002
	Sb-125	176.33	6.89	2.6780E+000	3.96E-001	7.7938E-001
		427.89	29.33	3.9632E-001		-4.9903E-001
		463.38	10.35	1.1857E+000		5.7244E-001
		600.56	17.80	6.0092E-001		-1.3185E-001
		606.64	5.02	2.7373E+000		2.9550E+000
		635.90	11.32	9.1472E-001		2.5653E-001
	Cs-134	563.23	8.38	1.3259E+000	1.25E-001	-1.5309E+000
		569.32	15.43	7.5698E-001		5.9307E-001
		604.70	97.60	1.4116E-001		-4.9398E-003
		795.84	85.40	1.2453E-001		-1.0062E-001
		801.93	8.73	1.2258E+000		-3.6615E-002
	Cs-137	661.65	85.12	1.3768E-001	1.38E-001	1.4217E-001
	Eu-152	121.78	28.40	9.4113E-001	3.40E-001	1.1958E-001
		244.69	7.49	2.0382E+000		-2.4407E-002
		344.27	26.50	4.8827E-001		2.6943E-001
		778.89	12.74	8.0722E-001		-4.0641E-001
		867.32	4.16	2.5127E+000		-1.9588E+000
		964.01	14.40	8.7471E-001		-1.6778E-001
		1085.78	10.00	1.0299E+000		-1.4749E-001
		1112.02	13.30	8.1594E-001		-1.6547E+000
		1407.95	20.70	3.4024E-001		-3.5746E-001
	Eu-154	123.07	40.50	6.5280E-001	2.77E-001	-2.3963E-001
		247.94	6.60	2.2101E+000		-1.5286E+000
		591.81	4.83	2.2613E+000		-3.3013E-001
		723.30	19.70	6.0878E-001		1.4805E-002
		756.87	4.33	2.5165E+000		2.1322E+000
		873.19	11.50	8.7721E-001		3.8595E-002
		996.32	10.30	9.2163E-001		2.2927E-001
		1004.76	17.90	5.2806E-001		-5.7239E-002
		1274.45	35.50	2.7720E-001		2.0514E-001
	Eu-155	86.54	30.90	1.3645E+000	1.36E+000	1.1049E-001
		105.31	20.70	1.6008E+000		-3.7980E-001
	Am-241	59.54	35.90	1.7916E+000	1.79E+000	5.0689E-002
	Cm-243	228.19	10.56	1.4596E+000	1.02E+000	-4.0186E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0167E+000	1.02E+000	-2.9687E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/27/2006 7:04:39 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-184-F-
Sample Title: NOL-03-02-184-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 6:54:36 PM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-184-F-
Title: NOL-03-02-184-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	308	291.76	72.77	1.12	6.05E+002	87.55	2.91E+003
m	2	284-	308	300.29	74.90	1.12	1.25E+003	103.33	3.38E+003
	3	332-	345	339.30	84.66	1.21	2.89E+002	171.34	2.66E+003
	4	947-	960	954.15	238.42	1.15	2.72E+002	74.10	4.20E+002
	5	1175-	1183	1179.91	294.87	1.15	5.74E+001	36.76	1.37E+002
	6	1398-	1413	1406.65	351.58	1.36	1.39E+002	48.54	1.58E+002
	7	1521-	1531	1525.93	381.40	0.68	2.71E+001	31.38	9.59E+001
	8	2031-	2052	2041.72	510.39	1.56	1.91E+002	52.46	1.40E+002
	9	2324-	2340	2330.70	582.66	1.66	2.22E+002	41.90	7.54E+001
	10	2423-	2442	2435.27	608.81	1.23	1.34E+002	46.46	1.22E+002
	11	2713-	2725	2719.75	679.95	0.52	2.54E+001	24.22	4.76E+001
	12	2901-	2914	2907.46	726.89	0.86	4.63E+001	25.29	4.37E+001
	13	3633-	3653	3642.94	910.82	1.58	1.74E+002	38.86	6.05E+001
	14	3865-	3882	3873.83	968.56	1.26	9.25E+001	33.36	6.05E+001
	15	5828-	5856	5841.62	1460.65	1.77	1.13E+003	68.95	2.44E+001
	16	7049-	7067	7058.37	1764.93	0.38	5.96E+001	16.87	4.38E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.987	511.00*		100.00	2.60282E-001	7.97593E-002
K-40	0.999	1460.81*		10.67	1.89118E+001	1.91881E+000
TL-208	0.745	277.35		6.80		
		510.84*		21.60	1.20501E+000	3.82145E-001
		583.14*		84.20	3.74906E-001	8.60802E-002
		860.37		12.46		
Bi-212	0.997	727.17*		11.80	5.94056E-001	3.31880E-001
Pb-212	0.520	74.81*	@	10.70	1.78824E+001	3.80416E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.60423E-001	2.07748E-001
Bi-214	0.692	609.31*		46.30	4.19277E-001	1.53975E-001
		1120.29		15.10		
		1764.49*		15.80	7.00451E-001	2.10176E-001
PB-214	0.580	74.82*	@	6.21	3.08119E+001	6.92579E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	3.44611E-001	2.28050E-001
		351.92*		37.20	4.52454E-001	1.75204E-001
Ac-228	0.629	338.32		11.40		
		911.07*		27.70	9.93150E-001	2.50048E-001
		969.11*		16.60	8.98769E-001	3.37754E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.987	1.793025E-001	8.185536E-002
K-40		0.999	1.891180E+001	1.918814E+000
TL-208		0.745	3.749058E-001	8.520876E-002
Bi-212		0.997	5.940561E-001	3.318803E-001
Pb-212	@	0.520	6.604233E-001	2.077478E-001
Bi-214		0.692	5.174785E-001	1.242096E-001
PB-214	@	0.580	4.124265E-001	1.389353E-001
Ac-228		0.629	9.597350E-001	2.009679E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F 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	1.0086E+000	14.47
3	84.66	4.8145E-001	59.31
7	381.40	4.5102E-002	115.95
11	679.95	4.2283E-002	95.46

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0376E-001	9.09E-002	3.7896E-002
	1332.49	100.00	9.0936E-002		6.0688E-002
Nb-94	702.63	100.00	9.7671E-002	9.46E-002	1.5413E-002
	871.10	100.00	9.4556E-002		-3.7266E-002
Ag-108m	79.20	7.10	6.5065E+000	1.21E-001	-8.0260E+000
	433.93	89.90	1.2069E-001		2.4911E-002
	614.37	90.40	1.2673E-001		5.8472E-002
	722.95	90.50	1.2114E-001		8.6262E-002
Sb-125	176.33	6.89	2.6367E+000	3.67E-001	1.5237E+000
	427.89	29.33	3.6704E-001		8.8805E-002
	463.38	10.35	1.0628E+000		7.8453E-001
	600.56	17.80	5.8982E-001		2.6674E-001
	606.64	5.02	2.6726E+000		3.2020E+000
	635.90	11.32	9.1678E-001		2.6682E-001
Cs-134	563.23	8.38	1.2082E+000	1.19E-001	-6.5057E-001
	569.32	15.43	6.6566E-001		2.9321E-001
	604.70	97.60	1.3732E-001		4.4630E-002
	795.84	85.40	1.1910E-001		1.1001E-001
	801.93	8.73	1.1268E+000		-1.5328E-001
Cs-137	661.65	85.12	1.2763E-001	1.28E-001	-8.3408E-002
Eu-152	121.78	28.40	9.2407E-001	3.40E-001	4.3122E-002
	244.69	7.49	1.9244E+000		-4.4851E-001
	344.27	26.50	4.3612E-001		-4.4077E-003
	778.89	12.74	7.7195E-001		-4.4365E-001
	867.32	4.16	2.3476E+000		3.9872E-002
	964.01	14.40	8.6988E-001		4.1194E-001
	1085.78	10.00	9.4022E-001		-6.6897E-001
	1112.02	13.30	7.0929E-001		-5.5153E-001
	1407.95	20.70	3.4024E-001		1.4552E-001
Eu-154	123.07	40.50	6.3790E-001	2.51E-001	-3.4731E-001
	247.94	6.60	2.0616E+000		-1.8551E+000
	591.81	4.83	2.0262E+000		4.2989E-001
	723.30	19.70	5.6247E-001		9.8839E-001
	756.87	4.33	2.3197E+000		1.3534E+000
	873.19	11.50	8.2005E-001		-3.1695E-001
	996.32	10.30	9.3988E-001		1.2176E-001
	1004.76	17.90	5.3162E-001		-1.9386E-001
	1274.45	35.50	2.5131E-001		-1.4595E-001
Eu-155	86.54	30.90	1.3535E+000	1.35E+000	6.9983E-001
	105.31	20.70	1.5578E+000		3.0045E-001
Am-241	59.54	35.90	1.7577E+000	1.76E+000	2.1803E-001
Cm-243	228.19	10.56	1.4306E+000	9.66E-001	4.6981E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.6630E-001	9.66E-001	-7.8688E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/27/2006 6:29:03 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-185-F-
Sample Title: NOL-03-02-185-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 6:19:00 PM
Live Time: 600.0 seconds
Real Time: 601.8 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-185-F-
Title: NOL-03-02-185-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	307	291.43	72.69	1.15	7.31E+002	93.84	2.75E+003
m	2	286-	307	300.10	74.85	1.15	1.40E+003	108.55	3.65E+003
	3	332-	345	340.16	84.87	1.00	2.69E+002	178.20	2.88E+003
	4	947-	960	954.07	238.40	1.13	3.08E+002	78.89	4.76E+002
	5	1174-	1190	1180.65	295.06	1.34	8.92E+001	62.91	3.00E+002
	6	1343-	1358	1351.63	337.82	0.66	1.08E+002	50.61	1.86E+002
	7	1400-	1417	1406.88	351.63	1.45	1.65E+002	58.78	2.25E+002
	8	2034-	2053	2042.05	510.47	1.39	1.97E+002	52.53	1.49E+002
	9	2324-	2338	2331.27	582.80	1.46	1.55E+002	41.26	1.00E+002
	10	2425-	2446	2435.66	608.91	1.64	1.45E+002	52.71	1.52E+002
	11	2902-	2914	2908.08	727.05	0.39	3.11E+001	27.80	6.29E+001
	12	3635-	3653	3643.54	910.97	1.28	1.36E+002	39.20	7.84E+001
	13	3869-	3882	3874.31	968.68	0.83	8.25E+001	31.37	6.25E+001
	14	4472-	4487	4480.92	1120.38	0.56	4.90E+001	25.93	4.20E+001
	15	5323-	5336	5328.99	1332.46	0.33	4.51E+001	19.31	1.89E+001
	16	5827-	5856	5842.12	1460.78	2.10	1.18E+003	69.74	1.87E+001
	17	7052-	7068	7059.84	1765.30	0.41	4.45E+001	20.45	2.05E+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: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.990	511.00*		100.00	2.68571E-001	8.03578E-002
K-40	1.000	1460.81*		10.67	1.97460E+001	1.98088E+000
TL-208	0.748	277.35		6.80		
		510.84*		21.60	1.24338E+000	3.85636E-001
		583.14*		84.20	2.62277E-001	7.77276E-002
		860.37		12.46		
Bi-212	0.999	727.17*		11.80	3.98400E-001	3.59743E-001
Pb-212	0.520	74.81*	@	10.70	2.00924E+001	4.23394E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.47582E-001	2.24734E-001
Bi-214	0.992	609.31*		46.30	4.51169E-001	1.73706E-001
		1120.29*		15.10	5.46314E-001	2.94840E-001
		1764.49*		15.80	5.22632E-001	2.45868E-001
PB-214	0.581	74.82*	@	6.21	3.46198E+001	7.71595E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	5.35285E-001	3.88106E-001
		351.92*		37.20	5.38042E-001	2.11465E-001
Ac-228	0.996	338.32*		11.40	1.13369E+000	5.60529E-001
		911.07*		27.70	7.75966E-001	2.41437E-001
		969.11*		16.60	8.02399E-001	3.16318E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.990	2.119191E-001	8.207217E-002
K-40		1.000	1.974602E+001	1.980879E+000
TL-208		0.748	2.622768E-001	7.725619E-002
Bi-212		0.999	3.983997E-001	3.597427E-001
Pb-212	@	0.520	7.475815E-001	2.247336E-001
Bi-214		0.992	4.883772E-001	1.278408E-001
PB-214	@	0.581	5.374110E-001	1.856901E-001
Ac-228		0.996	8.222112E-001	1.815718E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.69	1.2191E+000	12.83
3	84.87	4.4825E-001	66.26
15	1332.46	7.5247E-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:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1518E-001	9.25E-002	3.7457E-002
	1332.49	100.00	9.2475E-002		6.9454E-002
Nb-94	702.63	100.00	1.1177E-001	1.01E-001	-3.9382E-002
	871.10	100.00	1.0083E-001		-1.0413E-002
Ag-108m	79.20	7.10	6.6318E+000	1.30E-001	-4.2045E+000
	433.93	89.90	1.3114E-001		-3.7007E-002
	614.37	90.40	1.3444E-001		1.6621E-002
	722.95	90.50	1.3012E-001		-4.9213E-002
Sb-125	176.33	6.89	2.7422E+000	4.17E-001	7.1960E-002
	427.89	29.33	4.1740E-001		2.8051E-001
	463.38	10.35	1.1641E+000		6.6600E-002
	600.56	17.80	6.1659E-001		-4.4058E-001
	606.64	5.02	2.7907E+000		-2.7322E-001
	635.90	11.32	9.0224E-001		1.1082E-001
Cs-134	563.23	8.38	1.2797E+000	1.26E-001	-9.7144E-001
	569.32	15.43	6.9205E-001		-4.8042E-001
	604.70	97.60	1.3873E-001		-1.6269E-002
	795.84	85.40	1.2570E-001		7.2153E-002
	801.93	8.73	1.0982E+000		-9.1355E-001
Cs-137	661.65	85.12	1.3965E-001	1.40E-001	3.6056E-002
Eu-152	121.78	28.40	9.7875E-001	3.38E-001	7.8614E-001
	244.69	7.49	2.1337E+000		-3.2997E-001
	344.27	26.50	4.7542E-001		-6.1654E-002
	778.89	12.74	7.7618E-001		-8.1847E-001
	867.32	4.16	2.4284E+000		-2.6763E+000
	964.01	14.40	9.2764E-001		-5.2873E-001
	1085.78	10.00	9.9886E-001		-2.5063E-001
	1112.02	13.30	8.1151E-001		1.1664E-001
	1407.95	20.70	3.3771E-001		-8.3072E-004
Eu-154	123.07	40.50	6.7834E-001	2.89E-001	-3.5945E-001
	247.94	6.60	2.2767E+000		4.6908E-001
	591.81	4.83	2.4049E+000		1.9800E+000
	723.30	19.70	6.0003E-001		2.0255E-001
	756.87	4.33	2.5768E+000		2.3532E+000
	873.19	11.50	8.5532E-001		-2.1674E-001
	996.32	10.30	9.4886E-001		2.6085E-001
	1004.76	17.90	5.7252E-001		4.5324E-001
	1274.45	35.50	2.8876E-001		1.6604E-001
Eu-155	86.54	30.90	1.3935E+000	1.39E+000	1.4761E-001
	105.31	20.70	1.6114E+000		5.2791E-002
Am-241	59.54	35.90	1.7885E+000	1.79E+000	-1.0427E+000
Cm-243	228.19	10.56	1.5175E+000	1.01E+000	5.8256E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0088E+000	1.01E+000	-4.9128E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/26/2006 4:21:37 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-186-F-
Sample Title: NOL-03-02-186-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/26/2006 4:11:32 PM
Live Time: 600.0 seconds
Real Time: 601.8 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-186-F-
Title: NOL-03-02-186-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	283-	305	291.49	72.70	1.06	7.89E+002	92.93	3.07E+003
m	2	283-	305	300.19	74.88	1.06	1.12E+003	104.14	3.09E+003
	3	331-	346	339.54	84.72	1.09	5.03E+002	196.91	3.18E+003
	4	944-	960	954.34	238.46	1.18	2.74E+002	87.41	5.48E+002
	5	1176-	1188	1180.00	294.90	0.58	5.53E+001	51.91	2.44E+002
	6	1345-	1359	1351.87	337.88	1.01	6.25E+001	51.65	2.19E+002
	7	1397-	1414	1407.37	351.76	1.05	1.65E+002	58.95	2.27E+002
	8	2031-	2051	2042.57	510.60	1.73	1.61E+002	57.08	1.87E+002
	9	2321-	2342	2330.89	582.70	0.68	2.27E+002	50.32	1.15E+002
	10	2429-	2441	2435.41	608.84	1.00	1.43E+002	38.32	9.11E+001
	11	3633-	3652	3643.02	910.84	1.17	1.38E+002	37.47	6.50E+001
	12	3866-	3882	3874.24	968.66	1.26	6.40E+001	34.99	8.10E+001
	13	4473-	4487	4479.46	1120.01	0.35	4.83E+001	26.98	4.88E+001
	14	5828-	5856	5842.78	1460.94	2.09	1.15E+003	71.18	3.63E+001
	15	7051-	7066	7057.89	1764.81	0.42	3.73E+001	18.66	1.78E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.995	511.00*		100.00	2.20061E-001	8.33677E-002
K-40	0.999	1460.81*		10.67	1.93002E+001	1.96647E+000
TL-208	0.747	277.35		6.80		
		510.84*		21.60	1.01880E+000	3.94828E-001
		583.14*		84.20	3.83737E-001	9.87188E-002
		860.37		12.46		
Pb-212	0.520	74.81*	@	10.70	1.60873E+001	3.48789E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.66125E-001	2.36753E-001
Bi-214	0.994	609.31*		46.30	4.46167E-001	1.31671E-001
		1120.29*		15.10	5.37841E-001	3.06074E-001
		1764.49*		15.80	4.37650E-001	2.23591E-001
PB-214	0.581	74.82*	@	6.21	2.77189E+001	6.33765E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	3.31467E-001	3.16383E-001
		351.92*		37.20	5.36325E-001	2.11881E-001
Ac-228	0.996	338.32*		11.40	6.56682E-001	5.52270E-001
		911.07*		27.70	7.89986E-001	2.32905E-001
		969.11*		16.60	6.21759E-001	3.46315E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.995	1.371743E-001	8.600908E-002
K-40		0.999	1.930018E+001	1.966473E+000
TL-208		0.747	3.837368E-001	9.792350E-002
Pb-212	@	0.520	6.661246E-001	2.367530E-001
Bi-214		0.994	4.553143E-001	1.063852E-001
PB-214	@	0.581	4.728948E-001	1.760492E-001
Ac-228		0.996	7.287671E-001	1.824174E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.70	1.3142E+000	11.79
3	84.72	8.3763E-001	39.18

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1258E-001	9.91E-002	-5.4512E-002
	1332.49	100.00	9.9090E-002		8.5060E-002
Nb-94	702.63	100.00	1.1177E-001	1.05E-001	9.4740E-003
	871.10	100.00	1.0515E-001		2.9988E-004
Ag-108m	79.20	7.10	6.7231E+000	1.26E-001	-1.7962E+001
	433.93	89.90	1.2575E-001		5.0764E-002
	614.37	90.40	1.3444E-001		-2.6085E-001
	722.95	90.50	1.3345E-001		1.9191E-001
Sb-125	176.33	6.89	2.7844E+000	3.96E-001	2.1772E+000
	427.89	29.33	3.9577E-001		7.9183E-002
	463.38	10.35	1.0848E+000		5.2409E-001
	600.56	17.80	6.2836E-001		-1.2633E-001
	606.64	5.02	2.7940E+000		4.1846E+000
	635.90	11.32	9.4317E-001		-6.4698E-001
Cs-134	563.23	8.38	1.3139E+000	1.27E-001	-5.7576E-001
	569.32	15.43	7.1085E-001		-2.6474E-001
	604.70	97.60	1.3960E-001		-1.1474E-001
	795.84	85.40	1.2657E-001		1.2537E-001
	801.93	8.73	1.1668E+000		4.1581E-001
Cs-137	661.65	85.12	1.3518E-001	1.35E-001	1.9330E-002
Eu-152	121.78	28.40	9.7563E-001	3.38E-001	-3.5299E-001
	244.69	7.49	2.1304E+000		-5.9435E-001
	344.27	26.50	4.8022E-001		-8.8946E-002
	778.89	12.74	8.0722E-001		-2.7460E-001
	867.32	4.16	2.6492E+000		-1.1146E+000
	964.01	14.40	8.9533E-001		1.4017E-001
	1085.78	10.00	1.0541E+000		5.3868E-002
	1112.02	13.30	8.0482E-001		2.4216E-001
	1407.95	20.70	3.3771E-001		3.0522E-001
Eu-154	123.07	40.50	6.7665E-001	2.83E-001	-1.0147E-001
	247.94	6.60	2.2646E+000		-9.1263E-001
	591.81	4.83	2.3636E+000		3.1074E+000
	723.30	19.70	6.0878E-001		7.3635E-001
	756.87	4.33	2.4432E+000		-3.0838E-001
	873.19	11.50	8.9855E-001		1.7065E-003
	996.32	10.30	9.6949E-001		-4.8829E-001
	1004.76	17.90	5.7741E-001		2.1372E-001
	1274.45	35.50	2.8304E-001		-6.1010E-002
Eu-155	86.54	30.90	1.4034E+000	1.40E+000	2.8234E-001
	105.31	20.70	1.6531E+000		1.1695E+000
Am-241	59.54	35.90	1.8070E+000	1.81E+000	-4.1734E-001
Cm-243	228.19	10.56	1.4866E+000	1.03E+000	-1.3323E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0252E+000	1.03E+000	2.1254E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/27/2006 1:22:29 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-187-F-
Sample Title: NOL-03-02-187-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 1:12:26 PM
Live Time: 600.0 seconds
Real Time: 601.9 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-187-F-
Title: NOL-03-02-187-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	308	300.72	75.01	1.15	9.79E+002	203.08	3.66E+003
2	331-	344	339.28	84.65	0.71	3.36E+002	189.32	3.25E+003
3	945-	964	954.95	238.62	0.66	3.26E+002	108.68	7.80E+002
4	1397-	1415	1407.46	351.78	1.23	1.87E+002	65.07	2.71E+002
5	2032-	2054	2042.96	510.70	1.47	2.10E+002	59.65	1.84E+002
6	2324-	2344	2332.67	583.15	1.11	1.58E+002	51.58	1.46E+002
7	2426-	2448	2438.23	609.55	1.91	2.07E+002	47.09	9.52E+001
8	3635-	3656	3644.83	911.29	1.65	1.76E+002	38.39	5.50E+001
9	3869-	3885	3875.70	969.02	1.72	6.67E+001	32.09	6.43E+001
10	5829-	5860	5844.86	1461.46	2.26	1.18E+003	72.15	3.56E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.997	511.00*		100.00	2.85887E-001	9.01063E-002
K-40	0.985	1460.81*		10.67	1.97662E+001	2.00642E+000
TL-208	0.752	277.35		6.80		
		510.84*		21.60	1.32355E+000	4.30935E-001
		583.14*		84.20	2.66819E-001	9.39537E-002
		860.37		12.46		
Pb-212	0.520	74.81*	@	10.70	1.39869E+001	3.99120E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.91503E-001	2.91913E-001
Bi-214	0.397	609.31*		46.30	6.45878E-001	1.67203E-001
		1120.29		15.10		
		1764.49		15.80		
Ac-228	0.633	338.32		11.40		
		911.07*		27.70	1.00736E+000	2.48414E-001
		969.11*		16.60	6.48834E-001	3.19330E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN	0.997	2.282538E-001	9.234426E-002
K-40	0.985	1.976618E+001	2.006422E+000
TL-208	0.752	2.668194E-001	9.355044E-002
Pb-212 @	0.520	7.915032E-001	2.919128E-001
Bi-214	0.397	6.458778E-001	1.672026E-001
Ac-228	0.633	8.721906E-001	1.960723E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	5.5994E-001	56.35
4	351.78	3.1183E-001	34.78

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:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0565E-001	8.41E-002	6.9852E-002
	1332.49	100.00	8.4063E-002		3.2009E-002
Nb-94	702.63	100.00	1.0994E-001	1.01E-001	-5.4698E-002
	871.10	100.00	1.0111E-001		4.4232E-002
Ag-108m	79.20	7.10	7.1003E+000	1.27E-001	-9.4972E+000
	433.93	89.90	1.2972E-001		5.2939E-002
	614.37	90.40	1.3803E-001		1.2674E-003
	722.95	90.50	1.2745E-001		6.3709E-002
Sb-125	176.33	6.89	3.0627E+000	4.11E-001	1.2630E+000
	427.89	29.33	4.1119E-001		-1.1964E-001
	463.38	10.35	1.1547E+000		7.2702E-001
	600.56	17.80	6.1659E-001		2.6590E-001
	606.64	5.02	2.7708E+000		-4.3397E-001
	635.90	11.32	9.2906E-001		6.3965E-001
Cs-134	563.23	8.38	1.3163E+000	1.26E-001	-5.0972E-002
	569.32	15.43	6.9613E-001		-8.7271E-001
	604.70	97.60	1.3003E-001		-2.3221E-003
	795.84	85.40	1.2628E-001		5.3728E-002
	801.93	8.73	1.1759E+000		-7.0418E-001
Cs-137	661.65	85.12	1.2655E-001	1.27E-001	-3.7293E-002
Eu-152	121.78	28.40	1.0462E+000	3.50E-001	-5.1135E-001
	244.69	7.49	2.3149E+000		-1.1688E+000
	344.27	26.50	5.1387E-001		-2.0573E-001
	778.89	12.74	7.7407E-001		-5.2742E-001
	867.32	4.16	2.3884E+000		-3.3257E+000
	964.01	14.40	9.0002E-001		4.8392E-001
	1085.78	10.00	9.8934E-001		-1.0820E-001
	1112.02	13.30	7.1184E-001		-4.0855E-001
	1407.95	20.70	3.5015E-001		-1.7789E-001
Eu-154	123.07	40.50	7.2578E-001	2.52E-001	-9.3117E-002
	247.94	6.60	2.5335E+000		6.4679E-002
	591.81	4.83	2.2916E+000		1.7319E-001
	723.30	19.70	5.8327E-001		2.1144E-001
	756.87	4.33	2.3497E+000		9.1557E-002
	873.19	11.50	8.7961E-001		-1.1038E-001
	996.32	10.30	9.6365E-001		-8.1496E-001
	1004.76	17.90	5.7087E-001		3.9636E-001
	1274.45	35.50	2.5240E-001		-3.2609E-001
Eu-155	86.54	30.90	1.5048E+000	1.50E+000	3.0599E-003
	105.31	20.70	1.7452E+000		3.7983E-001
Am-241	59.54	35.90	1.8914E+000	1.89E+000	3.8591E-001
Cm-243	228.19	10.56	1.6682E+000	1.13E+000	1.3532E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1349E+000	1.13E+000	6.6244E-003

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/27/2006 10:28:20 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-188-F-
Sample Title: NOL-03-02-188-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 10:18:17 AM
Live Time: 600.0 seconds
Real Time: 602.0 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-188-F-
Title: NOL-03-02-188-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	308	291.63	72.74	1.38	8.18E+002	101.46	3.80E+003
m	2	283-	308	300.57	74.97	1.38	1.50E+003	114.33	4.74E+003
	3	331-	345	339.33	84.66	1.12	3.33E+002	195.05	3.31E+003
	4	947-	964	954.83	238.59	1.60	3.22E+002	95.64	6.31E+002
	5	1342-	1358	1352.18	337.95	0.84	9.99E+001	60.62	2.74E+002
	6	2034-	2052	2043.36	510.80	0.46	2.01E+002	58.41	2.02E+002
	7	2325-	2341	2333.52	583.36	1.47	2.04E+002	48.04	1.27E+002
	8	2430-	2444	2437.92	609.47	1.51	1.96E+002	44.37	1.10E+002
	9	3636-	3655	3646.03	911.59	0.64	1.40E+002	40.51	8.22E+001
	10	3868-	3887	3876.65	969.26	0.79	9.36E+001	37.85	7.94E+001
	11	4474-	4491	4484.48	1121.27	1.20	7.11E+001	32.60	6.29E+001
	12	5136-	5147	5141.38	1285.54	0.84	1.41E+001	15.99	1.99E+001
	13	5326-	5342	5333.27	1333.53	0.38	7.62E+001	22.94	1.88E+001
	14	5833-	5862	5847.21	1462.05	1.89	1.18E+003	71.76	3.31E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.999	511.00*		100.00	2.73710E-001	8.78835E-002
K-40	0.948	1460.81*		10.67	1.98763E+001	2.00965E+000
TL-208	0.751	277.35		6.80		
		510.84*		21.60	1.26718E+000	4.19822E-001
		583.14*		84.20	3.45357E-001	9.29100E-002
		860.37		12.46		
Pb-212	0.520	74.81*	@	10.70	2.14978E+001	4.51937E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.82599E-001	2.62892E-001
Bi-214	0.692	609.31*		46.30	6.11724E-001	1.57726E-001
		1120.29*		15.10	7.93065E-001	3.73157E-001
		1764.49		15.80		
Ac-228	0.994	338.32*		11.40	1.04931E+000	6.57722E-001
		911.07*		27.70	8.00397E-001	2.49493E-001
		969.11*		16.60	9.09661E-001	3.80140E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN	0.999	1.991134E-001	9.011292E-002
K-40	0.948	1.987635E+001	2.009647E+000
TL-208	0.751	3.453565E-001	9.222574E-002
Pb-212 @	0.520	7.825992E-001	2.628916E-001
Bi-214	0.692	6.392115E-001	1.452813E-001
Ac-228	0.994	8.530322E-001	1.988235E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.74	1.3629E+000	12.41
3	84.66	5.5571E-001	58.50
12	1285.54	2.3554E-002	113.13
13	1333.53	1.2697E-001	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:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1827E-001	1.07E-001	5.5608E-002
	1332.49	100.00	1.0725E-001		8.2451E-002
Nb-94	702.63	100.00	1.2197E-001	1.11E-001	7.2308E-002
	871.10	100.00	1.1130E-001		8.6666E-002
Ag-108m	79.20	7.10	6.8735E+000	1.34E-001	-4.4183E+000
	433.93	89.90	1.3980E-001		7.3264E-002
	614.37	90.40	1.5132E-001		-1.6813E-001
	722.95	90.50	1.3368E-001		-4.4053E-002
Sb-125	176.33	6.89	3.0086E+000	4.21E-001	-4.6420E-001
	427.89	29.33	4.2097E-001		-4.6820E-001
	463.38	10.35	1.1979E+000		5.9115E-001
	600.56	17.80	6.4788E-001		-5.8186E-002
	606.64	5.02	2.9850E+000		6.2204E+000
	635.90	11.32	1.0382E+000		2.3325E-005
Cs-134	563.23	8.38	1.4620E+000	1.41E-001	4.4541E-001
	569.32	15.43	7.5698E-001		-2.3449E-001
	604.70	97.60	1.4082E-001		-1.5679E-001
	795.84	85.40	1.4132E-001		8.7834E-002
	801.93	8.73	1.2709E+000		-1.1358E+000
Cs-137	661.65	85.12	1.4351E-001	1.44E-001	2.0600E-001
Eu-152	121.78	28.40	1.0380E+000	3.62E-001	1.8375E-002
	244.69	7.49	2.3149E+000		1.8171E+000
	344.27	26.50	5.1874E-001		7.2487E-002
	778.89	12.74	9.2764E-001		3.6257E-001
	867.32	4.16	2.6792E+000		-3.8383E+000
	964.01	14.40	9.4410E-001		-6.7805E-002
	1085.78	10.00	1.0083E+000		-7.1999E-001
	1112.02	13.30	8.0482E-001		-2.4311E-001
	1407.95	20.70	3.6212E-001		-7.6183E-002
Eu-154	123.07	40.50	7.2195E-001	2.78E-001	4.6241E-001
	247.94	6.60	2.5407E+000		-1.6436E-001
	591.81	4.83	2.4334E+000		-9.3823E-001
	723.30	19.70	6.2694E-001		-7.6929E-002
	756.87	4.33	2.6144E+000		-1.1999E+000
	873.19	11.50	9.5301E-001		-1.1483E-001
	996.32	10.30	9.9252E-001		-9.3498E-001
	1004.76	17.90	5.8066E-001		2.1916E-001
	1274.45	35.50	2.7818E-001		1.0720E-001
Eu-155	86.54	30.90	1.4484E+000	1.45E+000	-3.5638E-002
	105.31	20.70	1.7308E+000		-4.6590E-001
Am-241	59.54	35.90	1.8420E+000	1.84E+000	-1.5561E+000
Cm-243	228.19	10.56	1.7116E+000	1.15E+000	1.4463E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1450E+000	1.15E+000	1.4010E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/26/2006 1:27:16 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: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-189-F-
Sample Title: NOL-03-02-189-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/26/2006 1:17:12 PM
Live Time: 600.0 seconds
Real Time: 601.9 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-189-F-
Title: NOL-03-02-189-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	288-	308	291.74	72.76	1.20	6.11E+002	96.11	2.47E+003
m	2	288-	308	300.48	74.95	1.21	1.48E+003	111.98	4.07E+003
	3	333-	346	339.71	84.76	1.27	2.82E+002	181.89	3.00E+003
	4	949-	963	955.04	238.64	1.38	2.90E+002	84.35	5.40E+002
	5	1398-	1419	1408.80	352.11	0.86	2.29E+002	72.11	3.00E+002
	6	2035-	2054	2043.39	510.81	1.99	2.20E+002	52.21	1.40E+002
	7	2326-	2344	2333.49	583.35	1.21	1.56E+002	47.70	1.29E+002
	8	2429-	2446	2437.81	609.44	0.63	1.90E+002	48.71	1.31E+002
	9	3639-	3655	3646.28	911.65	1.36	1.27E+002	37.56	7.68E+001
	10	3870-	3885	3877.03	969.36	0.79	5.70E+001	30.96	6.40E+001
	11	4477-	4493	4484.80	1121.34	1.11	5.57E+001	31.20	6.23E+001
	12	5326-	5342	5334.79	1333.91	0.40	4.15E+001	21.59	2.55E+001
	13	5834-	5863	5847.91	1462.22	2.07	1.12E+003	67.53	1.45E+001
	14	7057-	7071	7064.77	1766.53	0.78	4.13E+001	16.68	1.08E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.999	511.00*	100.00	3.00229E-001	8.20209E-002
K-40	0.933	1460.81*	10.67	1.87797E+001	1.89605E+000
TL-208	0.751	277.35	6.80		
		510.84*	21.60	1.38995E+000	3.96330E-001
		583.14*	84.20	2.64003E-001	8.77399E-002
		860.37	12.46		
Pb-212	0.520	74.81* @	10.70	2.11973E+001	4.45251E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.06002E-001	2.33052E-001
Bi-214	0.963	609.31*	46.30	5.93521E-001	1.68771E-001
		1120.29*	15.10	6.21540E-001	3.54119E-001
		1764.49*	15.80	4.84737E-001	2.01866E-001
Ac-228	0.627	338.32	11.40		
		911.07*	27.70	7.28162E-001	2.30715E-001
		969.11*	16.60	5.54243E-001	3.06615E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN	0.999	2.432042E-001	8.416144E-002
K-40	0.933	1.877969E+001	1.896051E+000
TL-208	0.751	2.640026E-001	8.731710E-002
Pb-212 @	0.520	7.060016E-001	2.330517E-001
Bi-214	0.963	5.573478E-001	1.216061E-001
Ac-228	0.627	6.652887E-001	1.843544E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F 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	1.0181E+000	15.73
3	84.76	4.7027E-001	64.46
5	352.11	3.8201E-001	31.46
12	1333.91	6.9248E-002	51.95

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1374E-001	9.73E-002	8.8672E-002
	1332.49	100.00	9.7300E-002		1.3025E-001
Nb-94	702.63	100.00	1.1601E-001	9.60E-002	9.2512E-002
	871.10	100.00	9.6020E-002		7.2638E-002
Ag-108m	79.20	7.10	6.8628E+000	1.29E-001	-4.4181E+000
	433.93	89.90	1.3865E-001		-9.7452E-002
	614.37	90.40	1.5727E-001		-7.6098E-002
	722.95	90.50	1.2916E-001		-9.2131E-002
Sb-125	176.33	6.89	2.9441E+000	4.21E-001	3.5510E+000
	427.89	29.33	4.2097E-001		7.3023E-002
	463.38	10.35	1.2498E+000		7.1157E-001
	600.56	17.80	6.3877E-001		-4.1662E-001
	606.64	5.02	2.9634E+000		-2.3702E-001
	635.90	11.32	9.8997E-001		-2.1032E-003
Cs-134	563.23	8.38	1.3889E+000	1.31E-001	1.6793E-001
	569.32	15.43	7.3685E-001		-2.4071E-002
	604.70	97.60	1.4099E-001		-2.4442E-002
	795.84	85.40	1.3056E-001		4.8702E-002
	801.93	8.73	1.2764E+000		-1.4468E+000
Cs-137	661.65	85.12	1.4540E-001	1.45E-001	2.1342E-002
Eu-152	121.78	28.40	1.0107E+000	3.67E-001	3.1826E-002
	244.69	7.49	2.2627E+000		2.0338E-001
	344.27	26.50	4.9940E-001		-6.7850E-001
	778.89	12.74	8.0519E-001		-8.0443E-002
	867.32	4.16	2.3476E+000		-1.7518E+000
	964.01	14.40	8.4696E-001		-1.0086E-002
	1085.78	10.00	9.7000E-001		-4.4619E-001
	1112.02	13.30	7.1184E-001		-3.3271E-001
	1407.95	20.70	3.6680E-001		2.2701E-001
Eu-154	123.07	40.50	7.0170E-001	2.59E-001	5.4629E-001
	247.94	6.60	2.5323E+000		8.1571E-001
	591.81	4.83	2.4535E+000		1.4728E+000
	723.30	19.70	6.0113E-001		-4.6061E-002
	756.87	4.33	2.5441E+000		-1.7818E+000
	873.19	11.50	8.4540E-001		-8.1982E-001
	996.32	10.30	9.3686E-001		-1.7771E-001
	1004.76	17.90	5.5755E-001		4.3286E-001
	1274.45	35.50	2.5883E-001		5.1032E-002
Eu-155	86.54	30.90	1.4273E+000	1.43E+000	5.4597E-001
	105.31	20.70	1.6837E+000		-5.2076E-001
Am-241	59.54	35.90	1.8701E+000	1.87E+000	1.3823E+000
Cm-243	228.19	10.56	1.5939E+000	1.16E+000	3.7196E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1563E+000	1.16E+000	-2.4859E-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 6/28/2006 12:26:24 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-190-F-
Sample Title: NOL-03-02-190-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/28/2006 12:16:20 AM
Live Time: 600.0 seconds
Real Time: 601.8 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-190-F-
Title: NOL-03-02-190-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	307	291.66	72.74	1.08	5.68E+002	90.64	3.59E+003
m	2	283-	307	299.98	74.82	1.08	1.24E+003	108.23	3.71E+003
M	3	331-	354	339.45	84.69	0.97	4.60E+002	86.91	2.69E+003
m	4	331-	354	350.12	87.36	0.98	1.63E+002	76.11	2.32E+003
	5	948-	959	953.74	238.31	1.41	3.02E+002	70.62	3.96E+002
	6	1345-	1360	1351.51	337.79	1.40	1.00E+002	55.93	2.37E+002
	7	1401-	1411	1406.53	351.54	1.27	1.51E+002	43.02	1.39E+002
	8	2032-	2048	2041.38	510.31	0.90	1.45E+002	52.88	1.84E+002
	9	2324-	2338	2330.01	582.49	1.41	1.80E+002	42.29	9.70E+001
	10	2427-	2441	2434.56	608.63	1.43	1.65E+002	43.14	1.11E+002
	11	3631-	3653	3641.30	910.41	1.33	2.00E+002	45.07	8.50E+001
M	12	3846-	3881	3851.90	963.07	1.63	3.89E+001	16.76	4.50E+001
m	13	3846-	3881	3872.40	968.20	1.63	1.06E+002	24.21	7.95E+001
	14	4681-	4697	4688.60	1172.31	1.44	1.03E+002	32.59	5.53E+001
	15	5319-	5337	5327.56	1332.10	2.22	1.05E+002	29.95	3.84E+001
	16	5825-	5853	5839.96	1460.24	1.74	1.29E+003	73.83	2.88E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.983	511.00*	100.00	1.97549E-001	7.69151E-002
K-40	0.989	1460.81*	10.67	2.15713E+001	2.14082E+000
Co-60	0.983	1173.22*	100.00	1.75253E-001	5.72629E-002
		1332.49*	100.00	1.83859E-001	5.45921E-002
Eu-155	0.319	86.54*	30.90	6.54850E-001	3.31114E-001
		105.31	20.70		
TL-208	0.740	277.35	6.80		
		510.84*	21.60	9.14579E-001	3.63837E-001
		583.14*	84.20	3.04544E-001	8.18134E-002
		860.37	12.46		
Pb-212	0.675	74.81* @	10.70	1.77791E+001	3.81434E+000
		77.11 @	18.00		
		87.30* @	8.00	2.52936E+000	1.27893E+000
		238.63*	44.60	7.34056E-001	2.06639E-001
Bi-214	0.388	609.31*	46.30	5.15691E-001	1.48917E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.982	338.32*	11.40	1.05068E+000	6.10155E-001
		911.07*	27.70	1.14434E+000	2.89629E-001
		969.11*	16.60	1.02657E+000	2.58795E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.983	1.317675E-001	7.888995E-002
K-40		0.989	2.157126E+001	2.140817E+000
Co-60		0.983	1.797612E-001	3.951290E-002
Eu-155		0.319	4.648028E-001	3.354083E-001
TL-208		0.740	3.045438E-001	8.120919E-002
Pb-212	@	0.675	7.340562E-001	2.066391E-001
Bi-214		0.388	5.156912E-001	1.489172E-001
Ac-228		0.982	1.076290E+000	1.839960E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.74	9.4597E-001	15.97
M 3	84.69	7.6745E-001	18.87
7	351.54	2.5175E-001	28.48
M 12	963.07	6.4842E-002	43.07

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:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
+	Co-60	1173.22*	100.00	7.8577E-002	7.04E-002	1.7525E-001
		1332.49*	100.00	7.0434E-002		1.8386E-001
	Nb-94	702.63	100.00	1.1245E-001	1.06E-001	-2.1302E-002
		871.10	100.00	1.0568E-001		3.1313E-002
	Ag-108m	79.20	7.10	6.9026E+000	1.28E-001	-2.8663E-001
		433.93	89.90	1.2829E-001		-1.4201E-002
		614.37	90.40	1.3009E-001		-1.0013E-001
		722.95	90.50	1.3850E-001		8.7430E-002
	Sb-125	176.33	6.89	2.7472E+000	3.88E-001	-9.4150E-001
		427.89	29.33	3.8811E-001		-7.6300E-002
		463.38	10.35	1.2054E+000		3.6541E-001
		600.56	17.80	6.2486E-001		-5.4609E-001
		606.64	5.02	2.8879E+000		6.1773E+000
		635.90	11.32	9.3916E-001		6.5607E-002
	Cs-134	563.23	8.38	1.3402E+000	1.31E-001	2.5431E-002
		569.32	15.43	7.4320E-001		-8.7582E-002
		604.70	97.60	1.4723E-001		-2.0597E-002
		795.84	85.40	1.3140E-001		3.4856E-002
		801.93	8.73	1.3171E+000		6.2771E-001
	Cs-137	661.65	85.12	1.4656E-001	1.47E-001	6.0681E-002
	Eu-152	121.78	28.40	1.0003E+000	3.14E-001	7.7792E-003
		244.69	7.49	2.0690E+000		2.4342E-001
		344.27	26.50	4.6764E-001		3.0024E-002
		778.89	12.74	8.6584E-001		-1.2439E+000
		867.32	4.16	2.5819E+000		-4.3040E-001
		964.01	14.40	9.5882E-001		4.3812E-002
		1085.78	10.00	1.0145E+000		-9.2925E-001
		1112.02	13.30	8.5893E-001		-1.9897E+000
		1407.95	20.70	3.1399E-001		-5.8671E-002
	Eu-154	123.07	40.50	6.9276E-001	2.83E-001	5.8365E-001
		247.94	6.60	2.2525E+000		-1.4326E+000
		591.81	4.83	2.3843E+000		-8.5635E-001
		723.30	19.70	6.4047E-001		6.2836E-001
		756.87	4.33	2.4716E+000		6.3333E-001
		873.19	11.50	8.8676E-001		-5.0948E-001
		996.32	10.30	1.0233E+000		-4.7854E-001
		1004.76	17.90	5.6923E-001		-2.5618E-001
		1274.45	35.50	2.8304E-001		1.9130E-001
+	Eu-155	86.54*	30.90	9.1027E-001	9.10E-001	6.5485E-001
		105.31	20.70	1.6356E+000		-2.9543E-001
	Am-241	59.54	35.90	1.8218E+000	1.82E+000	-1.4712E+000
	Cm-243	228.19	10.56	1.4689E+000	1.03E+000	1.0284E-003

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	8.0087E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/28/2006 12:59:55 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: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-191-F-
Sample Title: NOL-03-02-191-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/28/2006 12:49:52 AM
Live Time: 600.0 seconds
Real Time: 602.3 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-191-F-
Title: NOL-03-02-191-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	308	292.00	72.83	1.05	1.01E+003	106.30	4.13E+003
m	2	284-	308	300.13	74.86	1.06	1.84E+003	122.73	4.15E+003
M	3	332-	356	339.75	84.77	1.27	6.94E+002	101.41	3.99E+003
m	4	332-	356	349.23	87.14	1.27	3.47E+002	92.96	4.64E+003
	5	944-	960	953.75	238.32	1.11	3.29E+002	100.62	7.38E+002
	6	1171-	1187	1179.55	294.78	0.85	9.43E+001	70.22	3.80E+002
	7	1399-	1416	1406.75	351.60	0.87	1.37E+002	62.36	2.68E+002
	8	2029-	2052	2040.95	510.20	1.10	2.28E+002	61.38	1.88E+002
	9	2322-	2338	2329.78	582.43	1.21	1.67E+002	45.67	1.20E+002
	10	2426-	2444	2435.03	608.75	1.56	1.70E+002	43.48	9.50E+001
	11	3634-	3653	3641.49	910.45	1.37	1.70E+002	41.05	7.72E+001
	12	3862-	3881	3872.61	968.25	1.40	9.32E+001	40.82	9.68E+001
	13	4471-	4483	4477.51	1119.52	0.34	3.55E+001	24.94	4.75E+001
	14	5321-	5333	5326.07	1331.73	0.39	4.38E+001	19.91	2.22E+001
	15	5827-	5854	5839.71	1460.18	1.97	1.21E+003	71.90	3.21E+001
	16	7049-	7063	7056.21	1764.39	0.91	3.26E+001	18.75	2.04E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.978	511.00*	100.00	3.10339E-001	9.36780E-002
K-40	0.986	1460.81*	10.67	2.02738E+001	2.03669E+000
Eu-155	0.325	86.54*	30.90	1.39670E+000	4.63574E-001
		105.31	20.70		
TL-208	0.737	277.35	6.80		
		510.84*	21.60	1.43675E+000	4.49286E-001
		583.14*	84.20	2.82504E-001	8.55830E-002
		860.37	12.46		
Pb-212	0.675	74.81* @	10.70	2.63154E+001	5.44911E+000
		77.11 @	18.00		
		87.30* @	8.00	5.39477E+000	1.79055E+000
		238.63*	44.60	8.00671E-001	2.74877E-001
Bi-214	0.989	609.31*	46.30	5.30714E-001	1.50655E-001
		1120.29*	15.10	3.95734E-001	2.81151E-001
		1764.49*	15.80	3.83321E-001	2.23600E-001
PB-214	0.667	74.82* @	6.21	4.53422E+001	9.94921E+000
		77.11 @	10.50		
		87.30* @	4.67	9.24158E+000	3.14578E+000
		241.98	7.49		
		295.21*	19.20	5.65522E-001	4.31872E-001
		351.92*	37.20	4.46152E-001	2.16298E-001
Ac-228	0.619	338.32	11.40		
		911.07*	27.70	9.71645E-001	2.60174E-001
		969.11*	16.60	9.05808E-001	4.07961E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.978	2.493181E-001	9.546382E-002
K-40		0.986	2.027385E+001	2.036689E+000
Eu-155		0.325	1.118388E+000	4.699027E-001
TL-208		0.737	2.825039E-001	8.508635E-002
Pb-212	@	0.675	8.006708E-001	2.748765E-001
Bi-214		0.989	4.700228E-001	1.141753E-001
PB-214	@	0.667	4.699387E-001	1.921634E-001
Ac-228		0.619	9.526099E-001	2.193617E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.83	1.6911E+000	10.48
M 3	84.77	1.1559E+000	14.62
14	1331.73	7.2955E-002	45.48

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:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	1.1432E-001	9.80E-002	-2.2212E-002
		1332.49	100.00	9.8020E-002		1.8595E-002
	Nb-94	702.63	100.00	1.1839E-001	1.06E-001	5.4943E-002
		871.10	100.00	1.0568E-001		4.4722E-002
	Ag-108m	79.20	7.10	7.5919E+000	1.27E-001	-4.2448E+000
		433.93	89.90	1.3630E-001		-4.8754E-002
		614.37	90.40	1.2695E-001		3.6887E-002
		722.95	90.50	1.3391E-001		6.6822E-002
	Sb-125	176.33	6.89	3.3436E+000	4.06E-001	3.4377E-001
		427.89	29.33	4.0594E-001		-1.1894E-001
		463.38	10.35	1.1609E+000		-1.2406E-003
		600.56	17.80	6.2486E-001		-4.5466E-001
		606.64	5.02	2.6966E+000		3.7972E+000
		635.90	11.32	9.7656E-001		-4.7942E-002
	Cs-134	563.23	8.38	1.4446E+000	1.37E-001	1.5205E+000
		569.32	15.43	7.1744E-001		-1.0907E+000
		604.70	97.60	1.3838E-001		-4.8586E-002
		795.84	85.40	1.3739E-001		1.0423E-001
		801.93	8.73	1.2457E+000		-2.2128E-001
	Cs-137	661.65	85.12	1.3941E-001	1.39E-001	1.3655E-001
	Eu-152	121.78	28.40	1.1477E+000	3.60E-001	3.8868E-001
		244.69	7.49	2.4332E+000		-2.5576E+000
		344.27	26.50	5.0669E-001		-1.3760E-001
		778.89	12.74	8.7148E-001		3.2818E-001
		867.32	4.16	2.5507E+000		7.3367E-001
		964.01	14.40	9.6028E-001		1.0742E-001
		1085.78	10.00	9.9570E-001		4.8000E-001
		1112.02	13.30	7.8669E-001		-5.7885E-001
		1407.95	20.70	3.5976E-001		-1.0908E-001
	Eu-154	123.07	40.50	7.9431E-001	2.79E-001	4.3034E-002
		247.94	6.60	2.6973E+000		-2.7588E+000
		591.81	4.83	2.3130E+000		-5.9536E-001
		723.30	19.70	6.1739E-001		3.6403E-001
		756.87	4.33	2.6829E+000		1.8982E+000
		873.19	11.50	9.1937E-001		-4.9219E-001
		996.32	10.30	9.8682E-001		-2.6925E-001
		1004.76	17.90	5.8227E-001		2.7534E-001
		1274.45	35.50	2.7916E-001		5.1914E-002
+	Eu-155	86.54*	30.90	1.2857E+000	1.29E+000	1.3967E+000
		105.31	20.70	1.9034E+000		-9.4734E-003
	Am-241	59.54	35.90	2.0324E+000	2.03E+000	-8.3526E-001
	Cm-243	228.19	10.56	1.7910E+000	1.21E+000	6.6381E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2123E+000	1.21E+000	1.0824E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/27/2006 3:45:27 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: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-192-F-
Sample Title: NOL-03-02-192-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 3:35:24 PM
Live Time: 600.0 seconds
Real Time: 602.0 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-192-F-
Title: NOL-03-02-192-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	308	291.51	72.71	1.13	7.87E+002	101.60	3.68E+003
m	2	285-	308	300.29	74.90	1.13	1.38E+003	114.10	4.44E+003
	3	334-	345	339.34	84.67	1.06	5.22E+002	172.63	2.87E+003
	4	945-	962	953.60	238.28	0.80	3.15E+002	100.28	7.07E+002
	5	1173-	1186	1180.36	294.99	0.40	1.06E+002	55.88	2.57E+002
	6	1401-	1416	1406.39	351.51	0.76	1.02E+002	55.43	2.30E+002
	7	2322-	2339	2331.44	582.84	1.19	1.90E+002	48.26	1.28E+002
	8	2425-	2444	2435.73	608.92	1.41	1.97E+002	47.61	1.12E+002
	9	2898-	2912	2905.78	726.47	0.75	6.27E+001	30.73	6.33E+001
	10	3634-	3653	3642.78	910.78	1.08	1.43E+002	36.98	6.04E+001
	11	3849-	3862	3855.67	964.02	0.30	3.92E+001	23.24	3.68E+001
	12	5827-	5857	5842.11	1460.77	2.05	1.22E+003	71.86	2.67E+001
	13	7052-	7065	7058.01	1764.84	1.44	3.45E+001	17.55	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: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	1.000	1460.81*		10.67	2.03830E+001	2.04353E+000
TL-208	0.469	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	3.21774E-001	9.17809E-002
		860.37		12.46		
Bi-212	0.983	727.17*		11.80	8.04218E-001	4.05428E-001
Pb-212	0.518	74.81*	@	10.70	1.97759E+001	4.20600E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.64757E-001	2.71606E-001
Bi-214	0.694	609.31*		46.30	6.13605E-001	1.66773E-001
		1120.29		15.10		
		1764.49*		15.80	4.05341E-001	2.10122E-001
PB-214	0.579	74.82*	@	6.21	3.40743E+001	7.65756E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	6.37298E-001	3.51999E-001
		351.92*		37.20	3.31431E-001	1.88788E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		1.000	2.038297E+001	2.043532E+000
TL-208		0.469	3.217737E-001	9.178094E-002
Bi-212		0.983	8.042177E-001	4.054284E-001
Pb-212	@	0.518	7.647571E-001	2.716059E-001
Bi-214		0.694	5.331138E-001	1.306285E-001
PB-214	@	0.579	3.997588E-001	1.663698E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F 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	1.3120E+000	12.91
3	84.67	8.7071E-001	33.04
10	910.78	2.3764E-001	25.93
11	964.02	6.5318E-002	59.31

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0689E-001	8.32E-002	-4.2203E-002
	1332.49	100.00	8.3214E-002		2.8458E-002
Nb-94	702.63	100.00	1.0994E-001	9.37E-002	1.2564E-002
	871.10	100.00	9.3666E-002		4.7155E-002
Ag-108m	79.20	7.10	7.3045E+000	1.30E-001	-9.3555E-002
	433.93	89.90	1.3096E-001		-8.4980E-003
	614.37	90.40	1.3315E-001		-4.9501E-002
	722.95	90.50	1.3036E-001		3.0188E-002
Sb-125	176.33	6.89	3.0791E+000	3.90E-001	1.5499E+000
	427.89	29.33	3.9031E-001		-2.1686E-001
	463.38	10.35	1.0915E+000		7.3820E-001
	600.56	17.80	6.0578E-001		-9.9683E-002
	606.64	5.02	2.8137E+000		5.3582E+000
	635.90	11.32	9.1265E-001		-9.5400E-001
Cs-134	563.23	8.38	1.3018E+000	1.25E-001	-2.9226E-001
	569.32	15.43	7.1350E-001		4.3521E-002
	604.70	97.60	1.4047E-001		-2.0578E-002
	795.84	85.40	1.2541E-001		8.9106E-002
	801.93	8.73	1.0950E+000		-1.1117E-001
Cs-137	661.65	85.12	1.2763E-001	1.28E-001	6.5230E-003
Eu-152	121.78	28.40	1.0718E+000	3.71E-001	-2.6375E-001
	244.69	7.49	2.2430E+000		-1.1094E+000
	344.27	26.50	4.7300E-001		-2.5120E-001
	778.89	12.74	7.7829E-001		-8.4716E-001
	867.32	4.16	2.2425E+000		-2.9723E+000
	964.01	14.40	8.7149E-001		3.7810E-001
	1085.78	10.00	1.0052E+000		-5.1501E-001
	1112.02	13.30	7.5863E-001		-1.5267E+000
	1407.95	20.70	3.7141E-001		1.3396E-001
Eu-154	123.07	40.50	7.3918E-001	2.83E-001	-3.1691E-001
	247.94	6.60	2.4344E+000		3.0654E-001
	591.81	4.83	2.1677E+000		-1.1029E+000
	723.30	19.70	6.0003E-001		4.3146E-001
	756.87	4.33	2.3437E+000		-7.0167E-001
	873.19	11.50	8.0444E-001		-5.8137E-001
	996.32	10.30	9.6658E-001		5.7186E-001
	1004.76	17.90	5.6757E-001		9.1145E-002
	1274.45	35.50	2.8304E-001		-3.5948E-002
Eu-155	86.54	30.90	1.5355E+000	1.54E+000	5.0570E-001
	105.31	20.70	1.8221E+000		-2.8933E-001
Am-241	59.54	35.90	1.9693E+000	1.97E+000	5.8843E-001
Cm-243	228.19	10.56	1.6817E+000	1.07E+000	7.0038E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0727E+000	1.07E+000	3.0160E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/27/2006 4:03:15 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-193-F-
Sample Title: NOL-03-02-193-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 3:53:14 PM
Live Time: 600.0 seconds
Real Time: 601.7 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-193-F-
Title: NOL-03-02-193-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	307	291.89	72.80	1.12	6.91E+002	93.75	3.33E+003
m	2	284-	307	300.11	74.86	1.12	1.33E+003	108.33	3.57E+003
	3	331-	345	339.57	84.73	0.79	3.72E+002	190.33	3.15E+003
	4	947-	960	954.24	238.44	1.21	3.37E+002	75.31	4.09E+002
	5	1172-	1188	1180.15	294.93	0.85	1.04E+002	63.02	2.97E+002
	6	1345-	1361	1351.48	337.78	1.52	9.11E+001	53.84	2.12E+002
	7	1397-	1415	1407.23	351.72	1.15	1.57E+002	58.64	2.19E+002
	8	2029-	2052	2041.17	510.25	0.64	2.35E+002	54.33	1.33E+002
M	9	2308-	2340	2312.32	578.06	1.52	1.89E+001	16.29	5.78E+001
m	10	2308-	2340	2330.79	582.68	1.52	2.22E+002	30.63	7.72E+001
	11	2425-	2444	2435.21	608.79	1.71	1.73E+002	47.03	1.15E+002
	12	3633-	3651	3642.56	910.72	1.45	1.56E+002	35.32	4.98E+001
	13	3867-	3881	3874.17	968.64	1.57	9.35E+001	30.72	5.25E+001
	14	4472-	4487	4478.90	1119.87	1.00	4.73E+001	26.63	4.57E+001
	15	5827-	5856	5841.86	1460.71	1.80	1.11E+003	69.87	3.36E+001
	16	7049-	7063	7056.29	1764.41	1.43	3.93E+001	17.07	1.27E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.981	511.00*		100.00	3.20161E-001	8.58565E-002
K-40	1.000	1460.81*		10.67	1.86399E+001	1.91072E+000
TL-208	0.745	277.35		6.80		
		510.84*		21.60	1.48223E+000	4.15507E-001
		583.14*		84.20	3.76094E-001	7.13087E-002
		860.37		12.46		
Pb-212	0.520	74.81*	@	10.70	1.90753E+001	4.04794E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	8.18457E-001	2.23563E-001
Bi-214	0.993	609.31*		46.30	5.40060E-001	1.61184E-001
		1120.29*		15.10	5.26945E-001	3.02044E-001
		1764.49*		15.80	4.61466E-001	2.05747E-001
PB-214	0.581	74.82*	@	6.21	3.28672E+001	7.37150E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	6.24246E-001	3.92409E-001
		351.92*		37.20	5.12809E-001	2.09310E-001
Ac-228	0.994	338.32*		11.40	9.56957E-001	5.85100E-001
		911.07*		27.70	8.93960E-001	2.26830E-001
		969.11*		16.60	9.08858E-001	3.13491E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.981	2.389250E-001	8.718699E-002
K-40		1.000	1.863985E+001	1.910717E+000
TL-208		0.745	3.760943E-001	7.024750E-002
Pb-212	@	0.520	8.184568E-001	2.235630E-001
Bi-214		0.993	5.126857E-001	1.169814E-001
PB-214	@	0.581	5.374915E-001	1.846801E-001
Ac-228		0.994	9.042761E-001	1.753253E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.80	1.1519E+000	13.56
3	84.73	6.2052E-001	51.12
M 9	578.06	3.1435E-002	86.39

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	9.6501E-002	8.24E-002	4.4910E-003
	1332.49	100.00	8.2357E-002		-3.1469E-002
Nb-94	702.63	100.00	9.8711E-002	9.80E-002	8.3124E-002
	871.10	100.00	9.8031E-002		-7.2431E-002
Ag-108m	79.20	7.10	6.8099E+000	1.24E-001	-1.8631E+000
	433.93	89.90	1.2446E-001		3.5992E-002
	614.37	90.40	1.2627E-001		1.0400E-002
	722.95	90.50	1.2891E-001		1.6459E-001
Sb-125	176.33	6.89	2.6857E+000	3.79E-001	1.2989E+000
	427.89	29.33	3.7858E-001		-1.8665E-001
	463.38	10.35	1.0832E+000		7.4644E-001
	600.56	17.80	5.7082E-001		3.2132E-001
	606.64	5.02	2.7238E+000		4.7532E+000
	635.90	11.32	8.7889E-001		1.4898E-001
Cs-134	563.23	8.38	1.2291E+000	1.28E-001	-1.1116E-001
	569.32	15.43	6.5421E-001		-3.9952E-001
	604.70	97.60	1.3678E-001		-1.2751E-002
	795.84	85.40	1.2830E-001		1.3193E-001
	801.93	8.73	1.1046E+000		-5.3633E-001
Cs-137	661.65	85.12	1.3081E-001	1.31E-001	8.6842E-002
Eu-152	121.78	28.40	9.6437E-001	3.40E-001	4.3757E-001
	244.69	7.49	2.0439E+000		3.6997E-001
	344.27	26.50	4.4654E-001		-1.5958E-001
	778.89	12.74	6.8625E-001		-1.1349E+000
	867.32	4.16	2.3131E+000		-4.3223E+000
	964.01	14.40	8.9376E-001		-1.2728E-001
	1085.78	10.00	9.2323E-001		-7.0399E-001
	1112.02	13.30	7.6575E-001		-2.8621E-002
	1407.95	20.70	3.4024E-001		-9.5037E-002
Eu-154	123.07	40.50	6.6910E-001	2.57E-001	-4.9102E-001
	247.94	6.60	2.2389E+000		-1.9596E-001
	591.81	4.83	2.0934E+000		6.4821E-001
	723.30	19.70	5.9450E-001		6.2287E-001
	756.87	4.33	2.0767E+000		-4.2219E-001
	873.19	11.50	8.8676E-001		9.1907E-001
	996.32	10.30	8.8073E-001		3.4387E-001
	1004.76	17.90	5.3866E-001		-3.9836E-001
	1274.45	35.50	2.5670E-001		2.4943E-001
Eu-155	86.54	30.90	1.4166E+000	1.42E+000	9.5600E-002
	105.31	20.70	1.6431E+000		-7.8537E-002
Am-241	59.54	35.90	1.8633E+000	1.86E+000	3.0283E-001
Cm-243	228.19	10.56	1.4881E+000	1.04E+000	-1.6092E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0350E+000	1.04E+000	3.3954E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/27/2006 4:19:59 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-194-F-
Sample Title: NOL-03-02-194-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 4:09:57 PM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-194-F-
Title: NOL-03-02-194-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	307	291.76	72.77	1.08	6.56E+002	91.76	2.80E+003
m	2	286-	307	300.15	74.87	1.09	1.18E+003	103.95	3.43E+003
	3	331-	345	339.79	84.78	1.46	5.23E+002	183.29	2.85E+003
	4	947-	960	954.11	238.41	1.07	2.86E+002	71.57	3.80E+002
	5	1348-	1362	1352.79	338.11	0.63	8.95E+001	47.66	1.73E+002
	6	1400-	1413	1406.83	351.62	1.14	1.46E+002	47.39	1.59E+002
	7	2036-	2053	2041.88	510.43	1.54	1.57E+002	49.89	1.50E+002
	8	2320-	2340	2330.71	582.66	1.12	2.42E+002	46.29	8.67E+001
	9	2429-	2444	2435.73	608.92	1.53	1.50E+002	41.64	1.00E+002
	10	2899-	2916	2905.80	726.48	0.40	5.00E+001	31.75	6.50E+001
	11	3632-	3653	3642.82	910.79	1.34	1.65E+002	37.96	5.54E+001
M	12	3852-	3880	3858.15	964.63	1.19	2.43E+001	15.05	4.88E+001
m	13	3852-	3880	3873.59	968.50	1.19	7.06E+001	21.51	6.14E+001
	14	4266-	4277	4271.44	1067.99	0.62	1.77E+001	16.83	2.23E+001
	15	4470-	4488	4479.76	1120.08	1.64	7.27E+001	25.41	2.83E+001
	16	5827-	5856	5841.87	1460.71	2.11	1.24E+003	70.44	1.13E+001
	17	7050-	7066	7057.07	1764.61	0.39	4.34E+001	15.79	6.62E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.989	511.00*	100.00	2.14307E-001	7.39714E-002
K-40	1.000	1460.81*	10.67	2.07589E+001	2.05438E+000
TL-208	0.745	277.35	6.80		
		510.84*	21.60	9.92160E-001	3.51915E-001
		583.14*	84.20	4.10017E-001	9.47893E-002
		860.37	12.46		
Bi-212	0.983	727.17*	11.80	6.41212E-001	4.14218E-001
Pb-212	0.520	74.81* @	10.70	1.69225E+001	3.63556E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.94878E-001	2.05261E-001
Bi-214	0.996	609.31*	46.30	4.67388E-001	1.42180E-001
		1120.29*	15.10	8.10792E-001	2.96005E-001
		1764.49*	15.80	5.09660E-001	1.92370E-001
Ac-228	0.994	338.32*	11.40	9.40352E-001	5.21986E-001
		911.07*	27.70	9.41866E-001	2.42774E-001
		969.11*	16.60	6.86200E-001	2.21178E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.989	1.257429E-001	7.669835E-002
K-40		1.000	2.075890E+001	2.054377E+000
TL-208		0.745	4.100169E-001	9.384276E-002
Bi-212		0.983	6.412122E-001	4.142183E-001
Pb-212	@	0.520	6.948778E-001	2.052610E-001
Bi-214		0.996	5.249689E-001	1.066587E-001
Ac-228		0.994	8.145048E-001	1.560246E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F 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	1.0930E+000	13.99
3	84.78	8.7224E-001	35.02
6	351.62	2.4264E-001	32.55
M 12	964.63	4.0548E-002	61.86
14	1067.99	2.9438E-002	95.29

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0565E-001	8.90E-002	1.4343E-002
	1332.49	100.00	8.8973E-002		5.1414E-004
Nb-94	702.63	100.00	1.0301E-001	9.22E-002	3.0073E-002
	871.10	100.00	9.2163E-002		6.1591E-002
Ag-108m	79.20	7.10	6.6226E+000	1.17E-001	-7.5916E+000
	433.93	89.90	1.1739E-001		-9.2716E-002
	614.37	90.40	1.2876E-001		-6.1661E-002
	722.95	90.50	1.2088E-001		1.8412E-002
Sb-125	176.33	6.89	2.6358E+000	3.93E-001	8.1877E-001
	427.89	29.33	3.9251E-001		3.4080E-001
	463.38	10.35	1.0798E+000		3.4770E-001
	600.56	17.80	5.6823E-001		-3.2229E-001
	606.64	5.02	2.6932E+000		5.4453E+000
	635.90	11.32	8.4371E-001		8.2692E-002
Cs-134	563.23	8.38	1.2056E+000	1.18E-001	9.4429E-001
	569.32	15.43	6.6139E-001		-1.1762E-001
	604.70	97.60	1.3317E-001		-9.0090E-002
	795.84	85.40	1.1848E-001		-1.7267E-005
	801.93	8.73	1.0248E+000		-1.2239E+000
Cs-137	661.65	85.12	1.2491E-001	1.25E-001	2.7295E-002
Eu-152	121.78	28.40	9.4246E-001	3.53E-001	7.5233E-002
	244.69	7.49	1.9631E+000		2.5445E-001
	344.27	26.50	4.4032E-001		1.2976E-002
	778.89	12.74	7.5909E-001		-5.1063E-001
	867.32	4.16	2.0704E+000		-3.0050E+000
	964.01	14.40	8.8746E-001		-4.2334E-002
	1085.78	10.00	9.0940E-001		-1.6203E-001
	1112.02	13.30	7.4175E-001		-2.2733E-001
	1407.95	20.70	3.5258E-001		-4.5675E-001
Eu-154	123.07	40.50	6.5353E-001	2.81E-001	1.6900E-001
	247.94	6.60	2.0881E+000		-3.2777E-001
	591.81	4.83	2.0840E+000		1.3968E+000
	723.30	19.70	5.5297E-001		-9.8267E-002
	756.87	4.33	2.2271E+000		-1.2199E+000
	873.19	11.50	7.9385E-001		2.8073E-002
	996.32	10.30	8.5785E-001		3.5333E-001
	1004.76	17.90	5.1357E-001		-2.9767E-002
	1274.45	35.50	2.8111E-001		1.0062E-001
Eu-155	86.54	30.90	1.3868E+000	1.39E+000	-1.7698E-001
	105.31	20.70	1.6418E+000		1.1929E+000
Am-241	59.54	35.90	1.8099E+000	1.81E+000	-3.4522E-002
Cm-243	228.19	10.56	1.3961E+000	9.28E-001	7.4257E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.2805E-001	9.28E-001	-4.2292E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/28/2006 1:17:26 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: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-195-F-
Sample Title: NOL-03-02-195-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/28/2006 1:07:23 AM
Live Time: 600.0 seconds
Real Time: 601.7 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-195-F-
Title: NOL-03-02-195-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	306	291.79	72.78	1.08	6.32E+002	90.89	3.45E+003
m	2	283-	306	300.08	74.85	1.09	1.22E+003	106.21	3.54E+003
M	3	331-	357	339.23	84.64	1.20	5.67E+002	90.00	3.06E+003
m	4	331-	357	350.06	87.35	1.21	2.27E+002	79.60	3.35E+003
	5	945-	959	953.79	238.33	1.06	3.58E+002	77.65	4.21E+002
	6	1173-	1185	1179.69	294.82	1.35	7.75E+001	51.03	2.28E+002
	7	1401-	1415	1405.74	351.35	0.79	1.07E+002	50.74	1.93E+002
	8	2319-	2341	2330.06	582.50	1.65	2.39E+002	53.65	1.32E+002
	9	2426-	2443	2434.87	608.71	1.44	1.78E+002	46.18	1.16E+002
	10	2902-	2912	2906.79	726.72	0.48	3.93E+001	24.99	5.17E+001
	11	3631-	3651	3641.29	910.40	1.48	1.85E+002	38.97	5.78E+001
M	12	3850-	3882	3855.47	963.97	1.70	2.95E+001	16.30	4.80E+001
m	13	3850-	3882	3872.49	968.22	1.70	1.01E+002	22.93	7.20E+001
	14	5318-	5332	5324.79	1331.41	0.57	3.77E+001	18.50	1.73E+001
	15	5826-	5853	5840.10	1460.27	1.67	1.23E+003	72.54	3.14E+001
	16	7045-	7063	7053.95	1763.83	0.59	8.18E+001	18.50	2.24E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.990	1460.81*	10.67	2.06043E+001	2.06471E+000
Eu-155	0.320	86.54*	30.90	9.09966E-001	3.65731E-001
		105.31	20.70		
TL-208	0.461	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	4.04936E-001	1.04972E-001
		860.37	12.46		
Bi-212	0.993	727.17*	11.80	5.03658E-001	3.25969E-001
Pb-212	0.675	74.81* @	10.70	1.74812E+001	3.74897E+000
		77.11 @	18.00		
		87.30* @	8.00	3.51474E+000	1.41263E+000
		238.63*	44.60	8.69396E-001	2.32805E-001
Bi-214	0.688	609.31*	46.30	5.55326E-001	1.59582E-001
		1120.29	15.10		
		1764.49*	15.80	9.60550E-001	2.37588E-001
PB-214	0.664	74.82* @	6.21	3.01206E+001	6.81961E+000
		77.11 @	10.50		
		87.30* @	4.67	6.02097E+000	2.46231E+000
		241.98	7.49		
		295.21*	19.20	4.65012E-001	3.16000E-001
		351.92*	37.20	3.48746E-001	1.75175E-001
Ac-228	0.618	338.32	11.40		
		911.07*	27.70	1.05945E+000	2.54183E-001
		969.11*	16.60	9.78584E-001	2.45397E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.990	2.060425E+001	2.064709E+000
Eu-155		0.320	6.280586E-001	3.713776E-001
TL-208		0.461	4.049363E-001	1.049721E-001
Bi-212		0.993	5.036582E-001	3.259695E-001
Pb-212	@	0.675	8.693959E-001	2.328048E-001
Bi-214		0.688	6.813065E-001	1.324730E-001
PB-214	@	0.664	3.759667E-001	1.522794E-001
Ac-228		0.618	1.017597E+000	1.765460E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.78	1.0531E+000	14.38
M 3	84.64	9.4495E-001	15.87
M 12	963.97	4.9167E-002	55.25
14	1331.41	6.2848E-002	49.07

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:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	1.0992E-001	8.86E-002	-3.1159E-002
		1332.49	100.00	8.8574E-002		8.6935E-002
	Nb-94	702.63	100.00	1.1017E-001	1.04E-001	-6.4868E-002
		871.10	100.00	1.0435E-001		1.3764E-002
	Ag-108m	79.20	7.10	6.7127E+000	1.28E-001	-6.9617E+000
		433.93	89.90	1.2990E-001		2.3955E-002
		614.37	90.40	1.2831E-001		-1.5400E-002
		722.95	90.50	1.2916E-001		8.4727E-002
	Sb-125	176.33	6.89	2.6445E+000	3.83E-001	3.0843E-001
		427.89	29.33	3.8309E-001		-4.7332E-001
		463.38	10.35	1.0932E+000		-5.3314E-001
		600.56	17.80	6.3301E-001		-5.7713E-002
		606.64	5.02	2.8719E+000		6.3517E+000
		635.90	11.32	9.9566E-001		8.2185E-001
	Cs-134	563.23	8.38	1.3472E+000	1.33E-001	-3.3902E-001
		569.32	15.43	7.0953E-001		-2.9624E-001
		604.70	97.60	1.4590E-001		-2.3136E-002
		795.84	85.40	1.3334E-001		1.0861E-001
		801.93	8.73	1.2055E+000		-1.8551E-001
	Cs-137	661.65	85.12	1.3340E-001	1.33E-001	6.5654E-002
	Eu-152	121.78	28.40	9.5485E-001	3.48E-001	4.4888E-002
		244.69	7.49	2.0679E+000		5.6055E-001
		344.27	26.50	4.5419E-001		-4.4367E-001
		778.89	12.74	8.2526E-001		2.5165E-001
		867.32	4.16	2.5127E+000		-3.2901E-003
		964.01	14.40	9.2157E-001		-1.1714E-001
		1085.78	10.00	1.0330E+000		1.4009E-001
		1112.02	13.30	7.4662E-001		-1.1999E+000
		1407.95	20.70	3.4770E-001		-3.7418E-001
	Eu-154	123.07	40.50	6.6105E-001	2.76E-001	-1.7733E-001
		247.94	6.60	2.2389E+000		-8.5625E-001
		591.81	4.83	2.3885E+000		1.4719E+000
		723.30	19.70	5.9450E-001		2.2678E-001
		756.87	4.33	2.4489E+000		-6.8091E-001
		873.19	11.50	9.1248E-001		4.3371E-001
		996.32	10.30	1.0066E+000		3.1165E-001
		1004.76	17.90	5.6091E-001		4.3437E-001
		1274.45	35.50	2.7621E-001		-3.1420E-002
+	Eu-155	86.54*	30.90	1.0905E+000	1.09E+000	9.0997E-001
		105.31	20.70	1.6441E+000		5.9806E-001
	Am-241	59.54	35.90	1.8271E+000	1.83E+000	5.3579E-001
	Cm-243	228.19	10.56	1.4401E+000	1.02E+000	-1.1072E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0181E+000	1.02E+000	-3.9285E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/27/2006 12:58:38 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-196-F-
Sample Title: NOL-03-02-196-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 12:48:34 PM
Live Time: 600.0 seconds
Real Time: 602.3 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-196-F-
Title: NOL-03-02-196-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	308	291.60	72.73	1.18	8.42E+002	102.67	3.59E+003
m	2	285-	308	300.19	74.88	1.18	1.66E+003	118.12	4.58E+003
M	3	335-	355	339.49	84.71	1.17	6.48E+002	99.55	2.76E+003
m	4	335-	355	350.60	87.48	1.18	1.81E+002	85.78	3.45E+003
	5	947-	962	953.90	238.35	1.26	2.67E+002	91.58	6.30E+002
	6	1171-	1185	1181.21	295.20	1.07	7.51E+001	65.66	3.64E+002
	7	1401-	1416	1406.75	351.60	1.75	1.56E+002	60.67	2.65E+002
	8	2322-	2337	2331.96	582.97	1.53	2.35E+002	47.57	1.17E+002
	9	2423-	2442	2435.73	608.92	0.87	1.78E+002	51.37	1.44E+002
	10	3633-	3653	3642.44	910.69	1.49	1.60E+002	43.06	8.76E+001
	11	3869-	3881	3874.48	968.72	1.23	6.34E+001	30.88	6.96E+001
	12	4473-	4487	4479.23	1119.95	0.94	6.89E+001	29.32	5.31E+001
	13	5828-	5857	5842.86	1460.96	2.48	1.21E+003	73.50	4.09E+001
	14	7052-	7066	7059.01	1765.09	0.88	2.90E+001	19.43	2.40E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.999	1460.81*	10.67	2.03468E+001	2.05757E+000
Eu-155	0.315	86.54*	30.90	7.25127E-001	3.71617E-001
		105.31	20.70		
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.98119E-001	9.57489E-002
		860.37	12.46		
Pb-212	0.675	74.81* @	10.70	2.38259E+001	4.96668E+000
		77.11 @	18.00		
		87.30* @	8.00	2.80080E+000	1.43537E+000
		238.63*	44.60	6.49954E-001	2.44794E-001
Bi-214	0.994	609.31*	46.30	5.54539E-001	1.74332E-001
		1120.29*	15.10	7.68307E-001	3.36857E-001
		1764.49*	15.80	3.40565E-001	2.30844E-001
PB-214	0.668	74.82* @	6.21	4.10526E+001	9.06177E+000
		77.11 @	10.50		
		87.30* @	4.67	4.79795E+000	2.48545E+000
		241.98	7.49		
		295.21*	19.20	4.50700E-001	4.01274E-001
		351.92*	37.20	5.07069E-001	2.14959E-001
Ac-228	0.630	338.32	11.40		
		911.07*	27.70	9.17907E-001	2.68108E-001
		969.11*	16.60	6.15994E-001	3.07079E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.999	2.034677E+001	2.057573E+000
Eu-155		0.315	4.820983E-001	3.780516E-001
TL-208		0.470	3.981193E-001	9.574891E-002
Pb-212	@	0.675	6.499537E-001	2.447938E-001
Bi-214		0.994	5.192976E-001	1.285841E-001
PB-214	@	0.668	4.946374E-001	1.879989E-001
Ac-228		0.630	7.873127E-001	2.019630E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F 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	1.4041E+000	12.19
M 3	84.71	1.0804E+000	15.36

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:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	1.1937E-001	1.11E-001	9.3704E-002
		1332.49	100.00	1.1141E-001		1.6300E-001
	Nb-94	702.63	100.00	1.1881E-001	1.05E-001	7.1927E-003
		871.10	100.00	1.0462E-001		5.4112E-003
	Ag-108m	79.20	7.10	7.2986E+000	1.39E-001	-3.5414E+000
		433.93	89.90	1.4418E-001		-3.0599E-002
		614.37	90.40	1.3907E-001		-1.1213E-001
		722.95	90.50	1.4074E-001		8.2662E-002
	Sb-125	176.33	6.89	3.1647E+000	4.48E-001	1.1060E+000
		427.89	29.33	4.4806E-001		3.3560E-001
		463.38	10.35	1.2656E+000		8.8816E-001
		600.56	17.80	6.6570E-001		-2.4086E-001
		606.64	5.02	2.9881E+000		4.4527E+000
		635.90	11.32	9.5903E-001		-3.8847E-001
	Cs-134	563.23	8.38	1.3957E+000	1.34E-001	-9.1957E-001
		569.32	15.43	7.8499E-001		4.6373E-002
		604.70	97.60	1.5321E-001		5.3350E-002
		795.84	85.40	1.3443E-001		8.1444E-003
		801.93	8.73	1.2372E+000		-1.1819E+000
	Cs-137	661.65	85.12	1.4375E-001	1.44E-001	2.1005E-002
	Eu-152	121.78	28.40	1.0902E+000	3.83E-001	3.5799E-001
		244.69	7.49	2.3797E+000		-4.8562E-001
		344.27	26.50	5.2619E-001		-6.3490E-002
		778.89	12.74	8.4290E-001		-9.3780E-001
		867.32	4.16	2.4677E+000		-3.0645E+000
		964.01	14.40	9.7043E-001		-3.2886E-001
		1085.78	10.00	1.1008E+000		1.0663E+000
		1112.02	13.30	7.7513E-001		-7.4209E-001
		1407.95	20.70	3.8268E-001		1.1684E-001
	Eu-154	123.07	40.50	7.5538E-001	2.90E-001	-8.0511E-002
		247.94	6.60	2.6115E+000		-1.9857E+000
		591.81	4.83	2.3761E+000		-1.6210E+000
		723.30	19.70	6.5371E-001		5.7936E-001
		756.87	4.33	2.5876E+000		3.9568E-001
		873.19	11.50	8.9855E-001		2.0620E-001
		996.32	10.30	9.7820E-001		-3.2236E-001
		1004.76	17.90	6.1969E-001		1.2073E-001
		1274.45	35.50	2.8970E-001		1.7071E-001
+	Eu-155	86.54*	30.90	1.1042E+000	1.10E+000	7.2513E-001
		105.31	20.70	1.8153E+000		1.3673E+000
	Am-241	59.54	35.90	1.9831E+000	1.98E+000	-1.3713E-001
	Cm-243	228.19	10.56	1.7083E+000	1.19E+000	6.5225E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1950E+000	1.19E+000	1.3738E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/27/2006 11:41:35 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: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-197-F-
Sample Title: NOL-03-02-197-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 11:31:28 AM
Live Time: 600.0 seconds
Real Time: 602.0 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-197-F-
Title: NOL-03-02-197-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	306	291.89	72.80	1.22	8.19E+002	99.74	3.28E+003
m	2	286-	306	300.26	74.89	1.22	1.44E+003	113.18	4.06E+003
	3	331-	345	339.50	84.71	0.79	4.20E+002	199.30	3.43E+003
	4	947-	961	953.54	238.26	1.30	2.26E+002	85.86	5.86E+002
	5	1171-	1188	1180.41	295.00	0.67	1.10E+002	68.82	3.45E+002
	6	1397-	1417	1407.45	351.78	1.33	1.74E+002	67.37	2.77E+002
	7	2037-	2051	2042.77	510.65	1.00	9.39E+001	51.13	2.02E+002
	8	2320-	2341	2331.34	582.82	1.38	1.83E+002	53.22	1.48E+002
	9	2428-	2442	2435.14	608.78	1.64	1.58E+002	44.12	1.21E+002
	10	3632-	3654	3642.54	910.72	0.72	1.49E+002	47.31	1.12E+002
	11	3866-	3881	3874.23	968.66	0.90	8.01E+001	31.60	5.99E+001
	12	5196-	5207	5201.28	1300.52	0.30	1.54E+001	16.69	2.26E+001
	13	5321-	5335	5328.71	1332.39	0.33	3.89E+001	21.58	2.81E+001
	14	5625-	5636	5630.23	1407.79	0.75	1.80E+001	11.33	6.00E+000
	15	5828-	5857	5842.01	1460.75	2.07	1.17E+003	69.92	2.14E+001
	16	7051-	7064	7057.51	1764.72	0.33	3.76E+001	20.14	2.44E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	1.000	1460.81*	10.67	1.97013E+001	1.97975E+000
TL-208	0.749	277.35	6.80		
		510.84*	21.60	5.92668E-001	3.36180E-001
		583.14*	84.20	3.10019E-001	9.86824E-002
		860.37	12.46		
Pb-212	0.518	74.81* @	10.70	2.05445E+001	4.34038E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.50112E-001	2.25771E-001
Bi-214	0.692	609.31*	46.30	4.92199E-001	1.50489E-001
		1120.29	15.10		
		1764.49*	15.80	4.41340E-001	2.40684E-001
PB-214	0.582	74.82* @	6.21	3.53987E+001	7.90776E+000
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	6.62060E-001	4.27674E-001
		351.92*	37.20	5.67519E-001	2.39023E-001
Ac-228	0.629	338.32	11.40		
		911.07*	27.70	8.53634E-001	2.88033E-001
		969.11*	16.60	7.79110E-001	3.17911E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
X	ANN		0.996		
	K-40		1.000	1.970133E+001	1.979755E+000
	TL-208		0.749	3.324415E-001	9.468730E-002
	Pb-212	@	0.518	5.501125E-001	2.257710E-001
	Bi-214		0.692	4.779048E-001	1.275997E-001
	PB-214	@	0.582	5.900213E-001	2.086476E-001
	Ac-228		0.629	8.200379E-001	2.134534E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.80	1.3652E+000	12.18
3	84.71	7.0045E-001	47.42
12	1300.52	2.5603E-002	108.66
13	1332.39	6.4776E-002	55.53
14	1407.79	3.0000E-002	62.97

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1170E-001	9.98E-002	-2.4840E-002
	1332.49	100.00	9.9797E-002		7.9346E-002
Nb-94	702.63	100.00	1.1731E-001	1.08E-001	-8.8354E-003
	871.10	100.00	1.0827E-001		6.1549E-002
Ag-108m	79.20	7.10	7.0015E+000	1.35E-001	-1.4050E+001
	433.93	89.90	1.3613E-001		-9.0029E-002
	614.37	90.40	1.3509E-001		-1.5240E-001
	722.95	90.50	1.3577E-001		1.8319E-002
Sb-125	176.33	6.89	2.8939E+000	4.31E-001	-2.8999E+000
	427.89	29.33	4.3053E-001		1.5988E-001
	463.38	10.35	1.2278E+000		-3.1282E-001
	600.56	17.80	6.2603E-001		-5.6052E-001
	606.64	5.02	2.9101E+000		6.3991E+000
	635.90	11.32	1.0051E+000		3.2236E-002
Cs-134	563.23	8.38	1.4940E+000	1.41E-001	1.5720E+000
	569.32	15.43	7.8379E-001		-9.3429E-002
	604.70	97.60	1.4557E-001		-9.7058E-002
	795.84	85.40	1.4055E-001		1.7739E-001
	801.93	8.73	1.2429E+000		2.7047E-002
Cs-137	661.65	85.12	1.3818E-001	1.38E-001	-2.9665E-002
Eu-152	121.78	28.40	1.0370E+000	3.27E-001	6.2316E-001
	244.69	7.49	2.2471E+000		2.1025E+000
	344.27	26.50	4.8967E-001		-2.2830E-001
	778.89	12.74	8.5636E-001		-7.1612E-001
	867.32	4.16	2.6310E+000		-1.1633E+000
	964.01	14.40	9.5589E-001		4.8240E-001
	1085.78	10.00	1.0238E+000		2.0998E-001
	1112.02	13.30	8.2691E-001		-7.3656E-001
	1407.95	20.70	3.2740E-001		-3.5187E-002
Eu-154	123.07	40.50	7.1574E-001	2.96E-001	8.9471E-002
	247.94	6.60	2.4468E+000		9.5381E-001
	591.81	4.83	2.4374E+000		2.9571E-001
	723.30	19.70	6.2904E-001		5.0617E-001
	756.87	4.33	2.5220E+000		-7.8460E-001
	873.19	11.50	9.2165E-001		-9.3310E-002
	996.32	10.30	1.0122E+000		1.3082E-001
	1004.76	17.90	5.9502E-001		-6.4197E-002
	1274.45	35.50	2.9621E-001		1.3596E-001
Eu-155	86.54	30.90	1.4840E+000	1.48E+000	4.2604E-001
	105.31	20.70	1.7388E+000		-2.2044E-001
Am-241	59.54	35.90	1.9549E+000	1.95E+000	3.6697E-001
Cm-243	228.19	10.56	1.5925E+000	1.09E+000	-3.5324E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0914E+000	1.09E+000	-4.4055E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/27/2006 10:44:18 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: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-198-F-
Sample Title: NOL-03-02-198-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 10:34:16 AM
Live Time: 600.0 seconds
Real Time: 601.9 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-198-F-
Title: NOL-03-02-198-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	313	291.76	72.77	1.32	8.81E+002	98.32	3.49E+003
m	2	283-	313	300.45	74.94	1.32	1.59E+003	111.58	4.11E+003
m	3	283-	313	309.02	77.08	1.32	2.19E+002	86.25	3.50E+003
	4	333-	345	339.51	84.71	0.77	4.47E+002	172.53	2.77E+003
	5	945-	963	954.57	238.52	1.17	3.46E+002	94.16	5.81E+002
	6	1398-	1414	1408.30	351.99	1.25	1.57E+002	57.46	2.24E+002
	7	1846-	1858	1851.32	462.78	1.16	3.47E+001	36.70	1.18E+002
	8	2327-	2340	2333.17	583.28	1.38	1.82E+002	43.16	1.08E+002
	9	2426-	2447	2437.40	609.34	1.47	1.70E+002	54.31	1.60E+002
	10	3636-	3657	3646.83	911.79	0.95	1.84E+002	41.59	7.11E+001
	11	3869-	3888	3878.96	969.84	0.57	9.86E+001	38.57	8.24E+001
	12	4477-	4492	4484.52	1121.28	0.58	7.06E+001	30.07	5.44E+001
	13	5326-	5342	5333.16	1333.50	0.99	5.62E+001	23.21	2.68E+001
	14	5833-	5861	5848.42	1462.35	1.93	1.18E+003	70.53	2.55E+001
	15	7058-	7074	7066.05	1766.85	0.54	5.32E+001	17.90	9.81E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.920	1460.81*	10.67	1.97373E+001	1.98829E+000
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.07787E-001	8.33138E-002
		860.37	12.46		
Pb-212	0.843	74.81* @	10.70	2.26984E+001	4.72640E+000
		77.11* @	18.00	1.78983E+000	7.87757E-001
		87.30 @	8.00		
		238.63*	44.60	8.39977E-001	2.64084E-001
Bi-214	0.955	609.31*	46.30	5.29323E-001	1.81685E-001
		1120.29*	15.10	7.87345E-001	3.45561E-001
		1764.49*	15.80	6.25074E-001	2.19418E-001
PB-214	0.390	74.82* @	6.21	3.91100E+001	8.62442E+000
		77.11* @	10.50	3.06827E+000	1.36974E+000
		87.30 @	4.67		
		241.98	7.49		
		295.21	19.20		
		351.92*	37.20	5.12041E-001	2.05800E-001
Ac-228	0.619	338.32	11.40		
		911.07*	27.70	1.05265E+000	2.67062E-001
		969.11*	16.60	9.59118E-001	3.88322E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.920	1.973725E+001	1.988288E+000
TL-208		0.470	3.077872E-001	8.331384E-002
Pb-212	@	0.843	8.399772E-001	2.640841E-001
Bi-214		0.955	5.991351E-001	1.297066E-001
PB-214	@	0.390	5.120408E-001	2.037436E-001
Ac-228		0.619	1.022618E+000	2.200461E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F 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	1.4681E+000	11.16
4	84.71	7.4576E-001	38.56
7	462.78	5.7876E-002	105.69
13	1333.50	9.3735E-002	41.26

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:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1882E-001	1.08E-001	3.7174E-002
	1332.49	100.00	1.0822E-001		1.1114E-001
Nb-94	702.63	100.00	1.1623E-001	1.10E-001	-7.8250E-002
	871.10	100.00	1.1005E-001		3.4522E-002
Ag-108m	79.20	7.10	6.8849E+000	1.34E-001	-3.5073E-001
	433.93	89.90	1.3392E-001		-1.3287E-001
	614.37	90.40	1.5056E-001		-1.4894E-002
	722.95	90.50	1.4007E-001		5.1219E-002
Sb-125	176.33	6.89	2.8429E+000	4.15E-001	1.9768E+000
	427.89	29.33	4.1534E-001		-3.8555E-002
	463.38	10.35	1.2204E+000		5.2614E-001
	600.56	17.80	6.2720E-001		8.9018E-002
	606.64	5.02	2.9228E+000		7.0440E-002
	635.90	11.32	1.0218E+000		-5.6144E-002
Cs-134	563.23	8.38	1.4642E+000	1.37E-001	5.8130E-001
	569.32	15.43	7.7173E-001		1.5237E-001
	604.70	97.60	1.3696E-001		-1.8606E-002
	795.84	85.40	1.4184E-001		1.3392E-001
	801.93	8.73	1.2764E+000		-1.5879E+000
Cs-137	661.65	85.12	1.4159E-001	1.42E-001	1.5273E-001
Eu-152	121.78	28.40	1.0135E+000	3.67E-001	1.2528E+000
	244.69	7.49	2.1271E+000		-1.4996E+000
	344.27	26.50	5.1564E-001		8.5458E-003
	778.89	12.74	8.8448E-001		-6.1164E-001
	867.32	4.16	2.7672E+000		-2.6613E+000
	964.01	14.40	8.9062E-001		-2.1154E-001
	1085.78	10.00	1.0979E+000		2.6418E-001
	1112.02	13.30	8.2908E-001		3.0417E-001
	1407.95	20.70	3.6680E-001		5.6260E-002
Eu-154	123.07	40.50	6.9792E-001	2.86E-001	2.0515E-002
	247.94	6.60	2.2713E+000		-1.7963E+000
	591.81	4.83	2.3045E+000		-1.2540E+000
	723.30	19.70	6.3634E-001		-2.2507E-002
	756.87	4.33	2.5984E+000		2.2376E+000
	873.19	11.50	9.4416E-001		-1.7513E-001
	996.32	10.30	9.9819E-001		-1.5684E+000
	1004.76	17.90	6.0439E-001		3.4160E-001
	1274.45	35.50	2.8592E-001		2.1513E-001
Eu-155	86.54	30.90	1.4517E+000	1.45E+000	1.9808E-001
	105.31	20.70	1.6648E+000		4.2008E-002
Am-241	59.54	35.90	1.8845E+000	1.88E+000	-7.7149E-001
Cm-243	228.19	10.56	1.5346E+000	1.04E+000	2.1685E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0385E+000	1.04E+000	3.3624E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/26/2006 1:46:55 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-199-F-
Sample Title: NOL-03-02-199-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/26/2006 1:36:53 PM
Live Time: 600.0 seconds
Real Time: 601.8 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-199-F-
Title: NOL-03-02-199-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	307	291.73	72.76	1.15	7.62E+002	94.02	3.18E+003
m	2	284-	307	300.55	74.97	1.15	1.28E+003	107.66	3.78E+003
	3	333-	345	339.80	84.78	0.93	4.15E+002	170.28	2.71E+003
	4	947-	964	954.78	238.57	1.38	3.20E+002	90.60	5.58E+002
	5	1347-	1358	1353.50	338.28	0.73	6.09E+001	46.56	2.01E+002
	6	1400-	1415	1408.84	352.12	1.01	1.42E+002	54.81	2.13E+002
	7	2033-	2054	2044.02	510.97	1.13	2.09E+002	55.23	1.56E+002
	8	2327-	2341	2332.70	583.16	1.44	1.61E+002	46.76	1.41E+002
	9	2430-	2448	2438.06	609.51	1.84	2.00E+002	44.60	9.39E+001
	10	3636-	3658	3646.24	911.64	1.16	1.47E+002	41.07	7.56E+001
	11	3735-	3746	3740.97	935.33	0.35	2.16E+001	21.04	3.74E+001
	12	3870-	3887	3877.85	969.56	1.13	9.60E+001	35.05	6.80E+001
	13	4476-	4495	4484.42	1121.25	1.56	9.98E+001	33.75	5.62E+001
	14	5834-	5862	5848.60	1462.40	2.15	1.13E+003	72.45	5.08E+001
	15	7060-	7075	7066.82	1767.05	1.09	3.79E+001	19.01	1.81E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	1.000	511.00*		100.00	2.85003E-001	8.46583E-002
K-40	0.916	1460.81*		10.67	1.89772E+001	1.95902E+000
TL-208	0.752	277.35		6.80		
		510.84*		21.60	1.31946E+000	4.06479E-001
		583.14*		84.20	2.72042E-001	8.66932E-002
		860.37		12.46		
Pb-212	0.520	74.81*	@	10.70	1.83068E+001	3.90426E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.77122E-001	2.51710E-001
Bi-214	0.692	609.31*		46.30	6.24935E-001	1.59136E-001
		1120.29*		15.10	1.11259E+000	3.94475E-001
		1764.49		15.80		
Ac-228	0.992	338.32*		11.40	6.39563E-001	4.99459E-001
		911.07*		27.70	8.44002E-001	2.54313E-001
		969.11*		16.60	9.33845E-001	3.54567E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		1.000	2.262417E-001	8.668341E-002
K-40		0.916	1.897721E+001	1.959017E+000
TL-208		0.752	2.720425E-001	8.623864E-002
Pb-212	@	0.520	7.771217E-001	2.517098E-001
Bi-214		0.692	6.931890E-001	1.475800E-001
Ac-228		0.992	8.401771E-001	1.909534E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F 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	1.2699E+000	12.34
3	84.78	6.9148E-001	41.04
6	352.12	2.3624E-001	38.67
11	935.33	3.5932E-002	97.58
15	1767.05	6.3177E-002	50.15

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.1518E-001	9.87E-002	8.0903E-002
	1332.49	100.00	9.8735E-002		9.1757E-002
Nb-94	702.63	100.00	1.0424E-001	1.02E-001	6.3264E-002
	871.10	100.00	1.0247E-001		-4.2321E-002
Ag-108m	79.20	7.10	6.8227E+000	1.30E-001	-4.7006E+000
	433.93	89.90	1.3392E-001		-3.5494E-002
	614.37	90.40	1.4394E-001		-2.6195E-002
	722.95	90.50	1.2964E-001		-5.4284E-002
Sb-125	176.33	6.89	2.8130E+000	4.22E-001	-5.6165E-001
	427.89	29.33	4.2250E-001		-7.4967E-002
	463.38	10.35	1.1594E+000		-3.3168E-001
	600.56	17.80	6.5126E-001		8.6347E-002
	606.64	5.02	2.8815E+000		2.0002E-001
	635.90	11.32	9.9755E-001		1.9185E-001
Cs-134	563.23	8.38	1.2994E+000	1.30E-001	-3.3860E-001
	569.32	15.43	7.1613E-001		1.1195E-001
	604.70	97.60	1.3226E-001		-5.4477E-002
	795.84	85.40	1.3000E-001		7.5802E-002
	801.93	8.73	1.2229E+000		-1.4042E+000
Cs-137	661.65	85.12	1.4540E-001	1.45E-001	2.6315E-003
Eu-152	121.78	28.40	9.8494E-001	3.85E-001	-2.9129E-001
	244.69	7.49	2.1249E+000		-2.2498E+000
	344.27	26.50	4.9061E-001		-3.1404E-001
	778.89	12.74	8.3902E-001		2.1234E-001
	867.32	4.16	2.4806E+000		-1.7116E+000
	964.01	14.40	8.9376E-001		-1.3677E-001
	1085.78	10.00	9.5358E-001		-2.6537E-001
	1112.02	13.30	7.6575E-001		-5.4876E-002
	1407.95	20.70	3.8489E-001		3.4409E-001
Eu-154	123.07	40.50	6.8687E-001	2.95E-001	2.7131E-001
	247.94	6.60	2.3556E+000		-5.1308E-001
	591.81	4.83	2.3636E+000		-9.9320E-001
	723.30	19.70	5.9561E-001		-3.1026E-002
	756.87	4.33	2.4660E+000		-1.6036E-001
	873.19	11.50	8.8200E-001		1.5541E-002
	996.32	10.30	9.9819E-001		-3.1242E-002
	1004.76	17.90	5.8708E-001		3.6959E-001
	1274.45	35.50	2.9529E-001		1.9313E-001
Eu-155	86.54	30.90	1.4172E+000	1.42E+000	-3.8699E-001
	105.31	20.70	1.6553E+000		1.0519E+000
Am-241	59.54	35.90	1.8571E+000	1.86E+000	1.0645E+000
Cm-243	228.19	10.56	1.5346E+000	1.04E+000	-2.8420E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0447E+000	1.04E+000	-3.7346E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/28/2006 12:45:16 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: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-200-F-
Sample Title: NOL-03-02-200-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/28/2006 12:35:13 AM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-200-F-
Title: NOL-03-02-200-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	307	291.03	72.59	1.17	7.27E+002	88.62	2.89E+003
m	2	283-	307	300.03	74.84	1.18	1.17E+003	101.02	3.42E+003
	3	330-	344	338.78	84.53	0.88	3.27E+002	176.82	2.71E+003
	4	945-	960	953.39	238.22	1.12	3.56E+002	81.18	4.52E+002
	5	1171-	1188	1180.01	294.90	0.58	9.25E+001	61.53	2.75E+002
	6	1342-	1359	1352.63	338.07	1.39	9.06E+001	54.21	2.06E+002
	7	1400-	1414	1405.85	351.37	1.18	1.72E+002	53.13	1.92E+002
	8	2034-	2049	2041.26	510.28	0.74	1.38E+002	48.92	1.59E+002
	9	2319-	2338	2329.93	582.46	1.53	1.93E+002	52.11	1.46E+002
	10	2423-	2444	2434.94	608.73	1.58	2.18E+002	47.21	9.61E+001
	11	3630-	3653	3641.81	910.53	1.26	1.92E+002	42.35	6.87E+001
	12	3864-	3881	3872.45	968.21	0.88	8.52E+001	36.77	8.18E+001
	13	4468-	4488	4476.70	1119.32	1.45	9.70E+001	35.41	6.30E+001
	14	5318-	5334	5326.58	1331.85	0.95	6.43E+001	20.57	1.47E+001
	15	5825-	5854	5839.79	1460.20	1.93	1.20E+003	70.79	2.22E+001
	16	7049-	7062	7055.25	1764.15	1.08	3.91E+001	17.89	1.59E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.982	511.00*		100.00	1.87573E-001	7.13809E-002
K-40	0.987	1460.81*		10.67	2.01213E+001	2.01579E+000
TL-208	0.739	277.35		6.80		
		510.84*		21.60	8.68392E-001	3.37991E-001
		583.14*		84.20	3.26933E-001	9.79110E-002
		860.37		12.46		
Pb-212	0.517	74.81*	@	10.70	1.68068E+001	3.59810E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	8.64424E-001	2.39337E-001
Bi-214	0.986	609.31*		46.30	6.80154E-001	1.69540E-001
		1120.29*		15.10	1.08106E+000	4.11030E-001
		1764.49*		15.80	4.59512E-001	2.15096E-001
PB-214	0.577	74.82*	@	6.21	2.89585E+001	6.54634E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	5.54946E-001	3.80781E-001
		351.92*		37.20	5.61250E-001	1.96754E-001
Ac-228	0.986	338.32*		11.40	9.51515E-001	5.88785E-001
		911.07*		27.70	1.10030E+000	2.73460E-001
		969.11*		16.60	8.27950E-001	3.67806E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.982	1.169551E-001	7.441244E-002
K-40		0.987	2.012126E+001	2.015792E+000
TL-208		0.739	3.269328E-001	9.732955E-002
Pb-212	@	0.517	8.644237E-001	2.393373E-001
Bi-214		0.986	6.417105E-001	1.266705E-001
PB-214	@	0.577	5.599217E-001	1.747982E-001
Ac-228		0.986	9.970225E-001	2.056330E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.59	1.2114E+000	12.19
3	84.53	5.4433E-001	54.14
14	1331.85	1.0713E-001	32.01

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:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0841E-001	9.44E-002	-1.3157E-002
	1332.49	100.00	9.4362E-002		5.2540E-002
Nb-94	702.63	100.00	1.1177E-001	1.08E-001	-2.9842E-002
	871.10	100.00	1.0827E-001		1.5329E-002
Ag-108m	79.20	7.10	6.3589E+000	1.25E-001	-3.4808E+000
	433.93	89.90	1.3061E-001		-4.7040E-002
	614.37	90.40	1.2535E-001		-3.1882E-002
	722.95	90.50	1.2794E-001		1.1409E-001
Sb-125	176.33	6.89	2.6017E+000	4.08E-001	-6.5791E-001
	427.89	29.33	4.0752E-001		1.9870E-001
	463.38	10.35	1.1260E+000		1.0549E+000
	600.56	17.80	5.8857E-001		-3.3716E-001
	606.64	5.02	2.7708E+000		6.9043E+000
	635.90	11.32	9.3916E-001		-1.3104E-001
Cs-134	563.23	8.38	1.3496E+000	1.29E-001	6.3134E-001
	569.32	15.43	7.2657E-001		2.4110E-001
	604.70	97.60	1.4185E-001		-3.0439E-002
	795.84	85.40	1.2944E-001		9.4145E-002
	801.93	8.73	1.1455E+000		-5.8793E-001
Cs-137	661.65	85.12	1.3619E-001	1.36E-001	1.6230E-001
Eu-152	121.78	28.40	9.0668E-001	3.71E-001	-4.4183E-001
	244.69	7.49	1.9438E+000		-1.3752E+000
	344.27	26.50	4.5922E-001		1.5693E-002
	778.89	12.74	7.7829E-001		-7.9713E-001
	867.32	4.16	2.5444E+000		-2.6697E+000
	964.01	14.40	9.3964E-001		-1.3030E-001
	1085.78	10.00	1.0238E+000		1.7114E-001
	1112.02	13.30	8.1815E-001		-2.5453E-001
	1407.95	20.70	3.7141E-001		1.2961E-001
Eu-154	123.07	40.50	6.2977E-001	2.71E-001	-2.7239E-001
	247.94	6.60	2.0925E+000		1.7189E-002
	591.81	4.83	2.2916E+000		3.4089E-002
	723.30	19.70	5.8440E-001		6.5325E-001
	756.87	4.33	2.5275E+000		5.6116E-001
	873.19	11.50	9.3523E-001		9.3856E-002
	996.32	10.30	1.0370E+000		3.0975E-001
	1004.76	17.90	5.9027E-001		-1.6511E-001
	1274.45	35.50	2.7122E-001		1.7006E-001
Eu-155	86.54	30.90	1.3272E+000	1.33E+000	-4.6568E-001
	105.31	20.70	1.5443E+000		1.5179E+000
Am-241	59.54	35.90	1.7517E+000	1.75E+000	-4.4835E-001
Cm-243	228.19	10.56	1.3920E+000	9.59E-001	-5.2668E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.5878E-001	9.59E-001	1.6385E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/28/2006 7:58:38 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-201
Sample Title: NOL-03-02-201-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/28/2006 7:48:36 AM
Live Time: 600.0 seconds
Real Time: 601.7 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-201
Title: NOL-03-02-201-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	305	291.38	72.67	1.10	6.14E+002	91.27	3.27E+003
m	2	283-	305	300.37	74.92	1.10	1.07E+003	104.31	3.39E+003
	3	333-	346	339.06	84.60	0.84	3.71E+002	172.00	2.65E+003
	4	944-	959	954.21	238.43	1.12	2.70E+002	77.46	4.30E+002
	5	1173-	1189	1180.01	294.90	0.86	8.77E+001	58.02	2.51E+002
	6	1347-	1359	1352.18	337.95	0.65	8.02E+001	43.54	1.57E+002
	7	1398-	1414	1407.34	351.75	1.68	1.57E+002	55.79	2.08E+002
	8	2030-	2052	2041.24	510.27	1.04	2.21E+002	55.40	1.49E+002
	9	2322-	2341	2331.31	582.81	0.86	1.87E+002	47.18	1.12E+002
	10	2425-	2445	2436.33	609.07	1.26	1.88E+002	50.89	1.34E+002
	11	3635-	3654	3643.50	910.96	1.75	1.81E+002	37.64	5.36E+001
	12	3867-	3883	3873.71	968.53	1.75	6.41E+001	30.58	5.69E+001
	13	4468-	4488	4480.25	1120.21	0.82	6.02E+001	35.45	7.38E+001
	14	5828-	5856	5843.18	1461.04	1.86	1.08E+003	67.38	2.22E+001
	15	7051-	7068	7060.00	1765.34	0.39	6.00E+001	18.52	9.00E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.982	511.00*		100.00	3.01078E-001	8.58644E-002
K-40	0.998	1460.81*		10.67	1.80603E+001	1.84802E+000
TL-208	0.747	277.35		6.80		
		510.84*		21.60	1.39388E+000	4.13498E-001
		583.14*		84.20	3.16054E-001	8.98189E-002
		860.37		12.46		
Pb-212	0.520	74.81*	@	10.70	1.52559E+001	3.34182E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	6.55058E-001	2.14472E-001
Bi-214	0.994	609.31*		46.30	5.87564E-001	1.74724E-001
		1120.29*		15.10	6.72091E-001	4.01890E-001
		1764.49*		15.80	7.05542E-001	2.28877E-001
PB-214	0.581	74.82*	@	6.21	2.63072E+001	6.07082E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	5.26780E-001	3.59468E-001
		351.92*		37.20	5.10243E-001	2.00841E-001
Ac-228	0.995	338.32*		11.40	8.42147E-001	4.76037E-001
		911.07*		27.70	1.03796E+000	2.46323E-001
		969.11*		16.60	6.23458E-001	3.04358E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.982	2.328100E-001	8.800076E-002
K-40		0.998	1.806032E+001	1.848017E+000
TL-208		0.747	3.160538E-001	8.922640E-002
Pb-212	@	0.520	6.550583E-001	2.144723E-001
Bi-214		0.994	6.353868E-001	1.312645E-001
PB-214	@	0.581	5.141769E-001	1.753307E-001
Ac-228		0.995	8.694896E-001	1.776412E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.67	1.0239E+000	14.86
3	84.60	6.1814E-001	46.38

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.3052E-001	1.21E-001	2.7046E-002
	1332.49	100.00	1.2113E-001		4.2814E-002
Nb-94	702.63	100.00	1.0498E-001	1.02E-001	-2.6630E-002
	871.10	100.00	1.0221E-001		2.1229E-002
Ag-108m	79.20	7.10	6.7634E+000	1.26E-001	-1.7413E+001
	433.93	89.90	1.2813E-001		-6.8686E-002
	614.37	90.40	1.4068E-001		3.5883E-003
	722.95	90.50	1.2648E-001		1.3279E-001
Sb-125	176.33	6.89	4.1586E+000	6.41E-001	2.0932E-001
	427.89	29.33	6.4071E-001		2.9977E-001
	463.38	10.35	1.7765E+000		8.3037E-001
	600.56	17.80	9.7132E-001		-2.9354E-001
	606.64	5.02	4.6262E+000		1.0634E+001
	635.90	11.32	1.4849E+000		6.9701E-001
Cs-134	563.23	8.38	2.5219E+000	2.35E-001	1.1447E+000
	569.32	15.43	1.3093E+000		8.8328E-001
	604.70	97.60	2.6766E-001		2.6035E-002
	795.84	85.40	2.3490E-001		4.2848E-002
	801.93	8.73	2.2534E+000		1.4160E+000
Cs-137	661.65	85.12	1.3286E-001	1.33E-001	-2.2282E-003
Eu-152	121.78	28.40	1.0187E+000	3.87E-001	-3.6848E-002
	244.69	7.49	2.0674E+000		-1.1569E+000
	344.27	26.50	4.9324E-001		-6.3114E-002
	778.89	12.74	8.5479E-001		-6.3507E-001
	867.32	4.16	2.7386E+000		-7.7862E-001
	964.01	14.40	9.5538E-001		3.1334E-001
	1085.78	10.00	1.0901E+000		2.4099E-001
	1112.02	13.30	8.3841E-001		2.7372E-001
	1407.95	20.70	3.8723E-001		1.9580E-001
Eu-154	123.07	40.50	7.3980E-001	2.93E-001	-2.5015E-001
	247.94	6.60	2.4355E+000		1.3928E+000
	591.81	4.83	2.5732E+000		2.2509E-001
	723.30	19.70	6.7158E-001		8.6347E-001
	756.87	4.33	2.6952E+000		-2.1957E-001
	873.19	11.50	1.0028E+000		-7.2090E-001
	996.32	10.30	1.1139E+000		6.2557E-001
	1004.76	17.90	6.1039E-001		-2.0532E-001
	1274.45	35.50	2.9300E-001		-1.6336E-001
Eu-155	86.54	30.90	1.7629E+000	1.76E+000	7.5307E-001
	105.31	20.70	2.0234E+000		-1.3405E+000
Am-241	59.54	35.90	1.8843E+000	1.88E+000	5.3969E-001
Cm-243	228.19	10.56	1.4212E+000	9.73E-001	7.2199E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.7296E-001	9.73E-001	-3.2348E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/27/2006 3:27:33 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-202-F-
Sample Title: NOL-03-02-202-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 3:17:32 PM
Live Time: 600.0 seconds
Real Time: 601.5 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-202-F-
Title: NOL-03-02-202-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	308	291.18	72.62	1.28	5.60E+002	88.38	3.06E+003
m	2	283-	308	300.38	74.93	1.28	1.07E+003	100.56	3.88E+003
	3	331-	346	339.71	84.76	1.17	2.94E+002	184.80	2.85E+003
	4	448-	461	453.73	113.27	0.49	1.07E+002	126.96	1.48E+003
	5	946-	961	954.16	238.42	1.26	2.94E+002	76.87	4.14E+002
M	6	1173-	1208	1179.67	294.81	1.03	7.30E+001	27.36	1.88E+002
m	7	1173-	1208	1199.58	299.79	1.03	5.18E+001	24.38	1.83E+002
	8	1400-	1414	1406.81	351.62	0.44	1.63E+002	50.39	1.73E+002
	9	1881-	1891	1886.27	471.52	0.91	2.09E+001	25.62	6.31E+001
	10	2030-	2052	2041.57	510.35	1.57	1.80E+002	55.18	1.58E+002
	11	2321-	2342	2330.60	582.63	1.31	1.97E+002	48.37	1.09E+002
	12	2428-	2444	2435.53	608.87	1.18	1.64E+002	43.18	1.03E+002
	13	2901-	2916	2907.41	726.88	0.37	5.16E+001	27.79	4.94E+001
	14	3634-	3651	3643.12	910.86	1.54	1.30E+002	35.85	6.29E+001
	15	3867-	3881	3874.02	968.60	1.32	7.50E+001	28.23	4.60E+001
	16	5827-	5855	5842.04	1460.76	2.07	1.14E+003	70.51	3.30E+001
	17	7050-	7064	7057.46	1764.70	0.47	5.38E+001	19.43	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: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.985	511.00*		100.00	2.45308E-001	8.22661E-002
K-40	1.000	1460.81*		10.67	1.91206E+001	1.94809E+000
TL-208	0.744	277.35		6.80		
		510.84*		21.60	1.13568E+000	3.91992E-001
		583.14*		84.20	3.32664E-001	9.26015E-002
		860.37		12.46		
Bi-212	0.997	727.17*		11.80	6.62409E-001	3.64980E-001
Pb-212	0.520	74.81*	@	10.70	1.52938E+001	3.32488E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.13814E-001	2.17790E-001
Bi-214	0.694	609.31*		46.30	5.12772E-001	1.48886E-001
		1120.29		15.10		
		1764.49*		15.80	6.31926E-001	2.36862E-001
PB-214	0.580	74.82*	@	6.21	2.63516E+001	6.03981E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	4.37696E-001	1.79908E-001
		351.92*		37.20	5.31730E-001	1.86612E-001
Ac-228	0.630	338.32		11.40		
		911.07*		27.70	7.44518E-001	2.22326E-001
		969.11*		16.60	7.28680E-001	2.84859E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.985	1.734523E-001	8.463040E-002
K-40		1.000	1.912063E+001	1.948092E+000
TL-208		0.744	3.326635E-001	9.196466E-002
Bi-212		0.997	6.624085E-001	3.649796E-001
Pb-212	@	0.520	7.138137E-001	2.177895E-001
Bi-214		0.694	5.465180E-001	1.260520E-001
PB-214	@	0.580	4.829933E-001	1.295191E-001
Ac-228		0.630	7.385228E-001	1.752639E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.62	9.3256E-001	15.79
3	84.76	4.9052E-001	62.79
4	113.27	1.7838E-001	118.63
m 7	299.79	8.6307E-002	47.09
9	471.52	3.4792E-002	122.75

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0053E-001	8.86E-002	1.8348E-002
	1332.49	100.00	8.8574E-002		4.9183E-002
Nb-94	702.63	100.00	1.0326E-001	9.19E-002	-3.0440E-002
	871.10	100.00	9.1860E-002		8.4388E-002
Ag-108m	79.20	7.10	6.3623E+000	1.21E-001	-6.0077E+000
	433.93	89.90	1.2069E-001		4.1590E-003
	614.37	90.40	1.2741E-001		7.7318E-003
	722.95	90.50	1.2345E-001		3.4521E-002
Sb-125	176.33	6.89	2.4948E+000	3.78E-001	-6.4396E-001
	427.89	29.33	3.7801E-001		3.4316E-001
	463.38	10.35	1.0262E+000		-5.1920E-001
	600.56	17.80	5.7467E-001		-3.2516E-001
	606.64	5.02	2.7774E+000		5.2684E+000
	635.90	11.32	8.7240E-001		1.1011E-001
Cs-134	563.23	8.38	1.2747E+000	1.10E-001	-2.7542E-001
	569.32	15.43	6.3516E-001		-1.4436E-002
	604.70	97.60	1.4030E-001		7.0276E-003
	795.84	85.40	1.1010E-001		-1.3938E-003
	801.93	8.73	1.0655E+000		2.2273E-001
Cs-137	661.65	85.12	1.2464E-001	1.25E-001	-2.2248E-002
Eu-152	121.78	28.40	8.9376E-001	3.60E-001	9.7071E-001
	244.69	7.49	1.8799E+000		5.8568E-001
	344.27	26.50	4.5671E-001		-1.7462E-001
	778.89	12.74	7.4819E-001		-5.5106E-001
	867.32	4.16	2.2710E+000		-1.7619E+000
	964.01	14.40	8.5522E-001		3.3763E-001
	1085.78	10.00	9.4357E-001		-6.5106E-001
	1112.02	13.30	7.5385E-001		-4.7802E-001
	1407.95	20.70	3.5976E-001		-1.1504E-001
Eu-154	123.07	40.50	6.1661E-001	2.42E-001	-1.4688E-001
	247.94	6.60	2.0675E+000		-1.1238E+000
	591.81	4.83	2.0840E+000		9.4630E-001
	723.30	19.70	5.6716E-001		1.3308E-001
	756.87	4.33	2.3136E+000		4.1627E-001
	873.19	11.50	7.3564E-001		-8.6330E-001
	996.32	10.30	9.1546E-001		-9.9247E-001
	1004.76	17.90	4.6929E-001		-4.8095E-001
	1274.45	35.50	2.4240E-001		4.0429E-002
Eu-155	86.54	30.90	1.2999E+000	1.30E+000	1.3568E-001
	105.31	20.70	1.4829E+000		-9.8604E-001
Am-241	59.54	35.90	1.7400E+000	1.74E+000	1.2480E+000
Cm-243	228.19	10.56	1.3532E+000	9.23E-001	-2.2511E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.2257E-001	9.23E-001	3.5199E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/27/2006 3:03:52 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-203-F-
Sample Title: NOL-03-02-203-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 2:53:51 PM
Live Time: 600.0 seconds
Real Time: 601.4 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-203-F-
Title: NOL-03-02-203-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	308	291.32	72.66	1.21	4.89E+002	81.77	2.70E+003
m	2	283-	308	300.23	74.89	1.21	1.03E+003	95.81	3.09E+003
	3	944-	961	953.97	238.37	0.71	3.07E+002	80.49	4.24E+002
	4	1172-	1187	1180.17	294.94	1.46	8.43E+001	53.24	2.18E+002
	5	1398-	1411	1406.76	351.60	1.59	1.37E+002	47.34	1.62E+002
	6	2324-	2339	2331.28	582.80	1.31	2.12E+002	42.97	8.94E+001
	7	2428-	2444	2435.29	608.81	1.47	1.54E+002	41.08	9.13E+001
M	8	2882-	2916	2888.14	722.06	1.38	2.04E+001	14.30	4.49E+001
m	9	2882-	2916	2908.29	727.10	1.38	5.45E+001	17.63	4.53E+001
	10	3171-	3186	3179.47	794.91	0.35	3.19E+001	27.33	5.41E+001
	11	3635-	3651	3641.87	910.55	1.25	1.54E+002	32.80	4.01E+001
	12	3866-	3883	3873.61	968.50	0.95	7.99E+001	33.65	6.61E+001
	13	4471-	4487	4479.22	1119.95	0.81	5.21E+001	28.08	4.89E+001
	14	5827-	5856	5841.88	1460.72	1.95	1.15E+003	70.83	3.38E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	1.000	1460.81*		10.67	1.92073E+001	1.95695E+000
TL-208	0.468	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	3.58062E-001	8.63720E-002
		860.37		12.46		
Bi-212	1.000	727.17*		11.80	6.99369E-001	2.40704E-001
Pb-212	0.519	74.81*	@	10.70	1.47579E+001	3.20126E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.45256E-001	2.27868E-001
Bi-214	0.693	609.31*		46.30	4.79845E-001	1.41224E-001
		1120.29*		15.10	5.80268E-001	3.19060E-001
		1764.49		15.80		
PB-214	0.580	74.82*	@	6.21	2.54282E+001	5.81653E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	5.05779E-001	3.30556E-001
		351.92*		37.20	4.44951E-001	1.71136E-001
Ac-228	0.625	338.32		11.40		
		911.07*		27.70	8.80647E-001	2.13346E-001
		969.11*		16.60	7.76986E-001	3.37149E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		1.000	1.920731E+001	1.956947E+000
TL-208		0.468	3.580620E-001	8.637203E-002
Bi-212		1.000	6.993690E-001	2.407042E-001
Pb-212	@	0.519	7.452556E-001	2.278679E-001
Bi-214		0.693	4.962965E-001	1.291395E-001
PB-214	@	0.580	4.578087E-001	1.519764E-001
Ac-228		0.625	8.510073E-001	1.802826E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.66	8.1491E-001	16.72
M 8	722.06	3.4013E-002	70.08
10	794.91	5.3236E-002	85.55

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	9.8536E-002	7.84E-002	-7.5789E-002
	1332.49	100.00	7.8375E-002		-1.6582E-002
Nb-94	702.63	100.00	1.0050E-001	9.22E-002	-9.7441E-003
	871.10	100.00	9.2163E-002		3.4571E-002
Ag-108m	79.20	7.10	5.9825E+000	1.15E-001	-3.1113E+000
	433.93	89.90	1.1500E-001		-1.5847E-002
	614.37	90.40	1.2256E-001		-2.2388E-002
	722.95	90.50	1.2010E-001		1.9119E-002
Sb-125	176.33	6.89	2.3704E+000	3.45E-001	2.0909E-001
	427.89	29.33	3.4528E-001		1.1902E-001
	463.38	10.35	1.0542E+000		2.1596E-001
	600.56	17.80	5.7339E-001		-2.9272E-001
	606.64	5.02	2.6829E+000		3.9492E+000
	635.90	11.32	8.5928E-001		1.5180E-001
Cs-134	563.23	8.38	1.2317E+000	1.18E-001	3.4825E-001
	569.32	15.43	6.6424E-001		-1.8941E-001
	604.70	97.60	1.3661E-001		-1.9796E-002
	795.84	85.40	1.1817E-001		-1.4020E-002
	801.93	8.73	1.1014E+000		6.9973E-001
Cs-137	661.65	85.12	1.2736E-001	1.27E-001	1.7075E-002
Eu-152	121.78	28.40	8.4256E-001	3.57E-001	1.5736E-001
	244.69	7.49	1.7691E+000		-2.0216E+000
	344.27	26.50	4.3082E-001		7.7908E-002
	778.89	12.74	7.3490E-001		-1.4034E+000
	867.32	4.16	2.2568E+000		4.3854E-001
	964.01	14.40	8.9376E-001		3.7032E-001
	1085.78	10.00	9.2323E-001		-1.1061E-001
	1112.02	13.30	6.8587E-001		-4.1672E-001
	1407.95	20.70	3.5738E-001		1.3538E-001
Eu-154	123.07	40.50	5.8211E-001	2.50E-001	-1.8971E-001
	247.94	6.60	1.9536E+000		3.2918E-001
	591.81	4.83	2.0213E+000		-3.9242E-001
	723.30	19.70	5.5417E-001		1.3528E-001
	756.87	4.33	2.2522E+000		-1.3940E+000
	873.19	11.50	7.7496E-001		3.3189E-001
	996.32	10.30	8.7750E-001		-7.8736E-002
	1004.76	17.90	5.0803E-001		-2.8460E-001
	1274.45	35.50	2.5021E-001		9.8009E-003
Eu-155	86.54	30.90	1.2543E+000	1.25E+000	2.0922E+000
	105.31	20.70	1.4334E+000		-3.6246E-001
Am-241	59.54	35.90	1.6599E+000	1.66E+000	-4.6929E-001
Cm-243	228.19	10.56	1.2825E+000	9.04E-001	1.0404E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.0431E-001	9.04E-001	-3.3727E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/27/2006 2:42:59 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-204-F-
Sample Title: NOL-03-02-204-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 2:32:56 PM
Live Time: 600.0 seconds
Real Time: 601.5 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-204-F-
Title: NOL-03-02-204-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	307	291.44	72.69	1.17	5.24E+002	83.96	2.88E+003
m	2	283-	307	300.08	74.85	1.17	1.09E+003	98.86	3.33E+003
	3	331-	346	339.64	84.74	0.73	2.35E+002	181.20	2.76E+003
	4	944-	960	954.08	238.40	0.92	3.16E+002	79.82	4.29E+002
	5	1346-	1357	1352.19	337.96	1.10	1.11E+002	40.83	1.29E+002
	6	1401-	1417	1406.77	351.60	1.30	1.76E+002	55.16	1.95E+002
	7	2034-	2053	2041.97	510.45	1.07	1.82E+002	50.84	1.40E+002
	8	2323-	2341	2331.03	582.74	1.69	1.97E+002	41.67	7.61E+001
	9	2430-	2445	2435.31	608.82	1.10	1.07E+002	43.46	1.27E+002
	10	2900-	2915	2906.38	726.62	1.53	5.04E+001	30.84	6.56E+001
	11	3433-	3445	3439.29	859.89	0.53	3.44E+001	22.38	3.56E+001
	12	3634-	3652	3642.66	910.75	0.86	1.49E+002	35.47	5.32E+001
M	13	3848-	3881	3855.95	964.08	1.34	3.34E+001	16.42	5.55E+001
m	14	3848-	3881	3874.02	968.60	1.35	5.98E+001	20.53	6.58E+001
	15	5829-	5855	5841.71	1460.67	2.14	1.10E+003	67.70	2.29E+001
	16	7051-	7065	7057.64	1764.75	0.59	4.13E+001	19.27	1.88E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.990	511.00*	100.00	2.47651E-001	7.70316E-002
K-40	0.999	1460.81*	10.67	1.83675E+001	1.87105E+000
TL-208	0.898	277.35	6.80		
		510.84*	21.60	1.14653E+000	3.68715E-001
		583.14*	84.20	3.33219E-001	8.27971E-002
		860.37*	12.46	4.32028E-001	2.86024E-001
Bi-212	0.990	727.17*	11.80	6.46934E-001	4.02860E-001
Pb-212	0.520	74.81* @	10.70	1.55779E+001	3.36575E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.67101E-001	2.28260E-001
Bi-214	0.693	609.31*	46.30	3.34824E-001	1.41810E-001
		1120.29	15.10		
		1764.49*	15.80	4.84642E-001	2.31487E-001
Ac-228	0.995	338.32*	11.40	1.16610E+000	4.66286E-001
		911.07*	27.70	8.51751E-001	2.25441E-001
		969.11*	16.60	5.81762E-001	2.08725E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN	0.990	1.740476E-001	7.889387E-002
K-40	0.999	1.836753E+001	1.871053E+000
TL-208	0.898	3.407551E-001	7.888987E-002
Bi-212	0.990	6.469344E-001	4.028603E-001
Pb-212 @	0.520	7.671013E-001	2.282603E-001
Bi-214	0.693	3.757062E-001	1.209234E-001
Ac-228	0.995	7.511460E-001	1.455110E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.69	8.7352E-001	16.02
3	84.74	3.9220E-001	77.00
6	351.60	2.9278E-001	31.40
M 13	964.08	5.5700E-002	49.15

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	9.6844E-002	7.84E-002	3.4547E-002
	1332.49	100.00	7.8375E-002		3.4998E-002
Nb-94	702.63	100.00	1.0473E-001	8.88E-002	3.2519E-002
	871.10	100.00	8.8763E-002		-4.0618E-002
Ag-108m	79.20	7.10	6.1499E+000	1.18E-001	-3.4262E+000
	433.93	89.90	1.1817E-001		-1.2114E-001
	614.37	90.40	1.2673E-001		-4.5006E-002
	722.95	90.50	1.2062E-001		-2.9769E-002
Sb-125	176.33	6.89	2.4088E+000	3.82E-001	-6.0600E-001
	427.89	29.33	3.8197E-001		-3.5483E-002
	463.38	10.35	1.1292E+000		8.9976E-001
	600.56	17.80	5.8857E-001		-3.5627E-001
	606.64	5.02	2.6863E+000		3.3040E+000
	635.90	11.32	8.4819E-001		-2.9261E-001
Cs-134	563.23	8.38	1.3187E+000	1.10E-001	-4.6483E-002
	569.32	15.43	6.9613E-001		-2.0136E-001
	604.70	97.60	1.3226E-001		-8.1877E-002
	795.84	85.40	1.1010E-001		1.7157E-003
	801.93	8.73	1.0554E+000		-7.4035E-001
Cs-137	661.65	85.12	1.3416E-001	1.34E-001	9.1478E-002
Eu-152	121.78	28.40	8.6383E-001	3.17E-001	-4.9240E-001
	244.69	7.49	1.8887E+000		-1.3806E-001
	344.27	26.50	4.2000E-001		-2.3429E-001
	778.89	12.74	7.3266E-001		-1.1728E+000
	867.32	4.16	2.1916E+000		-2.2535E+000
	964.01	14.40	8.9219E-001		2.9613E-002
	1085.78	10.00	9.3346E-001		-6.8975E-001
	1112.02	13.30	7.1944E-001		-1.7964E-001
	1407.95	20.70	3.1672E-001		-3.1145E-001
Eu-154	123.07	40.50	6.0271E-001	2.62E-001	1.4856E-001
	247.94	6.60	2.0227E+000		6.8475E-001
	591.81	4.83	2.0649E+000		1.1286E+000
	723.30	19.70	5.6129E-001		-2.2300E-002
	756.87	4.33	2.3317E+000		-3.9866E-001
	873.19	11.50	7.9118E-001		6.0707E-002
	996.32	10.30	9.1546E-001		3.9194E-001
	1004.76	17.90	4.8518E-001		-6.0581E-001
	1274.45	35.50	2.6199E-001		-3.2913E-002
Eu-155	86.54	30.90	1.2799E+000	1.28E+000	4.5664E-001
	105.31	20.70	1.4321E+000		-1.0555E-001
Am-241	59.54	35.90	1.6756E+000	1.68E+000	-2.7838E-001
Cm-243	228.19	10.56	1.3320E+000	9.37E-001	1.5844E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.3738E-001	9.37E-001	3.4779E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/27/2006 11:24:00 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-205-F-
Sample Title: NOL-03-02-205-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 11:13:58 AM
Live Time: 600.0 seconds
Real Time: 601.8 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-205-F-
Title: NOL-03-02-205-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	288-	308	291.75	72.77	1.08	6.04E+002	93.72	2.51E+003
m	2	288-	308	300.15	74.87	1.09	1.17E+003	105.85	3.67E+003
	3	334-	344	339.75	84.77	1.36	3.41E+002	150.10	2.32E+003
	4	947-	961	954.03	238.39	1.31	2.96E+002	79.56	4.68E+002
	5	1172-	1186	1179.33	294.73	0.62	4.81E+001	56.71	2.73E+002
	6	1348-	1360	1352.58	338.05	0.39	5.62E+001	47.13	1.97E+002
	7	1399-	1413	1407.03	351.67	1.03	1.67E+002	52.84	1.94E+002
	8	2030-	2052	2041.27	510.28	1.10	2.26E+002	56.07	1.53E+002
	9	2323-	2340	2331.49	582.86	1.23	2.03E+002	46.15	1.08E+002
	10	2428-	2447	2435.91	608.97	1.04	1.66E+002	52.51	1.57E+002
	11	3630-	3652	3643.19	910.88	1.19	1.70E+002	45.42	9.53E+001
	12	3865-	3883	3873.89	968.57	1.54	1.06E+002	39.49	8.87E+001
	13	4470-	4487	4480.04	1120.15	1.40	6.77E+001	29.61	4.93E+001
	14	5321-	5335	5328.28	1332.28	1.06	3.68E+001	20.23	2.42E+001
	15	5826-	5856	5841.88	1460.72	2.02	1.17E+003	71.20	3.12E+001
	16	7049-	7066	7057.99	1764.84	0.66	5.88E+001	20.35	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: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.982	511.00*		100.00	3.08765E-001	8.71657E-002
K-40	1.000	1460.81*		10.67	1.95527E+001	1.98295E+000
TL-208	0.748	277.35		6.80		
		510.84*		21.60	1.42947E+000	4.20091E-001
		583.14*		84.20	3.44253E-001	9.00463E-002
		860.37		12.46		
Pb-212	0.519	74.81*	@	10.70	1.67061E+001	3.60825E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.18941E-001	2.23836E-001
Bi-214	0.997	609.31*		46.30	5.18975E-001	1.75963E-001
		1120.29*		15.10	7.55211E-001	3.39634E-001
		1764.49*		15.80	6.91406E-001	2.48914E-001
PB-214	0.580	74.82*	@	6.21	2.87851E+001	6.55887E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.88807E-001	3.43649E-001
		351.92*		37.20	5.44633E-001	1.94666E-001
Ac-228	0.996	338.32*		11.40	5.90593E-001	5.03749E-001
		911.07*		27.70	9.70945E-001	2.82936E-001
		969.11*		16.60	1.03300E+000	3.98895E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.982	2.344064E-001	8.927646E-002
K-40		1.000	1.955267E+001	1.982950E+000
TL-208		0.748	3.442534E-001	8.934467E-002
Pb-212	@	0.519	7.189408E-001	2.238358E-001
Bi-214		0.997	6.035725E-001	1.323306E-001
PB-214	@	0.580	4.824847E-001	1.693781E-001
Ac-228		0.996	9.221327E-001	2.098088E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F 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	1.0070E+000	15.51
3	84.77	5.6862E-001	43.99
14	1332.28	6.1339E-002	54.97

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	1.0689E-001	9.55E-002	-7.0334E-002
	1332.49	100.00	9.5475E-002		5.8344E-002
Nb-94	702.63	100.00	1.1132E-001	9.94E-002	9.0655E-002
	871.10	100.00	9.9441E-002		-7.0060E-002
Ag-108m	79.20	7.10	6.8577E+000	1.29E-001	1.5169E+000
	433.93	89.90	1.3131E-001		9.7471E-003
	614.37	90.40	1.3636E-001		-4.6967E-002
	722.95	90.50	1.2891E-001		8.5054E-002
Sb-125	176.33	6.89	2.7363E+000	4.10E-001	-2.7342E+000
	427.89	29.33	4.0962E-001		3.0216E-001
	463.38	10.35	1.1420E+000		-5.1919E-002
	600.56	17.80	6.4448E-001		-8.1277E-001
	606.64	5.02	3.0278E+000		-8.0683E-001
	635.90	11.32	9.2906E-001		1.9979E-001
Cs-134	563.23	8.38	1.3980E+000	1.31E-001	-2.0019E-001
	569.32	15.43	7.2397E-001		-1.7240E-001
	604.70	97.60	1.5017E-001		-9.6634E-002
	795.84	85.40	1.3056E-001		1.6324E-002
	801.93	8.73	1.2709E+000		-1.7512E-001
Cs-137	661.65	85.12	1.3965E-001	1.40E-001	1.0785E-001
Eu-152	121.78	28.40	9.7506E-001	3.60E-001	5.6615E-001
	244.69	7.49	2.0871E+000		5.1171E-001
	344.27	26.50	4.7446E-001		1.3927E-001
	778.89	12.74	8.0316E-001		-9.4795E-002
	867.32	4.16	2.4742E+000		-3.2055E+000
	964.01	14.40	9.7761E-001		-1.8180E-001
	1085.78	10.00	1.0511E+000		-8.1107E-001
	1112.02	13.30	7.9581E-001		-3.2229E-001
	1407.95	20.70	3.5976E-001		1.3734E-001
Eu-154	123.07	40.50	6.7544E-001	2.60E-001	9.7717E-002
	247.94	6.60	2.2740E+000		7.4344E-001
	591.81	4.83	2.3258E+000		1.6032E+000
	723.30	19.70	5.9227E-001		2.9565E-001
	756.87	4.33	2.5496E+000		-2.8584E-001
	873.19	11.50	8.5037E-001		-1.6723E-001
	996.32	10.30	9.5776E-001		-9.4115E-002
	1004.76	17.90	5.7415E-001		7.4407E-001
	1274.45	35.50	2.5989E-001		-3.1053E-001
Eu-155	86.54	30.90	1.4094E+000	1.41E+000	-4.9159E-001
	105.31	20.70	1.6581E+000		-2.7222E-001
Am-241	59.54	35.90	1.8751E+000	1.88E+000	6.3877E-001
Cm-243	228.19	10.56	1.4759E+000	1.03E+000	-5.0069E-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	-8.3314E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/27/2006 11:06:03 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-206-F-
Sample Title: NOL-03-02-206-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 10:56:01 AM
Live Time: 600.0 seconds
Real Time: 601.6 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-206-F-
Title: NOL-03-02-206-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	308	291.66	72.74	1.19	6.21E+002	90.33	3.27E+003
m	2	283-	308	300.47	74.95	1.20	1.24E+003	104.91	3.73E+003
	3	332-	346	339.77	84.78	0.81	2.92E+002	184.99	2.98E+003
	4	947-	961	954.33	238.46	1.04	2.92E+002	72.40	3.72E+002
	5	1171-	1185	1179.90	294.87	0.40	7.63E+001	54.97	2.46E+002
	6	1346-	1360	1351.51	337.79	0.85	5.06E+001	47.31	1.84E+002
	7	1399-	1414	1407.78	351.86	1.07	1.32E+002	51.80	1.88E+002
	8	1886-	1896	1891.86	472.91	0.47	2.22E+001	27.39	7.28E+001
	9	2032-	2053	2041.92	510.44	1.61	1.90E+002	55.58	1.63E+002
	10	2324-	2339	2331.07	582.75	1.10	1.36E+002	42.66	1.12E+002
	11	2425-	2443	2435.82	608.95	1.20	1.42E+002	41.71	9.20E+001
	12	3634-	3653	3643.44	910.94	1.38	1.29E+002	35.23	5.56E+001
	13	3793-	3804	3798.63	949.75	0.32	1.85E+001	20.78	3.65E+001
	14	3867-	3885	3875.18	968.89	1.41	7.47E+001	31.50	5.43E+001
	15	5322-	5336	5328.98	1332.45	1.54	3.56E+001	17.84	1.64E+001
	16	5505-	5516	5510.95	1377.96	0.58	2.04E+001	9.73	1.59E+000
	17	5829-	5855	5843.13	1461.03	2.00	1.11E+003	69.60	3.39E+001
	18	7051-	7066	7059.43	1765.20	1.00	4.49E+001	18.96	1.61E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.989	511.00*		100.00	2.59238E-001	8.35481E-002
K-40	0.998	1460.81*		10.67	1.86531E+001	1.90881E+000
TL-208	0.747	277.35		6.80		
		510.84*		21.60	1.20017E+000	3.99022E-001
		583.14*		84.20	2.29666E-001	7.81256E-002
		860.37		12.46		
Pb-212	0.520	74.81*	@	10.70	1.77157E+001	3.78248E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.10131E-001	2.08250E-001
Bi-214	0.692	609.31*		46.30	4.43210E-001	1.41212E-001
		1120.29		15.10		
		1764.49*		15.80	5.27956E-001	2.28936E-001
PB-214	0.581	74.82*	@	6.21	3.05246E+001	6.88371E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	4.57640E-001	3.38642E-001
		351.92*		37.20	4.31276E-001	1.83454E-001
Ac-228	0.997	338.32*		11.40	5.31888E-001	5.03842E-001
		911.07*		27.70	7.40671E-001	2.18903E-001
		969.11*		16.60	7.25850E-001	3.15601E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.989	2.096299E-001	8.521996E-002
K-40		0.998	1.865306E+001	1.908807E+000
TL-208		0.747	2.296655E-001	7.776630E-002
Pb-212	@	0.520	7.101314E-001	2.082499E-001
Bi-214		0.692	4.665664E-001	1.201871E-001
PB-214	@	0.581	4.372573E-001	1.613052E-001
Ac-228		0.997	7.127995E-001	1.693997E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.74	1.0349E+000	14.55
3	84.78	4.8594E-001	63.45
8	472.91	3.6974E-002	123.46
13	949.75	3.0894E-002	112.11
15	1332.45	5.9383E-002	50.06
16	1377.96	3.4015E-002	47.69

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	9.8871E-002	9.21E-002	5.5076E-002
	1332.49	100.00	9.2093E-002		3.5353E-002
Nb-94	702.63	100.00	1.0521E-001	1.00E-001	-6.0220E-002
	871.10	100.00	1.0000E-001		-1.4369E-002
Ag-108m	79.20	7.10	6.6285E+000	1.22E-001	-4.8198E+000
	433.93	89.90	1.2353E-001		7.5521E-002
	614.37	90.40	1.2763E-001		-9.6899E-003
	722.95	90.50	1.2243E-001		-4.3085E-002
Sb-125	176.33	6.89	2.5761E+000	3.79E-001	-9.9236E-001
	427.89	29.33	3.7858E-001		9.0801E-002
	463.38	10.35	1.0332E+000		-2.8917E-001
	600.56	17.80	6.1181E-001		1.7203E-001
	606.64	5.02	2.5669E+000		2.7225E+000
	635.90	11.32	8.7240E-001		-5.2891E-002
Cs-134	563.23	8.38	1.2496E+000	1.13E-001	6.0826E-001
	569.32	15.43	6.8521E-001		2.8804E-002
	604.70	97.60	1.3115E-001		4.2565E-002
	795.84	85.40	1.1340E-001		-2.5932E-002
	801.93	8.73	1.0982E+000		-6.0591E-001
Cs-137	661.65	85.12	1.3442E-001	1.34E-001	1.6158E-001
Eu-152	121.78	28.40	9.4084E-001	3.25E-001	8.9013E-001
	244.69	7.49	1.9366E+000		6.9117E-001
	344.27	26.50	4.5671E-001		-1.6559E-001
	778.89	12.74	7.5039E-001		-1.0481E+000
	867.32	4.16	2.4481E+000		-3.4184E+000
	964.01	14.40	8.3862E-001		-1.1080E-001
	1085.78	10.00	9.9886E-001		1.8106E-001
	1112.02	13.30	7.3440E-001		-8.0512E-002
	1407.95	20.70	3.2476E-001		-1.7789E-001
Eu-154	123.07	40.50	6.4885E-001	2.56E-001	3.0251E-001
	247.94	6.60	2.0925E+000		1.0277E+000
	591.81	4.83	2.2787E+000		-6.5102E-001
	723.30	19.70	5.6247E-001		-3.3661E-001
	756.87	4.33	2.2522E+000		-1.4362E+000
	873.19	11.50	8.5778E-001		-2.7107E-001
	996.32	10.30	9.1546E-001		3.9902E-001
	1004.76	17.90	5.1357E-001		9.7745E-002
	1274.45	35.50	2.5563E-001		2.8182E-001
Eu-155	86.54	30.90	1.3706E+000	1.37E+000	4.2434E-001
	105.31	20.70	1.5766E+000		-6.0465E-001
Am-241	59.54	35.90	1.8078E+000	1.81E+000	-8.3751E-001
Cm-243	228.19	10.56	1.3490E+000	9.72E-001	1.9440E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	9.7154E-001	9.72E-001	5.1752E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/26/2006 2:10:07 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-207-F-
Sample Title: NOL-03-02-207-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/26/2006 2:00:05 PM
Live Time: 600.0 seconds
Real Time: 601.8 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-207-F-
Title: NOL-03-02-207-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	308	291.67	72.75	1.27	8.10E+002	95.78	3.47E+003
m	2	283-	308	300.16	74.87	1.27	1.27E+003	106.09	3.95E+003
	3	331-	344	339.82	84.79	1.25	4.70E+002	176.33	2.76E+003
	4	944-	961	954.09	238.40	1.38	2.42E+002	88.34	5.48E+002
	5	1347-	1359	1352.46	338.02	0.73	5.80E+001	43.85	1.65E+002
	6	1400-	1414	1407.13	351.69	0.47	9.32E+001	51.15	2.04E+002
	7	2323-	2339	2330.66	582.65	1.16	1.41E+002	43.36	1.11E+002
	8	2428-	2445	2434.52	608.62	1.28	1.70E+002	45.96	1.17E+002
	9	2639-	2653	2645.29	661.33	1.31	3.09E+001	34.50	9.61E+001
	10	2901-	2911	2906.31	726.60	1.63	3.09E+001	27.20	6.61E+001
	11	3634-	3653	3642.32	910.66	1.47	1.75E+002	39.47	6.60E+001
	12	3725-	3737	3730.83	932.80	0.93	2.31E+001	21.87	3.79E+001
	13	3866-	3883	3873.55	968.49	1.26	8.78E+001	33.57	6.32E+001
	14	4124-	4136	4129.68	1032.54	0.55	1.53E+001	19.22	3.07E+001
	15	4471-	4487	4479.12	1119.92	0.50	4.62E+001	30.74	6.38E+001
	16	4687-	4698	4692.32	1173.24	0.62	1.73E+001	19.44	3.18E+001
	17	5828-	5856	5842.20	1460.80	1.55	1.12E+003	69.82	3.21E+001
	18	7048-	7064	7057.17	1764.63	0.34	5.63E+001	20.45	1.67E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	1.000	1460.81*	10.67	1.88168E+001	1.92151E+000
Cs-137	0.996	661.65*	85.12	5.38875E-002	6.05536E-002
TL-208	0.465	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.38884E-001	7.96911E-002
		860.37	12.46		
Bi-212	0.989	727.17*	11.80	3.96512E-001	3.51996E-001
Pb-212	0.520	74.81* @	10.70	1.81386E+001	3.86620E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.87909E-001	2.33663E-001
Bi-214	0.989	609.31*	46.30	5.32048E-001	1.57750E-001
		1120.29*	15.10	5.14725E-001	3.47008E-001
		1764.49*	15.80	6.61551E-001	2.49232E-001
Ac-228	0.992	338.32*	11.40	6.08864E-001	4.70518E-001
		911.07*	27.70	1.00137E+000	2.53603E-001
		969.11*	16.60	8.53406E-001	3.38408E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		1.000	1.881683E+001	1.921507E+000
Cs-137		0.996	5.388754E-002	6.055361E-002
TL-208		0.465	2.388844E-001	7.969115E-002
Bi-212		0.989	3.965121E-001	3.519957E-001
Pb-212	@	0.520	5.879092E-001	2.336630E-001
Bi-214		0.989	5.620996E-001	1.244295E-001
Ac-228		0.992	8.949378E-001	1.863465E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.75	1.3501E+000	11.82
3	84.79	7.8312E-001	37.53
6	351.69	1.5530E-001	54.90
12	932.80	3.8566E-002	94.49
14	1032.54	2.5426E-002	125.98
16	1173.24	2.8750E-002	112.70

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	1.0781E-001	9.58E-002	8.1389E-002
		1332.49	100.00	9.5843E-002		3.3403E-002
	Nb-94	702.63	100.00	1.0760E-001	1.03E-001	-5.9770E-002
		871.10	100.00	1.0301E-001		2.6106E-002
	Ag-108m	79.20	7.10	6.6691E+000	1.30E-001	-4.2029E+000
		433.93	89.90	1.3025E-001		-4.7434E-002
		614.37	90.40	1.2965E-001		8.5739E-003
		722.95	90.50	1.3156E-001		6.7798E-002
	Sb-125	176.33	6.89	2.6840E+000	3.99E-001	2.1552E-001
		427.89	29.33	3.9901E-001		-1.5682E-001
		463.38	10.35	1.1609E+000		1.8390E-001
		600.56	17.80	6.2603E-001		-6.9480E-001
		606.64	5.02	2.8300E+000		4.7729E+000
		635.90	11.32	9.5312E-001		1.3774E-001
	Cs-134	563.23	8.38	1.3331E+000	1.31E-001	6.8563E-001
		569.32	15.43	7.0687E-001		-5.1462E-001
		604.70	97.60	1.4116E-001		-1.2786E-001
		795.84	85.40	1.3112E-001		2.2109E-002
		801.93	8.73	1.1967E+000		-1.0184E+000
+	Cs-137	661.65*	85.12	1.0064E-001	1.01E-001	5.3888E-002
	Eu-152	121.78	28.40	9.6005E-001	3.17E-001	4.1529E-002
		244.69	7.49	1.9631E+000		-6.6376E-001
		344.27	26.50	4.3348E-001		-3.6118E-001
		778.89	12.74	8.0316E-001		-1.6015E+000
		867.32	4.16	2.4871E+000		-3.6213E+000
		964.01	14.40	9.2309E-001		4.2958E-002
		1085.78	10.00	1.0238E+000		-1.1989E-001
		1112.02	13.30	7.1944E-001		1.1763E-001
		1407.95	20.70	3.1672E-001		-3.2587E-002
	Eu-154	123.07	40.50	6.6156E-001	2.55E-001	-2.5797E-002
		247.94	6.60	2.1400E+000		1.3348E+000
		591.81	4.83	2.4455E+000		2.0190E+000
		723.30	19.70	6.0878E-001		2.0042E-001
		756.87	4.33	2.4660E+000		-1.6090E+000
		873.19	11.50	9.1248E-001		3.4805E-001
		996.32	10.30	1.0451E+000		4.3860E-001
		1004.76	17.90	5.7579E-001		-3.1016E-001
		1274.45	35.50	2.5456E-001		1.2283E-001
	Eu-155	86.54	30.90	1.4079E+000	1.41E+000	-7.3352E-001
		105.31	20.70	1.6476E+000		1.1678E+000
	Am-241	59.54	35.90	1.8645E+000	1.86E+000	8.7788E-001
	Cm-243	228.19	10.56	1.4697E+000	1.01E+000	5.5149E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0110E+000	1.01E+000	4.5935E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/26/2006 2:28:55 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-208-F-
Sample Title: NOL-03-02-208-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/26/2006 2:18:53 PM
Live Time: 600.0 seconds
Real Time: 601.9 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-208-F-
Title: NOL-03-02-208-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	308	291.43	72.69	1.17	6.36E+002	95.26	3.51E+003
m	2	284-	308	300.17	74.87	1.18	1.26E+003	108.63	4.18E+003
	3	332-	346	339.55	84.72	0.85	3.92E+002	192.58	3.21E+003
	4	947-	963	953.85	238.34	1.37	2.33E+002	88.91	5.75E+002
	5	1176-	1191	1181.26	295.21	0.40	1.17E+002	58.35	2.55E+002
	6	1396-	1413	1406.59	351.56	0.88	1.74E+002	61.17	2.46E+002
	7	2323-	2339	2331.18	582.78	1.24	1.87E+002	48.76	1.38E+002
	8	2377-	2387	2381.54	595.37	1.11	3.18E+001	26.34	6.22E+001
	9	2427-	2447	2435.37	608.83	1.90	1.65E+002	50.87	1.40E+002
	10	2641-	2651	2646.22	661.56	0.38	2.53E+001	27.51	7.17E+001
	11	3633-	3652	3643.30	910.91	1.60	1.58E+002	41.00	7.99E+001
	12	3867-	3883	3873.93	968.58	1.09	8.50E+001	32.19	5.90E+001
	13	5320-	5335	5328.47	1332.33	1.87	6.20E+001	22.20	2.20E+001
	14	5828-	5857	5842.39	1460.84	2.09	1.20E+003	70.89	2.22E+001
	15	7051-	7066	7058.64	1765.00	1.37	5.69E+001	18.36	1.01E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	1.000	1460.81*		10.67	2.01913E+001	2.02138E+000
Cs-137	1.000	661.65*		85.12	4.42357E-002	4.83054E-002
TL-208	0.468	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	3.16114E-001	9.21982E-002
		860.37		12.46		
Pb-212	0.519	74.81*	@	10.70	1.79914E+001	3.85415E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	5.66010E-001	2.33592E-001
Bi-214	0.692	609.31*		46.30	5.14893E-001	1.71013E-001
		1120.29		15.10		
		1764.49*		15.80	6.68128E-001	2.25768E-001
PB-214	0.580	74.82*	@	6.21	3.09997E+001	7.01174E+000
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	6.99886E-001	3.69485E-001
		351.92*		37.20	5.65967E-001	2.20492E-001
Ac-228	0.630	338.32		11.40		
		911.07*		27.70	9.04931E-001	2.56725E-001
		969.11*		16.60	8.26767E-001	3.24750E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		1.000	2.019127E+001	2.021380E+000
Cs-137		1.000	4.423569E-002	4.830543E-002
TL-208		0.468	3.161136E-001	9.219822E-002
Pb-212	@	0.519	5.660104E-001	2.335918E-001
Bi-214		0.692	5.707596E-001	1.363198E-001
PB-214	@	0.580	6.011344E-001	1.893408E-001
Ac-228		0.630	8.748694E-001	2.013953E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.69	1.0603E+000	14.97
3	84.72	6.5297E-001	49.15
8	595.37	5.2926E-002	82.94
13	1332.33	1.0339E-001	35.79

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
	Co-60	1173.22	100.00	1.1345E-001	1.05E-001	1.4858E-001
		1332.49	100.00	1.0460E-001		3.5653E-002
	Nb-94	702.63	100.00	1.2176E-001	1.08E-001	1.9868E-002
		871.10	100.00	1.0827E-001		1.8256E-002
	Ag-108m	79.20	7.10	6.8513E+000	1.32E-001	3.2293E-001
		433.93	89.90	1.3715E-001		-6.0012E-002
		614.37	90.40	1.4254E-001		4.3298E-002
		722.95	90.50	1.3203E-001		-3.0426E-002
	Sb-125	176.33	6.89	2.7729E+000	4.20E-001	1.0421E+000
		427.89	29.33	4.2047E-001		-5.6871E-002
		463.38	10.35	1.1765E+000		-3.1459E-001
		600.56	17.80	6.3417E-001		-2.3882E-001
		606.64	5.02	2.9070E+000		-1.7046E-001
		635.90	11.32	9.7075E-001		6.1572E-001
	Cs-134	563.23	8.38	1.3613E+000	1.39E-001	-8.1967E-001
		569.32	15.43	7.3173E-001		-1.6521E-001
		604.70	97.60	1.4168E-001		2.3736E-002
		795.84	85.40	1.3898E-001		4.3857E-002
		801.93	8.73	1.3171E+000		1.5948E+000
+	Cs-137	661.65*	85.12	7.9973E-002	8.00E-002	4.4236E-002
	Eu-152	121.78	28.40	9.8677E-001	3.48E-001	2.5585E-001
		244.69	7.49	2.0747E+000		-1.2833E+000
		344.27	26.50	4.8544E-001		-3.5542E-001
		778.89	12.74	8.5826E-001		-1.5352E+000
		867.32	4.16	2.6127E+000		-2.4946E+000
		964.01	14.40	9.5589E-001		5.4348E-001
		1085.78	10.00	1.0979E+000		-1.0770E-001
		1112.02	13.30	8.1594E-001		-2.1862E-001
		1407.95	20.70	3.4770E-001		-2.0117E-001
	Eu-154	123.07	40.50	6.8628E-001	3.06E-001	3.7537E-001
		247.94	6.60	2.2900E+000		-8.6620E-001
		591.81	4.83	2.4814E+000		-7.0466E-001
		723.30	19.70	6.0769E-001		-1.0890E-002
		756.87	4.33	2.6881E+000		-2.6718E+000
		873.19	11.50	9.2846E-001		-2.7108E-001
		996.32	10.30	1.0558E+000		3.9734E-001
		1004.76	17.90	6.3313E-001		-5.9779E-002
		1274.45	35.50	3.0614E-001		2.6121E-001
	Eu-155	86.54	30.90	1.4305E+000	1.43E+000	-2.6408E-001
		105.31	20.70	1.6700E+000		1.2077E+000
	Am-241	59.54	35.90	1.8657E+000	1.87E+000	-5.5459E-001
	Cm-243	228.19	10.56	1.4797E+000	1.03E+000	-5.3638E-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	1.7625E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/29/2006 3:56:05 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: NOL-03-02-209-F
Sample Title: NOL-03-02-209-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/29/2006 3:46:04 PM
Live Time: 600.0 seconds
Real Time: 600.9 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: ORG7829
Log Number: NOL-03-02-209-F
Title: NOL-03-02-209-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	306	301.01	75.25	1.05	1.43E+002	96.71	9.58E+002
2	332-	347	341.00	85.25	0.88	1.24E+002	114.05	1.08E+003
3	948-	961	954.38	238.61	1.04	1.69E+002	61.99	3.01E+002
4	1399-	1414	1407.84	351.98	0.73	8.90E+001	47.64	1.67E+002
5	2325-	2341	2332.28	583.11	1.73	1.21E+002	36.32	7.04E+001
6	2428-	2445	2436.34	609.13	1.80	9.72E+001	39.02	9.18E+001
7	2903-	2914	2908.31	727.13	0.44	2.03E+001	21.05	3.77E+001
8	3635-	3655	3644.51	911.19	0.41	9.06E+001	34.25	5.84E+001
9	3865-	3883	3874.14	968.60	0.72	6.82E+001	27.89	3.98E+001
10	4276-	4288	4281.92	1070.56	0.29	1.49E+001	14.84	1.61E+001
11	4474-	4488	4480.48	1120.20	0.90	4.54E+001	22.59	2.96E+001
12	5829-	5858	5843.73	1461.04	1.95	8.16E+002	58.38	1.50E+001
13	7053-	7066	7059.07	1764.90	1.24	2.52E+001	13.90	8.77E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.998	1460.81*	10.67	1.85464E+001	2.00386E+000
TL-208	0.472	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.69227E-001	8.83112E-002
		860.37	12.46		
Bi-212	1.000	727.17*	11.80	3.45082E-001	3.59761E-001
Pb-212	0.593	74.81* @	10.70	5.50711E+000	3.88241E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.51035E-001	2.20013E-001
Bi-214	0.998	609.31*	46.30	4.00310E-001	1.68174E-001
		1120.29*	15.10	6.69577E-001	3.40709E-001
		1764.49*	15.80	4.10261E-001	2.29800E-001
Ac-228	0.630	338.32	11.40		
		911.07*	27.70	6.89699E-001	2.72539E-001
		969.11*	16.60	8.80190E-001	3.71650E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40	0.998	1.854644E+001	2.003856E+000
TL-208	0.472	2.692273E-001	8.831119E-002
Bi-212	1.000	3.450820E-001	3.597613E-001
Pb-212 @	0.593	5.510346E-001	2.200132E-001
Bi-214	0.998	4.401778E-001	1.260795E-001
Ac-228	0.630	7.563145E-001	2.197781E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
2	85.25	2.0625E-001	92.16
4	351.98	1.4826E-001	53.56
10	1070.56	2.4892E-002	99.36

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:ORG7829
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.2573E-001	9.88E-002	1.3400E-003
	1332.49	100.00	9.8816E-002		2.2249E-002
Nb-94	702.63	100.00	1.1007E-001	1.10E-001	-1.7674E-003
	871.10	100.00	1.1242E-001		-5.4240E-002
Ag-108m	79.20	7.10	1.0871E+001	1.44E-001	-9.9537E+000
	433.93	89.90	1.5508E-001		2.0307E-003
	614.37	90.40	1.6991E-001		6.1872E-002
	722.95	90.50	1.4442E-001		2.0457E-002
Sb-125	176.33	6.89	2.9335E+000	4.88E-001	-1.4911E+000
	427.89	29.33	4.8778E-001		-6.0883E-001
	463.38	10.35	1.2628E+000		-1.3297E-001
	600.56	17.80	6.7967E-001		-2.2627E-001
	606.64	5.02	3.1301E+000		5.0070E+000
	635.90	11.32	1.0496E+000		2.2351E-001
Cs-134	563.23	8.38	1.5755E+000	1.33E-001	5.4247E-001
	569.32	15.43	8.6450E-001		4.7115E-001
	604.70	97.60	1.5842E-001		6.8398E-002
	795.84	85.40	1.3300E-001		8.7561E-002
	801.93	8.73	1.1386E+000		-5.7902E-001
Cs-137	661.65	85.12	1.3761E-001	1.38E-001	-1.3441E-001
Eu-152	121.78	28.40	1.0759E+000	3.93E-001	2.9735E-001
	244.69	7.49	2.3347E+000		-8.0017E-001
	344.27	26.50	5.3702E-001		-6.1113E-001
	778.89	12.74	8.6743E-001		-2.8897E-001
	867.32	4.16	2.7313E+000		-2.0828E+000
	964.01	14.40	9.8843E-001		-2.8240E-001
	1085.78	10.00	1.0349E+000		-8.2301E-001
	1112.02	13.30	7.9121E-001		-8.7193E-001
	1407.95	20.70	3.9289E-001		5.3028E-002
Eu-154	123.07	40.50	7.4545E-001	2.67E-001	4.5144E-001
	247.94	6.60	2.6142E+000		-1.2363E+000
	591.81	4.83	2.5741E+000		7.9853E-001
	723.30	19.70	6.6703E-001		2.5685E-001
	756.87	4.33	2.5941E+000		1.7041E+000
	873.19	11.50	9.6256E-001		-1.3315E+000
	996.32	10.30	1.0466E+000		2.9668E-001
	1004.76	17.90	5.6634E-001		-4.5201E-001
	1274.45	35.50	2.6673E-001		-2.8117E-001
Eu-155	86.54	30.90	1.8335E+000	1.83E+000	2.6212E+000
	105.31	20.70	1.8394E+000		-6.1447E-001
Am-241	59.54	35.90	4.4204E+000	4.42E+000	-2.4974E+000
Cm-243	228.19	10.56	1.7712E+000	1.21E+000	8.9909E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2123E+000	1.21E+000	3.3773E-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 6/29/2006 3:38:49 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: ORG7829

Spectrum File: ORG7829
Sample ID: NOL-03-02-210-F
Sample Title: NOL-03-02-210-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/29/2006 3:28:48 PM
Live Time: 600.0 seconds
Real Time: 600.8 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: ORG7829
Log Number: NOL-03-02-210-F
Title: NOL-03-02-210-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	297-	308	300.95	75.24	1.31	2.12E+002	92.54	7.95E+002
	2	945-	961	955.43	238.87	0.60	1.72E+002	66.24	3.10E+002
	3	1401-	1414	1406.27	351.59	0.50	6.77E+001	40.93	1.32E+002
	4	2035-	2052	2042.53	510.67	1.63	8.14E+001	39.35	9.86E+001
	5	2324-	2339	2332.68	583.21	1.39	1.06E+002	34.52	6.80E+001
	6	2429-	2445	2436.69	609.21	0.85	7.90E+001	36.10	8.30E+001
M	7	2887-	2916	2892.02	723.06	0.82	1.84E+001	12.61	3.25E+001
m	8	2887-	2916	2909.80	727.50	0.82	3.09E+001	15.14	3.58E+001
	9	3173-	3184	3178.79	794.75	0.69	2.75E+001	20.23	3.15E+001
	10	3636-	3652	3644.46	911.18	1.97	8.95E+001	28.45	3.85E+001
	11	3869-	3883	3875.76	969.01	0.89	4.68E+001	25.65	4.32E+001
	12	5830-	5857	5843.97	1461.10	2.11	7.20E+002	55.92	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
ANN	0.996	511.00*	100.00	1.46253E-001	7.33961E-002
K-40	0.997	1460.81*	10.67	1.63667E+001	1.83608E+000
TL-208	0.752	277.35	6.80		
		510.84*	21.60	6.77100E-001	3.44267E-001
		583.14*	84.20	2.36559E-001	8.29815E-002
		860.37	12.46		
Bi-212	0.996	727.17*	11.80	5.25690E-001	2.64463E-001
Pb-212	0.592	74.81* @	10.70	8.19120E+000	3.91529E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.60882E-001	2.33464E-001
Bi-214	0.402	609.31*	46.30	3.25513E-001	1.54065E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.632	338.32	11.40		
		911.07*	27.70	6.81343E-001	2.30317E-001
		969.11*	16.60	6.04349E-001	3.37167E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
ANN	0.996	9.515666E-002	7.553470E-002
K-40	0.997	1.636671E+001	1.836083E+000
TL-208	0.752	2.365594E-001	8.262260E-002
Bi-212	0.996	5.256900E-001	2.644633E-001
Pb-212 @	0.592	5.608817E-001	2.334638E-001
Bi-214	0.402	3.255130E-001	1.540648E-001
Ac-228	0.632	6.568470E-001	1.901811E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	351.59	1.1285E-001	60.44
M	7	723.06	3.0733E-002	68.38
	9	794.75	4.5876E-002	73.51

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:ORG7829
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.1564E-001	1.00E-001	3.4809E-002
	1332.49	100.00	1.0011E-001		5.9840E-002
Nb-94	702.63	100.00	1.1487E-001	1.03E-001	4.8751E-002
	871.10	100.00	1.0319E-001		-3.3043E-002
Ag-108m	79.20	7.10	1.0183E+001	1.41E-001	2.0077E+000
	433.93	89.90	1.4103E-001		-7.1948E-002
	614.37	90.40	1.5923E-001		-8.0689E-003
	722.95	90.50	1.5791E-001		4.7889E-002
Sb-125	176.33	6.89	2.8897E+000	4.43E-001	3.0136E+000
	427.89	29.33	4.4300E-001		-2.2844E-001
	463.38	10.35	1.3047E+000		6.2502E-001
	600.56	17.80	7.1107E-001		1.6986E-002
	606.64	5.02	3.0307E+000		1.5146E+000
	635.90	11.32	1.0807E+000		4.7314E-001
Cs-134	563.23	8.38	1.4357E+000	1.38E-001	5.6281E-001
	569.32	15.43	7.7626E-001		-5.2672E-001
	604.70	97.60	1.5461E-001		-8.0210E-003
	795.84	85.40	1.3781E-001		3.4988E-002
	801.93	8.73	1.2135E+000		-1.0096E+000
Cs-137	661.65	85.12	1.3979E-001	1.40E-001	-1.8243E-002
Eu-152	121.78	28.40	9.8541E-001	3.59E-001	-6.3684E-003
	244.69	7.49	2.2815E+000		-3.2121E-001
	344.27	26.50	5.0777E-001		-9.5484E-001
	778.89	12.74	8.6407E-001		-5.9118E-001
	867.32	4.16	2.3835E+000		-1.7292E+000
	964.01	14.40	1.0182E+000		-7.0600E-002
	1085.78	10.00	1.1230E+000		1.8117E-002
	1112.02	13.30	7.5378E-001		-4.1965E-001
	1407.95	20.70	3.5918E-001		3.5612E-002
Eu-154	123.07	40.50	6.8933E-001	3.00E-001	-6.8339E-002
	247.94	6.60	2.5266E+000		-1.2205E+000
	591.81	4.83	2.6403E+000		-1.2124E+000
	723.30	19.70	7.2391E-001		1.3209E-001
	756.87	4.33	2.7426E+000		-6.2195E-001
	873.19	11.50	9.2266E-001		5.5256E-002
	996.32	10.30	1.0173E+000		-6.6891E-001
	1004.76	17.90	6.3592E-001		2.3766E-001
	1274.45	35.50	2.9983E-001		-5.6303E-002
Eu-155	86.54	30.90	1.7419E+000	1.73E+000	2.0549E+000
	105.31	20.70	1.7342E+000		6.3164E-001
Am-241	59.54	35.90	4.1959E+000	4.20E+000	1.3389E+000
Cm-243	228.19	10.56	1.5873E+000	1.11E+000	-1.4995E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1100E+000	1.11E+000	9.5077E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/29/2006 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: NOL-03-02-211-F
Sample Title: NOL-03-02-211-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/29/2006 3:14:05 PM
Live Time: 600.0 seconds
Real Time: 600.8 seconds

Energy Calibration Date: 5/10/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7829Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: ORG7829
Log Number: NOL-03-02-211-F
Title: NOL-03-02-211-F-G
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	292-	309	300.98	75.25	1.50	3.88E+002	119.58	1.02E+003
2	332-	348	339.69	84.93	1.30	2.01E+002	109.82	9.34E+002
3	948-	962	954.42	238.62	0.86	1.56E+002	59.98	2.70E+002
4	1396-	1418	1407.84	351.98	0.62	1.45E+002	57.12	1.81E+002
5	2033-	2054	2043.04	510.80	1.18	1.28E+002	44.71	1.04E+002
6	2325-	2340	2332.26	583.10	1.31	8.30E+001	34.64	7.60E+001
7	2428-	2446	2436.33	609.12	1.10	1.01E+002	36.88	7.50E+001
8	3638-	3654	3644.75	911.25	0.90	9.52E+001	29.30	4.08E+001
9	3870-	3884	3876.95	969.31	1.09	5.73E+001	23.20	2.87E+001
10	4473-	4487	4480.40	1120.18	0.76	3.76E+001	19.89	2.24E+001
11	5831-	5857	5844.38	1461.20	2.41	6.16E+002	52.50	2.34E+001
12	7055-	7068	7061.94	1765.61	0.41	2.91E+001	12.84	4.85E+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: ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
ANN	0.999	511.00*	100.00	2.30541E-001	8.61638E-002
K-40	0.995	1460.81*	10.67	1.39920E+001	1.64536E+000
TL-208	0.753	277.35	6.80		
		510.84*	21.60	1.06732E+000	4.08318E-001
		583.14*	84.20	1.85312E-001	8.09849E-002
		860.37	12.46		
Pb-212	0.593	74.81* @	10.70	1.49687E+001	5.46666E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.10502E-001	2.11518E-001
Bi-214	0.991	609.31*	46.30	4.16094E-001	1.60377E-001
		1120.29*	15.10	5.54168E-001	2.99312E-001
		1764.49*	15.80	4.74053E-001	2.14135E-001
Ac-228	0.632	338.32	11.40		
		911.07*	27.70	7.24478E-001	2.38119E-001
		969.11*	16.60	7.39448E-001	3.09403E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:ORG7829

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
ANN		0.999	1.905141E-001	8.791180E-002
K-40		0.995	1.399201E+001	1.645356E+000
TL-208		0.753	1.853119E-001	8.075938E-002
Pb-212	@	0.593	5.105015E-001	2.115183E-001
Bi-214		0.991	4.551370E-001	1.179741E-001
Ac-228		0.632	7.300464E-001	1.887042E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
2	84.93	3.3446E-001	54.73
4	351.98	2.4120E-001	39.47

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:ORG7829
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.1514E-001	9.48E-002	1.0992E-001
	1332.49	100.00	9.4824E-002		-1.1109E-002
Nb-94	702.63	100.00	1.2059E-001	1.09E-001	-2.7346E-002
	871.10	100.00	1.0883E-001		-3.4011E-002
Ag-108m	79.20	7.10	9.8615E+000	1.37E-001	-4.4826E+000
	433.93	89.90	1.4356E-001		5.6003E-002
	614.37	90.40	1.5860E-001		4.1528E-002
	722.95	90.50	1.3655E-001		6.2380E-002
Sb-125	176.33	6.89	2.7055E+000	4.42E-001	1.7733E+000
	427.89	29.33	4.4216E-001		1.8385E-001
	463.38	10.35	1.1879E+000		4.0285E-001
	600.56	17.80	6.9278E-001		-2.3363E-001
	606.64	5.02	3.0360E+000		6.0512E+000
	635.90	11.32	1.0176E+000		3.3182E-001
Cs-134	563.23	8.38	1.4357E+000	1.25E-001	8.0028E-002
	569.32	15.43	8.0747E-001		4.5954E-001
	604.70	97.60	1.5267E-001		8.0566E-003
	795.84	85.40	1.2490E-001		3.1596E-002
	801.93	8.73	1.1873E+000		-1.5225E+000
Cs-137	661.65	85.12	1.4192E-001	1.42E-001	1.3551E-001
Eu-152	121.78	28.40	9.5964E-001	4.42E-001	-4.1500E-001
	244.69	7.49	2.1196E+000		-8.3236E-002
	344.27	26.50	5.2873E-001		-5.1612E-001
	778.89	12.74	8.5392E-001		-8.1957E-001
	867.32	4.16	2.6461E+000		-6.0832E-001
	964.01	14.40	1.0010E+000		-5.3390E-001
	1085.78	10.00	1.0018E+000		4.1894E-001
	1112.02	13.30	7.4950E-001		-3.6122E-001
	1407.95	20.70	4.4181E-001		-4.0094E-002
Eu-154	123.07	40.50	6.7077E-001	3.00E-001	4.6391E-002
	247.94	6.60	2.3786E+000		-1.5279E+000
	591.81	4.83	2.5403E+000		1.8964E-001
	723.30	19.70	6.3476E-001		8.0095E-001
	756.87	4.33	2.7426E+000		4.2389E-001
	873.19	11.50	9.3883E-001		3.2989E-002
	996.32	10.30	9.9224E-001		-9.5072E-002
	1004.76	17.90	5.7224E-001		-9.0013E-002
	1274.45	35.50	2.9983E-001		1.6003E-001
Eu-155	86.54	30.90	1.6940E+000	1.69E+000	1.0212E+000
	105.31	20.70	1.7001E+000		-1.5146E-001
Am-241	59.54	35.90	4.0398E+000	4.04E+000	8.2385E-001
Cm-243	228.19	10.56	1.6347E+000	1.11E+000	5.2008E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1123E+000	1.11E+000	1.0840E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/10/2006 9:00:31 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-212-F-
Sample Title: NOL-03-02-212-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/10/2006 8:55:29 PM
Live Time: 300.0 seconds
Real Time: 300.4 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 6/1/2006
Calibration Efficiency: 6279_SOIL_1M90
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-212-F-
Title: NOL-03-02-212-F-G-I
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	307	299.99	74.83	0.64	1.17E+002	78.37	5.84E+002
2	1401-	1413	1407.70	351.84	0.42	3.75E+001	24.60	4.55E+001
3	2430-	2444	2436.63	609.15	0.46	4.17E+001	21.84	2.83E+001
4	3642-	3653	3647.96	912.07	0.78	2.14E+001	19.15	2.86E+001
5	5326-	5340	5332.15	1333.25	0.67	3.37E+001	13.68	5.28E+000
6	5833-	5857	5845.38	1461.59	2.45	2.71E+002	33.01	3.11E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.979	1460.81*	10.67	2.21547E+001	3.24161E+000
Bi-214	0.385	609.31*	46.30	6.80458E-001	3.66275E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.979	2.215466E+001	3.241614E+000
Bi-214	0.385	6.804581E-001	3.662751E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	74.83	3.8980E-001	67.02
2	351.84	1.2494E-001	65.64
4	912.07	7.1467E-002	89.33
5	1333.25	1.1241E-001	40.58

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:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	3.5234E-001	3.49E-001	6.3472E-003
	1332.49	100.00	3.4892E-001		3.9100E-001
Nb-94	702.63	100.00	3.1955E-001	2.99E-001	-2.4598E-001
	871.10	100.00	2.9881E-001		-1.6559E-001
Ag-108m	79.20	7.10	1.5345E+001	3.68E-001	-6.5516E+000
	433.93	89.90	4.1059E-001		-1.0734E-001
	614.37	90.40	4.2423E-001		-1.6280E-001
	722.95	90.50	3.6848E-001		-1.4584E-001
Sb-125	176.33	6.89	6.8691E+000	1.15E+000	-3.1236E+000
	427.89	29.33	1.1492E+000		-1.4078E+000
	463.38	10.35	3.0091E+000		-2.1530E+000
	600.56	17.80	1.7260E+000		-1.2482E+000
	606.64	5.02	7.7483E+000		5.1512E+000
	635.90	11.32	3.0119E+000		-2.8375E+000
Cs-134	563.23	8.38	3.9613E+000	3.73E-001	1.4809E+000
	569.32	15.43	1.9628E+000		-2.0074E+000
	604.70	97.60	3.7336E-001		-2.0724E-001
	795.84	85.40	3.7665E-001		-2.4735E-001
	801.93	8.73	3.8630E+000		-1.9669E+000
Cs-137	661.65	85.12	4.2983E-001	4.30E-001	8.9845E-002
Eu-152	121.78	28.40	2.3476E+000	8.94E-001	2.4308E-001
	244.69	7.49	5.7603E+000		6.6147E-001
	344.27	26.50	1.4813E+000		1.2900E+000
	778.89	12.74	2.7530E+000		-1.3622E+000
	867.32	4.16	6.9372E+000		-2.3217E+000
	964.01	14.40	2.6391E+000		8.9355E-001
	1085.78	10.00	3.2248E+000		1.3802E+000
	1112.02	13.30	2.3407E+000		-1.0693E-001
	1407.95	20.70	8.9397E-001		-1.7299E-001
Eu-154	123.07	40.50	1.6089E+000	7.66E-001	-2.7345E-001
	247.94	6.60	6.3465E+000		6.2592E-001
	591.81	4.83	7.1611E+000		3.9608E+000
	723.30	19.70	1.7351E+000		1.0994E+000
	756.87	4.33	7.5411E+000		-1.6353E+000
	873.19	11.50	2.5774E+000		1.6119E-001
	996.32	10.30	2.8244E+000		1.1184E-001
	1004.76	17.90	1.7579E+000		-6.9753E-002
	1274.45	35.50	7.6596E-001		-6.9069E-001
Eu-155	86.54	30.90	3.2951E+000	3.30E+000	4.5288E+000
	105.31	20.70	3.7606E+000		-6.4963E-001
Am-241	59.54	35.90	3.9165E+000	3.92E+000	8.2611E-002
Cm-243	228.19	10.56	4.0709E+000	2.78E+000	2.7979E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.7784E+000	2.78E+000	1.3633E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/10/2006 9:09:26 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-213-F-
Sample Title: NOL-03-02-213-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/10/2006 9:04:36 PM
Live Time: 300.0 seconds
Real Time: 300.4 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 6/1/2006
Calibration Efficiency: 6279_SOIL_1M90
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-213-F-
Title: NOL-03-02-213-F-G-I
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	308	292.05	72.84	1.07	1.08E+002	38.01	5.34E+002
m	2	285-	308	300.59	74.98	1.08	2.23E+002	44.17	6.03E+002
	3	334-	342	338.95	84.57	0.32	8.92E+001	52.00	2.89E+002
	4	945-	961	954.49	238.50	1.06	7.74E+001	43.25	1.31E+002
	5	2432-	2442	2437.15	609.28	0.68	3.52E+001	17.96	1.98E+001
	6	3639-	3652	3645.37	911.43	1.05	4.60E+001	18.06	1.40E+001
	7	5835-	5856	5844.73	1461.43	0.42	2.73E+002	35.85	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: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.987	1460.81*	10.67	2.22862E+001	3.44298E+000
Pb-212	0.518	74.81* @	10.70	1.70168E+001	4.73696E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	1.02354E+000	5.94085E-001
Bi-214	0.386	609.31*	46.30	5.75040E-001	3.01720E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.987	2.228625E+001	3.442984E+000
Pb-212 @	0.518	1.023537E+000	5.940849E-001
Bi-214	0.386	5.750404E-001	3.017198E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.84	3.6099E-001	35.10
3	84.57	2.9745E-001	58.27
6	911.43	1.5333E-001	39.26

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:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	3.3544E-001	2.95E-001	9.9037E-002
	1332.49	100.00	2.9514E-001		4.0824E-002
Nb-94	702.63	100.00	3.2174E-001	2.91E-001	-1.6338E-001
	871.10	100.00	2.9128E-001		1.4135E-001
Ag-108m	79.20	7.10	1.5279E+001	3.96E-001	-4.7368E+000
	433.93	89.90	3.9556E-001		6.2418E-002
	614.37	90.40	4.1464E-001		-1.8702E-001
	722.95	90.50	4.0184E-001		2.2089E-001
Sb-125	176.33	6.89	6.6096E+000	1.19E+000	-3.4495E+000
	427.89	29.33	1.1922E+000		-4.6318E-001
	463.38	10.35	3.2136E+000		2.2419E+000
	600.56	17.80	1.9402E+000		-5.0271E-001
	606.64	5.02	8.1066E+000		7.4091E+000
	635.90	11.32	2.9768E+000		3.2857E+000
Cs-134	563.23	8.38	3.8926E+000	3.90E-001	2.4516E+000
	569.32	15.43	2.1075E+000		1.3180E+000
	604.70	97.60	4.0667E-001		-1.4243E-001
	795.84	85.40	3.8954E-001		4.1552E-002
	801.93	8.73	3.5028E+000		-1.9143E+000
Cs-137	661.65	85.12	4.3421E-001	4.34E-001	2.8288E-001
Eu-152	121.78	28.40	2.3099E+000	1.07E+000	5.3417E-001
	244.69	7.49	5.3791E+000		-1.0888E+000
	344.27	26.50	1.3813E+000		3.0145E-001
	778.89	12.74	2.5538E+000		-2.3224E+000
	867.32	4.16	6.4228E+000		-6.1792E+000
	964.01	14.40	2.4073E+000		-1.8816E+000
	1085.78	10.00	3.0444E+000		2.3673E-001
	1112.02	13.30	2.2806E+000		-3.5896E-001
	1407.95	20.70	1.0694E+000		1.3673E-001
Eu-154	123.07	40.50	1.5807E+000	7.38E-001	-4.7882E-001
	247.94	6.60	5.7216E+000		-2.0907E+000
	591.81	4.83	7.1223E+000		3.8172E+000
	723.30	19.70	1.8559E+000		9.7456E-001
	756.87	4.33	7.3367E+000		-4.0891E-001
	873.19	11.50	2.6628E+000		9.2478E-001
	996.32	10.30	2.7449E+000		-6.9449E-001
	1004.76	17.90	1.5509E+000		7.9869E-001
	1274.45	35.50	7.3847E-001		-1.0818E-001
Eu-155	86.54	30.90	3.1808E+000	3.18E+000	-1.8796E-001
	105.31	20.70	3.6304E+000		-5.9588E-001
Am-241	59.54	35.90	3.7712E+000	3.77E+000	-2.6132E+000
Cm-243	228.19	10.56	4.0709E+000	2.83E+000	1.5148E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.8326E+000	2.83E+000	2.4040E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/10/2006 9:17:02 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-214-F-
Sample Title: NOL-03-02-214-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/10/2006 9:12:04 PM
Live Time: 300.0 seconds
Real Time: 300.4 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 6/1/2006
Calibration Efficiency: 6279_SOIL_1M90
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-214-F-
Title: NOL-03-02-214-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
	2	296-	307	299.97	74.82	0.97	1.87E+002	78.96	5.68E+002
M	3	321-	345	325.37	81.17	0.74	4.87E+001	29.99	2.84E+002
m	4	321-	345	340.34	84.92	0.74	8.13E+001	35.66	3.66E+002
	5	1346-	1360	1353.63	338.32	0.49	4.47E+001	25.07	4.13E+001
	6	2325-	2339	2333.06	583.25	1.51	5.22E+001	19.65	1.68E+001
	7	2432-	2444	2437.46	609.36	0.67	5.03E+001	19.54	1.87E+001
	8	3638-	3649	3643.89	911.05	0.90	1.65E+001	18.40	2.85E+001
	9	5833-	5858	5845.48	1461.62	2.08	2.78E+002	35.10	9.90E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.977	1460.81*	10.67	2.27448E+001	3.41077E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	4.62994E-001	1.84560E-001
		860.37	12.46		
Bi-214	0.386	609.31*	46.30	8.22211E-001	3.34734E-001
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.536	338.32*	11.40	2.53603E+000	1.47638E+000
		911.07*	27.70	4.78349E-001	5.35315E-001
		969.11	16.60		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.977	2.274477E+001	3.410767E+000
TL-208	0.471	4.629940E-001	1.845601E-001
Bi-214	0.386	8.222107E-001	3.347336E-001
Ac-228	0.536	7.174370E-001	5.032546E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	74.82	6.2478E-001	42.12
M 3	81.17	1.6248E-001	61.54
m 4	84.92	2.7084E-001	43.89

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:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	3.4279E-001	3.18E-001	3.4230E-001
	1332.49	100.00	3.1783E-001		2.2740E-001
Nb-94	702.63	100.00	3.2174E-001	2.91E-001	9.8687E-002
	871.10	100.00	2.9128E-001		-7.4035E-002
Ag-108m	79.20	7.10	1.5411E+001	3.49E-001	-1.9327E+000
	433.93	89.90	3.9726E-001		-8.8563E-003
	614.37	90.40	4.3359E-001		-1.5507E-001
	722.95	90.50	3.4929E-001		-1.0995E-001
Sb-125	176.33	6.89	6.9600E+000	1.16E+000	1.6643E+000
	427.89	29.33	1.1601E+000		-4.8739E-001
	463.38	10.35	3.5416E+000		2.2493E+000
	600.56	17.80	1.8643E+000		-1.0198E+000
	606.64	5.02	8.1700E+000		9.5079E+000
	635.90	11.32	2.8128E+000		-1.5032E+000
Cs-134	563.23	8.38	4.0288E+000	3.49E-001	-3.3990E+000
	569.32	15.43	2.2424E+000		-6.5218E-001
	604.70	97.60	3.9127E-001		-2.7414E-001
	795.84	85.40	3.4935E-001		-3.1289E-001
	801.93	8.73	3.3068E+000		-2.1726E+000
Cs-137	661.65	85.12	3.9047E-001	3.90E-001	2.2575E-001
Eu-152	121.78	28.40	2.3369E+000	1.07E+000	6.4863E-001
	244.69	7.49	5.3261E+000		-1.9102E+000
	344.27	26.50	1.3102E+000		-5.4597E-001
	778.89	12.74	2.5013E+000		-9.2629E-002
	867.32	4.16	7.4134E+000		-4.6039E+000
	964.01	14.40	2.4225E+000		2.1596E-001
	1085.78	10.00	2.9907E+000		-4.4634E-001
	1112.02	13.30	2.6362E+000		-1.1938E-001
	1407.95	20.70	1.0694E+000		-1.4678E-001
Eu-154	123.07	40.50	1.5987E+000	7.29E-001	-1.1555E+000
	247.94	6.60	6.0955E+000		2.2899E+000
	591.81	4.83	6.5098E+000		-1.4143E+000
	723.30	19.70	1.6383E+000		1.1021E+000
	756.87	4.33	7.8852E+000		4.0460E+000
	873.19	11.50	2.4888E+000		-8.2912E-001
	996.32	10.30	3.0972E+000		1.5491E+000
	1004.76	17.90	1.7990E+000		1.1546E+000
	1274.45	35.50	7.2906E-001		2.1755E-001
Eu-155	86.54	30.90	3.3111E+000	3.31E+000	1.4622E-001
	105.31	20.70	3.7036E+000		-3.8114E+000
Am-241	59.54	35.90	3.9245E+000	3.92E+000	1.9145E-001
Cm-243	228.19	10.56	3.9076E+000	2.81E+000	-1.0900E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.8095E+000	2.81E+000	-2.4101E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/10/2006 9:27:40 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-215-F-
Sample Title: NOL-03-02-215-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/10/2006 9:22:15 PM
Live Time: 300.0 seconds
Real Time: 300.5 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 6/1/2006
Calibration Efficiency: 6279_SOIL_1M90
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-215-F-
Title: NOL-03-02-215-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	297-	307	300.83	75.04	0.89	1.51E+002	77.47	5.85E+002
2	946-	960	955.62	238.78	1.03	6.77E+001	43.80	1.49E+002
3	2325-	2340	2331.47	582.85	1.36	5.38E+001	25.50	3.82E+001
4	2432-	2444	2437.55	609.38	1.04	4.01E+001	24.18	4.09E+001
5	3638-	3652	3644.83	911.29	0.39	4.66E+001	20.21	1.94E+001
6	5326-	5337	5331.58	1333.10	0.99	1.96E+001	14.28	1.34E+001
7	5835-	5857	5845.49	1461.62	1.97	3.00E+002	36.04	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: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.977	1460.81*	10.67	2.44951E+001	3.55255E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	4.77731E-001	2.34641E-001
		860.37	12.46		
Pb-212	0.518	74.81* @	10.70	1.15129E+001	6.31096E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.95472E-001	5.96187E-001
Bi-214	0.386	609.31*	46.30	6.55096E-001	4.02984E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.977	2.449513E+001	3.552551E+000
TL-208	0.469	4.777309E-001	2.346408E-001
Pb-212 @	0.518	8.954716E-001	5.961869E-001
Bi-214	0.386	6.550961E-001	4.029838E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	911.29	1.5523E-001	43.39
6	1333.10	6.5404E-002	72.80

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	3.3044E-001	3.30E-001	1.3763E-001
	1332.49	100.00	3.4143E-001		2.9671E-001
Nb-94	702.63	100.00	3.8664E-001	3.20E-001	9.1758E-002
	871.10	100.00	3.2026E-001		-2.1271E-001
Ag-108m	79.20	7.10	1.5831E+001	4.06E-001	-9.0863E+000
	433.93	89.90	4.4055E-001		-1.7874E-001
	614.37	90.40	4.1850E-001		-1.5836E-001
	722.95	90.50	4.0607E-001		2.2278E-001
Sb-125	176.33	6.89	7.7112E+000	1.36E+000	-2.1159E+000
	427.89	29.33	1.3637E+000		3.8605E-001
	463.38	10.35	3.7992E+000		1.1986E+000
	600.56	17.80	1.8863E+000		7.9663E-002
	606.64	5.02	8.7480E+000		1.4263E+001
	635.90	11.32	3.0809E+000		8.4848E-001
Cs-134	563.23	8.38	4.4712E+000	4.23E-001	3.9281E+000
	569.32	15.43	2.3691E+000		7.7520E-001
	604.70	97.60	4.2309E-001		-2.0810E-001
	795.84	85.40	4.5029E-001		2.3080E-001
	801.93	8.73	4.1679E+000		-3.2935E+000
Cs-137	661.65	85.12	4.6971E-001	4.70E-001	7.1863E-001
Eu-152	121.78	28.40	2.4263E+000	1.30E+000	-4.4166E-001
	244.69	7.49	5.9769E+000		-1.2201E+000
	344.27	26.50	1.4346E+000		5.8285E-001
	778.89	12.74	2.7689E+000		1.8844E+000
	867.32	4.16	8.1757E+000		-1.8105E+000
	964.01	14.40	2.7207E+000		1.8837E-001
	1085.78	10.00	3.2497E+000		1.8935E+000
	1112.02	13.30	2.1766E+000		7.2637E-001
	1407.95	20.70	1.3004E+000		9.7503E-001
Eu-154	123.07	40.50	1.6883E+000	8.10E-001	-3.8147E-001
	247.94	6.60	6.3320E+000		-1.0297E+000
	591.81	4.83	7.5746E+000		-6.9896E-001
	723.30	19.70	1.8656E+000		-1.1450E-001
	756.87	4.33	8.1216E+000		7.7007E+000
	873.19	11.50	2.9029E+000		4.2387E-001
	996.32	10.30	2.9517E+000		9.4790E-001
	1004.76	17.90	1.7016E+000		1.4369E+000
	1274.45	35.50	8.0953E-001		2.4883E-001
Eu-155	86.54	30.90	3.4149E+000	3.41E+000	3.7458E+000
	105.31	20.70	4.0332E+000		-2.8672E+000
Am-241	59.54	35.90	4.2651E+000	4.27E+000	4.3140E-001
Cm-243	228.19	10.56	4.0625E+000	3.19E+000	3.4319E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	3.1921E+000	3.19E+000	-2.0601E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/10/2006 9:37:08 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-216-F-
Sample Title: NOL-03-02-216-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/10/2006 9:32:02 PM
Live Time: 300.0 seconds
Real Time: 300.4 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 6/1/2006
Calibration Efficiency: 6279_SOIL_1M90
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-216-F-
Title: NOL-03-02-216-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	295-	306	300.55	74.97	0.97	1.35E+002	77.42	5.66E+002
2	331-	345	339.26	84.65	0.91	8.06E+001	80.70	5.58E+002
3	947-	961	954.62	238.53	1.17	8.12E+001	36.73	9.38E+001
4	1848-	1857	1852.20	463.00	0.56	1.66E+001	15.33	1.94E+001
5	2325-	2339	2331.49	582.86	0.63	4.78E+001	21.32	2.32E+001
6	2431-	2442	2436.75	609.18	0.46	2.65E+001	18.15	2.35E+001
7	3638-	3652	3645.17	911.37	0.49	4.50E+001	19.68	1.90E+001
8	5833-	5858	5845.31	1461.57	1.20	2.74E+002	34.02	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: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.980	1460.81*	10.67	2.23683E+001	3.31952E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	4.24093E-001	1.97047E-001
		860.37	12.46		
Pb-212	0.518	74.81* @	10.70	1.03196E+001	6.23421E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	1.07378E+000	5.14142E-001
Bi-214	0.385	609.31*	46.30	4.32727E-001	3.01086E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.980	2.236834E+001	3.319522E+000
TL-208	0.469	4.240932E-001	1.970469E-001
Pb-212 @	0.518	1.073782E+000	5.141418E-001
Bi-214	0.385	4.327273E-001	3.010861E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	2.6874E-001	100.09
4	463.00	5.5278E-002	92.47
7	911.37	1.4984E-001	43.77

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:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	3.2278E-001	3.10E-001	2.1555E-001
	1332.49	100.00	3.0954E-001		3.8455E-001
Nb-94	702.63	100.00	3.6636E-001	2.94E-001	-3.5074E-002
	871.10	100.00	2.9381E-001		9.9834E-002
Ag-108m	79.20	7.10	1.4954E+001	3.85E-001	-9.8769E+000
	433.93	89.90	3.8519E-001		9.2899E-002
	614.37	90.40	4.0282E-001		1.1389E-001
	722.95	90.50	3.9324E-001		3.7684E-001
Sb-125	176.33	6.89	6.7872E+000	1.19E+000	2.3252E+000
	427.89	29.33	1.1869E+000		-1.5072E-001
	463.38	10.35	3.3740E+000		-5.8507E-001
	600.56	17.80	1.6267E+000		-2.2064E+000
	606.64	5.02	7.1208E+000		4.8529E+000
	635.90	11.32	2.9944E+000		1.9782E-001
Cs-134	563.23	8.38	3.8461E+000	3.10E-001	-1.3734E+000
	569.32	15.43	2.0034E+000		-3.2876E-001
	604.70	97.60	3.5836E-001		-2.8859E-001
	795.84	85.40	3.0997E-001		-2.6725E-001
	801.93	8.73	2.9379E+000		-1.7871E+000
Cs-137	661.65	85.12	3.8308E-001	3.83E-001	6.7443E-002
Eu-152	121.78	28.40	2.2844E+000	1.18E+000	1.6822E-001
	244.69	7.49	5.4445E+000		1.9525E-002
	344.27	26.50	1.2179E+000		-1.2300E+000
	778.89	12.74	2.4295E+000		-6.7330E-001
	867.32	4.16	7.2388E+000		-6.4768E+000
	964.01	14.40	2.4225E+000		9.8588E-001
	1085.78	10.00	2.8517E+000		2.3526E+000
	1112.02	13.30	2.1766E+000		1.2781E-001
	1407.95	20.70	1.1822E+000		5.9830E-001
Eu-154	123.07	40.50	1.5974E+000	7.00E-001	2.3187E-001
	247.94	6.60	6.1853E+000		-6.5684E-001
	591.81	4.83	6.5098E+000		-3.2345E+000
	723.30	19.70	1.8363E+000		1.5983E+000
	756.87	4.33	7.2846E+000		-4.9776E+000
	873.19	11.50	2.4888E+000		-6.1793E-002
	996.32	10.30	3.1672E+000		2.1553E+000
	1004.76	17.90	1.7300E+000		9.7269E-002
	1274.45	35.50	6.9997E-001		4.4839E-001
Eu-155	86.54	30.90	3.3302E+000	3.33E+000	1.5748E+000
	105.31	20.70	3.7948E+000		2.9102E+000
Am-241	59.54	35.90	3.9716E+000	3.97E+000	-2.5743E+000
Cm-243	228.19	10.56	3.8097E+000	2.90E+000	5.8935E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.9008E+000	2.90E+000	6.8123E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/10/2006 9:49:15 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-217-F-
Sample Title: NOL-03-02-217-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/10/2006 9:44:13 PM
Live Time: 300.0 seconds
Real Time: 300.4 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 6/1/2006
Calibration Efficiency: 6279_SOIL_1M90
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-217-F-
Title: NOL-03-02-217-F-G-I
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	305	292.05	72.84	1.23	1.40E+002	38.50	5.58E+002
m	2	283-	305	300.41	74.93	1.24	1.88E+002	42.61	5.66E+002
	3	949-	960	954.19	238.43	0.80	5.76E+001	32.37	8.54E+001
	4	2036-	2052	2043.99	510.96	1.06	7.19E+001	25.49	3.11E+001
	5	2328-	2341	2333.61	583.39	0.84	4.89E+001	18.91	1.61E+001
	6	3640-	3652	3646.37	911.67	0.35	1.65E+001	16.13	1.95E+001
	7	3870-	3881	3875.47	968.97	0.33	2.36E+001	15.76	1.64E+001
	8	5833-	5857	5844.91	1461.47	1.40	2.68E+002	32.81	3.02E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	1.000	511.00*		100.00	5.18757E-001	1.96845E-001
K-40	0.985	1460.81*		10.67	2.19163E+001	3.21685E+000
TL-208	0.749	277.35		6.80		
		510.84*		21.60	2.40165E+000	9.32185E-001
		583.14*		84.20	4.34302E-001	1.77137E-001
		860.37		12.46		
Pb-212	0.518	74.81*	@	10.70	1.43446E+001	4.29535E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.61668E-001	4.44492E-001
Ac-228	0.636	338.32		11.40		
		911.07*		27.70	4.77455E-001	4.69862E-001
		969.11*		16.60	1.15552E+000	7.80313E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN	1.000	4.249479E-001	2.005054E-001
K-40	0.985	2.191627E+001	3.216846E+000
TL-208	0.749	4.343018E-001	1.765706E-001
Pb-212 @	0.518	7.616682E-001	4.444922E-001
Ac-228	0.636	6.578870E-001	4.025221E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.84	4.6717E-001	27.47

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	3.4760E-001	2.92E-001	3.5968E-001
	1332.49	100.00	2.9217E-001		2.6919E-001
Nb-94	702.63	100.00	3.1735E-001	3.13E-001	1.4381E-001
	871.10	100.00	3.1329E-001		-1.2545E-001
Ag-108m	79.20	7.10	1.4280E+001	3.65E-001	-1.5022E+001
	433.93	89.90	3.7272E-001		6.1401E-002
	614.37	90.40	3.6492E-001		-1.1754E-001
	722.95	90.50	3.8443E-001		1.4729E-001
Sb-125	176.33	6.89	6.0562E+000	1.09E+000	-2.4787E+000
	427.89	29.33	1.0929E+000		-7.6812E-002
	463.38	10.35	3.4051E+000		1.3897E+000
	600.56	17.80	1.9822E+000		1.4513E+000
	606.64	5.02	7.2294E+000		4.8342E+000
	635.90	11.32	2.5973E+000		1.2742E+000
Cs-134	563.23	8.38	3.6287E+000	3.49E-001	-1.4541E+000
	569.32	15.43	1.9491E+000		-3.0330E-001
	604.70	97.60	3.6781E-001		1.4485E-002
	795.84	85.40	3.4935E-001		1.6633E-001
	801.93	8.73	3.2485E+000		-1.0046E+000
Cs-137	661.65	85.12	3.9290E-001	3.93E-001	2.8150E-001
Eu-152	121.78	28.40	2.0406E+000	8.94E-001	-3.5863E-001
	244.69	7.49	5.0526E+000		1.6439E+000
	344.27	26.50	1.3764E+000		4.5134E-001
	778.89	12.74	2.3740E+000		-6.4892E-002
	867.32	4.16	7.6949E+000		-2.2356E+000
	964.01	14.40	2.5548E+000		-1.7108E+000
	1085.78	10.00	3.0444E+000		1.8413E+000
	1112.02	13.30	2.1766E+000		-1.8144E+000
	1407.95	20.70	8.9397E-001		-7.8632E-002
Eu-154	123.07	40.50	1.4063E+000	6.90E-001	-8.0853E-001
	247.94	6.60	5.5746E+000		-1.4474E+000
	591.81	4.83	6.7206E+000		4.0599E+000
	723.30	19.70	1.7455E+000		3.7861E-001
	756.87	4.33	7.1793E+000		2.0564E+000
	873.19	11.50	2.7856E+000		-4.5900E-001
	996.32	10.30	2.6348E+000		4.3028E-001
	1004.76	17.90	1.3083E+000		-3.9974E-001
	1274.45	35.50	6.8998E-001		4.2805E-001
Eu-155	86.54	30.90	3.1674E+000	3.17E+000	6.0982E+000
	105.31	20.70	3.6432E+000		-8.1176E-001
Am-241	59.54	35.90	3.8094E+000	3.81E+000	-9.0022E-001
Cm-243	228.19	10.56	3.6152E+000	2.70E+000	-6.8079E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.6990E+000	2.70E+000	1.9724E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/10/2006 9:57:14 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-218-F-
Sample Title: NOL-03-02-218-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/10/2006 9:52:16 PM
Live Time: 300.0 seconds
Real Time: 300.4 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 6/1/2006
Calibration Efficiency: 6279_SOIL_1M90
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-218-F-
Title: NOL-03-02-218-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	295-	308	300.79	75.03	0.90	9.12E+001	84.54	6.37E+002
2	948-	960	955.80	238.83	0.80	4.37E+001	34.68	1.02E+002
3	3637-	3652	3644.37	911.17	0.49	4.39E+001	18.96	1.61E+001
4	3867-	3880	3874.84	968.81	1.02	2.53E+001	14.86	1.17E+001
5	5833-	5857	5845.21	1461.55	2.00	2.69E+002	32.87	3.05E+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: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.981	1460.81*	10.67	2.19965E+001	3.22494E+000
Pb-212	0.518	74.81* @	10.70	6.93781E+000	6.57496E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	5.78611E-001	4.67687E-001
Ac-228	0.642	338.32	11.40		
		911.07*	27.70	1.27065E+000	5.67670E-001
		969.11*	16.60	1.23760E+000	7.38260E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.981	2.199649E+001	3.224942E+000
Pb-212	@	0.518	5.786105E-001	4.676872E-001
Ac-228		0.642	1.258370E+000	4.500142E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	3.1225E-001	2.89E-001	1.9112E-001
	1332.49	100.00	2.8917E-001		2.0072E-001
Nb-94	702.63	100.00	2.8208E-001	2.82E-001	-3.0671E-002
	871.10	100.00	3.0614E-001		1.4411E-001
Ag-108m	79.20	7.10	1.5130E+001	3.66E-001	1.8791E+000
	433.93	89.90	3.8519E-001		-2.8571E-001
	614.37	90.40	3.6933E-001		-1.8985E-001
	722.95	90.50	3.6614E-001		-4.5597E-002
Sb-125	176.33	6.89	6.1368E+000	1.18E+000	-2.0526E+000
	427.89	29.33	1.1762E+000		4.9278E-001
	463.38	10.35	2.8826E+000		6.7496E-001
	600.56	17.80	1.7734E+000		-1.2436E+000
	606.64	5.02	7.1572E+000		3.7646E+000
	635.90	11.32	2.6580E+000		7.4098E-002
Cs-134	563.23	8.38	3.4757E+000	3.60E-001	4.6881E-001
	569.32	15.43	1.9900E+000		-6.6216E-001
	604.70	97.60	3.6027E-001		5.5052E-002
	795.84	85.40	3.7136E-001		1.2416E-001
	801.93	8.73	3.3640E+000		3.9448E-002
Cs-137	661.65	85.12	3.5456E-001	3.55E-001	-1.5728E-001
Eu-152	121.78	28.40	2.1776E+000	1.03E+000	-1.3622E+000
	244.69	7.49	5.2456E+000		5.7418E-001
	344.27	26.50	1.2123E+000		-5.4783E-001
	778.89	12.74	2.1577E+000		-8.9959E-001
	867.32	4.16	6.8752E+000		-7.1796E+000
	964.01	14.40	2.2494E+000		-4.7155E-001
	1085.78	10.00	2.8229E+000		-4.9938E-001
	1112.02	13.30	2.0669E+000		-5.3990E-001
	1407.95	20.70	1.0287E+000		3.4598E-001
Eu-154	123.07	40.50	1.5077E+000	7.10E-001	-6.4716E-001
	247.94	6.60	5.6568E+000		1.2304E+000
	591.81	4.83	6.6790E+000		6.0887E-001
	723.30	19.70	1.6821E+000		1.9008E-001
	756.87	4.33	6.7967E+000		5.1015E+000
	873.19	11.50	2.5990E+000		-8.0332E-001
	996.32	10.30	2.4291E+000		-5.0238E-001
	1004.76	17.90	1.4352E+000		6.1731E-001
	1274.45	35.50	7.0981E-001		1.8616E-001
Eu-155	86.54	30.90	3.2221E+000	3.22E+000	3.4876E+000
	105.31	20.70	3.6508E+000		-5.1075E-001
Am-241	59.54	35.90	3.9975E+000	4.00E+000	-6.3327E-001
Cm-243	228.19	10.56	3.6625E+000	2.52E+000	-8.0062E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.5150E+000	2.52E+000	-1.9645E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/10/2006 10:05:05 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-219-F-
Sample Title: NOL-03-02-219-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/10/2006 10:00:13 PM
Live Time: 300.0 seconds
Real Time: 300.4 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 6/1/2006
Calibration Efficiency: 6279_SOIL_1M90
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-219-F-
Title: NOL-03-02-219-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	295-	308	300.48	74.95	1.17	1.74E+002	87.91	6.65E+002
2	951-	964	954.71	238.56	1.08	5.77E+001	37.71	1.11E+002
3	1402-	1417	1407.16	351.70	1.07	3.82E+001	25.23	4.08E+001
4	1687-	1696	1691.09	422.71	0.58	1.35E+001	14.45	1.75E+001
5	2328-	2339	2333.46	583.35	0.51	3.17E+001	19.14	2.53E+001
6	3638-	3652	3644.98	911.33	0.56	5.00E+001	18.94	1.50E+001
7	4688-	4700	4693.97	1173.65	0.58	2.28E+001	15.96	1.63E+001
8	5326-	5337	5331.48	1333.08	0.53	1.97E+001	14.28	1.33E+001
9	5833-	5856	5845.38	1461.59	2.36	2.49E+002	32.41	6.05E+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: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.979	1460.81*	10.67	2.03608E+001	3.12149E+000
Co-60	0.991	1173.22*	100.00	1.92542E-001	1.35944E-001
		1332.49*	100.00	1.69487E-001	1.23752E-001
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.81297E-001	1.73782E-001
		860.37	12.46		
Pb-212	0.518	74.81* @	10.70	1.32906E+001	7.18659E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.62876E-001	5.12865E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.979	2.036078E+001	3.121487E+000
Co-60	0.991	1.799348E-001	9.151340E-002
TL-208	0.470	2.812970E-001	1.737821E-001
Pb-212 @	0.518	7.628761E-001	5.128645E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
3	351.70	1.2734E-001	66.04
4	422.71	4.5000E-002	107.05
6	911.33	1.6667E-001	37.89

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:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
+	Co-60	1173.22*	100.00	2.0673E-001	1.87E-001	1.9254E-001
		1332.49*	100.00	1.8717E-001		1.6949E-001
	Nb-94	702.63	100.00	3.6255E-001	2.81E-001	-7.7800E-003
		871.10	100.00	2.8090E-001		-1.9729E-001
	Ag-108m	79.20	7.10	1.5630E+001	3.50E-001	-6.0766E+000
		433.93	89.90	3.5023E-001		5.3760E-002
		614.37	90.40	4.2042E-001		-1.7299E-001
		722.95	90.50	3.7311E-001		-3.1204E-004
	Sb-125	176.33	6.89	6.4704E+000	1.05E+000	-1.3364E+000
		427.89	29.33	1.0455E+000		3.2374E-001
		463.38	10.35	3.2300E+000		2.3280E+000
		600.56	17.80	2.0131E+000		-8.0463E-001
		606.64	5.02	8.0747E+000		-4.5132E-001
		635.90	11.32	2.9232E+000		2.1517E+000
	Cs-134	563.23	8.38	3.7989E+000	3.66E-001	-2.4148E-001
		569.32	15.43	2.0431E+000		-4.3307E-001
		604.70	97.60	3.8775E-001		-4.7286E-001
		795.84	85.40	3.6599E-001		6.2328E-002
		801.93	8.73	3.6358E+000		-1.8094E+000
	Cs-137	661.65	85.12	4.3202E-001	4.32E-001	-2.1274E-001
	Eu-152	121.78	28.40	2.1986E+000	8.44E-001	-1.1740E+000
		244.69	7.49	4.9960E+000		-1.9460E+000
		344.27	26.50	1.1951E+000		-9.3033E-001
		778.89	12.74	2.2390E+000		-6.3385E-001
		867.32	4.16	6.9372E+000		-5.8927E+000
		964.01	14.40	2.3139E+000		5.6067E-001
		1085.78	10.00	2.7048E+000		7.2673E-001
		1112.02	13.30	2.1978E+000		-5.9101E-001
		1407.95	20.70	8.4356E-001		1.0484E-002
	Eu-154	123.07	40.50	1.5172E+000	7.20E-001	-9.4773E-001
		247.94	6.60	5.6731E+000		-1.6726E+000
		591.81	4.83	7.6833E+000		-1.0012E+000
		723.30	19.70	1.7141E+000		9.0101E-001
		756.87	4.33	7.3367E+000		2.7581E+000
		873.19	11.50	2.5556E+000		2.9264E+000
		996.32	10.30	2.8760E+000		-8.4128E-001
		1004.76	17.90	1.7440E+000		1.2624E+000
		1274.45	35.50	7.1951E-001		6.7434E-001
	Eu-155	86.54	30.90	3.2531E+000	3.25E+000	3.8282E+000
		105.31	20.70	3.7606E+000		-3.6238E-001
	Am-241	59.54	35.90	3.9192E+000	3.92E+000	4.0906E-001
	Cm-243	228.19	10.56	3.5285E+000	2.34E+000	-3.4221E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.3440E+000	2.34E+000	-2.9014E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/10/2006 10:18:01 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-220-F-
Sample Title: NOL-03-02-220-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/10/2006 10:13:01 PM
Live Time: 300.0 seconds
Real Time: 300.4 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 6/1/2006
Calibration Efficiency: 6279_SOIL_1M90
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-220-F-
Title: NOL-03-02-220-F-G-I
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	308	300.47	74.95	0.76	1.55E+002	80.11	5.71E+002
2	949-	961	954.59	238.53	1.12	6.23E+001	31.46	7.37E+001
3	2328-	2338	2333.23	583.29	0.93	3.58E+001	19.45	2.62E+001
4	2906-	2915	2910.44	727.64	0.92	1.30E+001	11.68	1.00E+001
5	3638-	3653	3645.69	911.50	1.26	5.49E+001	19.61	1.51E+001
6	5326-	5337	5331.17	1333.00	0.48	2.46E+001	11.69	4.41E+000
7	5832-	5857	5844.81	1461.45	1.80	2.49E+002	34.91	1.61E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.986	1460.81*	10.67	2.03521E+001	3.29653E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.17405E-001	1.77538E-001
		860.37	12.46		
Bi-212	0.992	727.17*	11.80	8.60368E-001	7.79483E-001
Pb-212	0.518	74.81* @	10.70	1.17947E+001	6.52665E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.24543E-001	4.35770E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.986	2.035208E+001	3.296531E+000
TL-208	0.471	3.174046E-001	1.775377E-001
Bi-212	0.992	8.603682E-001	7.794834E-001
Pb-212 @	0.518	8.245433E-001	4.357702E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	911.50	1.8290E-001	35.75
6	1333.00	8.1983E-002	47.54

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	3.8593E-001	3.18E-001	4.4948E-001
	1332.49	100.00	3.1783E-001		3.3866E-001
Nb-94	702.63	100.00	3.3454E-001	3.01E-001	-2.9175E-002
	871.10	100.00	3.0127E-001		1.2835E-001
Ag-108m	79.20	7.10	1.5097E+001	3.07E-001	-1.7605E+000
	433.93	89.90	3.6538E-001		2.6496E-001
	614.37	90.40	3.5818E-001		-1.1489E-001
	722.95	90.50	3.0704E-001		-2.9966E-001
Sb-125	176.33	6.89	6.4052E+000	1.06E+000	1.5424E+000
	427.89	29.33	1.0576E+000		-8.9266E-001
	463.38	10.35	3.3583E+000		1.6694E+000
	600.56	17.80	1.6771E+000		-3.7024E-001
	606.64	5.02	7.1208E+000		7.3666E+000
	635.90	11.32	2.5768E+000		1.0926E+000
Cs-134	563.23	8.38	3.5785E+000	3.43E-001	7.5396E-001
	569.32	15.43	1.8788E+000		-3.3821E-001
	604.70	97.60	3.4266E-001		2.2952E-003
	795.84	85.40	3.6327E-001		-5.0786E-002
	801.93	8.73	3.5832E+000		-1.2556E+000
Cs-137	661.65	85.12	4.0949E-001	4.09E-001	1.9376E-001
Eu-152	121.78	28.40	2.2531E+000	9.64E-001	3.9706E-001
	244.69	7.49	4.7775E+000		-3.7781E+000
	344.27	26.50	1.2838E+000		-6.3718E-001
	778.89	12.74	2.3553E+000		-5.2383E-001
	867.32	4.16	7.5837E+000		-3.6065E-001
	964.01	14.40	2.4375E+000		3.0503E-001
	1085.78	10.00	2.9359E+000		8.4248E-001
	1112.02	13.30	2.0442E+000		1.4421E+000
	1407.95	20.70	9.6400E-001		2.5824E-001
Eu-154	123.07	40.50	1.5453E+000	7.48E-001	-4.9256E-001
	247.94	6.60	5.7377E+000		-2.1028E+000
	591.81	4.83	6.6371E+000		-2.4904E+000
	723.30	19.70	1.4236E+000		-9.8192E-001
	756.87	4.33	7.1260E+000		2.0435E+000
	873.19	11.50	2.5990E+000		-5.6091E-001
	996.32	10.30	2.5778E+000		1.3088E+000
	1004.76	17.90	1.5509E+000		-7.1842E-001
	1274.45	35.50	7.4776E-001		4.7774E-001
Eu-155	86.54	30.90	3.2547E+000	3.25E+000	4.7723E+000
	105.31	20.70	3.7235E+000		2.7361E+000
Am-241	59.54	35.90	3.9820E+000	3.98E+000	-1.6855E-001
Cm-243	228.19	10.56	3.7184E+000	2.60E+000	1.4516E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.6003E+000	2.60E+000	-6.4899E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/10/2006 10:27:22 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: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-221-F-
Sample Title: NOL-03-02-221-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/10/2006 10:22:21 PM
Live Time: 300.0 seconds
Real Time: 300.4 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 6/1/2006
Calibration Efficiency: 6279_SOIL_1M90
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-221-F-
Title: NOL-03-02-221-F-G-I
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	308	291.88	72.80	1.13	1.19E+002	39.04	4.54E+002
m	2	287-	308	300.43	74.94	1.13	2.61E+002	46.35	6.66E+002
	3	334-	346	339.38	84.68	0.69	6.50E+001	71.72	4.84E+002
	4	2040-	2050	2044.95	511.20	0.52	2.84E+001	22.60	4.36E+001
	5	5833-	5855	5845.58	1461.64	2.04	2.61E+002	35.22	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: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.999	511.00*	100.00	2.05045E-001	1.65370E-001
K-40	0.976	1460.81*	10.67	2.13141E+001	3.35762E+000

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN	0.999	2.050449E-001	1.653703E-001
K-40	0.976	2.131412E+001	3.357619E+000

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.80	3.9614E-001	32.85
m 2	74.94	8.6835E-001	17.79
3	84.68	2.1660E-001	110.38

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	3.4521E-001	3.23E-001	-4.1525E-002
	1332.49	100.00	3.2324E-001		1.2706E-001
Nb-94	702.63	100.00	2.9194E-001	2.92E-001	-3.9299E-001
	871.10	100.00	2.9381E-001		-8.2470E-002
Ag-108m	79.20	7.10	1.5574E+001	3.44E-001	-6.9007E+000
	433.93	89.90	3.6723E-001		-8.9505E-002
	614.37	90.40	4.0081E-001		-2.2831E-001
	722.95	90.50	3.4431E-001		8.2325E-002
Sb-125	176.33	6.89	6.7146E+000	1.18E+000	2.7132E+000
	427.89	29.33	1.1762E+000		6.1708E-001
	463.38	10.35	3.3583E+000		8.8192E-001
	600.56	17.80	1.9402E+000		-2.6446E-001
	606.64	5.02	7.6813E+000		3.2519E+000
	635.90	11.32	2.9051E+000		1.1755E+000
Cs-134	563.23	8.38	3.7751E+000	3.63E-001	-2.0188E+000
	569.32	15.43	1.8205E+000		-1.6958E+000
	604.70	97.60	3.8063E-001		-5.5026E-002
	795.84	85.40	3.6327E-001		7.2976E-003
	801.93	8.73	3.3640E+000		-3.1641E+000
Cs-137	661.65	85.12	4.3854E-001	4.39E-001	-4.7674E-002
Eu-152	121.78	28.40	2.2494E+000	9.64E-001	-1.5138E-001
	244.69	7.49	5.4834E+000		-9.4326E-001
	344.27	26.50	1.2784E+000		-9.8131E-001
	778.89	12.74	2.3740E+000		2.8364E-001
	867.32	4.16	7.5274E+000		1.8177E+000
	964.01	14.40	2.5973E+000		3.3802E-001
	1085.78	10.00	2.9081E+000		8.9732E-001
	1112.02	13.30	2.0669E+000		-5.6611E-001
	1407.95	20.70	9.6400E-001		-6.2022E-001
Eu-154	123.07	40.50	1.5807E+000	7.29E-001	2.3945E-002
	247.94	6.60	5.9116E+000		7.5591E-001
	591.81	4.83	6.8437E+000		-5.2309E+000
	723.30	19.70	1.6160E+000		8.7156E-001
	756.87	4.33	7.3883E+000		-2.2709E-001
	873.19	11.50	2.6837E+000		2.1290E+000
	996.32	10.30	2.7449E+000		8.1306E-001
	1004.76	17.90	1.5977E+000		-7.2401E-001
	1274.45	35.50	7.2906E-001		-2.8594E-001
Eu-155	86.54	30.90	3.2368E+000	3.24E+000	-6.9434E-001
	105.31	20.70	3.7826E+000		-1.2031E+000
Am-241	59.54	35.90	4.0156E+000	4.02E+000	-9.0474E-001
Cm-243	228.19	10.56	3.9164E+000	2.64E+000	-1.3551E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.6419E+000	2.64E+000	-6.1123E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/11/2006 12:41:42 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: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-222-F-
Sample Title: NOL-03-02-222-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/11/2006 12:36:40 AM
Live Time: 300.0 seconds
Real Time: 301.1 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 6/1/2006
Calibration Efficiency: 6279_SOIL_1M90
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-222-F-
Title: NOL-03-02-222-F-G-I
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	304	300.38	74.92	1.01	1.34E+002	58.87	3.58E+002
2	2325-	2340	2331.18	582.78	1.26	5.05E+001	20.91	2.05E+001
3	3637-	3651	3644.56	911.22	1.05	3.73E+001	17.49	1.47E+001
4	5832-	5854	5843.44	1461.11	2.22	2.66E+002	36.36	2.02E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.997	1460.81*	10.67	2.17398E+001	3.45562E+000
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	4.48230E-001	1.94534E-001
		860.37	12.46		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.997	2.173982E+001	3.455620E+000
TL-208	0.468	4.482299E-001	1.945344E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	74.92	4.4535E-001	44.06
3	911.22	1.2420E-001	46.94

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.6880E-001	2.69E-001	2.7624E-001
	1332.49	100.00	2.9217E-001		2.1095E-001
Nb-94	702.63	100.00	2.6922E-001	2.69E-001	2.4623E-002
	871.10	100.00	2.8090E-001		-6.0008E-002
Ag-108m	79.20	7.10	1.4369E+001	3.21E-001	-1.8592E+001
	433.93	89.90	3.6166E-001		9.9566E-002
	614.37	90.40	3.3953E-001		-1.4441E-001
	722.95	90.50	3.2089E-001		-1.4660E-002
Sb-125	176.33	6.89	6.0446E+000	1.04E+000	-3.2826E+000
	427.89	29.33	1.0394E+000		-5.5244E-001
	463.38	10.35	3.1301E+000		1.2814E+000
	600.56	17.80	1.7017E+000		5.8587E-001
	606.64	5.02	6.6285E+000		6.0361E+000
	635.90	11.32	2.7939E+000		1.9629E+000
Cs-134	563.23	8.38	3.0571E+000	3.20E-001	-1.6927E+000
	569.32	15.43	1.8788E+000		1.7059E+000
	604.70	97.60	3.1972E-001		-3.3824E-001
	795.84	85.40	3.3180E-001		1.5928E-001
	801.93	8.73	3.0662E+000		-1.5157E+000
Cs-137	661.65	85.12	3.5993E-001	3.60E-001	-9.3294E-002
Eu-152	121.78	28.40	2.1013E+000	9.86E-001	1.3393E-001
	244.69	7.49	4.8807E+000		3.4347E+000
	344.27	26.50	1.2291E+000		-9.8328E-001
	778.89	12.74	2.1369E+000		-5.5183E-001
	867.32	4.16	6.3553E+000		-5.2616E+000
	964.01	14.40	2.6253E+000		7.9045E-001
	1085.78	10.00	2.4158E+000		-1.6568E+000
	1112.02	13.30	1.7997E+000		-7.3757E-001
	1407.95	20.70	9.8609E-001		2.6211E-001
Eu-154	123.07	40.50	1.4733E+000	6.69E-001	1.3323E-001
	247.94	6.60	5.1792E+000		-2.0446E-001
	591.81	4.83	6.2915E+000		-1.3885E-001
	723.30	19.70	1.4364E+000		-2.8265E-001
	756.87	4.33	6.3289E+000		-1.8566E+000
	873.19	11.50	2.5556E+000		1.6668E+000
	996.32	10.30	2.3667E+000		7.5823E-001
	1004.76	17.90	1.4003E+000		-8.5801E-001
	1274.45	35.50	6.6949E-001		-5.7877E-001
Eu-155	86.54	30.90	2.9474E+000	2.95E+000	1.0399E+000
	105.31	20.70	3.4285E+000		-1.9409E+000
Am-241	59.54	35.90	3.9060E+000	3.91E+000	-1.0215E+000
Cm-243	228.19	10.56	3.3581E+000	2.44E+000	-1.2312E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.4445E+000	2.44E+000	-1.6105E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/11/2006 12:50:06 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-223-F-
Sample Title: NOL-03-02-223-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/11/2006 12:45:04 AM
Live Time: 300.0 seconds
Real Time: 300.8 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 6/1/2006
Calibration Efficiency: 6279_SOIL_1M90
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-223-F-
Title: NOL-03-02-223-F-G-I
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	306	291.94	72.81	1.15	9.65E+001	37.97	5.41E+002
m	2	285-	306	300.71	75.01	1.15	2.00E+002	43.53	6.11E+002
	3	950-	962	954.02	238.38	1.00	5.88E+001	32.54	8.12E+001
	4	2432-	2443	2436.10	609.02	0.48	2.69E+001	19.53	2.81E+001
	5	3636-	3650	3642.59	910.73	0.92	4.64E+001	15.52	5.64E+000
	6	5833-	5855	5843.04	1461.01	1.49	2.39E+002	31.45	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: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.999	1460.81*	10.67	1.95326E+001	3.01936E+000
Pb-212	0.517	74.81* @	10.70	1.51861E+001	4.45401E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.77151E-001	4.47218E-001
Bi-214	0.384	609.31*	46.30	4.38708E-001	3.23445E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.999	1.953260E+001	3.019362E+000
Pb-212	@	0.517	7.771512E-001	4.472177E-001
Bi-214		0.384	4.387085E-001	3.234452E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F 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	3.2182E-001	39.33
5	910.73	1.5454E-001	33.47

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.6880E-001	2.69E-001	-5.2405E-002
	1332.49	100.00	2.7994E-001		2.9960E-001
Nb-94	702.63	100.00	3.2607E-001	2.96E-001	-9.5058E-003
	871.10	100.00	2.9632E-001		1.3411E-001
Ag-108m	79.20	7.10	1.4937E+001	3.24E-001	-9.3472E+000
	433.93	89.90	3.2399E-001		1.3432E-001
	614.37	90.40	3.3953E-001		8.4622E-002
	722.95	90.50	3.3670E-001		-1.8377E-003
Sb-125	176.33	6.89	6.0794E+000	1.07E+000	-4.0250E-001
	427.89	29.33	1.0695E+000		2.9412E-001
	463.38	10.35	3.0788E+000		2.0531E+000
	600.56	17.80	1.6521E+000		4.4082E-001
	606.64	5.02	7.4067E+000		6.9713E+000
	635.90	11.32	2.7939E+000		-3.4784E-001
Cs-134	563.23	8.38	3.6037E+000	3.46E-001	-2.1665E+000
	569.32	15.43	1.9352E+000		-6.6627E-001
	604.70	97.60	3.6781E-001		-3.2084E-001
	795.84	85.40	3.4649E-001		1.6444E-001
	801.93	8.73	3.2778E+000		-9.8400E-001
Cs-137	661.65	85.12	3.9772E-001	3.98E-001	2.9652E-001
Eu-152	121.78	28.40	2.1660E+000	9.41E-001	-4.7474E-001
	244.69	7.49	5.0526E+000		1.4594E+000
	344.27	26.50	1.2403E+000		1.2768E-001
	778.89	12.74	2.2785E+000		-2.7514E+000
	867.32	4.16	7.6395E+000		-1.1958E-002
	964.01	14.40	2.3611E+000		8.4286E-001
	1085.78	10.00	2.6436E+000		-4.6363E-001
	1112.02	13.30	2.3407E+000		4.1458E-001
	1407.95	20.70	9.4131E-001		-9.3484E-001
Eu-154	123.07	40.50	1.5158E+000	6.90E-001	5.0868E-001
	247.94	6.60	5.6241E+000		1.7884E+000
	591.81	4.83	6.0182E+000		-9.8437E-001
	723.30	19.70	1.5702E+000		9.5583E-001
	756.87	4.33	7.4396E+000		-4.6980E+000
	873.19	11.50	2.4433E+000		3.5020E-001
	996.32	10.30	2.8760E+000		7.7034E-001
	1004.76	17.90	1.6130E+000		1.2003E+000
	1274.45	35.50	6.8998E-001		-6.9468E-001
Eu-155	86.54	30.90	3.1691E+000	3.17E+000	2.1085E+000
	105.31	20.70	3.5739E+000		-1.0574E+000
Am-241	59.54	35.90	3.8927E+000	3.89E+000	-1.2090E+000
Cm-243	228.19	10.56	3.5769E+000	2.60E+000	3.3874E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.6003E+000	2.60E+000	1.0693E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/11/2006 12:58:20 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-224-F-
Sample Title: NOL-03-02-224-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/11/2006 12:53:18 AM
Live Time: 300.0 seconds
Real Time: 300.4 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 6/1/2006
Calibration Efficiency: 6279_SOIL_1M90
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-224-F-
Title: NOL-03-02-224-F-G-I
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	307	300.24	74.89	0.87	1.42E+002	75.15	5.26E+002
2	949-	962	954.41	238.48	0.72	8.55E+001	37.88	1.03E+002
3	1399-	1413	1406.37	351.51	0.96	5.69E+001	24.01	3.21E+001
4	2328-	2338	2333.25	583.30	0.58	3.00E+001	15.34	1.30E+001
5	5832-	5855	5843.66	1461.16	2.15	2.75E+002	34.55	8.96E+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: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.996	1460.81*	10.67	2.24938E+001	3.36177E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.66316E-001	1.40478E-001
		860.37	12.46		
Pb-212	0.518	74.81* @	10.70	1.08243E+001	6.11183E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	1.13022E+000	5.31457E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.996	2.249380E+001	3.361773E+000
TL-208	0.471	2.663159E-001	1.404784E-001
Pb-212 @	0.518	1.130217E+000	5.314572E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	351.51	1.8976E-001	42.17

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	3.1225E-001	2.46E-001	9.0506E-002
	1332.49	100.00	2.4646E-001		3.0150E-002
Nb-94	702.63	100.00	3.2821E-001	3.23E-001	2.1006E-001
	871.10	100.00	3.2255E-001		2.1148E-001
Ag-108m	79.20	7.10	1.5541E+001	3.20E-001	-5.0889E+000
	433.93	89.90	3.1975E-001		-2.4686E-002
	614.37	90.40	3.7369E-001		-4.3860E-001
	722.95	90.50	3.4681E-001		3.1690E-001
Sb-125	176.33	6.89	6.5778E+000	1.00E+000	-2.8756E-001
	427.89	29.33	1.0021E+000		-5.8844E-001
	463.38	10.35	2.9375E+000		-2.7836E+000
	600.56	17.80	1.7260E+000		-1.0232E+000
	606.64	5.02	7.3716E+000		5.7930E+000
	635.90	11.32	2.7750E+000		4.2275E-001
Cs-134	563.23	8.38	4.3083E+000	3.26E-001	5.5178E+000
	569.32	15.43	1.8931E+000		-1.7531E+000
	604.70	97.60	3.6594E-001		6.1051E-002
	795.84	85.40	3.2572E-001		3.4061E-002
	801.93	8.73	3.1283E+000		7.5544E-001
Cs-137	661.65	85.12	3.5993E-001	3.60E-001	-2.9829E-001
Eu-152	121.78	28.40	2.2213E+000	9.64E-001	-4.7796E-003
	244.69	7.49	5.2456E+000		5.1621E-001
	344.27	26.50	1.2403E+000		1.8062E-001
	778.89	12.74	2.5538E+000		7.1284E-001
	867.32	4.16	8.0715E+000		-4.5282E+000
	964.01	14.40	2.4822E+000		3.6467E+000
	1085.78	10.00	2.6124E+000		-1.1937E-001
	1112.02	13.30	1.7732E+000		3.3023E-001
	1407.95	20.70	9.6400E-001		-7.0630E-002
Eu-154	123.07	40.50	1.5585E+000	6.59E-001	5.8767E-001
	247.94	6.60	5.4235E+000		-2.5129E+000
	591.81	4.83	6.2018E+000		-2.1242E+000
	723.30	19.70	1.5586E+000		6.5271E-001
	756.87	4.33	6.5673E+000		2.1770E-001
	873.19	11.50	2.7655E+000		9.7347E-001
	996.32	10.30	2.9267E+000		1.8821E+000
	1004.76	17.90	1.5509E+000		-5.0985E-001
	1274.45	35.50	6.5898E-001		1.9185E-001
Eu-155	86.54	30.90	3.1841E+000	3.18E+000	1.0131E+000
	105.31	20.70	3.7011E+000		1.6587E-001
Am-241	59.54	35.90	4.1398E+000	4.14E+000	-8.0938E-001
Cm-243	228.19	10.56	3.5285E+000	2.70E+000	-3.5657E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.6990E+000	2.70E+000	3.3499E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/11/2006 1:07:17 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-225-F-
Sample Title: NOL-03-02-225-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/11/2006 1:02:16 AM
Live Time: 300.0 seconds
Real Time: 300.3 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 6/1/2006
Calibration Efficiency: 6279_SOIL_1M90
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-225-F-
Title: NOL-03-02-225-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	295-	306	300.29	74.90	0.81	9.49E+001	72.36	5.01E+002
2	946-	960	954.95	238.62	0.92	7.44E+001	33.98	7.86E+001
3	2292-	2301	2296.20	574.03	0.33	8.00E+000	10.73	9.00E+000
4	2325-	2336	2331.51	582.86	0.87	3.00E+001	20.79	3.30E+001
5	3870-	3881	3875.69	969.02	1.07	2.26E+001	15.67	1.44E+001
6	5830-	5856	5843.75	1461.18	2.03	2.72E+002	34.05	6.75E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.995	1460.81*	10.67	2.22653E+001	3.31716E+000
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.66211E-001	1.87731E-001
		860.37	12.46		
Pb-212	0.519	74.81* @	10.70	7.23937E+000	5.69735E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	9.84258E-001	4.75200E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.995	2.226527E+001	3.317164E+000
TL-208	0.469	2.662109E-001	1.877314E-001
Pb-212 @	0.519	9.842579E-001	4.751997E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	574.03	2.6667E-002	134.13
5	969.02	7.5495E-002	69.21

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.9571E-001	2.39E-001	1.2549E-001
	1332.49	100.00	2.3915E-001		1.7154E-002
Nb-94	702.63	100.00	2.7184E-001	2.41E-001	2.6987E-002
	871.10	100.00	2.4074E-001		-9.5558E-002
Ag-108m	79.20	7.10	1.3877E+001	3.54E-001	2.7040E+000
	433.93	89.90	3.5789E-001		-1.4027E-001
	614.37	90.40	3.5591E-001		-2.4803E-001
	722.95	90.50	3.5419E-001		-1.8515E-002
Sb-125	176.33	6.89	5.6975E+000	1.11E+000	-1.8908E+000
	427.89	29.33	1.1101E+000		5.8783E-001
	463.38	10.35	3.2787E+000		8.6367E-001
	600.56	17.80	1.7966E+000		8.1829E-001
	606.64	5.02	7.4416E+000		6.1177E+000
	635.90	11.32	2.7939E+000		9.5833E-001
Cs-134	563.23	8.38	3.6536E+000	3.60E-001	1.1002E+000
	569.32	15.43	1.9491E+000		3.9698E-001
	604.70	97.60	3.6027E-001		-8.4955E-002
	795.84	85.40	3.6327E-001		-1.0228E-001
	801.93	8.73	3.2778E+000		-3.6578E+000
Cs-137	661.65	85.12	3.7298E-001	3.73E-001	1.1464E-001
Eu-152	121.78	28.40	2.0096E+000	9.18E-001	-6.8654E-001
	244.69	7.49	5.1500E+000		2.9467E+000
	344.27	26.50	1.1237E+000		-3.6760E-002
	778.89	12.74	2.1783E+000		-4.9780E-002
	867.32	4.16	6.0054E+000		-2.1500E+000
	964.01	14.40	2.3298E+000		-8.3759E-001
	1085.78	10.00	2.8229E+000		8.8778E-002
	1112.02	13.30	2.1115E+000		3.7455E-001
	1407.95	20.70	9.1799E-001		7.1293E-001
Eu-154	123.07	40.50	1.3708E+000	7.48E-001	-2.3677E-001
	247.94	6.60	5.4744E+000		2.5353E-001
	591.81	4.83	6.2468E+000		-3.1543E+000
	723.30	19.70	1.6383E+000		9.0860E-002
	756.87	4.33	7.3367E+000		-2.9475E+000
	873.19	11.50	2.1740E+000		-9.0999E-001
	996.32	10.30	2.6904E+000		1.3375E+000
	1004.76	17.90	1.6579E+000		9.4773E-001
	1274.45	35.50	7.4776E-001		7.3112E-001
Eu-155	86.54	30.90	2.9831E+000	2.98E+000	3.4219E+000
	105.31	20.70	3.4177E+000		1.4112E-001
Am-241	59.54	35.90	3.7575E+000	3.76E+000	-2.3531E+000
Cm-243	228.19	10.56	3.5089E+000	2.24E+000	-4.3107E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.2386E+000	2.24E+000	6.5877E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/11/2006 1:16:07 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: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-226-F-
Sample Title: NOL-03-02-226-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/11/2006 1:11:05 AM
Live Time: 300.0 seconds
Real Time: 300.3 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 6/1/2006
Calibration Efficiency: 6279_SOIL_1M90
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-226-F-
Title: NOL-03-02-226-F-G-I
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	306	300.07	74.85	0.92	8.42E+001	64.44	4.15E+002
2	950-	963	954.57	238.52	1.11	8.26E+001	32.99	7.14E+001
3	2429-	2442	2435.84	608.95	0.78	3.77E+001	20.04	2.43E+001
4	5832-	5855	5843.29	1461.07	1.30	2.59E+002	32.31	3.13E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.998	1460.81*	10.67	2.11710E+001	3.14991E+000
Pb-212	0.518	74.81* @	10.70	6.42520E+000	5.07696E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	1.09242E+000	4.68734E-001
Bi-214	0.383	609.31*	46.30	6.16239E-001	3.35819E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.998	2.117104E+001	3.149907E+000
Pb-212	@	0.518	1.092420E+000	4.687343E-001
Bi-214		0.383	6.162389E-001	3.358194E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	2.5585E-001	1.89E-001	-1.2090E-003
	1332.49	100.00	1.8856E-001		2.6096E-002
Nb-94	702.63	100.00	3.1289E-001	2.44E-001	1.5662E-001
	871.10	100.00	2.4385E-001		1.4826E-001
Ag-108m	79.20	7.10	1.3545E+001	3.20E-001	-7.0161E+000
	433.93	89.90	3.3637E-001		1.9857E-001
	614.37	90.40	3.1971E-001		-5.7321E-002
	722.95	90.50	3.2889E-001		1.1210E-001
Sb-125	176.33	6.89	5.9510E+000	1.03E+000	-2.8540E+000
	427.89	29.33	1.0333E+000		5.9410E-001
	463.38	10.35	2.9556E+000		-9.6283E-001
	600.56	17.80	1.5342E+000		-6.1883E-001
	606.64	5.02	7.4763E+000		9.1768E+000
	635.90	11.32	2.2915E+000		-1.8602E+000
Cs-134	563.23	8.38	3.1746E+000	3.41E-001	2.9102E-001
	569.32	15.43	1.6813E+000		-1.8631E+000
	604.70	97.60	3.7519E-001		-4.8679E-002
	795.84	85.40	3.4070E-001		1.7125E-001
	801.93	8.73	2.7684E+000		-4.4894E+000
Cs-137	661.65	85.12	3.6521E-001	3.65E-001	2.8947E-001
Eu-152	121.78	28.40	1.9330E+000	9.86E-001	-1.0953E-001
	244.69	7.49	4.7326E+000		3.9771E+000
	344.27	26.50	1.0989E+000		-1.4301E+000
	778.89	12.74	2.2190E+000		3.6324E-003
	867.32	4.16	6.0054E+000		-5.9036E-001
	964.01	14.40	2.2657E+000		-6.6282E-001
	1085.78	10.00	2.5487E+000		8.7391E-001
	1112.02	13.30	1.7732E+000		-7.0921E-001
	1407.95	20.70	9.8609E-001		5.6300E-001
Eu-154	123.07	40.50	1.3482E+000	7.20E-001	6.7482E-001
	247.94	6.60	4.9971E+000		-1.5164E+000
	591.81	4.83	6.1108E+000		3.2155E+000
	723.30	19.70	1.5350E+000		1.2344E+000
	756.87	4.33	5.7531E+000		-6.2849E+000
	873.19	11.50	2.0940E+000		-1.6920E-001
	996.32	10.30	2.5195E+000		1.5890E+000
	1004.76	17.90	1.3273E+000		-5.3407E-001
	1274.45	35.50	7.1951E-001		-4.0571E-001
Eu-155	86.54	30.90	2.8411E+000	2.84E+000	9.4780E-001
	105.31	20.70	3.2821E+000		2.0472E+000
Am-241	59.54	35.90	3.5912E+000	3.59E+000	-2.4587E+000
Cm-243	228.19	10.56	3.1891E+000	2.51E+000	-1.4177E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.5063E+000	2.51E+000	-5.0628E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/10/2006 10:48:37 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: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-227-F-
Sample Title: NOL-03-02-227-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/10/2006 10:43:36 PM
Live Time: 300.0 seconds
Real Time: 300.4 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 6/1/2006
Calibration Efficiency: 6279_SOIL_1M90
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-227-F-
Title: NOL-03-02-227-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	295-	314	300.40	74.93	0.94	1.72E+002	120.22	1.01E+003
2	5324-	5336	5330.40	1332.81	0.39	2.54E+001	15.67	1.46E+001
3	5832-	5855	5845.49	1461.62	1.48	2.28E+002	32.45	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: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.977	1460.81*	10.67	1.86775E+001	3.05432E+000

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.977	1.867751E+001	3.054317E+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	74.93	5.7198E-001	70.06
2	1332.81	8.4521E-002	61.79

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	3.2791E-001	3.28E-001	-4.0696E-001
	1332.49	100.00	3.4143E-001		3.0580E-001
Nb-94	702.63	100.00	3.3454E-001	3.11E-001	-7.2354E-002
	871.10	100.00	3.1092E-001		-2.4079E-001
Ag-108m	79.20	7.10	1.6424E+001	3.78E-001	5.5664E+000
	433.93	89.90	3.8344E-001		2.1698E-001
	614.37	90.40	4.1464E-001		-3.2511E-001
	722.95	90.50	3.7768E-001		7.8549E-002
Sb-125	176.33	6.89	7.1774E+000	1.14E+000	4.1571E-001
	427.89	29.33	1.1381E+000		-5.9023E-001
	463.38	10.35	3.3267E+000		2.4134E+000
	600.56	17.80	1.9081E+000		-6.8172E-001
	606.64	5.02	8.1700E+000		6.7707E+000
	635.90	11.32	2.7558E+000		-1.0951E+000
Cs-134	563.23	8.38	4.1387E+000	3.63E-001	3.8924E+000
	569.32	15.43	2.0562E+000		-1.8646E+000
	604.70	97.60	3.8775E-001		-5.6496E-003
	795.84	85.40	3.6327E-001		-1.5124E-001
	801.93	8.73	3.4480E+000		-9.3286E-001
Cs-137	661.65	85.12	4.0483E-001	4.05E-001	1.3374E-001
Eu-152	121.78	28.40	2.3864E+000	1.15E+000	-3.0148E-001
	244.69	7.49	5.6487E+000		-2.4996E+000
	344.27	26.50	1.3049E+000		-1.0656E+000
	778.89	12.74	2.4111E+000		-5.0617E-002
	867.32	4.16	7.5837E+000		-3.8745E+000
	964.01	14.40	2.6391E+000		6.2001E-001
	1085.78	10.00	2.8517E+000		2.0898E-001
	1112.02	13.30	2.2806E+000		-1.5810E+000
	1407.95	20.70	1.1460E+000		3.8380E-001
Eu-154	123.07	40.50	1.6565E+000	7.57E-001	-5.5628E-001
	247.94	6.60	6.2444E+000		2.4210E+000
	591.81	4.83	7.6110E+000		3.3340E-001
	723.30	19.70	1.7247E+000		3.7636E-001
	756.87	4.33	7.6906E+000		5.2689E+000
	873.19	11.50	2.8837E+000		2.7470E+000
	996.32	10.30	2.7449E+000		1.3063E+000
	1004.76	17.90	1.6281E+000		3.2740E-001
	1274.45	35.50	7.5692E-001		2.8621E-001
Eu-155	86.54	30.90	3.4778E+000	3.48E+000	6.5606E+000
	105.31	20.70	4.0922E+000		-1.3212E+000
Am-241	59.54	35.90	4.1522E+000	4.15E+000	-3.4393E+000
Cm-243	228.19	10.56	4.0456E+000	3.05E+000	-1.2230E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	3.0465E+000	3.05E+000	-1.7357E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/11/2006 12:04:36 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-228-F-
Sample Title: NOL-03-02-228-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/10/2006 11:59:35 PM
Live Time: 300.0 seconds
Real Time: 300.4 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 6/1/2006
Calibration Efficiency: 6279_SOIL_1M90
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-228-F-
Title: NOL-03-02-228-F-G-I
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	305	300.42	74.94	0.79	1.86E+002	71.46	5.04E+002
2	950-	960	955.21	238.68	0.92	5.63E+001	31.05	8.17E+001
3	1329-	1338	1333.72	333.34	0.49	1.46E+001	18.04	3.04E+001
4	2325-	2342	2331.20	582.78	1.35	5.93E+001	23.76	2.57E+001
5	2431-	2443	2436.26	609.06	0.40	3.46E+001	18.42	2.04E+001
6	3636-	3651	3644.00	911.08	0.53	4.89E+001	18.76	1.41E+001
7	5831-	5855	5843.78	1461.19	1.70	2.49E+002	33.26	9.43E+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: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.995	1460.81*	10.67	2.03287E+001	3.17945E+000
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	5.26009E-001	2.21696E-001
		860.37	12.46		
Pb-212	0.518	74.81* @	10.70	1.41643E+001	6.11289E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.44530E-001	4.27036E-001
Bi-214	0.384	609.31*	46.30	5.65707E-001	3.08763E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.995	2.032866E+001	3.179448E+000
TL-208	0.468	5.260092E-001	2.216957E-001
Pb-212 @	0.518	7.445298E-001	4.270356E-001
Bi-214	0.384	5.657070E-001	3.087634E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	333.34	4.8685E-002	123.52
6	911.08	1.6299E-001	38.36

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:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	3.4036E-001	3.18E-001	2.0041E-001
	1332.49	100.00	3.1783E-001		1.0983E-001
Nb-94	702.63	100.00	3.6446E-001	3.04E-001	-8.7525E-002
	871.10	100.00	3.0372E-001		-5.9724E-003
Ag-108m	79.20	7.10	1.5493E+001	3.64E-001	-2.3920E+001
	433.93	89.90	3.8868E-001		1.0428E-001
	614.37	90.40	3.6933E-001		-2.5427E-001
	722.95	90.50	3.6378E-001		3.4858E-001
Sb-125	176.33	6.89	7.2355E+000	1.18E+000	3.3004E+000
	427.89	29.33	1.1762E+000		-1.0193E-001
	463.38	10.35	3.2300E+000		2.2986E+000
	600.56	17.80	1.8532E+000		-3.3633E-002
	606.64	5.02	7.3716E+000		5.2741E+000
	635.90	11.32	2.9232E+000		5.5537E-001
Cs-134	563.23	8.38	3.8694E+000	3.71E-001	-2.2511E+000
	569.32	15.43	2.0691E+000		-1.4898E+000
	604.70	97.60	3.7702E-001		-2.6157E-001
	795.84	85.40	3.7136E-001		-1.2224E-001
	801.93	8.73	3.5028E+000		-1.5745E-001
Cs-137	661.65	85.12	4.2540E-001	4.25E-001	2.0432E-001
Eu-152	121.78	28.40	2.3811E+000	8.17E-001	2.3869E-002
	244.69	7.49	5.4445E+000		2.2566E+000
	344.27	26.50	1.2891E+000		-8.3926E-001
	778.89	12.74	2.3172E+000		-7.1015E-001
	867.32	4.16	7.4134E+000		1.3011E+000
	964.01	14.40	1.9873E+000		-6.9012E-001
	1085.78	10.00	2.9635E+000		-1.7811E-001
	1112.02	13.30	2.1766E+000		-2.5160E-001
	1407.95	20.70	8.1700E-001		-2.6936E-001
Eu-154	123.07	40.50	1.6491E+000	6.80E-001	-5.2620E-001
	247.94	6.60	5.6076E+000		-8.3069E+000
	591.81	4.83	6.7619E+000		8.1546E-001
	723.30	19.70	1.6928E+000		1.9579E+000
	756.87	4.33	7.4905E+000		3.6764E+000
	873.19	11.50	2.6417E+000		1.1819E+000
	996.32	10.30	2.4897E+000		-3.3315E+000
	1004.76	17.90	1.7016E+000		3.4399E-001
	1274.45	35.50	6.7982E-001		-8.6855E-001
Eu-155	86.54	30.90	3.3885E+000	3.39E+000	2.2137E+000
	105.31	20.70	3.8696E+000		-2.7248E+000
Am-241	59.54	35.90	4.2481E+000	4.25E+000	-1.0889E+000
Cm-243	228.19	10.56	4.0115E+000	2.87E+000	4.7946E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.8707E+000	2.87E+000	-2.2524E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/11/2006 12:12:58 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: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-229-F-
Sample Title: NOL-03-02-229-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/11/2006 12:07:57 AM
Live Time: 300.0 seconds
Real Time: 300.5 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 6/1/2006
Calibration Efficiency: 6279_SOIL_1M90
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-229-F-
Title: NOL-03-02-229-F-G-I
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	308	291.10	72.60	1.21	1.21E+002	40.96	4.84E+002
m	2	287-	308	300.65	74.99	1.21	2.73E+002	47.22	7.24E+002
	3	948-	961	953.71	238.31	1.60	6.79E+001	36.89	9.91E+001
	4	3637-	3650	3644.53	911.21	1.22	4.02E+001	18.00	1.58E+001
	5	5832-	5855	5843.77	1461.19	2.00	2.62E+002	34.58	1.22E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.995	1460.81*	10.67	2.14128E+001	3.31692E+000
Pb-212	0.517	74.81* @	10.70	2.07594E+001	5.42944E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.97499E-001	5.07712E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.995	2.141284E+001	3.316924E+000
Pb-212 @	0.517	8.974987E-001	5.077121E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.60	4.0411E-001	33.79
4	911.21	1.3399E-001	44.78

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:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	3.1492E-001	3.15E-001	2.5358E-001
	1332.49	100.00	3.2855E-001		1.4926E-001
Nb-94	702.63	100.00	3.3454E-001	3.09E-001	1.4798E-001
	871.10	100.00	3.0854E-001		1.9709E-001
Ag-108m	79.20	7.10	1.6154E+001	3.54E-001	-1.1438E+001
	433.93	89.90	3.5408E-001		3.1471E-002
	614.37	90.40	3.6713E-001		-5.2567E-001
	722.95	90.50	3.6614E-001		1.4010E-001
Sb-125	176.33	6.89	7.0100E+000	1.14E+000	9.9197E-001
	427.89	29.33	1.1437E+000		-3.9976E-001
	463.38	10.35	3.4512E+000		-2.8235E-002
	600.56	17.80	1.8532E+000		-5.4057E-001
	606.64	5.02	7.3363E+000		5.4910E+000
	635.90	11.32	2.7171E+000		1.6758E+000
Cs-134	563.23	8.38	3.9613E+000	3.62E-001	0.0000E+000
	569.32	15.43	2.1075E+000		-1.6721E+000
	604.70	97.60	3.6217E-001		-1.2984E-001
	795.84	85.40	4.2340E-001		2.7406E-001
	801.93	8.73	3.5832E+000		-1.7578E+000
Cs-137	661.65	85.12	4.1639E-001	4.16E-001	2.2013E-001
Eu-152	121.78	28.40	2.4841E+000	9.86E-001	2.1341E+000
	244.69	7.49	5.2456E+000		-2.0661E+000
	344.27	26.50	1.2997E+000		-1.2446E+000
	778.89	12.74	2.6051E+000		6.1774E-001
	867.32	4.16	7.5274E+000		-1.1819E+000
	964.01	14.40	2.6666E+000		-9.6904E-001
	1085.78	10.00	2.9635E+000		2.0391E+000
	1112.02	13.30	2.4560E+000		-1.7298E-001
	1407.95	20.70	9.8609E-001		-7.3389E-002
Eu-154	123.07	40.50	1.7040E+000	7.10E-001	9.0515E-001
	247.94	6.60	5.7216E+000		2.8111E+000
	591.81	4.83	7.0043E+000		2.6723E+000
	723.30	19.70	1.7035E+000		9.7351E-001
	756.87	4.33	7.6411E+000		1.7824E+000
	873.19	11.50	2.6205E+000		6.9810E-001
	996.32	10.30	2.8760E+000		-7.2763E-001
	1004.76	17.90	1.6130E+000		1.3972E+000
	1274.45	35.50	7.0981E-001		-1.9164E-001
Eu-155	86.54	30.90	3.4625E+000	3.46E+000	3.3160E+000
	105.31	20.70	3.9476E+000		-2.9312E+000
Am-241	59.54	35.90	4.3489E+000	4.35E+000	3.5709E+000
Cm-243	228.19	10.56	3.9944E+000	2.72E+000	-2.4091E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.7231E+000	2.72E+000	4.8484E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/11/2006 12:19:58 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: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-230-F-
Sample Title: NOL-03-02-230-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/11/2006 12:14:56 AM
Live Time: 300.0 seconds
Real Time: 301.1 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 6/1/2006
Calibration Efficiency: 6279_SOIL_1M90
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-230-F-
Title: NOL-03-02-230-F-G-I
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	307	299.88	74.80	0.59	1.64E+002	85.30	6.84E+002
2	334-	344	339.31	84.66	0.75	1.16E+002	68.26	4.60E+002
3	946-	960	954.32	238.46	0.92	5.98E+001	35.50	9.32E+001
4	3869-	3881	3875.40	968.95	0.47	2.69E+001	16.32	1.61E+001
5	5831-	5857	5843.76	1461.19	1.98	2.85E+002	33.86	3.21E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.995	1460.81*	10.67	2.32908E+001	3.34989E+000
Pb-212	0.518	74.81* @	10.70	1.25123E+001	6.96207E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.91305E-001	4.85642E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.995	2.329075E+001	3.349885E+000
Pb-212 @	0.518	7.913051E-001	4.856423E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	3.8570E-001	58.99
4	968.95	8.9651E-002	60.66

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	3.1756E-001	3.10E-001	2.6484E-001
	1332.49	100.00	3.0954E-001		3.2354E-001
Nb-94	702.63	100.00	3.4279E-001	3.23E-001	-1.7234E-001
	871.10	100.00	3.2255E-001		1.4949E-001
Ag-108m	79.20	7.10	1.6788E+001	3.75E-001	-3.8708E+000
	433.93	89.90	4.1385E-001		-8.1561E-002
	614.37	90.40	3.8226E-001		-3.2521E-001
	722.95	90.50	3.7540E-001		-1.8406E-001
Sb-125	176.33	6.89	7.0200E+000	1.23E+000	-1.3847E+000
	427.89	29.33	1.2285E+000		4.8586E-001
	463.38	10.35	3.4816E+000		1.0945E+000
	600.56	17.80	1.7260E+000		-1.0684E+000
	606.64	5.02	7.5795E+000		6.4248E+000
	635.90	11.32	2.6778E+000		-1.4719E-001
Cs-134	563.23	8.38	4.0951E+000	3.77E-001	-2.1213E+000
	569.32	15.43	2.2893E+000		8.1764E-001
	604.70	97.60	3.7702E-001		2.9919E-001
	795.84	85.40	3.8186E-001		1.4734E-001
	801.93	8.73	3.4755E+000		-9.1169E-001
Cs-137	661.65	85.12	4.0717E-001	4.07E-001	-1.8538E-001
Eu-152	121.78	28.40	2.4417E+000	9.64E-001	1.5717E+000
	244.69	7.49	5.3922E+000		-7.3248E-002
	344.27	26.50	1.3462E+000		-9.3102E-001
	778.89	12.74	2.5538E+000		7.7772E-001
	867.32	4.16	7.4706E+000		-1.0660E+001
	964.01	14.40	2.7073E+000		-4.3478E-001
	1085.78	10.00	2.9907E+000		0.0000E+000
	1112.02	13.30	2.4182E+000		-6.7459E-001
	1407.95	20.70	9.6400E-001		-3.5646E-001
Eu-154	123.07	40.50	1.6651E+000	7.66E-001	-5.6367E-001
	247.94	6.60	6.0348E+000		3.3407E+000
	591.81	4.83	7.1997E+000		9.6010E+000
	723.30	19.70	1.7247E+000		-3.1127E-002
	756.87	4.33	7.8371E+000		3.5773E+000
	873.19	11.50	2.7655E+000		1.5771E+000
	996.32	10.30	3.0011E+000		1.8996E-001
	1004.76	17.90	1.4860E+000		4.8041E-001
	1274.45	35.50	7.6596E-001		4.5665E-001
Eu-155	86.54	30.90	3.6016E+000	3.60E+000	-3.1411E-002
	105.31	20.70	4.1282E+000		-9.7005E-001
Am-241	59.54	35.90	4.3275E+000	4.33E+000	-1.4035E-001
Cm-243	228.19	10.56	4.1459E+000	2.92E+000	6.1946E-002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.9157E+000	2.92E+000	1.7407E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/11/2006 12:30:13 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: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-231-F-
Sample Title: NOL-03-02-231-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/11/2006 12:25:10 AM
Live Time: 300.0 seconds
Real Time: 301.1 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 6/1/2006
Calibration Efficiency: 6279_SOIL_1M90
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-231-F-
Title: NOL-03-02-231-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-	305	300.52	74.96	1.19	2.19E+002	85.86	6.75E+002
2	947-	960	954.88	238.60	1.09	6.59E+001	39.61	1.24E+002
3	2428-	2442	2435.27	608.81	1.18	5.21E+001	24.53	3.59E+001
4	3637-	3652	3643.69	911.00	0.46	4.13E+001	18.10	1.47E+001
5	5833-	5856	5844.36	1461.34	1.54	2.26E+002	32.88	1.43E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.990	1460.81*	10.67	1.84609E+001	3.07623E+000
Pb-212	0.518	74.81* @	10.70	1.66455E+001	7.30922E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.71570E-001	5.41469E-001
Bi-214	0.380	609.31*	46.30	8.49822E-001	4.14018E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.990	1.846087E+001	3.076225E+000
Pb-212	@	0.518	8.715696E-001	5.414691E-001
Bi-214		0.380	8.498223E-001	4.140179E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	911.00	1.3774E-001	43.81

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:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	3.0956E-001	3.10E-001	1.7932E-001
	1332.49	100.00	3.3634E-001		4.1080E-001
Nb-94	702.63	100.00	3.3454E-001	3.23E-001	-6.6363E-002
	871.10	100.00	3.2255E-001		-4.6029E-002
Ag-108m	79.20	7.10	1.6893E+001	3.83E-001	-1.4464E+001
	433.93	89.90	3.8344E-001		-2.5728E-001
	614.37	90.40	4.1850E-001		-1.3039E-001
	722.95	90.50	4.0184E-001		2.1672E-001
Sb-125	176.33	6.89	7.3598E+000	1.21E+000	1.6832E-001
	427.89	29.33	1.2079E+000		-4.3386E-001
	463.38	10.35	3.4051E+000		-1.8809E+000
	600.56	17.80	1.8973E+000		-1.0069E+000
	606.64	5.02	8.6297E+000		1.0285E+001
	635.90	11.32	3.0119E+000		-1.1072E-001
Cs-134	563.23	8.38	3.9613E+000	3.41E-001	-1.4114E-001
	569.32	15.43	2.2185E+000		-1.2389E+000
	604.70	97.60	4.2947E-001		-1.7065E-001
	795.84	85.40	3.4070E-001		-2.8573E-001
	801.93	8.73	3.5832E+000		2.7264E+000
Cs-137	661.65	85.12	4.7171E-001	4.72E-001	3.3499E-001
Eu-152	121.78	28.40	2.5141E+000	1.01E+000	-2.4741E+000
	244.69	7.49	5.6612E+000		-3.6491E+000
	344.27	26.50	1.4675E+000		-2.4385E-002
	778.89	12.74	2.8624E+000		7.4664E-001
	867.32	4.16	7.9659E+000		5.6108E+000
	964.01	14.40	2.7605E+000		8.9739E-001
	1085.78	10.00	3.0709E+000		-2.5975E+000
	1112.02	13.30	2.0212E+000		1.3760E-001
	1407.95	20.70	1.0076E+000		3.0404E-001
Eu-154	123.07	40.50	1.7466E+000	7.00E-001	-2.5286E-001
	247.94	6.60	6.2737E+000		3.5239E-001
	591.81	4.83	7.2382E+000		-1.2683E+000
	723.30	19.70	1.7966E+000		-4.9249E-001
	756.87	4.33	6.4493E+000		-9.1923E+000
	873.19	11.50	2.7453E+000		-2.5410E+000
	996.32	10.30	3.0972E+000		-5.2210E-001
	1004.76	17.90	1.7440E+000		4.1154E-001
	1274.45	35.50	6.9997E-001		2.7789E-001
Eu-155	86.54	30.90	3.6511E+000	3.65E+000	4.9050E+000
	105.31	20.70	4.1415E+000		-9.8029E-001
Am-241	59.54	35.90	4.3442E+000	4.34E+000	-1.1146E+000
Cm-243	228.19	10.56	4.1127E+000	2.89E+000	-1.6094E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.8933E+000	2.89E+000	-2.3012E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/10/2006 7:25:35 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: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-232
Sample Title: NOL-03-02-232-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/10/2006 7:20:33 PM
Live Time: 300.0 seconds
Real Time: 300.4 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 6/1/2006
Calibration Efficiency: 6279_SOIL_1M90
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-232
Title: NOL-03-02-232-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	293-	307	301.15	75.12	0.45	2.23E+002	97.57	7.81E+002
2	333-	345	339.36	84.67	0.49	6.31E+001	74.78	5.27E+002
3	945-	962	954.95	238.62	0.88	1.04E+002	40.48	9.91E+001
4	1403-	1414	1407.11	351.69	1.13	3.73E+001	22.42	3.67E+001
5	2430-	2442	2436.41	609.09	0.75	4.50E+001	17.44	1.30E+001
6	4687-	4698	4692.29	1173.23	0.51	1.52E+001	14.00	1.38E+001
7	5322-	5337	5329.93	1332.69	0.42	4.20E+001	16.66	1.00E+001
8	5833-	5857	5844.33	1461.33	1.38	2.71E+002	35.06	1.21E+001

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.991	1460.81*	10.67	2.21548E+001	3.38195E+000
Co-60	0.999	1173.22*	100.00	1.28987E-001	1.18885E-001
		1332.49*	100.00	3.61512E-001	1.46261E-001
Pb-212	0.518	74.81* @	10.70	1.69364E+001	8.12202E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	1.37455E+000	5.77226E-001
Bi-214	0.385	609.31*	46.30	7.34793E-001	2.98884E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.991	2.215475E+001	3.381945E+000
Co-60	0.999	2.214944E-001	9.225353E-002
Pb-212 @	0.518	1.374548E+000	5.772256E-001
Bi-214	0.385	7.347926E-001	2.988843E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
2	84.67	2.1022E-001	118.57
4	351.69	1.2432E-001	60.12

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
+	Co-60	1173.22*	100.00	1.8939E-001	1.79E-001	1.2899E-001
		1332.49*	100.00	1.7921E-001		3.6151E-001
	Nb-94	702.63	100.00	3.3244E-001	3.32E-001	-1.7034E-001
		871.10	100.00	3.3154E-001		-2.2894E-002
	Ag-108m	79.20	7.10	1.6486E+001	3.56E-001	1.0447E+001
		433.93	89.90	3.5599E-001		2.3821E-001
		614.37	90.40	3.9062E-001		2.5802E-002
		722.95	90.50	3.7995E-001		2.1558E-003
	Sb-125	176.33	6.89	6.5671E+000	1.18E+000	-1.0110E+000
		427.89	29.33	1.1762E+000		7.0616E-001
		463.38	10.35	3.4967E+000		1.4995E+000
		600.56	17.80	1.9925E+000		6.6596E-001
		606.64	5.02	7.7149E+000		6.7166E+000
		635.90	11.32	2.7365E+000		-8.1149E-001
	Cs-134	563.23	8.38	4.1818E+000	3.82E-001	-2.7387E+000
		569.32	15.43	2.3579E+000		1.8045E+000
		604.70	97.60	3.9819E-001		-6.3148E-002
		795.84	85.40	3.8186E-001		-3.4095E-001
		801.93	8.73	3.5566E+000		-9.0949E-001
	Cs-137	661.65	85.12	4.4283E-001	4.43E-001	8.1449E-002
	Eu-152	121.78	28.40	2.2771E+000	9.18E-001	-5.1964E-001
		244.69	7.49	5.1638E+000		-9.7135E-001
		344.27	26.50	1.3258E+000		-4.7301E-001
		778.89	12.74	2.6554E+000		-2.9287E+000
		867.32	4.16	7.8045E+000		-5.8899E-001
		964.01	14.40	2.6938E+000		3.2909E+000
		1085.78	10.00	2.7349E+000		-1.2395E+000
		1112.02	13.30	2.4372E+000		1.8320E-001
		1407.95	20.70	9.1799E-001		-7.2958E-001
	Eu-154	123.07	40.50	1.5742E+000	8.10E-001	-1.5895E-001
		247.94	6.60	5.6731E+000		-3.2043E+000
		591.81	4.83	7.3143E+000		7.0494E-001
		723.30	19.70	1.7865E+000		8.6750E-001
		756.87	4.33	7.5913E+000		7.0902E+000
		873.19	11.50	2.9969E+000		2.0419E+000
		996.32	10.30	2.9015E+000		3.1729E-001
		1004.76	17.90	1.6872E+000		4.0180E-001
		1274.45	35.50	8.0953E-001		7.4155E-001
	Eu-155	86.54	30.90	3.3869E+000	3.39E+000	-4.2709E-002
		105.31	20.70	3.9358E+000		-2.1268E+000
	Am-241	59.54	35.90	4.3299E+000	4.33E+000	1.3709E+000
	Cm-243	228.19	10.56	3.7461E+000	2.75E+000	3.4207E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.7469E+000	2.75E+000	5.2190E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/10/2006 8:21:57 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-233-F-
Sample Title: NOL-03-02-233-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/10/2006 8:16:55 PM
Live Time: 300.0 seconds
Real Time: 300.4 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 6/1/2006
Calibration Efficiency: 6279_SOIL_1M90
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-233-F-
Title: NOL-03-02-233-F-G-I
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	307	292.45	72.94	1.16	1.46E+002	43.19	7.48E+002
m	2	284-	307	300.77	75.02	1.16	2.11E+002	47.84	8.10E+002
	3	949-	961	953.57	238.27	1.12	5.73E+001	35.74	1.04E+002
	4	1223-	1231	1226.47	306.52	0.69	1.70E+001	15.43	2.10E+001
	5	5324-	5336	5330.52	1332.84	0.34	2.62E+001	13.43	7.82E+000
	6	5832-	5855	5843.57	1461.14	2.17	2.70E+002	32.94	3.06E+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: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.996	1460.81*	10.67	2.20766E+001	3.23264E+000
Pb-212	0.516	74.81* @	10.70	1.60452E+001	4.81052E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	7.56985E-001	4.87208E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.996	2.207660E+001	3.232642E+000
Pb-212 @	0.516	7.569851E-001	4.872079E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.94	4.8684E-001	29.57
4	306.52	5.6732E-002	90.63
5	1332.84	8.7279E-002	51.30

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:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	3.3544E-001	3.31E-001	2.6719E-001
	1332.49	100.00	3.3117E-001		2.9810E-001
Nb-94	702.63	100.00	3.4279E-001	2.89E-001	-8.8017E-002
	871.10	100.00	2.8872E-001		-2.6416E-003
Ag-108m	79.20	7.10	1.6470E+001	3.69E-001	-1.1394E+001
	433.93	89.90	3.6907E-001		8.5188E-002
	614.37	90.40	3.9062E-001		1.1980E-001
	722.95	90.50	3.8220E-001		1.0779E-001
Sb-125	176.33	6.89	7.0893E+000	1.12E+000	3.4235E+000
	427.89	29.33	1.1158E+000		5.9589E-001
	463.38	10.35	3.0442E+000		1.9016E+000
	600.56	17.80	1.6647E+000		1.8904E-001
	606.64	5.02	6.8223E+000		6.5504E+000
	635.90	11.32	2.6580E+000		7.6714E-001
Cs-134	563.23	8.38	3.7751E+000	3.28E-001	1.1563E+000
	569.32	15.43	1.9764E+000		3.1277E-001
	604.70	97.60	3.2826E-001		5.5177E-002
	795.84	85.40	3.5777E-001		-3.3484E-001
	801.93	8.73	3.8873E+000		1.1807E+000
Cs-137	661.65	85.12	3.9532E-001	3.95E-001	1.8843E-001
Eu-152	121.78	28.40	2.3261E+000	8.44E-001	5.1240E-001
	244.69	7.49	5.4184E+000		5.7342E-001
	344.27	26.50	1.2403E+000		-2.4310E-001
	778.89	12.74	1.9614E+000		-2.4361E+000
	867.32	4.16	7.0595E+000		-5.8197E+000
	964.01	14.40	2.1140E+000		-2.6672E+000
	1085.78	10.00	2.9907E+000		-1.4027E+000
	1112.02	13.30	2.0212E+000		-1.0619E+000
	1407.95	20.70	8.4356E-001		-6.1857E-001
Eu-154	123.07	40.50	1.5923E+000	7.48E-001	-1.2426E+000
	247.94	6.60	5.9581E+000		2.2299E+000
	591.81	4.83	6.5525E+000		4.1166E+000
	723.30	19.70	1.7763E+000		6.4715E-001
	756.87	4.33	7.6906E+000		6.0089E+000
	873.19	11.50	2.4662E+000		-6.0605E-001
	996.32	10.30	2.6348E+000		-4.3475E+000
	1004.76	17.90	1.8390E+000		1.8621E+000
	1274.45	35.50	7.4776E-001		3.4055E-002
Eu-155	86.54	30.90	3.3603E+000	3.36E+000	1.1511E+000
	105.31	20.70	3.8791E+000		1.0508E+000
Am-241	59.54	35.90	4.2868E+000	4.29E+000	-3.6851E-001
Cm-243	228.19	10.56	3.8097E+000	2.76E+000	7.4031E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.7627E+000	2.76E+000	-4.0673E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/10/2006 8:30:10 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-234-F-
Sample Title: NOL-03-02-234-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/10/2006 8:25:09 PM
Live Time: 300.0 seconds
Real Time: 300.4 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 6/1/2006
Calibration Efficiency: 6279_SOIL_1M90
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-234-F-
Title: NOL-03-02-234-F-G-I
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	308	291.77	72.77	1.24	1.52E+002	42.88	6.94E+002
m	2	284-	308	300.77	75.02	1.25	2.71E+002	48.60	8.36E+002
	3	948-	959	954.29	238.45	0.48	4.62E+001	34.77	1.07E+002
	4	2326-	2339	2334.02	583.49	0.86	4.08E+001	18.96	1.92E+001
	5	2429-	2442	2435.53	608.87	0.98	2.78E+001	19.75	2.63E+001
	6	3637-	3649	3643.84	911.04	0.69	3.60E+001	17.65	1.60E+001
	7	5834-	5858	5845.53	1461.63	2.17	3.08E+002	37.15	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: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.977	1460.81*	10.67	2.51492E+001	3.65755E+000
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	3.62262E-001	1.74771E-001
		860.37	12.46		
Pb-212	0.518	74.81* @	10.70	2.05971E+001	5.47463E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	6.11184E-001	4.69651E-001
Bi-214	0.382	609.31*	46.30	4.53079E-001	3.27290E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.977	2.514918E+001	3.657552E+000
TL-208	0.468	3.622621E-001	1.747712E-001
Pb-212 @	0.518	6.111837E-001	4.696510E-001
Bi-214	0.382	4.530786E-001	3.272899E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F 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	5.0711E-001	28.18
6	911.04	1.1992E-001	49.07

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:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	3.1225E-001	2.80E-001	2.5389E-002
	1332.49	100.00	2.7994E-001		2.8957E-001
Nb-94	702.63	100.00	3.0608E-001	3.06E-001	1.8126E-001
	871.10	100.00	3.1092E-001		2.5015E-001
Ag-108m	79.20	7.10	1.6923E+001	3.50E-001	-9.4654E+000
	433.93	89.90	3.5023E-001		1.0560E-001
	614.37	90.40	3.7800E-001		-8.1309E-002
	722.95	90.50	3.7311E-001		-6.6064E-002
Sb-125	176.33	6.89	6.6202E+000	1.10E+000	-7.2402E+000
	427.89	29.33	1.1044E+000		4.1408E-001
	463.38	10.35	3.3108E+000		6.2800E-001
	600.56	17.80	1.8863E+000		-6.5428E-002
	606.64	5.02	7.7483E+000		8.4554E+000
	635.90	11.32	2.7939E+000		4.9373E-001
Cs-134	563.23	8.38	4.0731E+000	3.41E-001	1.4130E+000
	569.32	15.43	1.9764E+000		-1.3774E+000
	604.70	97.60	3.7519E-001		2.9314E-002
	795.84	85.40	3.4070E-001		-2.3367E-001
	801.93	8.73	3.3640E+000		1.4296E+000
Cs-137	661.65	85.12	4.0949E-001	4.09E-001	3.5505E-001
Eu-152	121.78	28.40	2.4672E+000	1.01E+000	-1.3357E-001
	244.69	7.49	5.8091E+000		8.5662E-002
	344.27	26.50	1.3912E+000		-1.6003E+000
	778.89	12.74	2.4476E+000		3.9208E-002
	867.32	4.16	7.1796E+000		-3.6985E+000
	964.01	14.40	2.2819E+000		3.6213E-001
	1085.78	10.00	2.6124E+000		-6.3681E-001
	1112.02	13.30	2.3991E+000		1.2423E+000
	1407.95	20.70	1.0076E+000		5.5217E-001
Eu-154	123.07	40.50	1.6822E+000	7.75E-001	-9.0929E-001
	247.94	6.60	6.1704E+000		1.2409E-001
	591.81	4.83	6.4234E+000		-4.2714E-001
	723.30	19.70	1.7661E+000		7.8939E-001
	756.87	4.33	6.5086E+000		8.2129E-001
	873.19	11.50	2.6417E+000		1.2025E+000
	996.32	10.30	2.7449E+000		3.7594E-001
	1004.76	17.90	1.6281E+000		4.5727E-002
	1274.45	35.50	7.7489E-001		-4.7628E-001
Eu-155	86.54	30.90	3.4350E+000	3.43E+000	1.8059E+000
	105.31	20.70	4.0922E+000		1.3286E+000
Am-241	59.54	35.90	4.3655E+000	4.37E+000	-7.9846E-001
Cm-243	228.19	10.56	3.7917E+000	3.02E+000	2.3149E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	3.0179E+000	3.02E+000	3.8692E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/10/2006 8:39:02 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-235-F-
Sample Title: NOL-03-02-235-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/10/2006 8:33:59 PM
Live Time: 300.0 seconds
Real Time: 300.4 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 6/1/2006
Calibration Efficiency: 6279_SOIL_1M90
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-235-F-
Title: NOL-03-02-235-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	297-	305	300.71	75.01	0.88	1.76E+002	67.08	4.65E+002
2	2326-	2340	2332.05	583.00	0.53	2.67E+001	24.44	4.43E+001
3	5325-	5337	5331.26	1333.02	1.05	3.28E+001	17.83	1.82E+001
4	5833-	5858	5846.49	1461.87	2.02	2.94E+002	35.07	6.31E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.961	1460.81*	10.67	2.40203E+001	3.46510E+000
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	2.36636E-001	2.19023E-001
		860.37	12.46		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40	0.961	2.402027E+001	3.465098E+000
TL-208	0.471	2.366364E-001	2.190231E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	5.8744E-001	38.06
3	1333.02	1.0931E-001	54.38

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	4.2830E-001	3.75E-001	6.2223E-001
	1332.49	100.00	3.7501E-001		3.6700E-001
Nb-94	702.63	100.00	3.2821E-001	3.16E-001	-1.4004E-001
	871.10	100.00	3.1563E-001		4.1756E-001
Ag-108m	79.20	7.10	1.6569E+001	3.44E-001	-1.6806E+001
	433.93	89.90	3.6538E-001		-7.2651E-002
	614.37	90.40	3.4430E-001		-4.3502E-001
	722.95	90.50	3.9324E-001		2.4792E-001
Sb-125	176.33	6.89	6.4270E+000	1.15E+000	-4.9116E+000
	427.89	29.33	1.1492E+000		3.7239E-001
	463.38	10.35	3.2626E+000		-8.5132E-001
	600.56	17.80	1.8973E+000		1.8845E+000
	606.64	5.02	7.0843E+000		4.4380E+000
	635.90	11.32	2.8315E+000		-1.4214E+000
Cs-134	563.23	8.38	4.1170E+000	3.49E-001	-1.7764E+000
	569.32	15.43	2.1327E+000		6.9622E-001
	604.70	97.60	3.4863E-001		-4.7581E-001
	795.84	85.40	3.9705E-001		-4.1367E-002
	801.93	8.73	3.4203E+000		-1.9663E+000
Cs-137	661.65	85.12	3.9047E-001	3.90E-001	-1.3621E-001
Eu-152	121.78	28.40	2.2844E+000	8.69E-001	6.2052E-001
	244.69	7.49	4.9674E+000		-4.3133E+000
	344.27	26.50	1.3154E+000		-9.9151E-001
	778.89	12.74	2.2785E+000		-8.9026E-001
	867.32	4.16	7.0595E+000		-4.3696E+000
	964.01	14.40	2.4969E+000		5.4716E-001
	1085.78	10.00	2.9359E+000		2.6413E-001
	1112.02	13.30	2.4182E+000		9.3819E-002
	1407.95	20.70	8.6919E-001		6.2905E-001
Eu-154	123.07	40.50	1.5677E+000	7.10E-001	-3.0538E-001
	247.94	6.60	5.8647E+000		3.4332E+000
	591.81	4.83	7.1997E+000		-2.3237E+000
	723.30	19.70	1.7966E+000		1.6759E+000
	756.87	4.33	7.2846E+000		4.5004E-001
	873.19	11.50	2.4888E+000		4.3527E-001
	996.32	10.30	3.0734E+000		3.8015E+000
	1004.76	17.90	1.7159E+000		3.2009E-001
	1274.45	35.50	7.0981E-001		-4.7683E-001
Eu-155	86.54	30.90	3.5245E+000	3.52E+000	4.9170E+000
	105.31	20.70	3.9616E+000		1.3328E+000
Am-241	59.54	35.90	4.6492E+000	4.65E+000	-2.5305E-001
Cm-243	228.19	10.56	3.5479E+000	2.71E+000	-1.0894E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.7070E+000	2.71E+000	4.8337E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/10/2006 8:47:05 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-236-F-
Sample Title: NOL-03-02-236-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/10/2006 8:42:03 PM
Live Time: 300.0 seconds
Real Time: 300.4 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 6/1/2006
Calibration Efficiency: 6279_SOIL_1M90
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-236-F-
Title: NOL-03-02-236-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	297-	305	300.67	75.00	0.90	9.44E+001	65.04	4.68E+002
2	950-	961	954.65	238.54	1.25	3.05E+001	31.01	8.55E+001
3	2430-	2444	2436.77	609.18	1.17	4.37E+001	20.50	2.13E+001
4	5835-	5857	5844.95	1461.49	1.15	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: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
K-40	0.984	1460.81*	10.67	2.07507E+001	3.16444E+000
Pb-212	0.518	74.81* @	10.70	7.18422E+000	5.14773E+000
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	4.03576E-001	4.15068E-001
Bi-214	0.385	609.31*	46.30	7.14285E-001	3.46151E-001
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
K-40		0.984	2.075069E+001	3.164443E+000
Pb-212	@	0.518	4.035756E-001	4.150682E-001
Bi-214		0.385	7.142848E-001	3.461511E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
Co-60	1173.22	100.00	3.1492E-001	2.83E-001	1.4249E-001
	1332.49	100.00	2.8306E-001		1.2491E-001
Nb-94	702.63	100.00	3.1955E-001	2.76E-001	-2.1558E-001
	871.10	100.00	2.7556E-001		1.2288E-001
Ag-108m	79.20	7.10	1.6247E+001	3.66E-001	-7.1567E+000
	433.93	89.90	3.9213E-001		5.7600E-003
	614.37	90.40	4.0680E-001		-8.6408E-002
	722.95	90.50	3.6614E-001		9.1547E-004
Sb-125	176.33	6.89	6.5243E+000	1.20E+000	4.6720E+000
	427.89	29.33	1.2027E+000		-1.9160E-001
	463.38	10.35	3.2136E+000		1.2440E+000
	600.56	17.80	1.8863E+000		6.8563E-001
	606.64	5.02	7.6475E+000		5.6443E+000
	635.90	11.32	2.8315E+000		2.6287E-001
Cs-134	563.23	8.38	3.7511E+000	3.69E-001	1.0160E+000
	569.32	15.43	2.1202E+000		-6.7443E-001
	604.70	97.60	3.7336E-001		-2.8499E-002
	795.84	85.40	3.6869E-001		-1.1239E-001
	801.93	8.73	3.7638E+000		2.2601E-001
Cs-137	661.65	85.12	3.5993E-001	3.60E-001	-2.4911E-001
Eu-152	121.78	28.40	2.2881E+000	9.64E-001	-1.0827E+000
	244.69	7.49	4.9960E+000		-1.2732E+000
	344.27	26.50	1.1951E+000		1.5517E-001
	778.89	12.74	2.3363E+000		2.2832E-001
	867.32	4.16	6.7493E+000		4.7726E+000
	964.01	14.40	2.5405E+000		2.3924E+000
	1085.78	10.00	3.0444E+000		8.3661E-001
	1112.02	13.30	1.9743E+000		-1.9052E+000
	1407.95	20.70	9.6400E-001		1.7106E-002
Eu-154	123.07	40.50	1.6140E+000	6.80E-001	4.2558E-001
	247.94	6.60	5.6241E+000		2.0725E+000
	591.81	4.83	6.1565E+000		-4.2640E+000
	723.30	19.70	1.6928E+000		7.0319E-001
	756.87	4.33	6.5086E+000		1.0868E+000
	873.19	11.50	2.4201E+000		-2.7424E+000
	996.32	10.30	2.6065E+000		-1.1148E+000
	1004.76	17.90	1.6281E+000		8.7544E-001
	1274.45	35.50	6.7982E-001		-6.8528E-002
Eu-155	86.54	30.90	3.4257E+000	3.43E+000	4.1321E+000
	105.31	20.70	3.8118E+000		1.3013E+000
Am-241	59.54	35.90	4.4498E+000	4.45E+000	1.5506E+000
Cm-243	228.19	10.56	3.7092E+000	2.58E+000	3.2065E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	2.5835E+000	2.58E+000	1.0529E+000

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/12/2006 11:43:20 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: YEL7810

Spectrum File: YEL7810
Sample ID: NOL-03-02-237-F-
Sample Title: NOL-03-02-237-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/12/2006 11:33:16 AM
Live Time: 600.0 seconds
Real Time: 602.8 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7810Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: YEL7810
Log Number: NOL-03-02-237-F-
Title: NOL-03-02-237-F-G-I
Description:

Geometry:

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	296-	308	300.30	75.10	0.98	2.89E+002	180.18	3.08E+003
2	944-	961	953.16	238.33	1.30	2.39E+002	82.40	4.70E+002
3	1171-	1184	1179.69	294.97	0.58	4.22E+001	49.80	2.19E+002
4	1346-	1361	1351.37	337.89	0.97	1.32E+002	46.37	1.42E+002
5	1398-	1414	1406.76	351.74	0.41	1.16E+002	55.93	2.22E+002
6	2031-	2049	2042.63	510.72	1.32	9.49E+001	48.05	1.49E+002
7	2320-	2338	2330.46	582.69	1.69	1.48E+002	43.15	9.96E+001
8	2425-	2443	2434.80	608.77	1.22	1.61E+002	42.78	9.29E+001
9	3631-	3651	3641.77	910.54	0.83	1.00E+002	39.05	8.15E+001
10	3864-	3881	3873.08	968.38	0.87	6.98E+001	33.66	6.92E+001
11	5825-	5854	5839.53	1460.03	2.01	8.68E+002	61.18	2.25E+001
12	6344-	6357	6350.34	1587.75	0.72	2.02E+001	9.89	1.82E+000
13	7047-	7062	7053.70	1763.60	1.19	4.58E+001	15.80	6.19E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: YEL7810

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
ANN	0.997	511.00*		100.00	1.68218E-001	8.81570E-002
K-40	0.979	1460.81*		10.67	2.00327E+001	2.15099E+000
TL-208	0.746	277.35		6.80		
		510.84*		21.60	7.78785E-001	4.13060E-001
		583.14*		84.20	3.28978E-001	1.04834E-001
		860.37		12.46		
Pb-212	0.574	74.81*	@	10.70	8.99087E+000	5.87344E+000
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	7.36992E-001	2.79455E-001
Bi-214	0.683	609.31*		46.30	6.61051E-001	1.93484E-001
		1120.29		15.10		
		1764.49*		15.80	7.79487E-001	2.79925E-001
PB-214	0.614	74.82*	@	6.21	1.54915E+001	1.01824E+001
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	3.22351E-001	3.84402E-001
		351.92*		37.20	4.82489E-001	2.45993E-001
Ac-228	0.988	338.32*		11.40	1.76742E+000	6.80323E-001
		911.07*		27.70	7.62420E-001	3.08968E-001
		969.11*		16.60	8.96419E-001	4.42563E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:YEL7810

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
ANN		0.997	9.715836E-002	9.098930E-002
K-40		0.979	2.003267E+001	2.150990E+000
TL-208		0.746	3.289778E-001	1.042848E-001
Pb-212	@	0.574	7.369920E-001	2.794553E-001
Bi-214		0.683	6.993413E-001	1.591636E-001
PB-214	@	0.614	4.359630E-001	2.071988E-001
Ac-228		0.988	9.233712E-001	2.374122E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
12	1587.75	3.3636E-002	49.02

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:YEL7810
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Co-60	1173.22	100.00	1.2935E-001	1.16E-001	9.6839E-002
	1332.49	100.00	1.1629E-001		1.4102E-001
Nb-94	702.63	100.00	1.2599E-001	1.26E-001	5.9491E-002
	871.10	100.00	1.2579E-001		7.5947E-002
Ag-108m	79.20	7.10	1.4165E+001	1.53E-001	-2.0644E+001
	433.93	89.90	1.5594E-001		1.6391E-001
	614.37	90.40	1.5288E-001		-8.3297E-002
	722.95	90.50	1.5358E-001		1.1677E-001
Sb-125	176.33	6.89	3.3804E+000	4.67E-001	1.6941E+000
	427.89	29.33	4.6703E-001		-3.4442E-001
	463.38	10.35	1.4561E+000		1.1403E+000
	600.56	17.80	7.6121E-001		9.5164E-002
	606.64	5.02	3.4147E+000		5.9857E+000
	635.90	11.32	1.2429E+000		4.3296E-001
Cs-134	563.23	8.38	1.4840E+000	1.54E-001	-2.4026E-001
	569.32	15.43	8.5034E-001		5.0883E-003
	604.70	97.60	1.7397E-001		-3.0235E-003
	795.84	85.40	1.5361E-001		-1.6563E-003
	801.93	8.73	1.4070E+000		6.8728E-002
Cs-137	661.65	85.12	1.6136E-001	1.61E-001	1.4604E-002
Eu-152	121.78	28.40	1.2553E+000	4.05E-001	-2.9628E-001
	244.69	7.49	2.5236E+000		-1.3292E+000
	344.27	26.50	5.4275E-001		-2.5899E-001
	778.89	12.74	9.6419E-001		-1.1684E+000
	867.32	4.16	2.8966E+000		-3.8216E+000
	964.01	14.40	1.1019E+000		1.4427E-001
	1085.78	10.00	1.2217E+000		8.4616E-002
	1112.02	13.30	9.6350E-001		-2.4149E+000
	1407.95	20.70	4.0504E-001		8.6419E-002
Eu-154	123.07	40.50	8.6429E-001	2.96E-001	-2.7991E-002
	247.94	6.60	2.8337E+000		1.3497E+000
	591.81	4.83	2.8494E+000		4.3497E-001
	723.30	19.70	7.0066E-001		5.0586E-001
	756.87	4.33	2.8371E+000		2.1709E-001
	873.19	11.50	1.0458E+000		1.1995E-001
	996.32	10.30	1.1364E+000		2.9896E-001
	1004.76	17.90	6.1899E-001		1.8120E-001
	1274.45	35.50	2.9582E-001		4.8923E-002
Eu-155	86.54	30.90	2.3721E+000	2.33E+000	2.3431E+000
	105.31	20.70	2.3333E+000		-9.2557E-001
Am-241	59.54	35.90	7.5487E+000	7.55E+000	6.3391E+000
Cm-243	228.19	10.56	1.9023E+000	1.15E+000	1.2502E+000

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.1519E+000	1.15E+000	5.3418E-002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 7/12/2006 11:59:25 AM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: YEL7810

Spectrum File: YEL7810
Sample ID: NOL-03-02-238-F-
Sample Title: NOL-03-02-238-F-G-I
Description:

Sample Type:
Geometry:

Acquisition Started: 7/12/2006 11:49:21 AM
Live Time: 600.0 seconds
Real Time: 602.6 seconds

Energy Calibration Date: 5/9/2006
Eff Calibration Date: 5/1/2006
Calibration Efficiency: 7810Soil1m180170
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: YEL7810
Log Number: NOL-03-02-238-F-
Title: NOL-03-02-238-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	945-	962	953.44	238.40	1.22	3.23E+002	86.75	5.02E+002
2	1173-	1189	1179.56	294.93	1.28	1.02E+002	62.03	2.87E+002
3	1397-	1414	1405.96	351.54	0.80	1.15E+002	56.56	2.21E+002
4	2322-	2338	2331.46	582.94	1.07	1.72E+002	44.89	1.13E+002
5	2426-	2444	2434.71	608.75	1.61	1.44E+002	46.43	1.24E+002
6	3433-	3445	3438.94	859.83	0.40	2.80E+001	24.63	4.90E+001
7	3632-	3650	3641.64	910.51	0.58	1.11E+002	37.80	7.62E+001
8	4681-	4699	4688.70	1172.30	0.82	5.39E+001	27.92	4.41E+001
9	5321-	5334	5326.39	1331.74	0.59	5.95E+001	22.15	2.45E+001
10	5826-	5854	5840.05	1460.16	2.13	7.70E+002	58.94	2.90E+001
11	6342-	6355	6348.16	1587.20	0.80	1.30E+001	11.19	7.00E+000
12	7048-	7061	7054.95	1763.92	0.71	4.01E+001	15.10	6.95E+000

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: YEL7810

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (pCi/Gram)	Activity Uncertainty
K-40	0.985	1460.81*		10.67	1.77819E+001	1.98124E+000
Co-60	0.975	1173.22*		100.00	1.20268E-001	6.30240E-002
		1332.49*		100.00	1.40509E-001	5.34497E-002
TL-208	0.618	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	3.82151E-001	1.11300E-001
		860.37*		12.46	4.65886E-001	4.14227E-001
Pb-212	0.419	74.81	@	10.70		
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	9.95981E-001	3.10090E-001
Bi-214	0.686	609.31*		46.30	5.88700E-001	2.03802E-001
		1120.29		15.10		
		1764.49*		15.80	6.81621E-001	2.65858E-001
PB-214	0.528	74.82	@	6.21		
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	7.81551E-001	4.91851E-001
		351.92*		37.20	4.79524E-001	2.48269E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:YEL7810

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Gram)	Wt mean Activity Uncertainty
K-40		0.985	1.778189E+001	1.981240E+000
Co-60		0.975	1.320413E-001	4.076393E-002
TL-208		0.618	3.877895E-001	1.074878E-001
Pb-212	@	0.419	9.959808E-001	3.100900E-001
Bi-214		0.686	6.230937E-001	1.617453E-001
PB-214	@	0.528	5.408513E-001	2.216346E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N 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	910.51	1.8461E-001	34.13
11	1587.20	2.1667E-002	86.06

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:YEL7810
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
+	Co-60	1173.22*	100.00	9.5680E-002	7.05E-002	1.2027E-001
		1332.49*	100.00	7.0547E-002		1.4051E-001
	Nb-94	702.63	100.00	1.3423E-001	1.31E-001	-1.8288E-001
		871.10	100.00	1.3114E-001		1.3641E-001
	Ag-108m	79.20	7.10	1.3487E+001	1.60E-001	-3.1740E+001
		433.93	89.90	1.6335E-001		-3.3762E-002
		614.37	90.40	1.6633E-001		-7.4334E-002
		722.95	90.50	1.5989E-001		7.2386E-002
	Sb-125	176.33	6.89	3.3246E+000	5.08E-001	2.9239E-001
		427.89	29.33	5.0779E-001		3.2066E-001
		463.38	10.35	1.5193E+000		9.6895E-001
		600.56	17.80	6.9312E-001		-6.0095E-001
		606.64	5.02	3.4885E+000		6.4368E+000
		635.90	11.32	1.2189E+000		1.6848E-001
	Cs-134	563.23	8.38	1.6406E+000	1.57E-001	-2.7821E-002
		569.32	15.43	8.7286E-001		-8.9199E-001
		604.70	97.60	1.7030E-001		-4.4115E-002
		795.84	85.40	1.5734E-001		1.4403E-001
		801.93	8.73	1.4070E+000		-6.4614E-001
	Cs-137	661.65	85.12	1.7925E-001	1.79E-001	1.2052E-001
	Eu-152	121.78	28.40	1.2021E+000	4.32E-001	-5.6077E-001
		244.69	7.49	2.6078E+000		5.7556E-001
		344.27	26.50	6.0589E-001		-3.4050E-001
		778.89	12.74	9.9362E-001		-1.1907E+000
		867.32	4.16	3.2552E+000		6.3266E-001
		964.01	14.40	1.1456E+000		2.1013E+000
		1085.78	10.00	1.1808E+000		9.7433E-001
		1112.02	13.30	8.8582E-001		-1.2539E+000
		1407.95	20.70	4.3188E-001		-1.6485E-001
	Eu-154	123.07	40.50	8.3224E-001	2.84E-001	9.3926E-002
		247.94	6.60	2.7794E+000		-2.0103E+000
		591.81	4.83	2.9026E+000		1.5298E+000
		723.30	19.70	7.3304E-001		1.4398E-001
		756.87	4.33	3.2033E+000		2.5284E+000
		873.19	11.50	1.0978E+000		-1.0222E-003
		996.32	10.30	1.1188E+000		2.1574E-001
		1004.76	17.90	6.6019E-001		-4.7937E-001
		1274.45	35.50	2.8398E-001		1.1731E-001
	Eu-155	86.54	30.90	2.2363E+000	2.24E+000	2.2176E+000
		105.31	20.70	2.2521E+000		5.0413E-001
	Am-241	59.54	35.90	7.1676E+000	7.17E+000	4.5506E+000
	Cm-243	228.19	10.56	1.9186E+000	1.29E+000	-9.9615E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.2876E+000	1.29E+000	6.4040E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 6/27/2006 10:41:19 PM

Y A N K E E R O W E P O R T A B L E I S O C S

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID: NOL-03-02-172-F-
Sample Title: NOL-03-02-172-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 6/27/2006 10:31:16 PM
Live Time: 600.0 seconds
Real Time: 601.9 seconds

Energy Calibration Date: 3/28/2006
Eff Calibration Date: 10/4/2005
Calibration Efficiency: BLUE_1M180D_SOIL
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number: NOL-03-02-172-F-
Title: NOL-03-02-172-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	305	291.18	72.62	1.02	6.39E+002	83.56	2.51E+003
m	2	283-	305	299.99	74.83	1.03	1.01E+003	96.57	2.56E+003
M	3	331-	356	339.16	84.62	1.10	3.95E+002	79.08	2.34E+003
m	4	331-	356	349.25	87.15	1.10	1.70E+002	70.01	2.41E+003
	5	834-	841	837.11	209.15	0.77	4.12E+001	46.81	2.61E+002
	6	947-	961	953.74	238.31	1.32	3.27E+002	78.48	4.42E+002
	7	1170-	1187	1180.32	294.98	0.87	7.12E+001	64.05	3.05E+002
	8	1346-	1358	1352.24	337.97	0.68	8.62E+001	45.33	1.69E+002
	9	1396-	1415	1406.16	351.45	1.16	1.28E+002	61.24	2.42E+002
	10	2031-	2052	2040.97	510.20	1.32	1.50E+002	54.79	1.68E+002
	11	2323-	2339	2329.82	582.44	1.47	2.06E+002	44.26	9.73E+001
	12	2426-	2444	2435.00	608.74	1.33	1.79E+002	46.72	1.15E+002
	13	3632-	3652	3641.44	910.44	1.33	1.65E+002	45.04	9.98E+001
	14	3866-	3882	3873.16	968.39	1.52	1.14E+002	33.90	5.93E+001
	15	4471-	4487	4477.99	1119.64	0.61	5.22E+001	28.62	5.08E+001
	16	4685-	4697	4690.92	1172.89	0.68	3.09E+001	24.00	4.51E+001
	17	5319-	5334	5327.21	1332.01	0.43	5.28E+001	19.90	1.62E+001
	18	5825-	5853	5840.18	1460.29	2.11	1.18E+003	69.59	1.83E+001
	19	6513-	6526	6519.98	1630.29	0.37	1.84E+001	9.35	1.60E+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: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (pCi/Grams)	Activity Uncertainty
ANN	0.978	511.00*	100.00	2.04037E-001	7.96634E-002
K-40	0.991	1460.81*	10.67	1.97187E+001	1.97762E+000
Co-60	0.994	1173.22*	100.00	5.26575E-002	4.11417E-002
		1332.49*	100.00	9.27603E-002	3.57251E-002
Eu-155	0.325	86.54*	30.90	6.82229E-001	3.11855E-001
		105.31	20.70		
TL-208	0.738	277.35	6.80		
		510.84*	21.60	9.44618E-001	3.76794E-001
		583.14*	84.20	3.47935E-001	8.75226E-002
		860.37	12.46		
Pb-212	0.675	74.81* @	10.70	1.44727E+001	3.15627E+000
		77.11 @	18.00		
		87.30* @	8.00	2.63511E+000	1.20454E+000
		238.63*	44.60	7.95179E-001	2.27873E-001
Bi-214	0.690	609.31*	46.30	5.57303E-001	1.61196E-001
		1120.29*	15.10	5.81670E-001	3.24910E-001
		1764.49	15.80		
PB-214	0.666	74.82* @	6.21	2.49368E+001	5.73171E+000
		77.11 @	10.50		
		87.30* @	4.67	4.51410E+000	2.09144E+000
		241.98	7.49		
		295.21*	19.20	4.27164E-001	3.90942E-001
		351.92*	37.20	4.15314E-001	2.11104E-001
Ac-228	0.987	338.32*	11.40	9.05872E-001	4.96931E-001
		911.07*	27.70	9.45573E-001	2.79805E-001
		969.11*	16.60	1.10551E+000	3.49323E-001

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/Grams)	Wt mean Activity Uncertainty
ANN		0.978	1.288835E-001	8.183916E-002
K-40		0.991	1.971872E+001	1.977619E+000
Co-60		0.994	7.552091E-002	2.697467E-002
Eu-155		0.325	4.131880E-001	3.186114E-001
TL-208		0.738	3.479348E-001	8.678501E-002
Pb-212	@	0.675	7.951792E-001	2.278725E-001
Bi-214		0.690	5.621160E-001	1.444010E-001
PB-214	@	0.666	4.179714E-001	1.847199E-001
Ac-228		0.987	9.915370E-001	1.999304E-001

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

U N I D E N T I F I E D P E A K S

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.62	1.0650E+000	13.08
M 3	84.62	6.5816E-001	20.03
5	209.15	6.8616E-002	113.70
19	1630.29	3.0667E-002	50.82

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Grams)	Nuclide MDA (pCi/Grams)	Activity (pCi/Grams)
+	Co-60	1173.22*	100.00	6.5844E-002	4.58E-002	5.2658E-002
		1332.49*	100.00	4.5769E-002		9.2760E-002
	Nb-94	702.63	100.00	1.1839E-001	1.02E-001	2.2014E-002
		871.10	100.00	1.0166E-001		3.0322E-002
	Ag-108m	79.20	7.10	6.0729E+000	1.29E-001	-1.3611E+001
		433.93	89.90	1.3043E-001		-7.3976E-002
		614.37	90.40	1.2853E-001		-7.4642E-002
		722.95	90.50	1.2940E-001		3.8674E-002
	Sb-125	176.33	6.89	2.4173E+000	4.03E-001	-1.3533E+000
		427.89	29.33	4.0276E-001		1.2458E-001
		463.38	10.35	1.0696E+000		-6.5114E-001
		600.56	17.80	6.2603E-001		-2.6134E-001
		606.64	5.02	2.8591E+000		4.8651E+000
		635.90	11.32	9.0850E-001		3.2577E-001
	Cs-134	563.23	8.38	1.3425E+000	1.33E-001	2.3370E-001
		569.32	15.43	7.3557E-001		6.5553E-001
		604.70	97.60	1.4440E-001		-2.5761E-002
		795.84	85.40	1.3334E-001		1.3578E-001
		801.93	8.73	1.1908E+000		9.2270E-001
	Cs-137	661.65	85.12	1.3568E-001	1.36E-001	1.1255E-001
	Eu-152	121.78	28.40	8.8223E-001	3.62E-001	2.4892E-001
		244.69	7.49	1.9678E+000		-5.0530E-003
		344.27	26.50	4.5822E-001		3.4678E-001
		778.89	12.74	8.2922E-001		-1.7040E-001
		867.32	4.16	2.4415E+000		-5.9603E-001
		964.01	14.40	9.7187E-001		-1.5566E-001
		1085.78	10.00	1.0145E+000		-6.4329E-001
		1112.02	13.30	7.7513E-001		-1.0775E+000
		1407.95	20.70	3.6212E-001		1.4813E-001
	Eu-154	123.07	40.50	6.1065E-001	2.56E-001	-1.4619E-001
		247.94	6.60	2.1571E+000		4.5644E-001
		591.81	4.83	2.3045E+000		-8.0049E-001
		723.30	19.70	5.9893E-001		4.2368E-001
		756.87	4.33	2.4773E+000		1.3245E-001
		873.19	11.50	8.8913E-001		-2.9207E-001
		996.32	10.30	1.0038E+000		8.5819E-001
		1004.76	17.90	5.2985E-001		-7.6554E-001
		1274.45	35.50	2.5563E-001		6.1700E-002
+	Eu-155	86.54*	30.90	9.2998E-001	9.30E-001	6.8223E-001
		105.31	20.70	1.4676E+000		8.7608E-001
	Am-241	59.54	35.90	1.6322E+000	1.63E+000	-1.2351E+000
	Cm-243	228.19	10.56	1.3871E+000	1.00E+000	-2.3386E-001

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (pCi/Gram)	Nuclide MDA (pCi/Gram)	Activity (pCi/Gram)
Cm-243	277.60	14.00	1.0002E+000	1.00E+000	6.4650E-001

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction