J. Noggle

From: "Burns, Thomas F" <tburns1@entergy.com>
To: <jdn@nrc.gov>
Date: Mon, Nov 6, 2006 11:56 AM
Subject: Hudson river aquatic vegitation.

Jim,

As requested attached is the results of the aquatic vegetation from 2006 spring and summer.. You have the Gamma spec analyst on the data sheets with dates that they were sampled. As you can see there is a abundance of naturally occurring isotopes in the mix.

<<IPEC AQUATIC VEGETATION SPRING.PDF>> <<IPEC Aquatic Vegetation Sept.PDF>>

Regards
Tom Burns

CC: "Adler, Joseph J." <jadler@entergy.com>

B/16

HUDSON RIVER AQUATIC VEGETATION
ENVIRONMENTAL LABORATORY SAMPLE SUBMITTAL FORM

WEEK # 25 CLIENT CODE 04

CLIENT SAMPLE ID NUMBER	SAMPLING STATION NUMBER	SAMPLE LOCATION	SAMPLE TYPE	MEDIA CODE	SAMPLE DATE	VOLUME (UNITS)	ANALYSIS TYPE
20061802 IP06-368	28	MYRO LENTS COVE	RR	AV	6/16/06	985 GRAMS	GSA
20061803 IP06-367	17	MYRO VERPLANCK	RR	AV	6/16/06	1850 GRAMS	GSA
20061804 IP06-369	84	MYRO COLD SPRING	RR	AV	6/16/06	2250 GRAMS	GSA
20061805 IP06-370	84	CRISPUS COLD SPRING	RR	AV	6/16/06	1055 GRAMS	GSA

REMARKS: HUDSON RIVER AQUATIC VEGETATION SAMPLES – SPRING AND SUMMER SAMPLE COLLECTION
RR = REGULAR ROUTINE

James A. FitzPatrick Nuclear Power Plant
Environmental Laboratory Management System (ELMS)

*** Averaged Gamma Spectroscopy Recount Results Report ***

Lab Sample ID: 20061804
Media Type: AQUATIC VEGETATION
Analysis Date: 06/26/06 Analysis Time: 1424
Analysis Type: GSA
Recount Number: R

Primary Recount Number: R - 0

Nuclide	Measured Conc.	+/- Error	Achieved LLD	Achieved Critical Level	Units
ACTH-228	1.70e+02	1.59e+01	0.00e+00	0.00e+00	pCi/KG
AG-108M	0.00e+00	0.00e+00	1.11e+01	5.14e+00	pCi/KG
AG-110M	0.00e+00	0.00e+00	2.16e+01	9.91e+00	pCi/KG
BALA-140	0.00e+00	0.00e+00	1.99e+01	8.47e+00	pCi/KG
BE-7	3.45e+02	3.32e+01	0.00e+00	0.00e+00	pCi/KG
CE-141	0.00e+00	0.00e+00	2.01e+01	9.62e+00	pCi/KG
CE-144	0.00e+00	0.00e+00	8.26e+01	3.95e+01	pCi/KG
CO-57	0.00e+00	0.00e+00	1.05e+01	5.00e+00	pCi/KG
CO-58	0.00e+00	0.00e+00	1.30e+01	5.86e+00	pCi/KG
CO-60	0.00e+00	0.00e+00	1.49e+01	6.54e+00	pCi/KG
CR-51	0.00e+00	0.00e+00	1.02e+02	4.74e+01	pCi/KG
CS-134	0.00e+00	0.00e+00	1.00e+01	4.45e+00	pCi/KG
CS-137	2.46e+01	3.98e+00	0.00e+00	0.00e+00	pCi/KG
EU-152	0.00e+00	0.00e+00	3.50e+01	1.64e+01	pCi/KG
FE-59	0.00e+00	0.00e+00	4.15e+01	1.85e+01	pCi/KG
I-131	0.00e+00	0.00e+00	2.11e+01	9.89e+00	pCi/KG
I-132	0.00e+00	0.00e+00	2.36e+02	1.05e+02	pCi/KG
I-133	0.00e+00	0.00e+00	1.45e+03	6.62e+02	pCi/KG
K-40	3.59e+03	1.05e+02	0.00e+00	0.00e+00	pCi/KG
MN-54	0.00e+00	0.00e+00	1.26e+01	5.69e+00	pCi/KG
MO-99	0.00e+00	0.00e+00	4.41e+02	2.01e+02	pCi/KG
NB-95	0.00e+00	0.00e+00	1.33e+01	6.00e+00	pCi/KG
NP-239	0.00e+00	0.00e+00	5.33e+02	2.54e+02	pCi/KG
RA-226	3.36e+02	7.96e+01	0.00e+00	0.00e+00	pCi/KG
RU-103	0.00e+00	0.00e+00	1.34e+01	6.20e+00	pCi/KG
RU-106	0.00e+00	0.00e+00	1.47e+02	6.80e+01	pCi/KG
SB-124	0.00e+00	0.00e+00	2.61e+01	1.07e+01	pCi/KG
SE-75	0.00e+00	0.00e+00	1.52e+01	7.18e+00	pCi/KG
ZN-65	0.00e+00	0.00e+00	3.92e+01	1.81e+01	pCi/KG
ZR-95	0.00e+00	0.00e+00	2.40e+01	1.09e+01	pCi/KG

James A. FitzPatrick Nuclear Power Plant
Environmental Laboratory Management System (ELMS)

*** Averaged Gamma Spectroscopy Recount Results Report ***

Lab Sample ID: 20061802
Media Type: AQUATIC VEGETATION
Analysis Date: 06/26/06 Analysis Time: 1423
Analysis Type: GSA
Recount Number: R

Primary Recount Number: R - 0

Nuclide	Measured Conc.	+/- Error	Achieved LLD	Achieved Critical Level	Units
ACTH-228	1.33e+02	1.66e+01	0.00e+00	0.00e+00	pCi/KG
AG-108M	0.00e+00	0.00e+00	1.17e+01	5.38e+00	pCi/KG
AG-110M	0.00e+00	0.00e+00	2.17e+01	9.78e+00	pCi/KG
BALA-140	0.00e+00	0.00e+00	2.58e+01	1.11e+01	pCi/KG
BE-7	1.39e+02	3.13e+01	0.00e+00	0.00e+00	pCi/KG
CE-141	0.00e+00	0.00e+00	2.21e+01	1.06e+01	pCi/KG
CE-144	0.00e+00	0.00e+00	8.62e+01	4.11e+01	pCi/KG
CO-57	0.00e+00	0.00e+00	1.19e+01	5.72e+00	pCi/KG
CO-58	0.00e+00	0.00e+00	1.36e+01	6.05e+00	pCi/KG
CO-60	0.00e+00	0.00e+00	2.11e+01	9.45e+00	pCi/KG
CR-51	0.00e+00	0.00e+00	1.29e+02	6.03e+01	pCi/KG
CS-134	0.00e+00	0.00e+00	1.13e+01	5.00e+00	pCi/KG
CS-137	2.82e+01	4.10e+00	0.00e+00	0.00e+00	pCi/KG
EU-152	0.00e+00	0.00e+00	3.83e+01	1.78e+01	pCi/KG
FE-59	0.00e+00	0.00e+00	4.79e+01	2.13e+01	pCi/KG
I-131	0.00e+00	0.00e+00	2.10e+01	9.72e+00	pCi/KG
I-132	0.00e+00	0.00e+00	3.38e+02	1.52e+02	pCi/KG
I-133	0.00e+00	0.00e+00	1.99e+03	9.22e+02	pCi/KG
K-40	3.62e+03	1.09e+02	0.00e+00	0.00e+00	pCi/KG
MN-54	0.00e+00	0.00e+00	1.38e+01	6.15e+00	pCi/KG
MO-99	0.00e+00	0.00e+00	5.42e+02	2.47e+02	pCi/KG
NB-95	0.00e+00	0.00e+00	1.69e+01	7.66e+00	pCi/KG
NP-239	0.00e+00	0.00e+00	6.31e+02	3.01e+02	pCi/KG
RA-226	3.21e+02	7.13e+01	0.00e+00	0.00e+00	pCi/KG
RU-103	0.00e+00	0.00e+00	1.43e+01	6.51e+00	pCi/KG
RU-106	0.00e+00	0.00e+00	1.72e+02	7.94e+01	pCi/KG
SB-124	0.00e+00	0.00e+00	2.50e+01	9.62e+00	pCi/KG
SE-75	0.00e+00	0.00e+00	1.95e+01	9.24e+00	pCi/KG
ZN-65	0.00e+00	0.00e+00	4.63e+01	2.13e+01	pCi/KG
ZR-95	0.00e+00	0.00e+00	2.97e+01	1.35e+01	pCi/KG

INDIAN POINT SUMMARY SHEET

SAMPLE TYPE: Aquatic Vegetation REPORTING UNITS IN: pCi/kg Jun-06

ISOTOPE	MIN. REQ. CL*	LENTS COVE MYRO IP-06-368	VERPLANK MYRO IP-06-367	COLD SPRING MYRO IP-06-369	COLD SPRING CRISPUS IP-06-370
Be-7		109 ± 50.4	<54.70	433 ± 48.3	111 ± 36.8
K-40		3700 ± 175	2090 ± 153	3180 ± 148	2640 ± 144
Mn-54		<6.15	<7.00	<5.69	<4.65
Co-58		<6.05	<8.09	<5.86	<6.30
Fe-59		<21.30	<26.30	<18.50	<17.00
Co-60		<9.45	<6.75	<6.54	<6.66
Zn-65		<21.30	<21.90	<18.10	<18.10
Zr-95		<13.50	<13.10	<10.90	<8.88
Nb-95		<7.66	<9.18	<6.00	<7.64
Ru-103		<6.51	<6.86	<6.20	<5.71
Ru-106		<79.40	<66.70	<68.00	<54.40
I-131	(30*)	<9.72	<10.40	<9.89	<8.22
Cs-134	(30*)	<5.00	<6.62	<4.45	<6.23
Cs-137	(40*)	**2.82 ± 4.10**	<9.26	**24.6 ± 3.98**	<5.55
Ba/La-140		<25.80	<9.05	<8.47	<7.29
Ce-141		<10.60	<10.90	<9.62	<7.93
Ce-144		<5.72	<39.30	<39.50	<29.90
Ra-226		411 ± 110	<134.00	260 ± 125	371 ± 87.4
Ac-228		98.9 ± 26.0	<23.80	149 ± 23.9	<20.30

Results reported as < are CL values

*Posted CL's correspond to LLD's listed in TS-5.104 (Rev.5)

CL Values Verified By

NOTE: The summary data sheet results have been provided to you to facilitate the review of analytical results. These summary sheets have not been independently verified and should not be used for the final reporting of data without a second verification.

SEEKER G A M M A A N A L Y S I S R E S U L T S Version 2.3.0

Entergy Nuclear Northeast
James A. Fitzpatrick Environmental Lab

Sample DESCRIPTION: LENTS COVE MYRO RECOUNT DATA EXISTS RO

Counting Start:	06/22/2006 12:34:42	Lab ID.	.20061802
Decay Time.	1.45E+02 Hrs	Client ID	IP 06-368
Sampling Stop . .	06/16/2006 12:00:00	Sample Size	9.17e-01 KG
Sample Duration	0.00E+00 Hrs	Yield	1.0000
Sampling Start. .	06/16/2006 12:00:00	Geometry Code	1_0MS0
Live Time (hr:min:sec). . .	001:30:07	Eff. Calib. Date. .	10/07/2005 13:13:18
Real Time (hr:min:sec). . .	001:30:12	Library File.	.MASTER.LIB

REVIEWED BY:

Detector #: 2

Energy(keV)= -0.09+ 0.500*Ch+ 0.00e+00*Ch^2 + 0.00e+00*Ch^3 06/22/2006

FWHM(keV) = 0.99+ -0.014*En+ 1.69e-03*En^2 + -1.27e-05*En^3 02/14/2006
Where En = Sqrt(Energy in keV)

Eff.=1/[2.53e-02*En^-2.77e+00 + 1.16e+02*En^ 8.15e-01] 10/07/2005

CONCENTRATIONs Units: pCi/KG

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
RA-226	4.11E+02	1.10E+02	----------	----------	----------	RA-226
BE-7	1.09E+02	5.04E+01	----------	----------	----------	BE-7
CS-137	2.82E+01	6.58E+00	----------	----------	----------	CS-137
ACTH-228	9.89E+01	2.60E+01	----------	----------	----------	ACTH-228
K-40	3.70E+03	1.75E+02	----------	----------	----------	K-40
CO-57	----------	----------	5.72E+00	1.76E+01	1.19E+01	CO-57
CE-144	----------	----------	4.11E+01	1.28E+02	8.62E+01	CE-144
CE-141	----------	----------	1.06E+01	3.26E+01	2.21E+01	CE-141
NP-239	----------	----------	3.00E+02	9.26E+02	6.31E+02	NP-239
SE-75	----------	----------	9.24E+00	2.85E+01	1.95E+01	SE-75
CR-51	----------	----------	6.02E+01	1.84E+02	1.28E+02	CR-51
EU-152	----------	----------	1.78E+01	5.49E+01	3.83E+01	EU-152
I-131	----------	----------	9.72E+00	3.28E+01	2.10E+01	I-131
AG-108M	----------	----------	5.38E+00	1.77E+01	1.17E+01	AG-108M
RU-103	----------	----------	6.51E+00	2.13E+01	1.43E+01	RU-103
I-133	----------	----------	9.22E+02	2.90E+03	1.99E+03	I-133
CS-134	----------	----------	5.00E+00	1.70E+01	1.13E+01	CS-134
RU-106	----------	----------	7.94E+01	2.55E+02	1.72E+02	RU-106
MO-99	----------	----------	2.47E+02	7.93E+02	5.42E+02	MO-99
ZR-95	----------	----------	1.35E+01	4.37E+01	2.97E+01	ZR-95
NB-95	----------	----------	7.66E+00	2.42E+01	1.69E+01	NB-95
CO-58	----------	----------	6.05E+00	2.02E+01	1.36E+01	CO-58
MN-54	----------	----------	6.15E+00	2.06E+01	1.38E+01	MN-54
AG-110M	----------	----------	9.78E+00	3.18E+01	2.17E+01	AG-110M
I-132	----------	----------	1.52E+02	4.86E+02	3.38E+02	I-132
ZN-65	----------	----------	2.13E+01	6.63E+01	4.63E+01	ZN-65
FE-59	----------	----------	2.13E+01	6.90E+01	4.79E+01	FE-59

CONCENTRATIONs Units: pCi/KG

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
CO-60	----------	----------	9.45E+00	2.95E+01	2.11E+01	CO-60
BALA-140	----------	----------	1.11E+01	3.63E+01	2.58E+01	BALA-140
SB-124	----------	----------	9.62E+00	3.55E+01	2.50E+01	SB-124

TOTAL MEASURED ACTIVITY: 4.35E+03 +- 3.68E+02 pCi/KG

Results TRANSFERRED to ELMS.

SEEKER G A M M A A N A L Y S I S R E S U L T S Version 2.3.0

Entergy Nuclear Northeast
James A. Fitzpatrick Environmental Lab

Sample DESCRIPTION: LENT'S COVE MYRO R1 RECOUNT DATA EXISTS R1

Counting Start:	06/26/2006 10:20:08	Lab ID.	.20061802
Decay Time.	2.38E+02 Hrs	Client ID	IP 06-368
Sampling Stop . .	06/16/2006 12:00:00	Sample Size	9.17e-01 KG
Sample Duration	0.00E+00 Hrs	Yield	1.0000
Sampling Start. .	06/16/2006 12:00:00	Geometry Code	1_0MS0
Live Time (hr:min:sec). . .	001:30:04	Eff. Calib. Date. .	03/13/2006 10:22:33
Real Time (hr:min:sec). . .	001:30:08	Library File.	.MASTER.LIB

REVIEWED BY: _____

Detector #: 6

Energy(keV)= -0.03+ 0.500*Ch+ 0.00e+00*Ch^2 + 0.00e+00*Ch^3 06/26/2006

FWHM(keV) = 1.22+ 0.004*En+ 4.92e-04*En^2 + 0.00e+00*En^3 03/13/2006
Where En = Sqrt(Energy in keV)

Eff.=1/[3.91e-02*En^-2.61e+00 + 6.85e+01*En^ 7.31e-01] 03/13/2006

CONCENTRATIONs Units: pCi/KG

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
RA-226	2.32E+02	9.00E+01	----------	----------	----------	RA-226
BE-7	1.70E+02	3.69E+01	----------	----------	----------	BE-7
CS-137	2.83E+01	4.90E+00	----------	----------	----------	CS-137
ACTH-228	1.68E+02	2.05E+01	----------	----------	----------	ACTH-228
K-40	3.52E+03	1.32E+02	----------	----------	----------	K-40
CO-57	----------	----------	5.35E+00	1.64E+01	1.11E+01	CO-57
CE-144	----------	----------	4.11E+01	1.25E+02	8.53E+01	CE-144
CE-141	----------	----------	1.02E+01	3.19E+01	2.14E+01	CE-141
NP-239	----------	----------	6.89E+02	2.16E+03	1.44E+03	NP-239
SE-75	----------	----------	7.64E+00	2.33E+01	1.60E+01	SE-75
CR-51	----------	----------	5.38E+01	1.68E+02	1.14E+02	CR-51
EU-152	----------	----------	1.67E+01	5.16E+01	3.52E+01	EU-152
I-131	----------	----------	1.22E+01	3.84E+01	2.59E+01	I-131
AG-108M	----------	----------	4.47E+00	1.39E+01	9.55E+00	AG-108M
RU-103	----------	----------	5.35E+00	1.68E+01	1.15E+01	RU-103
I-133	----------	----------	1.56E+04	4.84E+04	3.34E+04	I-133
CS-134	----------	----------	3.70E+00	1.19E+01	8.24E+00	CS-134
RU-106	----------	----------	4.85E+01	1.55E+02	1.06E+02	RU-106
MO-99	----------	----------	5.02E+02	1.55E+03	1.08E+03	MO-99
ZR-95	----------	----------	1.00E+01	3.16E+01	2.17E+01	ZR-95
NB-95	----------	----------	6.65E+00	2.06E+01	1.43E+01	NB-95
CO-58	----------	----------	5.76E+00	1.77E+01	1.25E+01	CO-58
MN-54	----------	----------	5.43E+00	1.78E+01	1.18E+01	MN-54
AG-110M	----------	----------	5.55E+00	1.85E+01	1.24E+01	AG-110M
I-132	----------	----------	2.40E+02	7.75E+02	5.25E+02	I-132
ZN-65	----------	----------	5.84E+00	2.01E+01	1.39E+01	ZN-65
FE-59	----------	----------	1.52E+01	4.96E+01	3.38E+01	FE-59

CONCENTRATIONs Units: pCi/KG

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
CO-60	----------	----------	5.69E+00	1.78E+01	1.26E+01	CO-60
BALA-140	----------	----------	8.09E+00	2.70E+01	1.87E+01	BALA-140
SB-124	----------	----------	8.24E+00	2.97E+01	1.99E+01	SB-124

TOTAL MEASURED ACTIVITY: 4.12E+03 +- 2.84E+02 pCi/KG

Results TRANSFERRED to ELMS.

SEEKER G A M M A A N A L Y S I S R E S U L T S Version 2.3.0

Entergy Nuclear Northeast
James A. Fitzpatrick Environmental Lab

Sample DESCRIPTION: OFF VERPLANK MYRO

Counting Start:	06/22/2006 12:52:20	Lab ID.	.20061803
Decay Time.	1.45E+02 Hrs	Client ID	IP 06-367
Sampling Stop . .	06/16/2006 12:00:00	Sample Size	6.94e-01 KG
Sample Duration	0.00E+00 Hrs	Yield	1.0000
Sampling Start. .	06/16/2006 12:00:00	Geometry Code	1_0MS0
Live Time (hr:min:sec). . .	001:30:05	Eff. Calib. Date. .	09/27/2005 09:51:31
Real Time (hr:min:sec). . .	001:30:12	Library File.	.MASTER.LIB

REVIEWED BY:

Detector #: 3

Energy(keV)= -0.47+ 0.500*Ch+ 0.00e+00*Ch^2 + 0.00e+00*Ch^3 06/22/2006

FWHM(keV) = 0.71+ 0.017*En+ 3.87e-04*En^2 + 0.00e+00*En^3 03/14/2006
Where En = Sqrt(Energy in keV)

Eff.=1/[4.66e-02*En^-2.50e+00 + 1.13e+02*En^ 8.27e-01] 09/27/2005

CONCENTRATIONs Units: pCi/KG

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
K-40	2.09E+03	1.53E+02	----------	----------	----------	K-40
CO-57	----------	----------	5.16E+00	1.60E+01	1.10E+01	CO-57
CE-144	----------	----------	3.93E+01	1.23E+02	8.38E+01	CE-144
CE-141	----------	----------	1.09E+01	3.40E+01	2.32E+01	CE-141
RA-226	----------	----------	1.34E+02	4.32E+02	2.85E+02	RA-226
NP-239	----------	----------	2.45E+02	7.67E+02	5.29E+02	NP-239
SE-75	----------	----------	9.14E+00	2.87E+01	1.96E+01	SE-75
CR-51	----------	----------	6.11E+01	1.99E+02	1.32E+02	CR-51
EU-152	----------	----------	1.88E+01	6.05E+01	4.10E+01	EU-152
I-131	----------	----------	1.04E+01	3.52E+01	2.27E+01	I-131
AG-108M	----------	----------	5.20E+00	1.70E+01	1.16E+01	AG-108M
BE-7	----------	----------	5.47E+01	1.83E+02	1.22E+02	BE-7
RU-103	----------	----------	6.86E+00	2.27E+01	1.53E+01	RU-103
I-133	----------	----------	8.15E+02	2.65E+03	1.82E+03	I-133
CS-134	----------	----------	6.62E+00	2.19E+01	1.50E+01	CS-134
RU-106	----------	----------	6.67E+01	2.18E+02	1.51E+02	RU-106
CS-137	----------	----------	9.26E+00	2.92E+01	2.03E+01	CS-137
MO-99	----------	----------	2.60E+02	8.45E+02	5.81E+02	MO-99
ZR-95	----------	----------	1.31E+01	4.24E+01	2.95E+01	ZR-95
NB-95	----------	----------	9.18E+00	2.92E+01	2.04E+01	NB-95
CO-58	----------	----------	8.09E+00	2.59E+01	1.82E+01	CO-58
MN-54	----------	----------	7.00E+00	2.23E+01	1.59E+01	MN-54
AG-110M	----------	----------	7.98E+00	2.81E+01	1.88E+01	AG-110M
ACTH-228	----------	----------	2.38E+01	8.71E+01	5.50E+01	ACTH-228
I-132	----------	----------	1.32E+02	4.47E+02	3.07E+02	I-132
ZN-65	----------	----------	2.19E+01	6.72E+01	4.87E+01	ZN-65
FE-59	----------	----------	2.63E+01	8.32E+01	5.96E+01	FE-59

CONCENTRATIONs Units: pCi/KG

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
CO-60	----------	----------	6.75E+00	2.40E+01	1.63E+01	CO-60
BALA-140	----------	----------	9.05E+00	3.14E+01	2.28E+01	BALA-140
SB-124	----------	----------	9.63E+00	3.62E+01	2.67E+01	SB-124

TOTAL MEASURED ACTIVITY: 2.09E+03 +- 1.53E+02 pCi/KG

Results TRANSFERRED to ELMS.

SEEKER G A M M A A N A L Y S I S R E S U L T S Version 2.3.0

Entergy Nuclear Northeast
James A. Fitzpatrick Environmental Lab

RECOUNT DATA EXISTS

Sample DESCRIPTION: COLD SPRING MYRO

Counting Start:	06/22/2006 12:55:35	Lab ID.	.20061804
Decay Time.	1.45E+02 Hrs	Client ID	IP 06-369
Sampling Stop . .	06/16/2006 12:00:00	Sample Size	1.08e+00 KG
Sample Duration	0.00E+00 Hrs	Yield	1.0000
Sampling Start. .	06/16/2006 12:00:00	Geometry Code	1_0MS0
Live Time (hr:min:sec). . .	001:30:06	Eff. Calib. Date. .	10/07/2005 12:56:17
Real Time (hr:min:sec). . .	001:30:14	Library File.	.MASTER.LIB

REVIEWED BY:

Detector #: 1

Energy(keV)= -0.21+ 0.500*Ch+ 0.00e+00*Ch^2 + 0.00e+00*Ch^3 06/22/2006

FWHM(keV) = 0.82+ 0.015*En+ 3.58e-04*En^2 + 0.00e+00*En^3 02/14/2006
Where En = Sqrt(Energy in keV)

Eff.=1/[2.74e-02*En^-2.87e+00 + 1.11e+02*En^ 8.06e-01] 10/07/2005

CONCENTRATIONs Units: pCi/KG

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
RA-226	2.60E+02	1.25E+02	----------	----------	----------	RA-226
BE-7	4.33E+02	4.83E+01	----------	----------	----------	BE-7
CS-137	2.52E+01	6.01E+00	----------	----------	----------	CS-137
ACTH-228	1.49E+02	2.39E+01	----------	----------	----------	ACTH-228
K-40	3.18E+03	1.48E+02	----------	----------	----------	K-40
CO-57	----------	----------	5.00E+00	1.55E+01	1.05E+01	CO-57
CE-144	----------	----------	3.95E+01	1.21E+02	8.26E+01	CE-144
CE-141	----------	----------	9.62E+00	2.97E+01	2.01E+01	CE-141
NP-239	----------	----------	2.54E+02	7.90E+02	5.33E+02	NP-239
SE-75	----------	----------	7.18E+00	2.30E+01	1.52E+01	SE-75
CR-51	----------	----------	4.74E+01	1.48E+02	1.02E+02	CR-51
EU-152	----------	----------	1.64E+01	5.08E+01	3.50E+01	EU-152
I-131	----------	----------	9.89E+00	3.20E+01	2.11E+01	I-131
AG-108M	----------	----------	5.14E+00	1.65E+01	1.11E+01	AG-108M
RU-103	----------	----------	6.20E+00	1.96E+01	1.34E+01	RU-103
I-133	----------	----------	6.62E+02	2.10E+03	1.45E+03	I-133
CS-134	----------	----------	4.45E+00	1.46E+01	1.00E+01	CS-134
RU-106	----------	----------	6.80E+01	2.13E+02	1.47E+02	RU-106
MO-99	----------	----------	2.00E+02	6.46E+02	4.41E+02	MO-99
ZR-95	----------	----------	1.09E+01	3.49E+01	2.40E+01	ZR-95
NB-95	----------	----------	6.00E+00	1.95E+01	1.33E+01	NB-95
CO-58	----------	----------	5.86E+00	1.86E+01	1.30E+01	CO-58
MN-54	----------	----------	5.69E+00	1.86E+01	1.26E+01	MN-54
AG-110M	----------	----------	9.91E+00	3.06E+01	2.16E+01	AG-110M
I-132	----------	----------	1.05E+02	3.46E+02	2.36E+02	I-132
ZN-65	----------	----------	1.81E+01	5.58E+01	3.92E+01	ZN-65
FE-59	----------	----------	1.85E+01	5.92E+01	4.15E+01	FE-59

CONCENTRATIONs Units: pCi/KG

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
CO-60	----------	----------	6.54E+00	2.08E+01	1.49E+01	CO-60
BALA-140	----------	----------	8.47E+00	2.71E+01	1.99E+01	BALA-140
SB-124	----------	----------	1.07E+01	3.64E+01	2.61E+01	SB-124

TOTAL MEASURED ACTIVITY: 4.05E+03 +- 3.51E+02 pCi/KG

Results TRANSFERRED to ELMS.

SEEKER G A M M A A N A L Y S I S R E S U L T S Version 2.3.0

Entergy Nuclear Northeast
James A. Fitzpatrick Environmental Lab

Sample DESCRIPTION: COLD SPRING MYRO R1

RECOUNT DATA EXISTS R1

Counting Start:	06/26/2006 10:22:13	Lab ID.	.20061804
Decay Time.	2.38E+02 Hrs	Client ID	IP 06-369
Sampling Stop . .	06/16/2006 12:00:00	Sample Size	1.08e+00 KG
Sample Duration	0.00E+00 Hrs	Yield	1.0000
Sampling Start. .	06/16/2006 12:00:00	Geometry Code	1_0MS0
Live Time (hr:min:sec). . .	001:30:02	Eff. Calib. Date. .	05/17/2006 15:20:48
Real Time (hr:min:sec). . .	001:30:06	Library File.	.MASTER.LIB

REVIEWED BY:

Detector #: 7

Energy(keV)= -0.56+ 0.500*Ch+ 0.00e+00*Ch^2 + 0.00e+00*Ch^3 06/26/2006

FWHM(keV) = 0.82+ 0.013*En+ 3.88e-04*En^2 + 0.00e+00*En^3 05/17/2006
Where En = Sqrt(Energy in keV)

Eff.=1/[3.78e-02*En^-2.65e+00 + 8.97e+01*En^ 7.66e-01] 05/17/2006

CONCENTRATIONs Units: pCi/KG

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
RA-226	4.12E+02	9.89E+01	----------	----------	----------	RA-226
BE-7	2.56E+02	4.56E+01	----------	----------	----------	BE-7
CS-137	2.40E+01	5.22E+00	----------	----------	----------	CS-137
ACTH-228	1.90E+02	2.09E+01	----------	----------	----------	ACTH-228
K-40	3.99E+03	1.48E+02	----------	----------	----------	K-40
CO-57	----------	----------	5.04E+00	1.56E+01	1.05E+01	CO-57
CE-144	----------	----------	3.83E+01	1.17E+02	7.98E+01	CE-144
CE-141	----------	----------	1.04E+01	3.19E+01	2.16E+01	CE-141
NP-239	----------	----------	7.63E+02	2.38E+03	1.59E+03	NP-239
SE-75	----------	----------	7.36E+00	2.28E+01	1.55E+01	SE-75
CR-51	----------	----------	4.90E+01	1.53E+02	1.04E+02	CR-51
EU-152	----------	----------	1.42E+01	4.46E+01	3.03E+01	EU-152
I-131	----------	----------	1.19E+01	3.75E+01	2.53E+01	I-131
AG-108M	----------	----------	5.16E+00	1.59E+01	1.10E+01	AG-108M
RU-103	----------	----------	5.67E+00	1.82E+01	1.23E+01	RU-103
I-133	----------	----------	1.57E+04	4.85E+04	3.38E+04	I-133
CS-134	----------	----------	5.83E+00	1.84E+01	1.26E+01	CS-134
RU-106	----------	----------	5.08E+01	1.67E+02	1.11E+02	RU-106
MO-99	----------	----------	4.86E+02	1.55E+03	1.06E+03	MO-99
ZR-95	----------	----------	1.21E+01	3.78E+01	2.60E+01	ZR-95
NB-95	----------	----------	7.16E+00	2.28E+01	1.54E+01	NB-95
CO-58	----------	----------	4.87E+00	1.59E+01	1.08E+01	CO-58
MN-54	----------	----------	5.36E+00	1.71E+01	1.17E+01	MN-54
AG-110M	----------	----------	6.84E+00	2.25E+01	1.51E+01	AG-110M
I-132	----------	----------	2.67E+02	8.35E+02	5.84E+02	I-132
ZN-65	----------	----------	8.27E+00	2.70E+01	1.90E+01	ZN-65
FE-59	----------	----------	1.75E+01	5.59E+01	3.87E+01	FE-59

CONCENTRATIONs Units: pCi/KG

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
CO-60	----------	----------	5.53E+00	1.80E+01	1.25E+01	CO-60
BALA-140	----------	----------	1.09E+01	3.46E+01	2.46E+01	BALA-140
SB-124	----------	----------	8.82E+00	2.97E+01	2.15E+01	SB-124

TOTAL MEASURED ACTIVITY: 4.87E+03 +- 3.19E+02 pCi/KG

Results TRANSFERRED to ELMS.

SEEKER G A M M A A N A L Y S I S R E S U L T S Version 2.3.0

Entergy Nuclear Northeast
James A. Fitzpatrick Environmental Lab

Sample DESCRIPTION: COLD SPRING CRISPUS

Counting Start: 06/22/2006 13:05:12
Decay Time. . . . . 1.45E+02 Hrs
Sampling Stop . . 06/16/2006 12:00:00
Sample Duration . . . . 0.00E+00 Hrs
Sampling Start. . 06/16/2006 12:00:00
Live Time (hr:min:sec). . . 001:30:07
Real Time (hr:min:sec). . . 001:30:10

Lab ID. 20061805
Client ID . . . . . IP 06-370
Sample Size . . . . . 9.46e-01 KG
Yield 1.0000
Geometry Code . . . . . 1_0MS0
Eff. Calib. Date. . 09/27/2005 12:26:11
Library File. . . . . .MASTER.LIB

REVIEWED BY:

Detector #: 8

Energy(keV)= 0.11+ 0.500*Ch+ 0.00e+00*Ch^2 + 0.00e+00*Ch^3 06/22/2006

FWHM(keV) = 0.69+ 0.011*En+ 6.24e-04*En^2 + 0.00e+00*En^3 02/13/2006
Where En = Sqrt(Energy in keV)

Eff.=1/[3.21e-02*En^-2.63e+00 + 1.07e+02*En^ 8.11e-01] 09/27/2005

CONCENTRATIONs Units: pCi/KG

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
RA-226	3.71E+02	8.74E+01	----------	----------	----------	RA-226
BE-7	1.11E+02	3.68E+01	----------	----------	----------	BE-7
K-40	2.64E+03	1.44E+02	----------	----------	----------	K-40
CO-57	----------	----------	3.41E+00	1.08E+01	7.28E+00	CO-57
CE-144	----------	----------	2.99E+01	9.41E+01	6.34E+01	CE-144
CE-141	----------	----------	7.93E+00	2.50E+01	1.68E+01	CE-141
NP-239	----------	----------	2.02E+02	6.34E+02	4.30E+02	NP-239
SE-75	----------	----------	6.39E+00	1.98E+01	1.37E+01	SE-75
CR-51	----------	----------	4.91E+01	1.52E+02	1.06E+02	CR-51
EU-152	----------	----------	1.43E+01	4.57E+01	3.10E+01	EU-152
I-131	----------	----------	8.22E+00	2.66E+01	1.79E+01	I-131
AG-108M	----------	----------	3.77E+00	1.25E+01	8.42E+00	AG-108M
RU-103	----------	----------	5.71E+00	1.84E+01	1.25E+01	RU-103
I-133	----------	----------	5.77E+02	1.94E+03	1.29E+03	I-133
CS-134	----------	----------	6.23E+00	2.00E+01	1.37E+01	CS-134
RU-106	----------	----------	5.44E+01	1.76E+02	1.21E+02	RU-106
CS-137	----------	----------	5.55E+00	1.82E+01	1.23E+01	CS-137
MO-99	----------	----------	1.82E+02	6.02E+02	4.08E+02	MO-99
ZR-95	----------	----------	8.88E+00	3.09E+01	2.01E+01	ZR-95
NB-95	----------	----------	7.64E+00	2.39E+01	1.67E+01	NB-95
CO-58	----------	----------	6.30E+00	1.98E+01	1.40E+01	CO-58
MN-54	----------	----------	4.65E+00	1.51E+01	1.06E+01	MN-54
AG-110M	----------	----------	7.66E+00	2.53E+01	1.72E+01	AG-110M
ACTH-228	----------	----------	2.03E+01	7.07E+01	4.58E+01	ACTH-228
I-132	----------	----------	1.30E+02	4.20E+02	2.91E+02	I-132
ZN-65	----------	----------	1.81E+01	5.51E+01	3.95E+01	ZN-65
FE-59	----------	----------	1.70E+01	5.28E+01	3.88E+01	FE-59

CONCENTRATIONs Units: pCi/KG

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
CO-60	----------	----------	6.66E+00	2.16E+01	1.53E+01	CO-60
BALA-140	----------	----------	7.29E+00	2.55E+01	1.78E+01	BALA-140
SB-124	----------	----------	1.15E+01	3.81E+01	2.82E+01	SB-124

TOTAL MEASURED ACTIVITY: 3.12E+03 +- 2.68E+02 pCi/KG

Results TRANSFERRED to ELMS.

HUDSON RIVER AQUATIC VEGETATION
ENVIRONMENTAL LABORATORY SAMPLE SUBMITTAL FORM

WEEK # 35 CLIENT CODE 04

CLIENT SAMPLE ID NUMBER	SAMPLING STATION NUMBER	SAMPLE LOCATION	SAMPLE TYPE	MEDIA CODE	SAMPLE DATE	VOLUME (UNITS)	ANALYSIS TYPE
20062628 IP06-547	28	MYRO LENTS COVE	RR	AV	9/1/06	1085 GRAMS	GSA
20062629 IP06-548	17	MYRO VERPLANCK	RR	AV	8/31/06	2400 GRAMS	GSA
20062630 IP06-549	84	MYRO COLD SPRING	RR	AV	9/1/06	1580 GRAMS	GSA

REMARKS: HUDSON RIVER AQUATIC VEGETATION SAMPLES – SPRING AND SUMMER SAMPLE COLLECTION
RR = REGULAR ROUTINE

SEP 07 REC'D

INDIAN POINT SUMMARY SHEET

SAMPLE TYPE: Aquatic Vegetation REPORTING UNITS IN: pCi/kg SPETEMBER 2006

ISOTOPE	MIN. REQ. CL*	LENTS COVE MYRO IP 06-547	VERPLANK MYRO IP 06-548	COLD SPRING MYRO IP 06-549	
Be-7		287.3±89.25	391.6±95.96	<95.44	
K-40		2791±263.4	2448±277.1	3089±208.9	
Mn-54		<10.95	<13.92	<13.05	
Co-58		<12.69	<13.33	<12.21	
Fe-59		<38.64	<32.45	<28.56	
Co-60		<10.43	<19.2	<12	
Zn-65		<39.8	<45.04	<13.44	
Zr-95		<26.50	<23.71	<20.6	
Nb-95		<13.41	<15.18	<11.46	
Ru-103		<11.41	<13.16	<12.85	
Ru-106		<78.78	<115.5	<106.8	
I-131	(30*)	<15.47	<21.48	<16.38	
Cs-134	(30*)	<13.61	<10.39	<9.44	
Cs-137	(40*)	<11.19	<10.73	<10.45	
Ba/La-140		<24.65	<21.79	<10.1	
Ce-141		<18.56	<16.17	<19.89	
Ce-144		<61.30	<70.10	<77.40	
Ra-226		<174.7	<290.3	388±188.3	
Ac-228		<49.61	118.9±41.89	159.4±34.29	

Results reported as < are CL values

*Posted CL's correspond to LLD's listed in TS-5.104 (Rev.5)

CL Values Verified By

NOTE: The summary data sheet results have been provided to you to facilitate the review of analytical results. These summary sheets have not been independently verified and should not be used for the final reporting of data without a second verification.

SEEKER G A M M A A N A L Y S I S R E S U L T S Version 2.3.0

Entergy Nuclear Northeast
James A. Fitzpatrick Environmental Lab

Sample DESCRIPTION: LENTS COVE MYRO

Counting Start: 09/07/2006 11:35:23
Decay Time. . . . . 1.44E+02 Hrs
Sampling Stop . . 09/01/2006 12:00:00
Sample Duration . . . . 0.00E+00 Hrs
Sampling Start. . 09/01/2006 12:00:00
Live Time (hr:min:sec). . . 000:48:02
Real Time (hr:min:sec). . . 000:48:05

Lab ID. 20062628
Client ID . . . . . IP 06-547
Sample Size . . . . . 6.00e-01 KG
Yield 1.0000
Geometry Code VEGGS0
Eff. Calib. Date. . 09/27/2005 11:31:36
Library File. . . . . .MASTER.LIB

REVIEWED BY:

Detector #: 8

Energy(keV)= 0.03+ 0.500*Ch+ 0.00e+00*Ch^2 + 0.00e+00*Ch^3 09/07/2006

FWHM(keV) = 0.69+ 0.011*En+ 6.24e-04*En^2 + 0.00e+00*En^3 02/13/2006
Where En = Sqrt(Energy in keV)

Eff.=1/[4.10e-02*En^-2.53e+00 + 1.13e+02*En^ 8.35e-01] 09/27/2005

CONCENTRATIONs Units: pCi/KG

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
BE-7	2.87E+02	8.92E+01	----------	----------	----------	BE-7
K-40	2.79E+03	2.63E+02	----------	----------	----------	K-40
CO-57	----------	----------	7.09E+00	2.26E+01	1.56E+01	CO-57
CE-144	----------	----------	6.13E+01	1.95E+02	1.33E+02	CE-144
CE-141	----------	----------	1.86E+01	5.83E+01	3.99E+01	CE-141
RA-226	----------	----------	1.75E+02	6.08E+02	3.88E+02	RA-226
NP-239	----------	----------	3.49E+02	1.16E+03	7.78E+02	NP-239
SE-75	----------	----------	1.25E+01	4.06E+01	2.78E+01	SE-75
CR-51	----------	----------	8.99E+01	2.92E+02	2.02E+02	CR-51
EU-152	----------	----------	2.70E+01	9.07E+01	6.15E+01	EU-152
I-131	----------	----------	1.55E+01	5.19E+01	3.52E+01	I-131
AG-108M	----------	----------	9.00E+00	2.96E+01	2.07E+01	AG-108M
RU-103	----------	----------	1.14E+01	4.04E+01	2.63E+01	RU-103
I-133	----------	----------	1.12E+03	3.79E+03	2.64E+03	I-133
CS-134	----------	----------	1.36E+01	4.45E+01	3.13E+01	CS-134
RU-106	----------	----------	7.88E+01	2.67E+02	1.95E+02	RU-106
CS-137	----------	----------	1.12E+01	3.95E+01	2.61E+01	CS-137
MO-99	----------	----------	4.27E+02	1.43E+03	9.85E+02	MO-99
ZR-95	----------	----------	2.65E+01	8.38E+01	6.03E+01	ZR-95
NB-95	----------	----------	1.34E+01	4.39E+01	3.11E+01	NB-95
CO-58	----------	----------	1.27E+01	4.08E+01	2.96E+01	CO-58
MN-54	----------	----------	1.09E+01	3.61E+01	2.60E+01	MN-54
AG-110M	----------	----------	1.72E+01	5.75E+01	4.04E+01	AG-110M
ACTH-228	----------	----------	4.96E+01	1.76E+02	1.15E+02	ACTH-228
I-132	----------	----------	2.82E+02	9.08E+02	6.55E+02	I-132
ZN-65	----------	----------	3.98E+01	1.23E+02	9.00E+01	ZN-65
FE-59	----------	----------	3.86E+01	1.32E+02	9.23E+01	FE-59

CONCENTRATIONs Units: pCi/KG

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
CO-60	----------	----------	1.04E+01	4.02E+01	2.69E+01	CO-60
BALA-140	----------	----------	2.46E+01	7.83E+01	5.95E+01	BALA-140
SB-124	----------	----------	0.00E+00	3.59E+01	1.62E+01	SB-124

TOTAL MEASURED ACTIVITY: 3.08E+03 +- 3.53E+02 pCi/KG

Results TRANSFERRED to ELMS.

SEEKER G A M M A A N A L Y S I S R E S U L T S Version 2.3.0

Entergy Nuclear Northeast
James A. Fitzpatrick Environmental Lab

Sample DESCRIPTION: OFF VERPLANK MYRO

Counting Start: 09/07/2006 11:43:17
Decay Time. . . . . 1.68E+02 Hrs
Sampling Stop . . 08/31/2006 12:00:00
Sample Duration . . . . 0.00E+00 Hrs
Sampling Start. . 08/31/2006 12:00:00
Live Time (hr:min:sec). . . 000:48:06
Real Time (hr:min:sec). . . 000:48:09

Lab ID. 20062629
Client ID . . . . . IP 06-548
Sample Size . . . . . 6.28e-01 KG
Yield 1.0000
Geometry Code VEGGS0
Eff. Calib. Date. . 10/07/2005 07:21:58
Library File. . . . . .MASTER.LIB

REVIEWED BY:

Detector #: 2

Energy(keV)= 0.02+ 0.500*Ch+ 0.00e+00*Ch^2 + 0.00e+00*Ch^3 09/07/2006

FWHM(keV) = 0.99+ -0.014*En+ 1.69e-03*En^2 + -1.27e-05*En^3 02/14/2006
Where En = Sqrt(Energy in keV)

Eff.=1/[4.37e-02*En^-2.55e+00 + 1.23e+02*En^ 8.46e-01] 10/07/2005

CONCENTRATIONs Units: pCi/KG

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
BE-7	3.92E+02	9.60E+01	----------	----------	----------	BE-7
ACTH-228	1.19E+02	4.19E+01	----------	----------	----------	ACTH-228
K-40	2.45E+03	2.77E+02	----------	----------	----------	K-40
CO-57	----------	----------	9.59E+00	2.98E+01	2.06E+01	CO-57
CE-144	----------	----------	7.01E+01	2.22E+02	1.51E+02	CE-144
CE-141	----------	----------	1.62E+01	5.21E+01	3.52E+01	CE-141
RA-226	----------	----------	2.90E+02	9.39E+02	6.21E+02	RA-226
NP-239	----------	----------	6.46E+02	2.02E+03	1.40E+03	NP-239
SE-75	----------	----------	1.58E+01	5.02E+01	3.46E+01	SE-75
CR-51	----------	----------	1.00E+02	3.42E+02	2.24E+02	CR-51
EU-152	----------	----------	3.12E+01	1.02E+02	7.00E+01	EU-152
I-131	----------	----------	2.15E+01	7.08E+01	4.78E+01	I-131
AG-108M	----------	----------	9.99E+00	3.23E+01	2.27E+01	AG-108M
RU-103	----------	----------	1.32E+01	4.31E+01	2.99E+01	RU-103
I-133	----------	----------	3.32E+03	1.09E+04	7.55E+03	I-133
CS-134	----------	----------	1.04E+01	3.47E+01	2.50E+01	CS-134
RU-106	----------	----------	1.16E+02	3.89E+02	2.70E+02	RU-106
CS-137	----------	----------	1.07E+01	3.71E+01	2.54E+01	CS-137
MO-99	----------	----------	6.75E+02	2.18E+03	1.52E+03	MO-99
ZR-95	----------	----------	2.37E+01	7.64E+01	5.51E+01	ZR-95
NB-95	----------	----------	1.52E+01	4.90E+01	3.49E+01	NB-95
CO-58	----------	----------	1.33E+01	4.36E+01	3.11E+01	CO-58
MN-54	----------	----------	1.39E+01	4.53E+01	3.22E+01	MN-54
AG-110M	----------	----------	1.54E+01	5.63E+01	3.70E+01	AG-110M
I-132	----------	----------	3.60E+02	1.17E+03	8.37E+02	I-132
ZN-65	----------	----------	4.50E+01	1.37E+02	1.01E+02	ZN-65
FE-59	----------	----------	3.25E+01	1.22E+02	8.08E+01	FE-59

CONCENTRATIONs Units: pCi/KG

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
CO-60	----------	----------	1.92E+01	6.10E+01	4.47E+01	CO-60
BALA-140	----------	----------	2.18E+01	7.70E+01	5.49E+01	BALA-140
SB-124	----------	----------	0.00E+00	2.76E+01	1.72E+01	SB-124

TOTAL MEASURED ACTIVITY: 2.96E+03 +- 4.15E+02 pCi/KG

Results TRANSFERRED to ELMS.

SEEKER G A M M A A N A L Y S I S R E S U L T S Version 2.3.0

Entergy Nuclear Northeast
James A. Fitzpatrick Environmental Lab

Sample DESCRIPTION: COLD SPRING MYRO

Counting Start: 09/07/2006 11:46:07
Decay Time. . . . . 1.44E+02 Hrs
Sampling Stop . . 09/01/2006 12:00:00
Sample Duration . . . . 0.00E+00 Hrs
Sampling Start. . 09/01/2006 12:00:00
Live Time (hr:min:sec). . . 000:48:04
Real Time (hr:min:sec). . . 000:48:07

Lab ID. 20062630
Client ID . . . . . IP 06-549
Sample Size . . . . . 6.26e-01 KG
Yield 1.0000
Geometry Code VEGGS0
Eff. Calib. Date. . 03/13/2006 08:40:31
Library File. . . . . .MASTER.LIB

REVIEWED BY:

Detector #: 6

Energy(keV)= -0.01+ 0.500*Ch+ 0.00e+00*Ch^2 + 0.00e+00*Ch^3 09/07/2006

FWHM(keV) = 1.12+ 0.028*En+ 0.00e+00*En^2 + 0.00e+00*En^3 06/27/2006
Where En = Sqrt(Energy in keV)

Eff.=1/[3.45e-02*En^-2.66e+00 + 7.25e+01*En^ 7.44e-01] 03/13/2006

CONCENTRATIONs Units: pCi/KG

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
RA-226	3.88E+02	1.88E+02	----------	----------	----------	RA-226
ACTH-228	1.59E+02	3.43E+01	----------	----------	----------	ACTH-228
K-40	3.09E+03	2.09E+02	----------	----------	----------	K-40
CO-57	----------	----------	9.41E+00	2.95E+01	2.00E+01	CO-57
CE-144	----------	----------	7.74E+01	2.37E+02	1.64E+02	CE-144
CE-141	----------	----------	1.99E+01	6.17E+01	4.20E+01	CE-141
NP-239	----------	----------	4.03E+02	1.26E+03	8.64E+02	NP-239
SE-75	----------	----------	1.54E+01	4.76E+01	3.27E+01	SE-75
CR-51	----------	----------	9.28E+01	2.93E+02	2.01E+02	CR-51
EU-152	----------	----------	1.74E+01	5.87E+01	4.00E+01	EU-152
I-131	----------	----------	1.64E+01	5.44E+01	3.57E+01	I-131
AG-108M	----------	----------	1.03E+01	3.18E+01	2.24E+01	AG-108M
BE-7	----------	----------	9.54E+01	3.15E+02	2.09E+02	BE-7
RU-103	----------	----------	1.29E+01	4.05E+01	2.80E+01	RU-103
I-133	----------	----------	1.18E+03	3.83E+03	2.61E+03	I-133
CS-134	----------	----------	9.44E+00	3.10E+01	2.15E+01	CS-134
RU-106	----------	----------	1.07E+02	3.53E+02	2.38E+02	RU-106
CS-137	----------	----------	1.04E+01	3.47E+01	2.33E+01	CS-137
MO-99	----------	----------	3.51E+02	1.13E+03	7.86E+02	MO-99
ZR-95	----------	----------	2.06E+01	6.77E+01	4.58E+01	ZR-95
NB-95	----------	----------	1.15E+01	3.68E+01	2.56E+01	NB-95
CO-58	----------	----------	1.22E+01	3.98E+01	2.71E+01	CO-58
MN-54	----------	----------	1.31E+01	4.11E+01	2.87E+01	MN-54
AG-110M	----------	----------	1.41E+01	4.58E+01	3.19E+01	AG-110M
I-132	----------	----------	2.00E+02	6.74E+02	4.57E+02	I-132
ZN-65	----------	----------	1.34E+01	4.64E+01	3.33E+01	ZN-65
FE-59	----------	----------	2.86E+01	9.31E+01	6.62E+01	FE-59

CONCENTRATIONs Units: pCi/KG

Nuclide	Conc.	(1.00 Sigma) +- Uncert.	Critical Level Conc.	Less Than Conc.	LLD Conc.	Nuclide
CO-60	----------	----------	1.20E+01	4.02E+01	2.76E+01	CO-60
BALA-140	----------	----------	1.01E+01	3.53E+01	2.62E+01	BALA-140
SB-124	----------	----------	3.19E+01	9.75E+01	7.34E+01	SB-124

TOTAL MEASURED ACTIVITY: 3.64E+03 +- 4.31E+02 pCi/KG

Results TRANSFERRED to ELMS.