Attachment 5

Discharge Tunnel Basement Fill Model Calculation Spreadsheet

Discharge Tunnel
Future Groundwater Dose Summary

Source	Radionuclide	Future Groundwater Dose from Individual Worksheet	Percent of Dose from Concrete Sources
		mrem/yr	%
Discharge Tunnels	H-3	8.64E-03	3.77E+00
Intake	Ni-63	0.00E+00	0.00E+00
Structure	Fe-55	5.61E-04	2.45E-01
	Co-60	6.79E-03	2.96E+00
	Sr-90	2.46E-03	1.07E+00
	Cs-134	6.73E-04	2.94E-01
	Cs-137	1.99E-01	8.68E+01
	Pu-238	0.00E+00	0.00E+00
	Pu-239/240	0.00E+00	0.00E+00
	Cm-243/244	0.00E+00	0.00E+00
	C-14	4.16E-03	1.82E+00
	Am-241	6.90E-03	3.02E+00
	Total	**2.29E-01**	1.00E+02

Discharge Tunnels Sediments

Source		Annual Dose	Percent of DCGL of 15 mrem/yr
		mrem/yr	%
Tunnel #1		0.05	0.33%
Tunnel #2		1.7	11.33%
	Total	1.75	11.67%

Discharge Tunnel
Future Groundwater Dose Calculation

A. Tritium

Volumetric Contamination

Facility Area	Maximum Water Concentration @ 1 pCi/g Concrete Concentation	Actual Concrete Concent-ration	Maximum Water Concentration @ Actual Concrete Concentation	Ground-water DCGL @ 25 mrem/yr	Groundwater Dose at Actual Concrete Concentration
	pCi/L	pCi/g	pCi/L	pCi/L	mrem/yr
Discharge Tunnel 1 Floor	3.82E+01	0.00E+00	0.00E+00		0.00E+00
Discharge Tunnel 1 West Wall	3.39E+01	2.68E+00	9.08E+01		3.48E-03
Discharge Tunnel 1 East & North Wall	3.46E+01	2.22E+00	7.66E+01		2.94E-03
Discharge Tunnel 1 Ceiling	2.62E+01	0.00E+00	0.00E+00		0.00E+00
Discharge Tunnel 2 Floor	2.46E+01	0.00E+00	0.00E+00		0.00E+00
Discharge Tunnel 2 West Wall	2.21E+01	0.00E+00	0.00E+00		0.00E+00
Discharge Tunnel 2 East & North Wall	2.23E+01	2.59E+00	5.78E+01		2.22E-03
Discharge Tunnel 2 Ceiling	2.46E+01	0.00E+00	0.00E+00		0.00E+00
		Total	**2.25E+02**	652,000	**8.64E-03**

Discharge Tunnel
Future Groundwater Dose Calculation

A. Tritium

Concrete Density@150 lb/ft3 (g/m3) = 2.40E+06

Thick-ness (m)	Width (m)	Length (m)	Volume (m3)	Surface Area/ Volume (1/m)	Total Weight of Con-crete (g)	Curies at 1 pCi/g Unit Activity	Diffus-ion Co-efficient (cm2/s)	Cumu-lative Frac-tional Release	Maximum Curies Released at 1 pCi/g Activity (Ci)	Retard-ation Factor	Build-up Factor	Tunnel Water Volume (L)	Max Water Concen-tration @ 1 pCi/g (pCi/L)
Discharge Tunnel 1 Floor													
0.05	3.66	123.44	22.94	19.69	5.5E+07	5.5E-05	5.5E-07	9.25E-01	5.09E-05	1	1	1.3E+06	3.82E+01
Discharge Tunnel 1 West Wall													
0.05	4.72	84.73	20.34	19.69	4.9E+07	4.9E-05	5.5E-07	9.25E-01	4.52E-05	1	1	1.3E+06	3.39E+01
Discharge Tunnel 1East & North Wall													
0.05	4.72	86.56	20.78	19.69	5.0E+07	5.0E-05	5.5E-07	9.25E-01	4.61E-05	1	1	1.3E+06	3.46E+01
Discharge Tunnel 1 Ceiling													
0.05	3.66	84.73	15.74	19.69	3.8E+07	3.8E-05	5.5E-07	9.25E-01	3.50E-05	1	1	1.3E+06	2.62E+01
Discharge Tunnel 2 Floor													
0.05	5.49	123.44	34.40	19.69	8.3E+07	8.3E-05	5.5E-07	9.25E-01	7.64E-05	1	1	3.1E+06	2.46E+01
Discharge Tunnel 2 West Wall													
0.05	4.72	128.93	30.94	19.69	7.4E+07	7.4E-05	5.5E-07	9.25E-01	6.87E-05	1	1	3.1E+06	2.21E+01
Discharge Tunnel 2 East & North Wall													
0.05	4.72	129.84	31.16	19.69	7.5E+07	7.5E-05	5.5E-07	9.25E-01	6.92E-05	1	1	3.1E+06	2.23E+01
Discharge Tunnel 2 Ceiling													
0.05	5.49	123.44	34.40	19.69	8.3E+07	8.3E-05	5.5E-07	9.25E-01	7.64E-05	1	1	3.1E+06	2.46E+01

Discharge Tunnel
Future Groundwater Dose Calculation

B. Fe-55
Volumetric Contamination

Facility Area	Maximum Water Concentration @ 1 pCi/g Concrete Concentation	Actual Concrete Concent-ration	Maximum Water Concentration @ Actual Concrete Concentation	Ground-water DCGL @ 25 mrem/yr	Groundwater Dose at Actual Concrete Concentration
	pCi/L	pCi/g	pCi/L	pCi/L	mrem/yr
Discharge Tunnel 2 Floor	2.35E-01	6.26	1.47E+00		5.61E-04
		Total	**1.47E+00**	65,400	**5.61E-04**

Concrete Density@150 lb/ft3 (g/m3) = 2.40E+06

Thick-ness (m)	Wid-th (m)	Len-gth (m)	Vol-ume (m3)	Surface Area/ Volume (1/m)	Total Weight of Con-crete (g)	Curies at 1 pCi/g Unit Activity	Diffus-ion Co-efficient (cm2/s)	Cumu-lative Frac-tional Release	Maximum Curies Released at 1 pCi/g Activity (Ci)	Retard-ation Factor	Build-up Factor	Tunnel Water Volume	Max Water Concen-tration @ 1 pCi/g (pCi/L)
Discharge Tunnel 2 Floor													
0.05	5.49	123.44	34	19.69	8.3E+07	8.3E-05	5.0E-11	8.82E-03	7.29E-07	1	1	3.1E+06	2.35E-01

Discharge Tunnel
Future Groundwater Dose Calculation

C. Co-60

Facility Area	Maximum Water Concentration @ 1 pCi/g Concrete Concentation	Actual Concrete Concent-ration	Maximum Water Concentration @ Actual Concrete Concentation	Ground-water DCGL @ 25 mrem/yr	Groundwater Dose at Actual Concrete Concentration
Volumetric Contamination	pCi/L	pCi/g	pCi/L	pCi/L	mrem/yr
Discharge Tunnel 1 Floor	3.26E-01	3.41E-02	1.11E-02		2.43E-04
Discharge Tunnel 1 West Wall	2.89E-01	9.11E-01	2.63E-01		5.77E-03
Discharge Tunnel 1 East & North Wall	2.95E-01	9.30E-02	2.74E-02		6.02E-04
Discharge Tunnel 1 Ceiling	2.24E-01	0.00E+00	0.00E+00		0.00E+00
Discharge Tunnel 2 Floor	2.10E-01	0.00E+00	0.00E+00		0.00E+00
Discharge Tunnel 2 West Wall	1.89E-01	0.00E+00	0.00E+00		0.00E+00
Discharge Tunnel 2 East & North Wall	1.90E-01	4.13E-02	7.85E-03		1.72E-04
Discharge Tunnel 2 Ceiling	2.10E-01	0.00E+00	0.00E+00		0.00E+00
Intake Structure Floors	1.81E-03	8.94E-03	1.62E-05		3.54E-07
Intake Structure Walls	2.61E-03	2.92E-04	7.62E-07		1.67E-08
		Total	**3.10E-01**	1,140	**6.79E-03**

Discharge Tunnel

Concrete Density@150 lb/ft3 (g/m3) = 2.40E+06

Concrete Density@150 lb/ft3 (g/m3) = 2.40E+06

C. Co-60

Depth of Contam-ination (m)	Wid-th (m)	Len-gth (m)	Vol-ume (m3)	Surface Area/ Volume (1/m)	Total Weight of Con-crete (g)	Curies at 1 pCi/g Unit Activity	Diffus-ion Co-efficient (cm2/s)	Cumu-lative Frac-tional Release	Maximum Curies Released at 1 pCi/g Activity (Ci)	Retard-ation Factor	Build-up Factor	Tunnel Water Volume	Max Water Concen-tration @ 1 pCi/g (pCi/L)
0.05	3.66	123.44	22.94	19.69	5.5E+07	5.5E-05	4.0E-11	7.89E-03	4.34E-07	1	1	1.3E+06	3.26E-01
Discharge Tunnel 1 West Wall													
0.05	4.72	84.73	20.34	19.69	4.9E+07	4.9E-05	4.0E-11	7.89E-03	3.85E-07	1	1	1.3E+06	2.89E-01
Discharge Tunnel 1East & North Wall													
0.05	4.72	86.56	20.78	19.69	5.0E+07	5.0E-05	4.0E-11	7.89E-03	3.93E-07	1	1	1.3E+06	2.95E-01
Discharge Tunnel 1 Ceiling													
0.05	3.66	84.73	15.74	19.69	3.8E+07	3.8E-05	4.0E-11	7.89E-03	2.98E-07	1	1	1.3E+06	2.24E-01
Discharge Tunnel 2 Floor													
0.05	5.49	123.44	34.40	19.69	8.3E+07	8.3E-05	4.0E-11	7.89E-03	6.52E-07	1	1	3.1E+06	2.10E-01
Discharge Tunnel 2 West Wall													
0.05	4.72	128.93	30.94	19.69	7.4E+07	7.4E-05	4.0E-11	7.89E-03	5.86E-07	1	1	3.1E+06	1.89E-01
Discharge Tunnel 2 East & North Wall													
0.05	4.72	129.84	31.16	19.69	7.5E+07	7.5E-05	4.0E-11	7.89E-03	5.90E-07	1	1	3.1E+06	1.90E-01
Discharge Tunnel 2 Ceiling													
0.05	5.49	123.44	34.40	19.69	8.3E+07	8.3E-05	4.0E-11	7.89E-03	6.52E-07	1	1	3.1E+06	2.10E-01
Intake Structure Floor													
0.05	19.72	17.76	17.79	19.68	4.3E+07	4.3E-05	4.0E-11	7.89E-03	3.37E-07	99.00	1.65	3.1E+06	1.81E-03
Intake Structure Walls													
See Table Below		64.63	51.36	9.84	1.2E+08	1.2E-04	4.0E-11	3.94E-03	4.86E-07	99.00	1.65	3.1E+06	2.61E-03
East Wall													
6.10	0.10	19.72	12.22	9.84									
North and South Wall													
4.57	0.10	33.69	15.66	9.84									
Three Center Bays													
4.57	0.10	50.53	23.49	9.84									

Discharge Tunnel
Future Groundwater Dose Calculation

D. Sr-90

Facility Area	Maximum Water Concentration @ 1 pCi/g Concrete Concentation	Actual Concrete Concen-tration	Maximum Water Concentration @ Actual Concrete Concentation	Ground-water DCGL @ 25 mrem/yr	Groundwater Dose at Actual Concrete Concentration
Volumetric Contamination	pCi/L	pCi/g	pCi/L	pCi/L	mrem/yr
Discharge Tunnel 1 Floor	1.17E+00	9.87E-03	1.16E-02		1.15E-03
Discharge Tunnel 1 West Wall	1.04E+00	5.30E-03	5.52E-03		5.50E-04
Discharge Tunnel 1 East & North Wall	1.06E+00	1.26E-03	1.34E-03		1.33E-04
Discharge Tunnel 1 Ceiling	8.06E-01	0.00E+00	0.00E+00		0.00E+00
Discharge Tunnel 2 Floor	7.57E-01	5.33E-03	4.03E-03		4.02E-04
Discharge Tunnel 2 West Wall	6.81E-01	0.00E+00	0.00E+00		0.00E+00
Discharge Tunnel 2 East & North Wall	6.85E-01	0.00E+00	0.00E+00		0.00E+00
Discharge Tunnel 2 Ceiling	7.57E-01	0.00E+00	0.00E+00		0.00E+00
Discharge Tunnels Outlet Concrete Floor	4.05E-01	5.16E-03	2.09E-03		2.08E-04
Intake Structure Walls	3.49E-02	3.72E-03	1.30E-04		1.29E-05
		Total	**2.47E-02**	251	**2.46E-03**

Discharge Tunnel
Future Groundwater Dose Calculation

D. Sr-90 Concrete Density@150 lb/ft3 (g/m3) = 2.4E+06

Depth of Contamination (m)	Width (m)	Length (m)	Volume (m3)	Surface Area/ Volume (1/m)	Total Weight of Concrete (g)	Curies at 1 pCi/g Unit Activity	Diffus-ion Co-efficient (cm2/s)	Cumu-lative Frac-tional Release	Maximum Curies Released at 1 pCi/g Activity (Ci)	Retard-ation Factor	Build-up Factor	Tunnel Water Volume	Max Water Concen-tration @ 1 pCi/g (pCi/L)
Discharge Tunnel 1 Floor													
0.05	3.66	123.44	22.94	19.69	5.5E+07	5.5E-05	5.2E-10	2.85E-02	1.57E-06	1	1	1.3E+06	1.2E+00
Discharge Tunnel 1 West Wall													
0.05	4.72	84.73	20.34	19.69	4.9E+07	4.9E-05	5.2E-10	2.85E-02	1.39E-06	1	1	1.3E+06	1.0E+00
Discharge Tunnel 1East & North Wall													
0.05	4.72	86.56	20.78	19.69	5.0E+07	5.0E-05	5.2E-10	2.85E-02	1.42E-06	1	1	1.3E+06	1.1E+00
Discharge Tunnel 1 Ceiling													
0.05	3.66	84.73	15.74	19.69	3.8E+07	3.8E-05	5.2E-10	2.85E-02	1.08E-06	1	1	1.3E+06	8.1E-01
Discharge Tunnel 2 Floor													
0.05	5.49	123.44	34.40	19.69	8.3E+07	8.3E-05	5.2E-10	2.85E-02	2.35E-06	1	1	3.1E+06	7.6E-01
Discharge Tunnel 2 West Wall													
0.05	4.72	128.93	30.94	19.69	7.4E+07	7.4E-05	5.2E-10	2.85E-02	2.11E-06	1	1	3.1E+06	6.8E-01
Discharge Tunnel 2 East & North Wall													
0.05	4.72	129.84	31.16	19.69	7.5E+07	7.5E-05	5.2E-10	2.85E-02	2.13E-06	1	1	3.1E+06	6.9E-01
Discharge Tunnel 2 Ceiling													
0.05	5.49	123.44	34.40	19.69	8.3E+07	8.3E-05	5.2E-10	2.85E-02	2.35E-06	1	1	3.1E+06	7.6E-01
Discharge Tunnels Outlet Concrete Floor													
0.05	9.75	37.19	18.42	19.69	4.4E+07	4.4E-05	5.2E-10	2.85E-02	1.26E-06	1	1	3.1E+06	4.1E-01
Intake Structure Walls													
See Table in Co-60 Spreadsheet		64.63	51.36	9.84	1.2E+08	1.2E-04	5.2E-10	1.42E-02	1.75E-06	46.00	2.84	3.1E+06	3.5E-02

Discharge Tunnel
Future Groundwater Dose Calculation

E. Cs-134

Facility Area	Maximum Water Concentration @ 1 pCi/g Concrete Concentation	Actual Concrete Concen-tration	Maximum Water Concentration @ Actual Concrete Concentation	Ground-water DCGL @ 25 mrem/yr	Groundwater Dose at Actual Concrete Concentration
Volumetric Contamination	pCi/L	pCi/g	pCi/L	pCi/L	mrem/yr
Discharge Tunnel 1 Floor	2.82E+00	0.00E+00	0.00E+00		0.00E+00
Discharge Tunnel 1 West Wall	2.50E+00	0.00E+00	0.00E+00		0.00E+00
Discharge Tunnel 1 East & North Wall	2.55E+00	0.00E+00	0.00E+00		0.00E+00
Discharge Tunnel 1 Ceiling	1.94E+00	0.00E+00	0.00E+00		0.00E+00
Discharge Tunnel 2 Floor	1.82E+00	0.00E+00	0.00E+00		0.00E+00
Discharge Tunnel 2 West Wall	1.63E+00	0.00E+00	0.00E+00		0.00E+00
Discharge Tunnel 2 East & North Wall	1.65E+00	0.00E+00	0.00E+00		0.00E+00
Discharge Tunnel 2 Ceiling	1.82E+00	0.00E+00	0.00E+00		0.00E+00
Intake Structure Floor	2.09E-01	2.11E-02	4.41E-03		3.23E-04
Intake Structure Walls	3.02E-01	1.59E-02	4.79E-03		3.50E-04
		Total	**9.21E-03**	342	**6.73E-04**

Discharge Tunnel
Future Groundwater Dose Calculation

E. Cs-134													Concrete Density@150 lb/ft3 (g/m3) =	2.4E+06
Depth of Contamination (m)	Width (m)	Length (m)	Volume (m3)	Surface Area/ Volume (1/m)	*Total* Weight of Concrete (g)	Curies at 1 pCi/g Unit Activity	Diffus-ion Co-efficient (cm2/s)	Cumu-lative Frac-tional Releas e	Maximum Curies Released at 1 pCi/g Activity (Ci)	Retard-ation Factor	Build-up Factor	Containme nt Water Volume	*Max Water* Concen-tration @ 1 pCi/g (pCi/L)
Discharge Tunnel 1 Floor													
0.05	3.66	123.44	22.94	19.69	5.5E+07	5.5E-05	3.0E-09	0.068	3.76E-06	1	1	1.3E+06	2.8E+00
Discharge Tunnel 1 West Wall													
0.05	4.72	84.73	20.34	19.69	4.9E+07	4.9E-05	3.0E-09	0.068	3.34E-06	1	1	1.3E+06	2.5E+00
Discharge Tunnel 1East & North Wall													
0.05	4.72	86.56	20.78	19.69	5.0E+07	5.0E-05	3.0E-09	0.068	3.41E-06	1	1	1.3E+06	2.6E+00
Discharge Tunnel 1 Ceiling													
0.05	3.66	84.73	15.74	19.69	3.8E+07	3.8E-05	3.0E-09	0.068	2.58E-06	1	1	1.3E+06	1.9E+00
Discharge Tunnel 2 Floor													
0.05	5.49	123.44	34.40	19.69	8.3E+07	8.3E-05	3.0E-09	0.068	5.64E-06	1	1	3.1E+06	1.8E+00
Discharge Tunnel 2 West Wall													
0.05	4.72	128.93	30.94	19.69	7.4E+07	7.4E-05	3.0E-09	0.068	5.08E-06	1	1	3.1E+06	1.6E+00
Discharge Tunnel 2 East & North Wall													
0.05	4.72	129.84	31.16	19.69	7.5E+07	7.5E-05	3.0E-09	0.068	5.11E-06	1	1	3.1E+06	1.6E+00
Discharge Tunnel 2 Ceiling													
0.05	5.49	123.44	34.40	19.69	8.3E+07	8.3E-05	3.0E-09	0.068	5.64E-06	1	1	3.1E+06	1.8E+00
Intake Structure Floor													
0.05	19.72	17.76	17.79	19.68	4.3E+07	4.3E-05	3.0E-09	0.068	2.92E-06	202.00	45	3.1E+06	2.1E-01
Intake Structure Walls													
See Table in Co-60 Spreadsheet		64.63	51.36	9.84	1.2E+08	1.2E-04	3.0E-09	0.034	4.21E-06	202.00	45	3.1E+06	3.0E-01

Discharge Tunnel
Future Groundwater Dose Calculation

F. Cs-137

Facility Area	Maximum Water Concentration @ 1 pCi/g Concrete Concentation	Average Actual Concrete Concen-tration (Scan ratio)	Maximum Water Concentration @ Actual Concrete Concentation	Ground-water DCGL @ 25 mrem/yr	Groundwater Dose at Actual Concrete Concentration
Volumetric Contamination	pCi/L	pCi/g	pCi/L	pCi/L	mrem/yr
Discharge Tunnel 1 Floor	2.82E+00	2.83E-01	7.98E-01		4.63E-02
Discharge Tunnel 1 West Wall	2.50E+00	6.04E-01	1.51E+00		8.76E-02
Discharge Tunnel 1 East & North Wall	2.55E+00	2.67E-01	6.82E-01		3.96E-02
Discharge Tunnel 1 Ceiling	1.94E+00	2.00E-02	3.87E-02		2.24E-03
Discharge Tunnel 2 Floor	1.82E+00	6.73E-02	1.22E-01		7.10E-03
Discharge Tunnel 2 West Wall	1.63E+00	0.00E+00	0.00E+00		0.00E+00
Discharge Tunnel 2 East & North Wall	1.65E+00	7.77E-02	1.28E-01		7.41E-03
Discharge Tunnel 2 Ceiling	1.82E+00	0.00E+00	0.00E+00		0.00E+00
Discharge Tunnels Outlet Concrete Floor	9.73E-01	1.48E-01	1.44E-01		8.36E-03
Intake Structure Floor	2.09E-01	1.59E-02	3.34E-03		1.94E-04
		Total	**3.43E+00**	431	**1.99E-01**

Discharge Tunnel

Future Groundwater Dose Calculation

F. Cs-137

Concrete Density@150 lb/ft3 (g/m3) = 2.4E+06

Depth of Contamination (m)	Width (m)	Length (m)	Volume (m3)	Surface Area/ Volume (1/m)	Total Weight of Concrete (g)	Curies at 1 pCi/g Unit Activity	Diffus-ion Co-efficient (cm2/s)	Cumu-lative Frac-tional Release	Maximum Curies Released at 1 pCi/g Activity (Ci)	Retard-ation Factor	Build-up Factor	Tunnel Water Volume	Max Water Concen-tration @ 1 pCi/g (pCi/L)
Discharge Tunnel 1 Floor													
0.05	3.66	123.44	22.94	19.69	5.5E+07	5.5E-05	3.0E-09	6.83E-02	3.76E-06	1	1	1.3E+06	2.82E+00
Discharge Tunnel 1 West Wall													
0.05	4.72	84.73	20.34	19.69	4.9E+07	4.9E-05	3.0E-09	6.83E-02	3.34E-06	1	1	1.3E+06	2.50E+00
Discharge Tunnel 1East & North Wall													
0.05	4.72	86.56	20.78	19.69	5.0E+07	5.0E-05	3.0E-09	6.83E-02	3.41E-06	1	1	1.3E+06	2.55E+00
Discharge Tunnel 1 Ceiling													
0.05	3.66	84.73	15.74	19.69	3.8E+07	3.8E-05	3.0E-09	6.83E-02	2.58E-06	1	1	1.3E+06	1.94E+00
Discharge Tunnel 2 Floor													
0.05	5.49	123.44	34.40	19.69	8.3E+07	8.3E-05	3.0E-09	6.83E-02	5.64E-06	1	1	3.1E+06	1.82E+00
Discharge Tunnel 2 West Wall													
0.05	4.72	128.93	30.94	19.69	7.4E+07	7.4E-05	3.0E-09	6.83E-02	5.08E-06	1	1	3.1E+06	1.63E+00
Discharge Tunnel 2 East & North Wall													
0.05	4.72	129.84	31.16	19.69	7.5E+07	7.5E-05	3.0E-09	6.83E-02	5.11E-06	1	1	3.1E+06	1.65E+00
Discharge Tunnel 2 Ceiling													
0.05	5.49	123.44	34.40	19.69	8.3E+07	8.3E-05	3.0E-09	6.83E-02	5.64E-06	1	1	3.1E+06	1.82E+00
Discharge Tunnels Outlet Concrete Floor													
0.05	9.75	37.19	18.42	19.69	4.4E+07	4.4E-05	3.0E-09	6.83E-02	3.02E-06	1	1	3.1E+06	9.73E-01
Intake Structure Floor													
0.05	19.72	17.76	17.79	19.68	4.3E+07	4.3E-05	3.0E-09	6.83E-02	2.92E-06	202	45	3.1E+06	2.09E-01

Discharge Tunnel
Future Groundwater Dose Calculation

G. Pu-238

Facility Area	Maximum *Water* Concentration @ 1 pCi/g Concrete Concentation	*Actual* Concrete Concentration	Maximum *Water* Concentration @ Actual Concrete Concentation	*Ground-*water DCGL @ 25 mrem/yr	*Groundwater* Dose at Actual Concrete Concentration
Volumetric Contamination	pCi/L	pCi/g	pCi/L	pCi/L	mrem/yr
		Total	**0.00E+00**	15	**0.00E+00**

Discharge Tunnel
Future Groundwater Dose Calculation

H. Pu-238/240

Facility Area	Maximum Water Concentration @ 1 pCi/g Concrete Concentation	Actual Concrete Concen-tration	Maximum Water Concentration @ Actual Concrete Concentation	Ground-water DCGL @ 25 mrem/yr	Groundwater Dose at Actual Concrete Concentration
Volumetric Contamination	pCi/L	pCi/g	pCi/L	pCi/L	mrem/yr
		Total	**0.00E+00**	13.6	**0.00E+00**

Discharge Tunnel
Future Groundwater Dose Calculation

I. Am-241

Facility Area	Maximum Water Concentration @ 1 pCi/g Concrete Concentation	Average Actual Concrete Concen-tration (Scan ratio)	Maximum Water Concentration @ Actual Concrete Concentation	Ground-water DCGL @ 25 mrem/yr	Groundwater Dose at Actual Concrete Concentration
Volumetric Contamination	pCi/L	pCi/g	pCi/L	pCi/L	mrem/yr
Discharge Tunnel 1 Floor	3.64E-02	0.00E+00	0.00E+00		0.00E+00
Discharge Tunnel 1 West Wall	3.23E-02	1.07E-01	3.46E-03		6.56E-03
Discharge Tunnel 1 East & North Wall	3.30E-02	5.53E-03	1.82E-04		3.45E-04
Discharge Tunnel 1 Ceiling	2.50E-02	0.00E+00	0.00E+00		0.00E+00
Discharge Tunnel 2 Floor	2.35E-02	0.00E+00	0.00E+00		0.00E+00
Discharge Tunnel 2 West Wall	2.11E-02	0.00E+00	0.00E+00		0.00E+00
Discharge Tunnel 2 East & North Wall	2.13E-02	0.00E+00	0.00E+00		0.00E+00
Discharge Tunnel 2 Ceiling	2.35E-02	0.00E+00	0.00E+00		0.00E+00
		Total	**3.65E-03**	13	**6.90E-03**

Discharge Tunnel
Future Groundwater Dose Calculation

I. Am-241									Concrete Density@150 lb/ft3 (g/m3) =				2.4E+06
Depth of Contamination (m)	Width (m)	Length (m)	Volume (m3)	Surface Area/ Volume (1/m)	Total Weight of Concrete (g)	Curies at 1 pCi/g Unit Activity	Diffus-ion Co-efficient (cm2/s)	Cumu-lative Frac-tional Release	Maximum Curies Released at 1 pCi/g Activity (Ci)	Retard-ation Factor	Build-up Factor	Containme nt Water Volume	Max Water Concen-tration @ 1 pCi/g (pCi/L)
Discharge Tunnel 1 Floor													
0.05	3.66	123.44	22.94	19.69	5.5E+07	5.5E-05	5.0E-13	8.82E-04	4.86E-08	1	1	1.3E+06	3.64E-02
Discharge Tunnel 1 West Wall													
0.05	4.72	84.73	20.34	19.69	4.9E+07	4.9E-05	5.0E-13	8.82E-04	4.31E-08	1	1	1.3E+06	3.23E-02
Discharge Tunnel 1East & North Wall													
0.05	4.72	86.56	20.78	19.69	5.0E+07	5.0E-05	5.0E-13	8.82E-04	4.40E-08	1	1	1.3E+06	3.30E-02
Discharge Tunnel 1 Ceiling													
0.05	3.66	84.73	15.74	19.69	3.8E+07	3.8E-05	5.0E-13	8.82E-04	3.33E-08	1	1	1.3E+06	2.50E-02
Discharge Tunnel 2 Floor													
0.05	5.49	123.44	34.40	19.69	8.3E+07	8.3E-05	5.0E-13	8.82E-04	7.29E-08	1	1	3.1E+06	2.35E-02
Discharge Tunnel 2 West Wall													
0.05	4.72	128.93	30.94	19.69	7.4E+07	7.4E-05	5.0E-13	8.82E-04	6.55E-08	1	1	3.1E+06	2.11E-02
Discharge Tunnel 2 East & North Wall													
0.05	4.72	129.84	31.16	19.69	7.5E+07	7.5E-05	5.0E-13	8.82E-04	6.60E-08	1	1	3.1E+06	2.13E-02
Discharge Tunnel 2 Ceiling													
0.05	5.49	123.44	34.40	19.69	8.3E+07	8.3E-05	5.0E-13	8.82E-04	7.29E-08	1	1	3.1E+06	2.35E-02

Discharge Tunnel
Future Groundwater Dose Calculation

J. Ni-63

Facility Area	Maximum Water Concentration @ 1 pCi/g Concrete Concentation	Actual Concrete Concen-tration	Maximum Water Concentration @ Actual Concrete Concentation	Ground-water DCGL @ 25 mrem/yr	Groundwater Dose at Actual Concrete Concentration
Volumetric Contamination	pCi/L	pCi/g	pCi/L	pCi/L	mrem/yr
		0.00	0.00E+00		
		0.00	0.00E+00		
		0.00	0.00E+00		
		Total	**0.00E+00**	31,500	**0.00E+00**

Discharge Tunnel
Future Groundwater Dose Calculation

I. Cm-243/244

Facility Area	Maximum Water Concentration @ 1 pCi/g Concrete Concentation	Average Actual Concrete Concen-tration (Scan ratio)	Maximum Water Concentration @ Actual Concrete Concentation	Ground-water DCGL @ 25 mrem/yr	Groundwater Dose at Actual Concrete Concentration
Volumetric Contamination	pCi/L	pCi/g	pCi/L	pCi/L	mrem/yr
		0.00	0.00E+00		
		0.00	0.00E+00		
		0.00	0.00E+00		
		Total	**0.00E+00**	19.4	**0.00E+00**

Discharge Tunnel
Future Groundwater Dose Calculation

I. C-14

Facility Area	Maximum Water Concentration @ 1 pCi/g Concrete Concentation	Average Actual Concrete Concen-tration (Scan ratio)	Maximum Water Concentratio n @ Actual Concrete Concentation	Ground-water DCGL @ 25 mrem/yr	Groundwater Dose at Actual Concrete Concentration
Volumetric Contamination	pCi/L	pCi/g	pCi/L	pCi/L	mrem/yr
Discharge Tunnel 1 Floor	1.17E+00	0.00E+00	0.00E+00		0.00E+00
Discharge Tunnel 1 West Wall	1.04E+00	1.44E+00	1.50E+00		4.16E-03
Discharge Tunnel 1 East & North Wall	1.06E+00	0.00E+00	0.00E+00		0.00E+00
Discharge Tunnel 1 Ceiling	8.06E-01	0.00E+00	0.00E+00		0.00E+00
Discharge Tunnel 2 Floor	7.57E-01	0.00E+00	0.00E+00		0.00E+00
Discharge Tunnel 2 West Wall	6.81E-01	0.00E+00	0.00E+00		0.00E+00
Discharge Tunnel 2 East & North Wall	6.85E-01	0.00E+00	0.00E+00		0.00E+00
Discharge Tunnel 2 Ceiling	7.57E-01	0.00E+00	0.00E+00		0.00E+00
		Total	**1.50E+00**	9,010	**4.16E-03**

Discharge Tunnel
Future Groundwater Dose Calculation

I. C-14													Concrete Density@150 lb/ft3 (g/m3) = 2.4E+06
Depth of Contamination (m)	Width (m)	Length (m)	Volume (m3)	Surface Area/ Volume (1/m)	Total Weight of Concrete (g)	Curies at 1 pCi/g Unit Activity	Diffus-ion Co-efficient (cm2/s)	Cumu-lative Frac-tional Release	Maximum Curies Released at 1 pCi/g Activity (Ci)	Retard-ation Factor	Build-up Factor	Containme nt Water Volume	Max Water Concen-tration @ 1 pCi/g (pCi/L)
Discharge Tunnel 1 Floor													
0.05	3.66	123.44	22.94	19.69	5.5E+07	5.5E-05	5.2E-10	2.85E-02	1.57E-06	1	1	1.3E+06	1.17E+00
Discharge Tunnel 1 West Wall													
0.05	4.72	84.73	20.34	19.69	4.9E+07	4.9E-05	5.2E-10	2.85E-02	1.39E-06	1	1	1.3E+06	1.04E+00
Discharge Tunnel 1East & North Wall													
0.05	4.72	86.56	20.78	19.69	5.0E+07	5.0E-05	5.2E-10	2.85E-02	1.42E-06	1	1	1.3E+06	1.06E+00
Discharge Tunnel 1 Ceiling													
0.05	3.66	84.73	15.74	19.69	3.8E+07	3.8E-05	5.2E-10	2.85E-02	1.08E-06	1	1	1.3E+06	8.06E-01
Discharge Tunnel 2 Floor													
0.05	5.49	123.44	34.40	19.69	8.3E+07	8.3E-05	5.2E-10	2.85E-02	2.35E-06	1	1	3.1E+06	7.57E-01
Discharge Tunnel 2 West Wall													
0.05	4.72	128.93	30.94	19.69	7.4E+07	7.4E-05	5.2E-10	2.85E-02	2.11E-06	1	1	3.1E+06	6.81E-01
Discharge Tunnel 2 East & North Wall													
0.05	4.72	129.84	31.16	19.69	7.5E+07	7.5E-05	5.2E-10	2.85E-02	2.13E-06	1	1	3.1E+06	6.85E-01
Discharge Tunnel 2 Ceiling													
0.05	5.49	123.44	34.40	19.69	8.3E+07	8.3E-05	5.2E-10	2.85E-02	2.35E-06	1	1	3.1E+06	7.57E-01

Attachment 6

Discharge Tunnel Basement Fill Model Data Spreadsheet

Compilation of Discharge Tunnel #1 Concrete Core (CC) Samples				
Radionuclide	Average of Floor Core Samples	Average of West Wall Core Samples	Average of Center & North Wall Core Samples	Average of Ceiling Core Samples
	pCi/g	pCi/g	pCi/g	pCi/g
H-3		2.68E+00	2.22E+00	
C-14		1.44E+00		
Mn-54				
Fe-55				
Co-60	3.41E-02	9.11E-01	9.30E-02	
Ni-63				
Sr-90	9.87E-03	5.30E-03	1.26E-03	
Nb-94				
Tc-99				
Ag-108m				
Cs-134				
Cs-137	2.83E-01	6.04E-01	2.67E-01	2.00E-02
Eu-152				
Eu-154				
Eu-155				
Pu-238				
Pu-239				
Pu-241				
Am-241		1.07E-01	5.53E-03	
Cm-243				

Notes:

1. **Sample Results in Italic Font are <Detectable Activity (i.e. < 2sigma error)**
2. **Sample Results that are < Detectable Activity are shown as reported values**
3. **N/A - Samples not analyzed for these radionuclides**
4. **Bold Font Value used in Calculation**

Discharge Tunnel 1 Floor Core Bore Samples											
Radio-nuclide	5502-0001-010-C1C				5502-0001-005-C1C				Average of the 1st Sample	Average of the 1st two Samples	Average of All Samples
	5502-0001-010-C1C-01 (0-2")	5502-0001-010-C1C-02 (2-4")	5502-0001-010-C2C-03 (20-22")	5502-0001-010-C2C-04 (22-24")	5502-0001-005-C1C-01 (0-2")	5502-0001-005-C1C-02 (2-4")	5502-0001-005-C2C-03 (20-22")	5502-0001-005-C2C-04 (22-24")			
	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g
H-3	-0.23	-0.07	0.14	-0.08	0.63	0.40	1.09	0.60	<2 Sig	<2 Sig	<2 Sig
C-14	-0.23	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2 Sig	<2 Sig	<2 Sig
Mn-54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe-55	-0.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2 Sig	<2 Sig	<2 Sig
Co-60	0.05	0.01	0.00	0.00	0.02	0.03	0.02	0.03	**0.03**	<2 Sig	<2 Sig
Ni-63	-0.08	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2 Sig	<2 Sig	<2 Sig
Sr-90	0.01	0.00	0.01	0.00	0.01	0.00	0.00	-0.01	**0.01**	<2 Sig	<2 Sig
Nb-94	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tc-99	-0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2 Sig	<2 Sig	<2 Sig
Ag-108m	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cs-134	0.00	0.02	0.00	0.03	0.05	0.03	0.01	0.03	<2 Sig	<2 Sig	<2 Sig
Cs-137	0.24	0.06	0.00	-0.01	0.32	0.01	-0.01	0.03	**0.28**	<2 Sig	<2 Sig
Eu-152	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eu-154	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eu-155	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pu-238	0.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2 Sig	<2 Sig	<2 Sig
Pu-239	0.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2 Sig	<2 Sig	<2 Sig
Pu-241	1.42	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2 Sig	<2 Sig	<2 Sig
Am-241	-0.01	N/A	0.03	0.02	-0.01	0.04	0.01	0.02	-0.01	0.01	0.01
Cm-243	0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2 Sig	<2 Sig	<2 Sig

Discharge Tunnel 1 West Wall Core Bore Samples										
Radio-nuclide	5502-0002-021-IC					5502-0002-022-IC				
	5502-0002-021-IC-01 (0-2")	5502-0002-021-IC-02 (2-4 1/2")	5502-0002-021-IC-03 (4 1/2-6 1/2")	5502-0002-021-IC-04 (6 1/2-8 1/2")	5502-0002-021-IC-05 (8 1/2-11")	5502-0002-022-IC-01 (0-2")	5502-0002-022-IC-02 (2-4")	5502-0002-022-IC-03 (4-6")	5502-0002-022-IC-04 (6-8")	5502-0002-022-IC-05 (8-11")
	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g
H-3	-1.40	-0.05	2.07	0.38	-1.85	12.70	-0.43	1.47	1.84	0.91
C-14	N/A	N/A	N/A	N/A	N/A	1.44	N/A	N/A	N/A	N/A
Mn-54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe-55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Co-60	0.68	0.00	0.01	0.02	0.00	2.83	0.00	0.01	-0.01	0.00
Ni-63	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr-90	0.00	-0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nb-94	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tc-99	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ag-108m	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cs-134	0.02	0.00	0.01	0.01	0.00	0.03	0.02	0.01	0.01	0.05
Cs-137	0.94	0.01	0.01	0.00	0.01	1.01	0.00	-0.01	0.00	-0.03
Eu-152	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eu-154	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eu-155	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pu-238	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pu-239	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pu-241	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Am-241	0.00	0.00	0.01	0.01	0.03	0.24	0.06	-0.02	-0.03	0.03
Cm-243	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Discharge Tunnel 1 West Wall Core Bore Samples												
Radio-nuclide	5502-0002-023-IC					5502-0001-009-C1C				Average of the 1st Sample	Average of 1st two Samples	Average of All Samples
	5502-0002-023-IC-01 (0-2")	5502-0002-023-IC-02 (2-4")	5502-0002-023-IC-03 (4-7")	5502-0002-023-IC-04 (7-8½")	5502-0002-023-IC-05 (8½-11")	5502-0001-009-C1C-01 (0-2")	5502-0001-009-C1C-02 (2-4")	5502-0001-009-C2C-03 (20-22")	5502-0001-009-C2C-04 (22-24")			
	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g
H-3	[illegible]	[illegible]	1.54	0.05	0.87	-1.21	-1.36	-1.18	0.32	**2.68**	1.23	0.59
C-14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**1.44**	1.44	1.44
Mn-54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe-55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Co-60	0.15	-0.01	0.01	-0.01	0.01	-0.01	0.01	0.02	0.01	**0.91**	0.46	0.20
Ni-63	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr-90	-0.01	-0.01	0.00	0.00	0.00	0.02	0.00	0.00	0.02	**0.01**	0.00	0.00
Nb-94	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tc-99	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ag-108m	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cs-134	[illegible]	[illegible]	0.05	0.02	0.03	0.03	0.02	0.02	0.02	<2 Sig	<2 Sig	<2 Sig
Cs-137	0.32	[illegible]	0.00	0.01	0.01	0.15	0.00	0.00	-0.01	**0.60**	0.30	0.13
Eu-152	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eu-154	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eu-155	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pu-238	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pu-239	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pu-241	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Am-241	[illegible]	[illegible]	0.04	0.00	-0.01	0.02	-0.05	0.04	0.10	**0.11**	0.07	0.04
Cm-243	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Discharge Tunnel 1 Center (East) and North Wall Core Bore Samples												
Radio-nuclide	5502-0002-024-IC					5502-0002-007-C1C				Average of 1st Samples	Average of the 1st two Samples	Average of All Samples
	5502-0002-024-IC-01 (0-2")	5502-0002-024-IC-02 (2-4")	5502-0002-024-IC-03 (4-6")	5502-0002-024-IC-04 (6-8")	5502-0002-024-IC-05 (8-10")	5502-0002-007-C1C-01 (0-2")	5502-0002-007-02 (2-4")	5502-0002-007-C2C-03 (20-22")	5502-0002-007-C2C-04 (22-24")			
	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g
H-3	2.96	0.59	0.78	2.30	12.40	0.55	0.51	0.83	-0.07	1.30	0.92	**2.22**
C-14	-0.10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2 Sig	<2 Sig	<2 Sig
Mn-54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe-55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Co-60	0.19	0.00	-0.01	-0.01	0.00	0.00	-0.01	0.02	0.00	**0.09**	0.04	0.02
Ni-63	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr-90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.01	0.00	0.00	**0.00**
Nb-94	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tc-99	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ag-108m	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cs-134	0.00	0.00	0.00	0.01	0.01	0.01	0.05	0.00	0.00	<2 Sig	<2 Sig	<2 Sig
Cs-137	0.34	-0.02	0.00	0.00	0.00	0.19	0.01	0.01	0.37	**0.27**	0.13	0.10
Eu-152	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eu-154	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eu-155	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pu-238	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pu-239	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pu-241	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Am-241	0.04	0.00	0.01	0.01	0.02	-0.04	0.02	-0.01	0.01	0.00	**0.01**	0.00
Cm-243	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Discharge Tunnel 1 Ceiling Core Bore Samples										
Radio-nuclide	5502-0000-017-C					5502-0000-019-C				
	5502-0000-017-C-1C-01	5502-0000-017-C-1C-02	5502-0000-017-C-2C-03	5502-0000-017-C-4C-04	5502-0000-017-C-4C-05	5502-0000-019-C-1C-01	5502-0000-019-C-1C-02	5502-0000-017-C-2C-03	5502-0000-019-C-4C-04	5502-0000-017-C-4C-05
	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g
H-3	2.05	0.20	0.11	0.07	-1.12	2.40	0.83	1.44	0.14	1.36
C-14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.17
Mn-54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe-55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.45
Co-60	0.02	-0.01	0.01	-0.01	0.01	0.01	0.01	0.00	-0.01	0.00
Ni-63	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr-90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nb-94	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tc-99	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.01
Ag-108m	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cs-134	0.03	0.00	0.00	0.02	0.03	0.04	0.02	0.00	-0.01	0.04
Cs-137	0.01	0.00	0.01	-0.01	0.00	0.01	0.00	0.00	-0.01	0.00
Eu-152	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eu-154	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eu-155	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pu-238	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00
Pu-239	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00
Pu-241	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.01
Am-241	0.05	0.01	-0.02	0.01	-0.08	0.01	0.07	-0.02	0.02	0.00
Cm-243	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00

Discharge Tunnel 1 Ceiling Core Bore Samples								
Radio-nuclide	5502-0000-015-C					Average of 1st Samples	Average of the 1st two Samples	Average of All Samples
	Ceiling 5502-0000-015-C-1C-01	5502-0000-015-C-1C-02	5502-0000-015-C-2C-03	5502-0000-015-C-3C-04	5502-0000-015-C-3C-05			
	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g
H-3	-1.30	-0.10	0.07	-0.26	-0.83	<2 Sig	<2 Sig	<2 Sig
C-14	N/A	N/A	N/A	N/A	N/A	<2 Sig	<2 Sig	<2 Sig
Mn-54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe-55	N/A	N/A	N/A	N/A	N/A	<2 Sig	<2 Sig	<2 Sig
Co-60	-0.01	0.01	0.02	-0.01	-0.01	<2 Sig	<2 Sig	<2 Sig
Ni-63	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr-90	0.00	0.00	0.00	0.00	0.00	<2 Sig	<2 Sig	<2 Sig
Nb-94	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tc-99	N/A	N/A	N/A	N/A	N/A	<2 Sig	<2 Sig	<2 Sig
Ag-108m	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cs-134	0.04	0.01	0.01	0.00	0.03	<2 Sig	<2 Sig	<2 Sig
Cs-137	**0.04**	0.01	0.02	-0.01	0.00	**0.02**	0.02	0.01
Eu-152	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eu-154	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eu-155	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pu-238	N/A	N/A	N/A	N/A	N/A	<2 Sig	<2 Sig	<2 Sig
Pu-239	N/A	N/A	N/A	N/A	N/A	<2 Sig	<2 Sig	<2 Sig
Pu-241	N/A	N/A	N/A	N/A	N/A	<2 Sig	<2 Sig	<2 Sig
Am-241	0.01	0.00	0.03	-0.01	0.00	<2 Sig	<2 Sig	<2 Sig
Cm-243	N/A	N/A	N/A	N/A	N/A	<2 Sig	<2 Sig	<2 Sig

Core Sample Results

Discharge Tunnel #2

Compilation of Discharge Tunnel #2 Concrete Core (CC) Samples			
Radionuclide	Average of Floor Core Samples	Average of East & North Wall Core Samples	Average of Ceiling Core Samples
	pCi/g	pCi/g	pCi/g
H-3		2.59E+00	
C-14			
Mn-54			
Fe-55	6.26E+00		
Co-60		4.13E-02	
Ni-63			
Sr-90	5.33E-03		
Nb-94			
Tc-99			
Ag-108m			
Cs-134			
Cs-137	6.73E-02	7.77E-02	
Eu-152			
Eu-154			
Eu-155			
Pu-238			
Pu-239			
Pu-241			
Am-241			
Cm-243			

Notes:

1. **Sample Results in Italic Font are <Detectable Activity (i.e. < 2sigma error)**
2. **Sample Results that are < Detectable Activity are shown as reported values**
3. **N/A - Samples not analyzed for these radionuclides**
4. **Bold Font Value used in Calculation**

Discharge Tunnel 2 Floor Core Bore Samples

Radio-nuclide	5502-0002-006-C1C				5502-0002-008-C1C				Average of all samples	Average of the 1st Sample	Average of 1 and 2 Samples
	5502-0002-006-C1C-01 (0-2")	5502-0002-006-C1C-02 (2-4")	5502-0002-006-C2C-03 (20-22")	5502-0002-006-C2C-04 (22-24")	5502-0002-008-C1C-01 (0-2")	5502-0002-008-C1C-02 (2-4")	5502-0002-008-C2C-03 (20-22")	5502-0002-008-C2C-04 (22-24")			
	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g
H-3	1.53	0.60	0.65	1.42	-0.69	0.13	-0.40	0.89	<2 Sig	<2 Sig	<2 Sig
C-14	-0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2 Sig	<2 Sig	<2 Sig
Mn-54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe-55	6.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**6.26**	6.26	6.26
Co-60	0.00	0.01	-0.01	0.01	0.01	0.00	-0.01	0.01	<2 Sig	<2 Sig	<2 Sig
Ni-63	-0.51	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2 Sig	<2 Sig	<2 Sig
Sr-90	0.01	0.00	-0.01	0.00	0.00	0.01	0.00	0.01	0.00	0.01	**0.01**
Nb-94	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tc-99	-0.19	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2 Sig	<2 Sig	<2 Sig
Ag-108m	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cs-134	0.00	0.03	0.00	0.02	0.02	0.02	0.04	0.02	<2 Sig	<2 Sig	<2 Sig
Cs-137	0.13	0.05	0.00	-0.01	0.00	-0.01	-0.01	0.03	0.02	**0.07**	0.04
Eu-152	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eu-154	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eu-155	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pu-238	0.04	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2 Sig	<2 Sig	<2 Sig
Pu-239	0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2 Sig	<2 Sig	<2 Sig
Pu-241	0.03	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2 Sig	<2 Sig	<2 Sig
Am-241	-0.01	0.05	-0.02	0.06	-0.04	0.01	0.00	0.03	<2 Sig	<2 Sig	<2 Sig
Cm-243	0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2 Sig	<2 Sig	<2 Sig

Discharge Tunnel 2 East and North Walls Core Bore Samples

Radio-nuclide	5502-0002-001-C1C		5502-0002-002-C1C		5502-0002-002-C3C		5502-0002-003-C1C		5502-0002-003-C3C	
	5502-0002-001-C1C-01 (0-1")	5502-0002-001-C1C-02 (1-2")	5502-0002-002-C1C-01 (0-1")	5502-0002-002-C1C-02 (1-2")	5502-0002-002-C3C-01 (22-24")	5502-0002-002-C3C-02 (20-22")	5502-0002-003-C1C-01 (0-1")	5502-0002-003-C1C-02 (1-2")	5502-0002-003-C3C-01 (22-24")	5502-0002-003-C3C-02 (20-22")
	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g
H-3	0.70	1.17	0.61	0.74	3.98	2.48	0.57	1.58	2.33	2.42
C-14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mn-54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe-55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Co-60	0.00	0.01	0.10	0.01	0.00	0.00	0.13	-0.01	0.00	0.00
Ni-63	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr-90	0.01	0.00	0.00	-0.04	-0.02	0.00	0.05	-0.01	0.05	-0.01
Nb-94	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tc-99	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ag-108m	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cs-134	0.01	0.02	0.03	0.01	0.01	0.02	0.02	0.00	0.02	0.03
Cs-137	0.10	0.00	0.14	0.00	-0.01	-0.01	0.20	0.00	-0.01	0.00
Eu-152	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eu-154	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eu-155	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pu-238	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pu-239	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pu-241	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Am-241	0.00	0.03	-0.18	0.00	0.03	0.02	0.13	-0.03	-0.03	-0.01
Cm-243	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Core Sample Results

Discharge Tunnel 2 East and North Walls Core Bore Samples

Radio-nuclide	5502-0002-004-C1C		5502-0002-004-C3C		Average of all samples	Average of the 1st Sample	Average of last 2 Deep Samples
	5502-0002-004-C1C-01 (0-1")	5502-0002-004-C1C-02 (1-2")	5502-0002-004-C3C-01 (22-24")	5502-0002-004-C3C-02 (20-22")			
	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g
H-3	0.54	1.35	1.82	2.52	1.63	1.51	**2.59**
C-14	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mn-54	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe-55	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Co-60	0.05	0.02	0.01	-0.01	0.02	**0.04**	0.00
Ni-63	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr-90	0.04	0.01	0.01	0.00	<2 Sig	<2 Sig	<2 Sig
Nb-94	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tc-99	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ag-108m	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cs-134	0.02	0.01	0.03	0.04	<2 Sig	<2 Sig	<2 Sig
Cs-137	0.13	0.00	0.01	0.00	0.04	**0.08**	0.00
Eu-152	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eu-154	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eu-155	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pu-238	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pu-239	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pu-241	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Am-241	0.01	0.15	0.00	-0.09	<2 Sig	<2 Sig	<2 Sig
Cm-243	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Core Sample Results

Discharge Tunnel #2

Discharge Tunnel 2 Ceiling Core Bore Samples										
Radio-nuclide	5502-0000-016-C					5502-0000-018-C				
	5502-0000-0016-C-1C-01	5502-0000-016-C-1C-02	5502-0000-016-C-3C-03	5502-0000-016-C-4C-04	5502-0000-016-C-4C-05	5502-0000-018-C-1C-01	5502-0000-018-C-2C-02	5502-0000-018-C-5C-03	5502-0000-018-C-8C-04	5502-0000-018-C-8C-05
	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g
H-3	-0.39	0.83	-0.25	-0.50	0.47	-0.35	0.69	0.70	0.21	-0.04
C-14	N/A	N/A	N/A	N/A	0.09	N/A	N/A	N/A	N/A	N/A
Mn-54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe-55	N/A	N/A	N/A	N/A	-1.80	N/A	N/A	N/A	N/A	N/A
Co-60	-0.02	-0.01	0.00	0.00	-0.01	-0.02	0.01	0.00	0.00	0.00
Ni-63	N/A	N/A	N/A	N/A	-0.35	N/A	N/A	N/A	N/A	N/A
Sr-90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nb-94	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tc-99	N/A	N/A	N/A	N/A	0.14	N/A	N/A	N/A	N/A	N/A
Ag-108m	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cs-134	0.02	0.01	0.01	0.02	0.02	0.00	0.03	0.02	0.04	0.03
Cs-137	0.01	0.00	0.02	0.01	0.01	0.01	0.00	0.00	0.00	-0.01
Eu-152	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eu-154	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eu-155	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pu-238	N/A	N/A	N/A	N/A	0.00	N/A	N/A	N/A	N/A	N/A
Pu-239	N/A	N/A	N/A	N/A	0.00	N/A	N/A	N/A	N/A	N/A
Pu-241	N/A	N/A	N/A	N/A	-0.35	N/A	N/A	N/A	N/A	N/A
Am-241	0.03	0.01	-0.01	0.02	0.01	-0.01	-0.02	0.01	0.07	-0.10
Cm-243	N/A	N/A	N/A	N/A	0.01	N/A	N/A	N/A	N/A	N/A

Core Sample Results

Discharge Tunnel #2

Discharge Tunnel 2 Ceiling Core Bore Samples								
Radio-nuclide	5502-0000-020-C					Average of all samples	Average of the 1st Sample	Average of 1 and 2 Samples
	5502-0000-020-C-1C-01	5502-0000-020-C-1C-02	5502-0000-020-C-2C-03	5502-0000-020-C-3C-04	5502-0000-020-C-3C-05			
	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g
H-3	0.60	0.30	1.64	0.84	1.86	<2 Sig	<2 Sig	<2 Sig
C-14	N/A	N/A	N/A	N/A	N/A	<2 Sig	<2 Sig	<2 Sig
Mn-54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe-55	N/A	N/A	N/A	N/A	N/A	<2 Sig	<2 Sig	<2 Sig
Co-60	0.01	0.00	0.00	-0.01	0.01	<2 Sig	<2 Sig	<2 Sig
Ni-63	N/A	N/A	N/A	N/A	N/A	<2 Sig	<2 Sig	<2 Sig
Sr-90	0.00	0.00	0.00	0.00	0.00	<2 Sig	<2 Sig	<2 Sig
Nb-94	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tc-99	N/A	N/A	N/A	N/A	N/A	<2 Sig	<2 Sig	<2 Sig
Ag-108m	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cs-134	0.03	0.01	0.01	0.00	0.01	<2 Sig	<2 Sig	<2 Sig
Cs-137	0.00	0.00	0.01	-0.01	0.01	<2 Sig	<2 Sig	<2 Sig
Eu-152	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eu-154	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eu-155	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pu-238	N/A	N/A	N/A	N/A	N/A	<2 Sig	<2 Sig	<2 Sig
Pu-239	N/A	N/A	N/A	N/A	N/A	<2 Sig	<2 Sig	<2 Sig
Pu-241	N/A	N/A	N/A	N/A	N/A	<2 Sig	<2 Sig	<2 Sig
Am-241	0.02	0.01	0.00	0.00	0.02	<2 Sig	<2 Sig	<2 Sig
Cm-243	N/A	N/A	N/A	N/A	N/A	<2 Sig	<2 Sig	<2 Sig

Discharge Tunnels Outlet Floor Core Bore Samples											
Radio-nuclide	5502-0000-001-C1C				5502-0000-002-C1C		5502-0000-003-C1C		Average of all samples	Average of the 1st Sample	Average of 1 and 2 Samples
	5502-0000-001-C1C-01 (0-2")	5502-0000-001-C1C-02 (2-4")	5502-0000-001-C1C-03 (4-6")	5502-0000-001-C1C-04 (6-8")	5502-0000-002-C1C-01 (0-2")	5502-0000-002-C1C-02 (2-4")	5502-0000-003-C1C-01 (0-2")	5502-0000-003-C1C-02 (2-4")			
	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g
H-3	*-1.17*	*-0.98*	*-1.26*	*1.19*	*-0.36*	*1.19*	*-0.21*	*1.20*	*<2 Sig*	*<2 Sig*	*<2 Sig*
C-14	N/A	N/A	N/A	N/A	0.04	N/A	N/A	N/A	*<2 Sig*	*<2 Sig*	*<2 Sig*
Mn-54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe-55	N/A	N/A	N/A	N/A	*-1.09*	N/A	N/A	N/A	*<2 Sig*	*<2 Sig*	*<2 Sig*
Co-60	*0.05*	*0.02*	*-0.01*	*0.02*	*0.03*	*0.01*	*0.03*	*0.00*	*<2 Sig*	*<2 Sig*	*<2 Sig*
Ni-63	N/A	N/A	N/A	N/A	*-0.90*	N/A	N/A	N/A	*<2 Sig*	*<2 Sig*	*<2 Sig*
Sr-90	**0.01**	**0.01**	*0.00*	*0.01*	*0.01*	*0.00*	*0.00*	*0.00*	3.15E-03	**5.16E-03**	3.62E-03
Nb-94	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tc-99	N/A	N/A	N/A	N/A	*-0.13*	N/A	N/A	N/A	*<2 Sig*	*<2 Sig*	*<2 Sig*
Ag-108m	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cs-134	*0.06*	*0.02*	*0.06*	*0.03*	*0.02*	*0.03*	*0.04*	*0.01*	*<2 Sig*	*<2 Sig*	*<2 Sig*
Cs-137	**0.15**	*0.01*	*0.01*	*0.01*	**0.15**	*-0.01*	**0.14**	*0.00*	5.80E-02	**1.48E-01**	7.44E-02
Eu-152	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eu-154	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eu-155	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pu-238	N/A	N/A	N/A	N/A	*0.01*	N/A	N/A	N/A	*<2 Sig*	*<2 Sig*	*<2 Sig*
Pu-239	N/A	N/A	N/A	N/A	*0.01*	N/A	N/A	N/A	*<2 Sig*	*<2 Sig*	*<2 Sig*
Pu-241	N/A	N/A	N/A	N/A	*1.62*	N/A	N/A	N/A	*<2 Sig*	*<2 Sig*	*<2 Sig*
Am-241	*0.01*	*0.01*	*0.01*	*-0.01*	*0.01*	*-0.01*	*0.02*	*0.09*	*<2 Sig*	*<2 Sig*	*<2 Sig*
Cm-243	N/A	N/A	N/A	N/A	*0.03*	N/A	N/A	N/A	*<2 Sig*	*<2 Sig*	*<2 Sig*

Notes:

1. **Sample Results in Italic Font are <Detectable Activity (i.e. < 2sigma error)**
2. **Sample Results that are < Detectable Activity are shown as reported values**
3. **N/A - Samples not analyzed for these radionuclides**
4. **Bold Font Value used in Calculation**

Discharge Tunnel 1 Sediment Data						
Radio-nuclide	5502-0001-009-S1S		Average of All Samples	DCGL for 8 mrem/yr	Dose in mrem/yr	Percent of Dose
	pCi/g		pCi/g	pCi/g	mrem	%
H-3	[illegible]		*-1.61*	131.84	-0.10	-208%
C-14	N/A		N/A	1.81		
Mn-54	N/A		N/A	5.57		
Fe-55	N/A		N/A	8,768.00		
Co-60	[illegible]		*0.01*	1.22	0.09	196%
Ni-63	N/A		N/A	231.36		
Sr-90	[illegible]		*0.01*	0.50	0.09	196%
Nb-94	N/A		N/A	2.28		
Tc-99	N/A		N/A	4.03		
Ag-108m	N/A		N/A	2.28		
Cs-134	[illegible]		*0.01*	1.49	0.03	60%
Cs-137	[illegible]		*-0.01*	2.53	-0.04	-92%
Eu-152	N/A		N/A	3.23		
Eu-154	N/A		N/A	2.97		
Eu-155	N/A		N/A	125.44		
Pu-238	N/A		N/A	9.47		
Pu-239	N/A		N/A	8.54		
Pu-241	N/A		N/A	278.40		
Am-241	[illegible]		*-0.03*	8.26	-0.02	-52%
Cm-243	N/A		N/A	9.28		
				Totals	0.05	100%

Notes:

1. **Sample Results in Italic Font are <Detectable Activity (i.e. < 2sigma error)**
2. **Sample Results that are < Detectable Activity are shown as reported values**
3. **N/A - Samples not analyzed for these radionuclides**
4. **Bold Font Value used in Calculation**

Discharge Tunnel 2 Sediment Data											
Radio-nuclide	5502-0002-006-1S	5502-0002-006-2S	5502-0002-008-1S	5502-0002-008-2S	5502-0002-002-S01	5502-0002-003-S01	5502-0002-004-S01	Average of All Samples	DCGL for 8 mrem/yr	Avg Dose in mrem/yr	Avg Sample Percent of Dose
	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	mrem	%
H-3	[illegible]	[illegible]	[illegible]	[illegible]	*1.04*	*0.84*	*1.44*	*0.60*	131.84	0.04	2%
C-14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.81		
Mn-54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5.57		
Fe-55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8,768.00		
Co-60	[illegible]	0.12	[illegible]	[illegible]	*0.05*	*-0.01*	*-0.02*	0.03	1.22	0.19	11%
Ni-63	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	231.36		
Sr-90	[illegible]	[illegible]	[illegible]	*0.02*	*0.01*	0.07	0.08	0.03	0.50	0.53	31%
Nb-94	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.28		
Tc-99	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4.03		
Ag-108m	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.28		
Cs-134	[illegible]	[illegible]	[illegible]	*0.04*	*0.06*	*0.01*	*0.02*	0.02	1.49	0.12	7%
Cs-137	[illegible]	0.92	[illegible]	0.79	*0.03*	*-0.01*	*0.02*	0.26	2.53	0.81	48%
Eu-152	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3.23		
Eu-154	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.97		
Eu-155	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	125.44		
Pu-238	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	9.47		
Pu-239	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8.54		
Pu-241	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	278.40		
Am-241	[illegible]	[illegible]	[illegible]	*0.07*	*0.05*	*0.09*	*-0.02*	*0.01*	8.26	0.01	1%
Cm-243	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	9.28		
									Totals	1.70	100%

"Intake Structure" Characterization Samples

Wall Samples	Wall Sample # 7000-0000-10					Wall Sample # 7000-0000-11				
	Inside to Outside					Inside to Outside				
Radio-nuclide	7000-010C-1C-01	7000-010C-1C-02	7000-010C-2C-03	7000-010C-3C-04	7000-010C-3C-05	7000-011C-1C-01	7000-011C-1C-02	7000-011C-2C-03	7000-011C-3C-04	7000-011C-3C-05
	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g
H-3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
C-14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mn-54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.01	N/A
Fe-55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Co-60	*0.00*	[illegible]	[illegible]	[illegible]	*0.00*	*-0.02*	*0.00*	*0.00*	*0.00*	*0.00*
Ni-63	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr-90	[illegible]	[illegible]	0.01	[illegible]	0.01	*0.00*	*0.00*	*-0.01*	[illegible]	*0.00*
Nb-94	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tc-99	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ag-108m	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cs-134	*0.00*	[illegible]	[illegible]	[illegible]	*0.01*	*0.00*	*0.03*	0.04	0.05	*0.01*
Cs-137	[illegible]	[illegible]	[illegible]	[illegible]	*0.01*	*0.00*	*0.01*	*-0.01*	*-0.01*	*-0.01*
Eu-152	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eu-154	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eu-155	N/A	N/A	N/A	0.04	N/A	N/A	N/A	N/A	N/A	*0.07*
Pu-238	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pu-239	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pu-241	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Am-241	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cm-243	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:

1. **Sample Results in Italic Font are <Detectable Activity (i.e. < 2sigma error)**
2. **Sample Results that are < Detectable Activity are shown as reported values**
3. **N/A - Samples not analyzed for these radionuclides**
4. **Bold Font Value used in Calculation**

"Intake Structure" Characterization Samples

Wall Samples	Sample # 7000-0000-12				Sample # 7000-0000-13				Sample # 7000-0000-16			
	Inside to Outside				Inside to Outside				Inside to Outside			
Radio-nuclide	7000-012-C1C-01	7000-012-C1C-02	7000-012-C4C-03	7000-012-C4C-04	7000-013-C1C-01	7000-013-C1C-02	7000-013-C2C-03	7000-013-C2C-04	7000-016-C1C-01	7000-016-C1C-02	7000-016-C3C-03	7000-016-C3C-04
	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g
H-3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
C-14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mn-54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe-55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Co-60	[illegible]	[illegible]	[illegible]	[illegible]	-0.01	0.00	-0.01	0.02	0.00	0.02	[illegible]	[illegible]
Ni-63	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr-90	[illegible]	[illegible]	[illegible]	[illegible]	0.00	0.00	0.00	0.00	0.00	0.01	0.01	[illegible]
Nb-94	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tc-99	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ag-108m	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cs-134	[illegible]	[illegible]	0.02	[illegible]	0.01	0.00	0.02	0.04	0.03	0.01	[illegible]	[illegible]
Cs-137	[illegible]	[illegible]	[illegible]	[illegible]	0.00	0.00	-0.01	0.02	-0.01	-0.01	-0.02	[illegible]
Eu-152	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eu-154	N/A	N/A	N/A	N/A	N/A	N/A	0.06	N/A	N/A	N/A	N/A	N/A
Eu-155	0.05	N/A	N/A	N/A	N/A	N/A	0.07	N/A	N/A	N/A	N/A	N/A
Pu-238	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pu-239	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pu-241	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Am-241	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cm-243	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

"Intake Structure" Characterization Samples

Wall Samples	Sample # 7000-0000-18				Wall Sample		
	Inside to Outside				Average Concentrations		
Radio-nuclide	7000-018-C1C-01	7000-018-C1C-02	7000-018-C3C-03	7000-018-C3C-04	Average of 1st In/outside Samples	Avg 1st Two In/outside Samples	All Samples
	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g
H-3	N/A	N/A	N/A	N/A	*<2 Sig*	*<2 Sig*	*<2 Sig*
C-14	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mn-54	N/A	N/A	N/A	0.02	*<2 Sig*	*<2 Sig*	*<2 Sig*
Fe-55	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Co-60	0.00	[illegible]	[illegible]	0.00	-7.75E-04	1.44E-04	**2.92E-04**
Ni-63	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr-90	0.01	[illegible]	[illegible]	0.01	**3.72E-03**	1.75E-03	1.53E-03
Nb-94	N/A	N/A	N/A	N/A	*<2 Sig*	*<2 Sig*	*<2 Sig*
Tc-99	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ag-108m	N/A	N/A	N/A	N/A	*<2 Sig*	*<2 Sig*	*<2 Sig*
Cs-134	0.00	[illegible]	[illegible]	0.02	1.23E-02	1.54E-02	**1.59E-02**
Cs-137	0.00	0.00	[illegible]	0.00	*<2 Sig*	*<2 Sig*	*<2 Sig*
Eu-152	N/A	N/A	N/A	N/A	*<2 Sig*	*<2 Sig*	*<2 Sig*
Eu-154	N/A	N/A	N/A	N/A	*<2 Sig*	*<2 Sig*	*<2 Sig*
Eu-155	N/A	N/A	N/A	N/A	*<2 Sig*	*<2 Sig*	*<2 Sig*
Pu-238	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pu-239	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pu-241	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Am-241	N/A	N/A	N/A	N/A	*<2 Sig*	*<2 Sig*	*<2 Sig*
Cm-243	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Intake Structure Characterization Samples

Floor Samples	Floor Samples							
	# 7000-0000-14		# 7000-0000-15		# 7000-0000-17		Sample Averages	
Radio-nuclide	7000-014-C1C-01	7000-014-C1C-02	7000-015-C1C-01	7000-015-C1C-02	7000-017-C1C-01	7000-017-C1C-02	Avg of 1st Inside Samples	Avg of 1st Two Inside Samples
pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g
H-3	<2 Sig	<2 Sig	<2 Sig	<2 Sig	<2 Sig	<2 Sig	<2 Sig	<2 Sig
C-14	N/A	N/A	<2 Sig	N/A	<2 Sig	N/A	<2 Sig	<2 Sig
Mn-54	<2 Sig	<2 Sig	<2 Sig	<2 Sig	<2 Sig	<2 Sig	<2 Sig	<2 Sig
Fe-55	N/A	N/A	<2 Sig	N/A	<2 Sig	N/A	<2 Sig	<2 Sig
Co-60	0.00	0.00	0.03	0.02	0.00	0.01	**8.94E-03**	8.65E-03
Ni-63	N/A	N/A	<2 Sig	N/A	<2 Sig	N/A	<2 Sig	<2 Sig
Sr-90	0.00	[illegible]	[illegible]	0.00	0.00	0.00	<2 Sig	<2 Sig
Nb-94	<2 Sig	<2 Sig	<2 Sig	<2 Sig	<2 Sig	<2 Sig	<2 Sig	<2 Sig
Tc-99	N/A	N/A	<2 Sig	N/A	0.19	N/A	<2 Sig	<2 Sig
Ag-108m	<2 Sig	<2 Sig	<2 Sig	<2 Sig	<2 Sig	<2 Sig	<2 Sig	<2 Sig
Cs-134	0.[illegible]	0.[illegible]	0.[illegible]	0.04	0.03	0.03	1.94E-02	**2.11E-02**
Cs-137	0.00	0.[illegible]	0.02	0.01	0.02	0.00	**1.59E-02**	1.14E-02
Eu-152	<2 Sig	<2 Sig	<2 Sig	<2 Sig	<2 Sig	<2 Sig	<2 Sig	<2 Sig
Eu-154	<2 Sig	<2 Sig	<2 Sig	<2 Sig	<2 Sig	<2 Sig	<2 Sig	<2 Sig
Eu-155	<2 Sig	<2 Sig	<2 Sig	<2 Sig	<2 Sig	<2 Sig	<2 Sig	<2 Sig
Pu-238	N/A	N/A	<2 Sig	N/A	<2 Sig	N/A	<2 Sig	<2 Sig
Pu-239	N/A	N/A	<2 Sig	N/A	<2 Sig	N/A	<2 Sig	<2 Sig
Pu-241	N/A	N/A	<2 Sig	N/A	<2 Sig	N/A	<2 Sig	<2 Sig
Am-241	<2 Sig	<2 Sig	<2 Sig	<2 Sig	<2 Sig	<2 Sig	<2 Sig	<2 Sig
Cm-243	N/A	N/A	<2 Sig	N/A	<2 Sig	N/A	<2 Sig	<2 Sig

Attachment 7

Discharge Tunnel Structures Dimensions

Screenwell Building
Remaining Concrete Volumes and Areas

Item No.	Description	Units	Value	Volume in cu ft	Volume in cu M	Surface Area in sq ft	Surface Area in sq M
1	The Screenwell has four intake bays. There is a floor, 5 walls to form the four bays and a back wall on the east end of the structure. The portion in the river was removed to 4 feet below the high mean water level. The bay walls and the east wall were removed to maintain the remaining structure 4 feet below the final grade surface.						
2	**Screenwell Floor, top is at el -18' 0"**						
3	Length along river	ft	64.67				
4	Width from river eastward	ft	58.25				
5	Depth of concrete pour	ft	4				
6	**Volume of Floor**	cu ft		**15,068**	**427**		
7	**Surface Area of Top of Floor and Sides**						
8	Length along river less the width of the 5 walls	ft	47.67				
9	Width from river eastward less the east wall	ft	55.25			2,634	245
10	Sides of floor surface area						
11	Length	ft	64.67			517	48
12	width	ft	58.25			466	43
13	Depth of concrete pour	ft	4				
14	**Surface Area of Top of Floor and Sides**					**3,617**	**336**
15	**Surface area of Bottom of Floor Below Water**						
16	Length along river	ft	64.67				
17	Width from river eastward	ft	58.25				
18	Depth of concrete pour	ft	4				
19	**Surface are of Bottom of Floor Below Water**					**3,767**	**350**
20	**East Wall of Screenwell Below Water**						
21	Volume of East Wall						
22	Length	ft	64.67				
23	Height to top of Groundwater at el +2	ft	20				
24	Thickness	ft	3				
24	**Volume of East Wall Below Water**			**3,903**	**111**		
26	**Surface Area of River Side of East Wall Below Water**						
27	Length less the width of the 5 walls, 4,3,3,3,4 ft	ft	47.67				
28	Height Below Water -18' to +2'	ft	20				
29	**Surface Area of River Side of East Wall Below Water**					**953**	**89**
30	**Surface Area of East Side of East Wall and Top Side Below Water**						
31	length	ft	64.67				
32	Height Below Water -18' to +2'	ft	20				
33	Width	ft	3				
34	Surface Area of East Side of East Wall Below Water					1,293	120

Screenwell Building
Remaining Concrete Volumes and Areas

Item No.	Description	Units	Value	Volume in cu ft	Volume in cu M	Surface Area in sq ft	Surface Area in sq M
35	Surface Area of the Top Side of the East Wall Below					195	18
36	**Surface Area of East Side of East Wall and Top Side Below Water**					**1,489**	**138**
37	**Walls, North to South**						
38	**Volume of North Outer Wall Below Water**						
39	Length	ft	63.67				
40	Height angled to 4 ft below grade	ft	15				
41	Thickness	ft	4				
42	**Volume of North Outer Wall Below Water**	cu ft		**3,820**	**108**		
43	**Surface Area of North Outer Wall Below Water**						
44	Height angled to 4 ft below grade and below the water	ft	15				
45	North Outer Wall northside below water	ft				955	89
46	North Outer Wall southside below water	ft				910	85
47	North outer wall top below water	ft	64.45			258	24
48	**Total Surface Area Below Water for the North outer wall**					**2,123**	**197**
49	**Volume of North Bay Wall Below Water**						
50	Length	ft	60.67				
51	Height angled to 4 ft below grade	ft	15				
52	Thickness	ft	3				
53	**Volume of North Bay Wall Below Water**	cu ft		**2,730**	**77**		
54	**Surface area of North Bay Wall Below Water**						
55	Height angled to 4 ft below grade and below the water	ft	15				
56	North Bay Wall northside below water	ft				910	85
57	North Bay Wall southside below water	ft				910	85
58	North Bay Wall Top Below Water	ft	64.45			193	18
59	**Total Surface Area of North Bay Wall Below Water**					**2,013**	**187**
60	**Volume of Center Bay Wall Below Water**						
61	Length	ft	60.67				
62	Height angled to 4 ft below grade	ft	15				
63	Thickness	ft	3				
64	**Volume of Center Bay Wall Below Water**	cu ft		**2,730**	**77**		
65	**Surface area of Center Bay Wall Below Water**						
66	Height angled to 4 ft below grade and below the water	ft	15				
67	Center Bay Wall northside below water	ft				910	85
68	Center Bay Wall southside below water	ft				910	85
69	Center Bay Wall Top Below Water	ft	64.45			193	18

Screenwell Building
Remaining Concrete Volumes and Areas

Item No.	Description	Units	Value	Volume in cu ft	Volume in cu M	Surface Area in sq ft	Surface Area in sq M
70	**Total Surface Area of Center Bay Wall Below Water**					**2,013**	**187**
71	**Volume of South Bay Wall Below Water**						
72	Length	ft	60.67				
73	Height angled to 4 ft below grade	ft	15				
74	Thickness	ft	3				
75	**Volume of South Bay Wall Below Water**	cu ft		**2,730**	**77**		
76	**Surface area of South Bay Wall Below Water**						
77	Height angled to 4 ft below grade and below the water	ft	15				
78	South Bay Wall northside below water	ft				910	85
79	South Bay Wall southside below water	ft				910	85
80	South Bay Wall Top Below Water	ft	64.45			193	18
81	**Total Surface Area of South Bay Wall Below Water**					**2,013**	**187**
82	**Volume of South Outer Wall Below Water**						
83	Length	ft	63.67				
84	Height angled to 4 ft below grade	ft	15				
85	Thickness	ft	4				
86	**Volume of South Outer Wall Below Water**	cu ft		**3,820**	**108**		
87	**Surface area of South Outer Wall Below Water**						
88	Height angled to 4 ft below grade and below the water	ft	15				
89	South Outer Wall northside below water	ft				910	85
90	South Outer Wall southside below water	ft				955	89
91	South outer wall top below water	ft	64.45			258	24
92	**Total Surface Area of South Outer Wall Below Water**					**2,123**	**197**
93	**Total Volume of Concrete Below Water**	**cu ft**		**34,802**			
94		**cu M**			**986**		
95	**Total Surface Area of Concrete Below Water**	**cu ft**				**20,112**	
96		**cu M**					**1,868**
	References:						
	16103-56001 S1 FC-41A						
	16103-56001 S2 FC-41B						
	16103-56001 S3 FC-41C						

Attachment 8

Discharge Tunnel Basement Fill Model Sample Data

Discharge Tunnel Basement Fill Model Sample Data Index

File Number	Sample Location Description	Sample Identification	CY ID
1	Discharge Tunnel 2	5502-002-001, 002, 003, 004, 002-S01, 003-S01, 004-S01	CY-031 2260
2	Discharge Tunnel	5502-0000-001, 002, 003, 015, 016, 017, 018, 019, 020, -0001-005, 006, 007, 008, 009, 0010	CY-034 2484
3	Discharge Tunnel 1 West Wall Concrete Core (CC)	5502-0002-021, 022, 023, 024	
4	Intake Structure	7000-0000-012, 013, 014, 015, 016, 017, 018	CY-034 2491
5	Intake Structure	7000-0000-10, 11	

Attachment 2
ISFSI Records Entry Form
(Page 1 of 1)

NUCLEAR PLANT RECORDS TRANSMITTAL		NPR USE ONLY CONTROL NO. j U.N. NO. 2260
DEPARTMENT OF ORIGIN **Site Closure**	RECORDS CLASSIFICATION (SEE INSTRUCTIONS): ☐ CONFIDENTIAL ☐ SAFEGUARDS ☐ QA RECORD	DATE: **5/31/06**
TFI #: **11.10**	TFI TITLE: **50.75g Release Records**	RETENTION (Ref. Attachment 1): **L(+)LP+10**

ISFSI: ☐ **Type 1 (Dual Storage)** ✓ **Type 2** ☐ **Type 3** (Ref. Attachment 1)

DESCRIPTION OF RECORDS (NOTE: USE MORE THAN ONE TRANSMITTAL IF REQUIRED)

Work Plan and Inspection Record, WPIR, 24265-000-GEN-5000-00137-000, Underslab Subsurface Soil Sampling, 2004 and 2005 Radiological Characterization Activity.

This submittal is only the following portion of this WPIR: Discharge Tunnel 1 and 2, Survey / Sampling Work Plan SSWP Number BCY-SSWP-04-10-001.

Search the database using the WPIR number in the title field to find indexing information on all other components of this WPIR.

Special Instructions for OD processing: Optical Character Recognition (OCR) Required? ☐ YES ✓ NO

RECORDS ENTERED BY (PRINT NAME): **AR Bejma/J. McCarthy**	SUPERVISOR/PERSON ENTERING RECORDS (Signature):

RECEIPT (BY NPR)

DATE: 5/31/06	RECORDS ARE AS DESCRIBED BY ORIGINATOR: ☒ YES ☐ NO
CONDITION OF RECORDS: ☒ GOOD ☐ OTHER (Describe Below)	
RECEIVED AND ACCEPTED BY (SIGNATURE):	TEMPORARY FILE LOCATION NO.: NPR

PROCESSING (By NPR, Except for Adding 'Alternative Storage Ref.' As Applicable)

DATE PROCESSED	ASSIGNED OD NUMBER	SIGNATURE OF NPR PROCESSING PERSONNEL	ALTERNATIVE STORAGE REFERENCE	
			LOCATION	INDEXING REF. (IF ANY)
5/31/06	CY-031			

Survey/Sampling Work Plan – SSWP

Revision 1

GENERAL SECTION

SSWP Number: BCY-SSWP-04-10-001

Survey Unit # : 5502-0001 and 0002

Type of Survey: Characterization

Area Description : Discharge Tunnels 1 and 2

DATA QUALITY OBJECTIVES (DQO)

1.0 STATE THE PROBLEM

The problem: Obtain additional characterization data in sediment and concrete to support final status survey (FSS) planning.

Stakeholders: The primary stakeholders interested in the answer to this problem are Connecticut Yankee, the CT Department of Environmental Protection (CTDEP) and the US Nuclear Regulatory Commission (USNRC).

The Planning Team: The planning team consisted of Site Closure Group (SCG) personnel. The primary decision maker for this plan will be the Site Release /Technical Support Lead with input from the RCRA Group.

Schedule: This project has an expected duration of 3 working days including drilling and sample collection.

Resources: The primary resources needed to determine the answer to the problem are two divers, one drill operator and two laborers, one health physics technician and one radiological engineer. Ancillary support will be needed from the on-site Count Room and offsite lab for sample preparation, gamma spectroscopy and Hard to Detect radionuclide analysis.

2.0 IDENTIFY THE DECISION

The following decision needs to be defined to address the stated problem.

Principal Study Question: Is the radiological data obtained from sample analysis sufficient to adequately characterize the survey area?

Alternate Actions: Alternative actions include obtaining additional samples, performing additional analyses at an off-site facility to confirm gamma spectroscopy results and to identify and quantify hard-to-detect (HTD) radionuclides, and no action.

The Decision: Determine that the radiological data adequately characterizes the survey area. Consider additional sampling as necessary under a separate addendum to this sampling plan.

3.0 IDENTIFY THE INPUTS TO THE DECISION

Information Needed: Measurements of sample media are needed to identify and determine the concentration of those radionuclides that could potentially be present in the sub-grade portion of the Discharge Tunnels at the time of final status survey. Information is needed in concrete to establish how much, if any, contamination of the outside walls has occurred due to groundwater flow and information on any sediment contamination in the recirculated discharge warming water that is returned to the Screenwell Building. The sample media is concrete obtained from four locations on the east wall in tunnel number 2 and sediment, if available from in front of the butterfly valve in the de-icing line.

Source of the Information: The new measurements will include collection and radionuclide-specific analysis of concrete wafers and sediment samples. The collection process will typically use either an electric drill or pneumatic drill for coring. Cores will be sliced into wafers for analysis. Analysis for hard-to-detect (HTD) radionuclides will be performed under this SSWP as an output of the decision process. All samples will be analyzed for gamma emitting radionuclides. No QC measurements are necessary

given the limited area of investigation, number of samples and the purpose of the survey (i.e., to collect characterization data).

Table 1 shows the required radionuclides for analysis and the necessary detection sensitivity for the analytical and measurement process. The sensitivity or minimum detectable concentration (MDC) is set at 4% of the base-case DCGL values listed in Table 6-4 and Table 6-1of the License Termination Plan (LTP). Note, the specified MDC is lower than 10% of the DCGL that is recommended by the Section 5.5 of the LTP for fixed measurements (fixed measurements include samples). However, the MDC is the same as the MDC specified in recent FSS sample plans designed to achieve a 10 mrem/year Total Effective Dose Equivalent (TEDE).

Table 1 – Analytic matrix. Includes radionuclide and Base Case DCGL from Table 6-4 and Table 6-1 of the LTP and the required sensitivity or MDC for analysis

Nuclide	Concrete $DCGL_{25}$ (pCi/g)	Concrete MDC (pCi/g)	Soil $DCGL_{25}$ (pCi/g)	Soil MDC (pCi/g)
H-3	9.05E+01	3.62E+00	4.12E+02	1.65E+01
C-14	2.05E+01	8.20E-01	5.66E+00	2.26E-01
Mn-54	5.51E+01	2.20E+00	1.74E+01	6.96E-01
Fe-55	8.96E+01	3.58E+00	2.74E+04	1.10E+03
Co-60	9.07E+01	3.63E+00	3.81E+00	1.52E-01
Ni-63	1.29E+02	5.16E+00	7.23E+02	2.89E+01
Sr-90	3.77E-01	1.51E-02	1.55E+00	6.20E-02
Nb-94	7.74E+00	3.10E-01	7.12E+00	2.85E-01
Tc-99	2.85E+01	1.14E+00	1.26E+01	5.04E-01
Ag-108m	2.59E+01	1.04E+00	7.14E+00	2.86E-01
Cs-134	3.21E+02	1.28E+01	4.67E+00	1.87E-01
Cs-137	6.45E+02	2.58E+01	7.91E+00	3.16E-01
Eu-152	2.27E+02	9.08E+00	1.01E+01	4.04E-01
Eu-154	1.94E+02	7.76E+00	9.29E+00	3.72E-01
Eu-155	9.53E+03	3.81E+02	3.92E+02	1.57E+01
Pu-238	1.14E+01	4.56E-01	2.96E+01	1.18E+00
Pu-239/240	1.00E+01	4.00E-01	2.67E+01	1.07E+00
Pu-241	1.49E+02	5.96E+00	8.70E+02	3.48E+01
Am-241	4.42E+00	1.77E-01	2.58E+01	1.03E+00
Cm-243/244	3.83E+00	1.53E-01	2.90E+01	1.16E+00

4.0 DEFINE THE BOUNDARIES OF THE SURVEY.

Boundaries of the survey: The focus of this SSWP will be to collect four concrete samples at predetermined locations in the east wall of Discharge Tunnel number 2 and a sediment sample, if available, from in front of the butterfly valve in the de-icing pipe in Discharge Tunnel number 1. (Refer to Attachment 1). All samples will be identified under a general building designator of 5502.

The general orientation of the sample measurement locations (SML) is shown in Attachment 1. The sample location may be moved slightly depending upon the condition of the location. Samples will be taken less than two feet above the water line. Additional sampling may be necessary to determine the need and amount of decontamination and remediation efforts.

Temporal boundaries: Sampling will normally be performed during dayshift.

Constraints: Constraints include water, poor lighting, wet surfaces and confined spaces.

5.0 DEVELOP A DECISION RULE

The following decisions rules have been developed to define a logical process for choosing among alternative actions for the principal study questions associated with this survey unit.

Decision Rule (1): If obstruction prevents further travel of the coring drill, determine if there is sufficient sample for analysis. Consider moving the SML location to obtain a new sample of sufficient quantity, otherwise stop sampling at this SML. Document conclusion of the decision in the Daily Survey Journal sheet.

Decision Rule (2): If all analyses meet the required sensitivity with no anomalous or suspect results (e.g., identification of a gamma-emitting radionuclide not contained in Table 1 and not attributable to natural radioactivity) then no further action is required under this SSWP. Otherwise, reanalyze sample or consider performing additional analyses for other hard-to-detect (HTD) radionuclides.

6.0 SPECIFY TOLERABLE LIMITS ON DECISION ERRORS

There are no limits on decision errors for characterization surveys.

7.0 OPTIMIZE DESIGN

Number of biased samples and locations: There are five biased SMLs for sampling under this SSWP as shown on Attachment 1. These SMLs were determined by the planning team based on the output of the data quality objectives performed under SSWP 04-10-001 and the Decommissioning Request for Proposal (CY-04-001).

DQO STEPS COMPLETE (signature signifies affirmative response)

R Hollenbeck , 10/25/04

SC Radiological Engineer Date

Survey/Sampling Work Plan – SSWP

Revision 1

GENERAL INSTRUCTIONS

1. Characterization activities will be performed under WP&IR number 000-MEC-5000-1088-000.
2. Cognizant engineers to review pictures and plant drawings of the area.
3. Sampling equipment and supplies will consist of some or all of the following; concrete coring drill and drill bits, new marinelli containers, tape and tamper-evident tape, trowels, hacksaw, marker and new plastic bags for preparing samples and packaging off-site samples. Other equipment may include utility knifes, poly sheeting, location marker paint and hand augers.
4. Ensure obstructions are removed to provide suitable access for equipment and personnel.
5. Sample locations should be identified or labeled when possible.
6. Samples will be obtained in accordance with RPM 5.1-3, *"Collection of Surface and Subsurface Soil, Shoreline Sediment, Asphalt and Liquid Samples for Scoping, Characterization and Final Status Surveys"* and in accordance with the Work Plan and Inspection Record (WP&IR) and this SSWP.
7. Sample nomenclature will be as suggested by RPM 5.1-2, *"Preparation of Characterization, Remedial Action and Turnover Survey Plans"* with some modification to align the procedural format with the need to obtain multiple samples from the same location. For example, 5502-0002-001C-1C-01 represents the first concrete core wafer from the first core taken at SML #1. The dashes ("-") shown in the procedure are optional and are not required.
8. The cognizant radiological engineer will determine whether sufficient sample media has been collected for analysis in instances where only a partial core sample was obtained.
9. Samples will be handled in accordance with procedure RPM 5.1-5, *"Chain of Custody for Final Status Survey Samples."*
10. Sample analyses should meet the sensitivity requirements provided in Table 1 to this SSWP.
11. Documents generated during the performance of this SSWP will be complete and legible. Corrections will be made using a single line-out followed by an initial and date.

SPECIFIC INSTRUCTIONS

1. Initiate and utilize the Daily Survey Journal Sheet in accordance with RPM 5.1-11, *"Preparation of Final Status Survey Plans."*
2. Sample instructions (Attachment 1 provides location).
   a. Proceed to the selected SML denoted on Attachment 1 and designated by Table 2.

Table 2 – Sample Measurement Location (SML)

SML	TYPE	Concrete Designation
1	Concrete	5502-0002-001
2	Concrete	5502-0002-002
3	Concrete	5502-0002-003
4	Concrete	5502-0002-004
5	Sediment	5502-0001-005

b. Perform sediment sampling at the selected location.

(1). Drive the core sampler (tube) all the way into the sediment.

(2). Repeat sampling at the current location until enough sample has been obtained or as designated by the cognizant engineer.

(3). Label in accordance with the designation number provided in Table 2 followed by an "S".

c. Perform concrete coring at the selected location.

(1). Drill all the way through the concrete to the soil (estimated thickness is 24 inches).

(2). Identify the top by placing a "T" or arrow on the core, place into a double plastic bag or single vacuum sealed bag to maintain moisture content.

(3). Label in accordance with designation number provided in Table 2 followed by a "C-1C". Subsequent cores are identified as "C-2C", "C-3C" etc.

(4). Upon completion of the coring, place a mechanical plug in the hole.

d. Generate a Sample Control and Accountability form for the samples.

(1). Record sample information on a Sample Control and Accountability form.

(2). Place a security tamper seal on the container or maintain physical control until sample(s) are transferred to an appropriate locked storage area.

(3). Record sample location information on the Sample Control and Accountability form.

e. Disposition samples for analysis.

(1). Set-up area for sample preparation in the Site Closure Sea/Land container or where directed by health physics.

(2). Obtain two approximately 2 inch wafers from both the outer most core (nearest the soil). Obtain two approximately 1 inch wafers from the inner most core (inside the tunnel).

(3). Place the wafers into double plastic bags or into a vacuum sealed single bag, apply tamper proof tape and label each sample with "01", "02" etc, after the core designation.

f. Generate a COC for samples being analyzed onsite.

(1). Record sample IDs, dates, times and codes.

(2). The analysis code is "CHGAM" for all samples.

g. Generate a COC for samples being analyzed offsite.

(1). Record "General Engineering Laboratories" as the analysis laboratory.

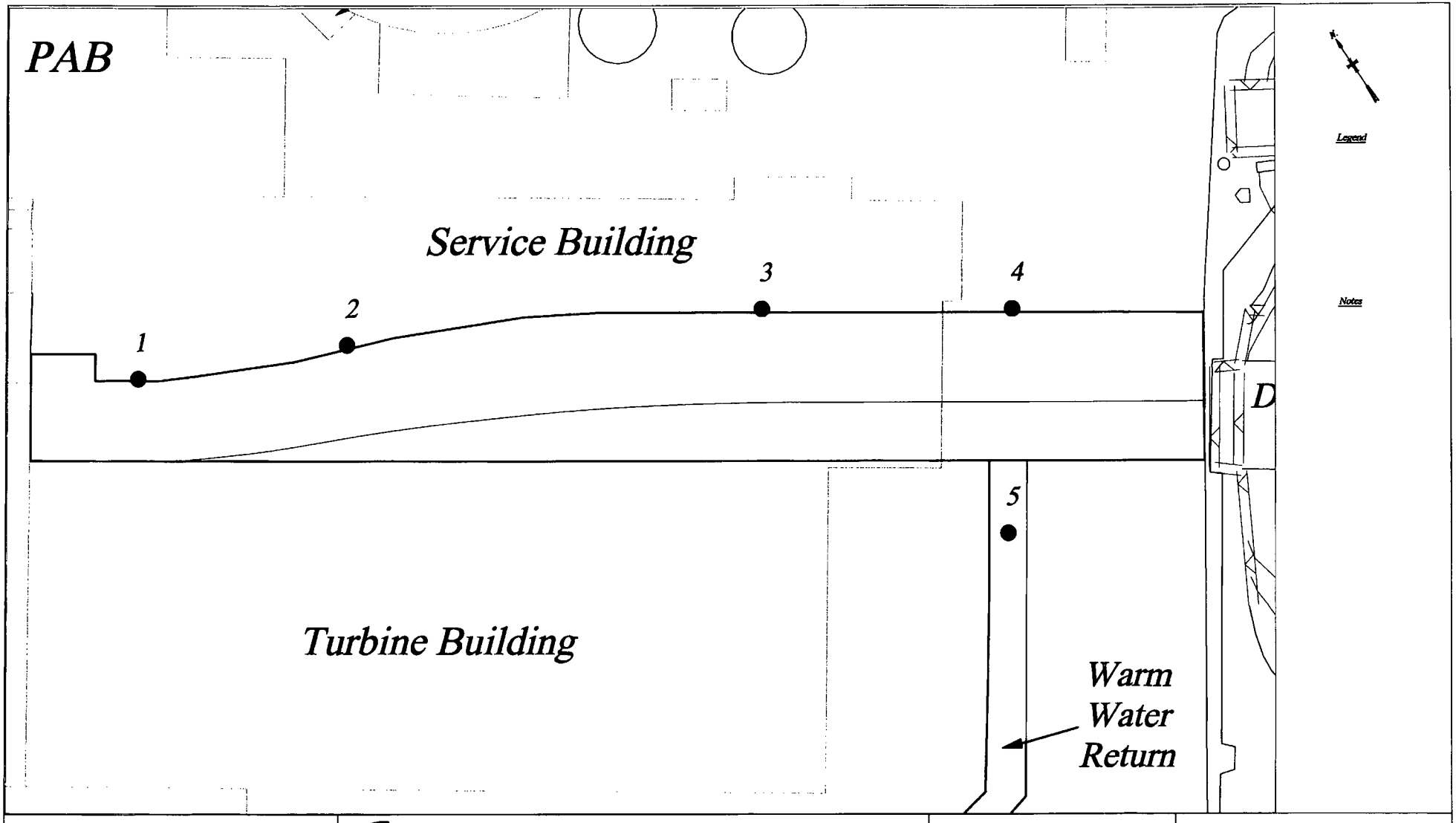
(2). Record sample IDs, dates, times and codes.

(3). The analysis codes are "CHGAM", "H-3", and "Sr-90" for all samples.

h. Evaluate the data and determine appropriate actions based upon the decision rules in Section 5.

Prepared by_____ Date 10/25/04
Radiological Engineer

Reviewed by_____ Date 10/25/04



Drawing Number:	Connecticut Yankee Atomic Power Company Approximate Sample Locations	Date: October 2004 Revision: 0	Attachment 1

Sample Control and Accountability

Sample Collection			Sample Storage			Sample Transfer		
Sample ID	Collected By	Date/Time	Location	Placed By	Date/Time	Location	Transferred By	Date/Time
5502-0001-005S	PJM	10/5/04 1205	EOF RMA	PJM	10/5/04 1509	Count Room	P. Hollenbeck	10/6/04 1352

Sample Control and Accountability

Sample Collection				Sample Storage				Sample Transfer		
Sample ID	Collected By	Date	Time	Location	Placed By	Date	Time	Location	Transferred By	Date/Time
5502-0002-001-C1C-01	J. Grinley	10/26/04	1430	EOF STORAGE AREA	J. Ricarte	11/4/04	1500	General Eng Labs	J. Degostin	11/8/04 @ 1350
5502-0002-001-C1C-02	J. Grinley	10/26/04	1430	EOF STORAGE AREA	J. Ricarte	11/4/04	1500	General Eng Labs	J. Degostin	11/8/04 @ 1350
5502-0002-002-C1C-01	J. Grinley	10/26/04	1025	EOF STORAGE AREA	J. Ricarte	11/4/04	1500	General Eng Labs	J. Degostin	11/8/04 @ 1350
5502-0002-002-C1C-02	J. Grinley	10/26/04	1025	EOF STORAGE AREA	J. Ricarte	11/4/04	1500	General Eng Labs	J. Degostin	11/8/04 @ 1350
5502-0002-002-C3C-01	J. Grinley	10/26/04	1050	EOF STORAGE AREA	J. Ricarte	11/4/04	1500	General Eng Labs	J. Degostin	11/8/04 @ 1350
5502-0002-002-C3C-02	J. Grinley	10/26/04	1050	EOF STORAGE AREA	J. Ricarte	11/4/04	1500	General Eng Labs	J. Degostin	11/8/04 @ 1350
5502-0002-002-S01	J. Grinley	10/26/04	1050	EOF STORAGE AREA	J. Ricarte	11/4/04	1500	General Eng Labs	J. Degostin	11/8/04 @ 1350
5502-0002-003-C1C-01	J. Grinley	10/26/04	0845	EOF STORAGE AREA	J. Ricarte	11/4/04	1500	General Eng Labs	J. Degostin	11/8/04 @ 1350
5502-0002-003-C1C-02	J. Grinley	10/26/04	0845	EOF STORAGE AREA	J. Ricarte	11/4/04	1500	General Eng Labs	J. Degostin	11/8/04 @ 1350
5502-0002-003-C3C-01	J. Grinley	10/26/04	0905	EOF STORAGE AREA	J. Ricarte	11/4/04	1500	General Eng Labs	J. Degostin	11/8/04 @ 1350

Sample Control and Accountability

Sample Collection				Sample Storage				Sample Transfer		
Sample ID	Collected By	Date	Time	Location	Placed By	Date	Time	Location	Transferred By	Date/Time
5502-0002-003-C3C-02	J. Grinley	10/26/04	0905	EOF STORAGE AREA	J. Ricarte	11/4/04	1500	General Eng Labs	J. Degostin	11/8/04 @ 1350
5502-0002-003-S01	J. Grinley	10/26/04	0920	EOF STORAGE AREA	J. Ricarte	11/4/04	1500	General Eng Labs	J. Degostin	11/8/04 @ 1350
5502-0002-004-C1C-01	J. Grinley	10/25/04	1530	EOF STORAGE AREA	J. Ricarte	11/4/04	1500	General Eng Labs	J. Degostin	11/8/04 @ 1350
5502-0002-004-C1C-02	J. Grinley	10/25/04	1530	EOF STORAGE AREA	J. Ricarte	11/4/04	1500	General Eng Labs	J. Degostin	11/8/04 @ 1350
5502-0002-004-C3C-01	J. Grinley	10/25/04	1550	EOF STORAGE AREA	J. Ricarte	11/4/04	1500	General Eng Labs	J. Degostin	11/8/04 @ 1350
5502-0002-004-C3C-02	J. Grinley	10/25/04	1550	EOF STORAGE AREA	J. Ricarte	11/4/04	1500	General Eng Labs	J. Degostin	11/8/04 @ 1350
5502-0002-004-S01	J. Grinley	10/25/04	1600	EOF STORAGE AREA	J. Ricarte	11/4/04	1500	General Eng Labs	J. Degostin	11/8/04 @ 1350
5502-0001-005S	P. Muller	10/5/04	1205	EOF STORAGE AREA	J Degostin	10/11/04	1100	General Eng Labs	J. Degostin	11/8/04 @ 1350

GENERAL ENGINEERING LABORATORIES, LLC
a Member of THE GEL GROUP, INC.
Meeting Today's Needs with a Vision for Tomorrow

November 12, 2004

Mr. Pete Hollenbeck
Connecticut Yankee Atomic Power
Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424

Re: Soil and Concrete PO# 002337
Work Order: 125166
SDG: MSR#04-3800

Dear Mr. Hollenbeck:

General Engineering Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on November 9, 2004. This data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4243.

Sincerely,

Cheryl Jones
Project Manager

Purchase Order: 002337
Chain of Custody: 2004-00263, 2004-00264
Enclosures

P.O. Box 30712 • Charleston, SC 29417 • 2040 Savage Road (29407)
Phone (843) 556-8171 • Fax (843) 766-1178 • www.gel.com

CONNECTICUT YANKEE
RE: SOIL AND CONCRETE
PO# 002337
Work Order: 125166

125166001	5502-0002-001-C1C-01
125166002	5502-0002-001-C1C-02
125166003	5502-0002-002-C1C-01
125166004	5502-0002-002-C1C-02
125166005	5502-0002-002-C3C-01
125166006	5502-0002-002-C3C-02
125166007	5502-0002-002-S01
125166008	5502-0002-003-C1C-01
125166009	5502-0002-003-C1C-02
125166010	5502-0002-003-C3C-01
125166011	5502-0002-003-C3C-02
125166012	5502-0002-003-S01
125166013	5502-0002-004-C1C-01
125166014	5502-0002-004-C1C-02
125166015	5502-0002-004-C3C-01
125166016	5502-0002-004-C3C-02
125166017	5502-0002-004-S01
125166018	5502-0001-005S

Table of Contents

General Narrative **1**

Chain of Custody **4**

Cooler Receipt Checklist **7**

Radiological Analysis **9**
Sample Data Summary 16
Quality Control Data 54

GENERAL NARRATIVE

CASE NARRATIVE
For
CONNECTICUT YANKEE
RE: Soil and Concrete
PO# 002337
Work Order: 125166

November 12, 2004

Laboratory Identification:
General Engineering Laboratories, LLC

Mailing Address:
P.O. Box 30712
Charleston, South Carolina 29417

Express Mail Delivery and Shipping Address:
2040 Savage Road
Charleston, South Carolina 29407

Telephone Number:
(843) 556-8171

Summary:

Sample receipt
The samples arrived at General Engineering Laboratories, LLC, (GEL) in Charleston, South Carolina November 9, 2004. All sample containers arrived without any visible signs of tampering or breakage. The chain of custody contained the proper documentation and signatures except in items of note located below.

The laboratory prepared the following sample:

Sample ID	Client Sample ID
125166001	5502-0002-001-C1C-01
125166002	5502-0002-001-C1C-02
125166003	5502-0002-002-C1C-01
125166004	5502-0002-002-C1C-02
125166005	5502-0002-002-C3C-01
125166006	5502-0002-002-C3C-02
125166007	5502-0002-002-S01
125166008	5502-0002-003-C1C-01
125166009	5502-0002-003-C1C-02
125166010	5502-0002-003-C3C-01
125166011	5502-0002-003-C3C-02
125166012	5502-0002-003-S01
125166013	5502-0002-004-C1C-01
125166014	5502-0002-004-C1C-02

125166015	5502-0002-004-C3C-01
125166016	5502-0002-004-C3C-02
125166017	5502-0002-004-S01
125166018	5502-0001-005S

Items of Note:
There are not any items to note.

Case Narrative:

Sample analyses were conducted using methodology as outlined in General Engineering Laboratories (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are listed below by analytical parameter.

Analytical Request:

Three soil samples were analyzed for CHGAM, H-3, and Sr-90. One soil sample was analyzed for CHGAM and Sr-90. Fourteen concrete samples were analyzed for CHGAM, Sr-90, and H-3.

Internal Chain of Custody:

Custody was maintained for all of these samples.

Data Package:

The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Laboratory Certifications, and Radiochemistry.

I certify that this data package is in compliance with the SOW, both technically and/for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or a designee, as verified by the following signature.

Cheryl Jones
Project Manager

CHAIN OF CUSTODY

Chain of Custody Form

Connecticut Yankee Atomic Power Company
362 Injun Hollow Road, East Hampton, CT 06424
860-267-2556

No. 2004-00263

Project Name: Haddam Neck Decommissioning

Contact Name & Phone:
Pete Hollenbeck 860-267-3923

Analytical Lab (Name, City, State):
General Engineering Laboratories
2040 Savage Road
Charleston, SC 29407 ATT: Sarah Kozlik

Priority: ☐ 30 D. ☐ 15 D. ☒ 7 D.
Other:

Lab Use Only
Comments: 36165

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	CHGAM	H-3	Sr-90				Comment, Preservation	Lab Sample ID
5502-0002-001-C1C-01	10/26/04	1430	CT	CR	PB	X	X	X					
5502-0002-001-C1C-02	10/26/04	1430	CT	CR	PB	X	X	X					
5502-0002-002-C1C-01	10/26/04	1025	CT	CR	PB	X	X	X					
5502-0002-002-C1C-02	10/26/04	1025	CT	CR	PB	X	X	X					
5502-0002-002-C3C-01	10/26/04	1050	CT	CR	PB	X	X	X					
5502-0002-002-C3C-02	10/26/04	1050	CT	CR	PB	X	X	X					
5502-0002-002-S01	10/26/04	1050	TS	G	PB	X	X	X					
5502-0002-003-C1C-01	10/26/04	0845	CT	CR	PB	X	X	X					
5502-0002-003-C1C-02	10/26/04	0845	CT	CR	PB	X	X	X					
5502-0002-003-C3C-01	10/26/04	0905	CT	CR	PB	X	X	X					

NOTES: PO #: 002337 MSR #: 04-3800 ☐ LTP QA ☐ Radwaste QA ☒ Non QA

Samples Shipped Via:
☒ Fed Ex
☐ UPS
☐ Hand
☐ Other ____

7919 7485 0095
Bill of Lading #

Internal Container Temp.: 18 Deg. C

Custody Sealed? Y ☐ N ☑

Custody Seal Intact? Y ☐ N ☑

1) Relinquished By [signature] Date/Time
Relinquished By

2) Received By [signature] Date/Time 11/9/04 10:30

4) Received By Date/Time

Received By Date/Time

Chain of Custody Form

Connecticut Yankee Atomic Power Company
362 Injun Hollow Road, East Hampton, CT 06424
860-267-2556

No. 2004-00264

Project Name: Haddam Neck Decommissioning

Contact Name & Phone:
Pete Hollenbeck 860-267-3923

Analytical Lab (Name, City, State):
General Engineering Laboratories
2040 Savage Road
Charleston, SC 29407 ATT: Sarah Kozlik

Priority: ☐ 30 D. ☐ 15 D. ☒ 7 D.
Other:

Lab Use Only
Comments: 36165

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	CHGAM	H-3	Sr-90				Comment, Preservation	Lab Sample ID
5502-0002-003-C3C-02	10/26/04	0905	CT	CR	PB	X	X	X					
5502-0002-003-S01	10/26/04	0920	TS	G	PB	X	X	X					
5502-0002-004-C1C-01	10/25/04	1530	CT	CR	PB	X	X	X					
5502-0002-004-C1C-02	10/25/04	1530	CT	CR	PB	X	X	X					
5502-0002-004-C3C-01	10/25/04	1550	CT	CR	PB	X	X	X					
5502-0002-004-C3C-02	10/25/04	1550	CT	CR	PB	X	X	X					
5502-0002-004-S01	10/25/04	1600	TS	G	PB	X	X	X					
5502-0001-005S	10/5/04	1205	TS	G	PB	X		X					

NOTES: PO #: 002337 MSR #: 04-3800 ☐ LTP QA ☐ Radwaste QA ☒ Non QA

Samples Shipped Via:
☒ Fed Ex
☐ UPS
☐ Hand
☐ Other ____
7919 7485 0095
Bill of Lading #

Internal Container Temp.: ____ Deg. C

Custody Sealed? Y ☐ N ☑

Custody Seal Intact? Y ☐ N ☑

1) Relinquished By [signature] Date/Time 11-8-04 1350	2) Received By [signature] Date/Time 11/9/04 10:30
3) Relinquished By Date/Time	4) Received By Date/Time
5) Relinquished By Date/Time	6) Received By Date/Time

COOLER RECEIPT CHECKLIST

SAMPLE RECEIPT & REVIEW FORM

GENERAL ENGINEERING LABORATORIES, LLC

PM use only

Client: Ct Yankee	SDG/ARCOC/Work Order: 125166
Date Received: 11/9	PM(A) Review (ensure non-conforming items are resolved prior to signing):
Received By: C. Gause	CAJ 11/9/09

	Sample Receipt Criteria	Conforming	NA	Non-Conforming	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within (4 +/- 2 C)? Record preservation method.	✓			Circle Temp device serial # ice bags blue ice dry ice none other(describe) 18.0
3	Chain of custody documents included with shipment?	✓			
4	Sample containers intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?		✓		Sample ID's, containers affected and observed pH:
6	VOA vials free of headspace (defined as < 6mm bubble)?		✓		Sample ID's and containers affected:
7	Samples received within holding time?	✓			Id's and tests affected:
8	Sample ID's on COC match ID's on bottles?	✓			Sample ID's and containers affected:
9	Date & time on COC match date & time on bottles?	✓			Sample ID's affected:
10	Number of containers received match number indicated on COC?	✓			Sample ID's affected:
11	COC form is properly signed in relinquished/received sections?	✓			
12	Air Bill ,Tracking #'s, & Additional Comments	Internal Samples Fed Ex 7919 7485 0095			

Radiological Information	Non-RAD	RAD	RADII	RSO RAD Receipt #
What is the radiological classification of the samples?		✓		Comments
Radioactivity Screening Results (maximum observed CPM)	30CPM			*If > x2 area background is observed on a non-radioactive sample, contact the RSO to investigate.

PM (or PMA) review of Receiving Rad classification: CAJ Initials 11/9/09 Date

RADIOLOGICAL ANALYSIS

Radiochemistry Case Narrative
Connecticut Yankee Atomic Power Co. (YANK)
SDG MSR#04-3800

Method/Analysis Information

Product:	**Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)**
Analytical Method:	EML HASL 300, 4.5.2.3
Prep Method:	Dry Soil Prep
Analytical Batch Number:	379926
Prep Batch Number:	379811

Sample ID	Client ID
125166001	5502-0002-001-C1C-01
125166002	5502-0002-001-C1C-02
125166003	5502-0002-002-C1C-01
125166004	5502-0002-002-C1C-02
125166005	5502-0002-002-C3C-01
125166006	5502-0002-002-C3C-02
125166007	5502-0002-002-S01
125166008	5502-0002-003-C1C-01
125166009	5502-0002-003-C1C-02
125166010	5502-0002-003-C3C-01
125166011	5502-0002-003-C3C-02
125166012	5502-0002-003-S01
125166013	5502-0002-004-C1C-01
125166014	5502-0002-004-C1C-02
125166015	5502-0002-004-C3C-01
125166016	5502-0002-004-C3C-02
125166017	5502-0002-004-S01
125166018	5502-0001-005S
1200737003	Method Blank (MB)
1200737005	Laboratory Control Sample (LCS)
1200737004	125166001(5502-0002-001-C1C-01) Sample Duplicate (DUP)

SOP Reference
Procedures for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-013 REV# 10.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 125166001 (5502-0002-001-C1C-01).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
Sample 1200737005 (LCS) was recounted due to operator error.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information

Qualifier	Reason	Analyte	Sample
UI	Data rejected due to interference.	Europium-152	125166018
UI	Data rejected due to low abundance.	Actinium-228	125166018
		Bismuth-214	125166018
		Europium-155	125166018
		Silver-108m	125166007
UI	Data rejected due to no valid peak.	Americium-241	125166018
		Cobalt-60	125166001
		Uranium-238	1200737003

Method/Analysis Information

Product:	**GFPC, Sr90, solid Quick TAT**
Analytical Method:	EPA 905.0 Modified
Prep Method:	Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method:	Dry Soil Prep
Analytical Batch Number:	379964
Prep Batch Number:	379860
Dry Soil Prep GL-RAD-A-021 Batch Number:	379811

Sample ID	Client ID
125166001	5502-0002-001-C1C-01
125166002	5502-0002-001-C1C-02
125166003	5502-0002-002-C1C-01
125166004	5502-0002-002-C1C-02
125166005	5502-0002-002-C3C-01
125166006	5502-0002-002-C3C-02
125166007	5502-0002-002-S01
125166008	5502-0002-003-C1C-01
125166009	5502-0002-003-C1C-02

125166010	5502-0002-003-C3C-01
125166011	5502-0002-003-C3C-02
125166012	5502-0002-003-S01
125166013	5502-0002-004-C1C-01
125166014	5502-0002-004-C1C-02
125166015	5502-0002-004-C3C-01
125166016	5502-0002-004-C3C-02
125166017	5502-0002-004-S01
125166018	5502-0001-005S
1200737121	Method Blank (MB)
1200737124	Laboratory Control Sample (LCS)
1200737122	125166001(5502-0002-001-C1C-01) Sample Duplicate (DUP)
1200737123	125166001(5502-0002-001-C1C-01) Matrix Spike (MS)

SOP Reference
Procedures for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-004 REV# 9.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 125166001 (5502-0002-001-C1C-01).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
Sample 1200737122 (5502-0002-001-C1C-01) was recounted due to high relative percent difference/relative error ratio.

Chemical Recoveries
All chemical recoveries meet the required acceptance limits for this sample set.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following NCR was generated for this SDG:
NCR 159290 was generated due to Failed RPD for DUP. 1. The relative percent difference (125166001, 1200737122) did not meet with in the required range. However with the sample MDA is used instead of the result, the relative percent difference meets at eighty-six percent. 1. Reporting results.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)**
Analytical Method:	EPA 906.0 Modified
Analytical Batch Number:	380128

Sample ID	Client ID
125166001	5502-0002-001-C1C-01
125166002	5502-0002-001-C1C-02
125166003	5502-0002-002-C1C-01
125166004	5502-0002-002-C1C-02
125166005	5502-0002-002-C3C-01
125166006	5502-0002-002-C3C-02
125166007	5502-0002-002-S01
125166008	5502-0002-003-C1C-01
125166009	5502-0002-003-C1C-02
125166010	5502-0002-003-C3C-01
125166011	5502-0002-003-C3C-02
125166012	5502-0002-003-S01
125166013	5502-0002-004-C1C-01
125166014	5502-0002-004-C1C-02
125166015	5502-0002-004-C3C-01
125166016	5502-0002-004-C3C-02
125166017	5502-0002-004-S01
1200737484	Method Blank (MB)
1200737487	Laboratory Control Sample (LCS)
1200737485	125166007(5502-0002-002-S01) Sample Duplicate (DUP)
1200737486	125166007(5502-0002-002-S01) Matrix Spike (MS)
1200737488	KNOWN

SOP Reference
Procedures for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-002 REV# 9.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry

All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 125166007 (5502-0002-002-S01).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
Samples 1200737488 (KNOWN) and 125166014 (5502-0002-004-C1C-02) were recounted due to the quench number being outside the calibration range.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information
Manual qualifiers were not required.

Certification Statement
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:
GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.
The following data validator verified the information presented in this case narrative:

A Gallen & Ch Cole 11/16/04

Reviewer:_____

General Engineering Laboratories
Form GEL-XXX
Rev. 06/02

NCR Report No.: 159290
Revision No.:

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr. 16-NOV-04	**Division:** Radiochemistry		**Type:** Process
Instrument Type: GFPC	**Quality Criteria:** Specifications		**Client Code:** YANK
Test / Method: EPA 905.0 Modified	**Matrix Type:** Solid	**Batch ID:** 379964	**Sample Numbers:** See Below

Potentially affected work order(s)(SDG): 125166(MSR#04-3800)

Application Issues:

Failed RPD for DUP

Specification and Requirements Nonconformance Description:	**NRG Disposition:**
1. The relative percent difference (125166001, 1200737122) did not meet with in the required range. However with the sample MDA is used instead of the result, the relative percent difference meets at eighty-six percent.	1. Reporting results.

Originator's Name:
Jimmy Hartley 16-NOV-04

Data Validator/Group Leader:
Heather Anderson 16-NOV-04

Quality Review:

Corrective Action:

Director:

Corrective Action ID and Complete Date:

SAMPLE DATA SUMMARY

GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report for
for

YANK001 Connecticut Yankee Atomic Power Co.

Client SDG: MSR#04-3800 GEL Work Order: 125166

The Qualifiers in this report are defined as follows:

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
** Indicates the analyte is a surrogate compound.
< Result is less than amount reported.
> Result is greater than amount reported.
B Target analyte was detected in the sample as well as the associated blank.
BD Flag for results below the MDC or a flag for low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
P The response between the confirmation column and the primary column is >40%D.
U Indicates the target analyte was analyzed for but not detected above the detection limit.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
Y QC Samples were not spiked with this compound.
h Sample preparation or preservation holding time exceeded.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.
** Indicates the analyte is a surrogate compound.
This data report has been prepared and reviewed in accordance with General Engineering Laboratories, LLC standard operating procedures. Please direct any questions to your Project Manager, Cheryl Jones.

Reviewed by

GENERAL ENGINEERING LABORATORIES, LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 16, 2004

Client Sample ID:	5502-0002-001-C1C-01	Project:	YANK01304
Sample ID:	125166001	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	26-OCT-04		
Receive Date:	09-NOV-04		
Collector:	Client		
Moisture:	6.78%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.354	+/-0.157	0.0608	+/-0.154	0.137	pCi/g		AKB 11/11/04	0953	379926	1
Americium-241	U	-0.00166	+/-0.0316	0.0281	+/-0.031	0.0585	pCi/g					
Bismuth-212		0.336	+/-0.251	0.142	+/-0.246	0.314	pCi/g					
Bismuth-214		0.338	+/-0.123	0.0324	+/-0.121	0.0713	pCi/g					
Cesium-134	U	0.0126	+/-0.0256	0.023	+/-0.0251	0.0505	pCi/g					
Cesium-137		0.0958	+/-0.0446	0.0194	+/-0.0438	0.0426	pCi/g					
Cobalt-60	U	0.00	+/-0.059	0.0156	+/-0.0578	0.0369	pCi/g					
	UI											
Europium-152	U	-0.0171	+/-0.0654	0.0473	+/-0.0641	0.102	pCi/g					
Europium-154	U	0.0586	+/-0.0618	0.0604	+/-0.0606	0.137	pCi/g					
Europium-155	U	0.00698	+/-0.0504	0.0471	+/-0.0494	0.0986	pCi/g					
Lead-212		0.356	+/-0.0677	0.0292	+/-0.0663	0.0615	pCi/g					
Lead-214		0.397	+/-0.0943	0.0336	+/-0.0925	0.0721	pCi/g					
Manganese-54	U	0.00112	+/-0.020	0.017	+/-0.0196	0.0382	pCi/g					
Niobium-94	U	0.0229	+/-0.021	0.020	+/-0.0206	0.0434	pCi/g					
Potassium-40		4.02	+/-0.839	0.157	+/-0.822	0.373	pCi/g					
Radium-226		0.338	+/-0.123	0.0324	+/-0.121	0.0713	pCi/g					
Silver-108m	U	0.0117	+/-0.0198	0.0186	+/-0.0194	0.0398	pCi/g					
Thallium-208		0.120	+/-0.0438	0.0156	+/-0.0429	0.0347	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid Quick TAT												
Strontium-90	U	0.0124	+/-0.0344	0.0328	+/-0.0346	0.0675	pCi/g		JMB1 11/13/04	0122	379964	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	0.698	+/-1.08	0.875	+/-1.08	1.75	pCi/g		ATH1 11/11/04	1119	380128	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	11/10/04	1427	379860
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	11/09/04	1506	379811

The following Analytical Methods were performed

Method	Description

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 16, 2004

Client Sample ID: 5502–0002–001–C1C–01
Sample ID: 125166001

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
1	EML HASL 300, 4.5.2.3										
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid Quick TAT	67	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

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** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Flag for results below the MDC or a flag for low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
U Indicates the target analyte was analyzed for but not detected above the detection limit.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
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362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 16, 2004

Client Sample ID:	5502-0002-001-C1C-02	Project:	YANK01304
Sample ID:	125166002	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	26-OCT-04		
Receive Date:	09-NOV-04		
Collector:	Client		
Moisture:	5.63%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.334	+/-0.139	0.052	+/-0.137	0.116	pCi/g		AKB 11/11/04	0954	379926	1
Americium-241	U	0.0306	+/-0.0868	0.0643	+/-0.085	0.135	pCi/g					
Bismuth-212		0.457	+/-0.307	0.118	+/-0.301	0.260	pCi/g					
Bismuth-214		0.305	+/-0.0927	0.0243	+/-0.0908	0.0537	pCi/g					
Cesium-134	U	0.021	+/-0.0243	0.0221	+/-0.0238	0.0477	pCi/g					
Cesium-137	U	0.000164	+/-0.0161	0.0137	+/-0.0158	0.0304	pCi/g					
Cobalt-60	U	0.00672	+/-0.0211	0.0184	+/-0.0207	0.0417	pCi/g					
Europium-152	U	-0.00395	+/-0.044	0.0369	+/-0.0431	0.0794	pCi/g					
Europium-154	U	0.037	+/-0.067	0.0601	+/-0.0657	0.133	pCi/g					
Europium-155	U	0.00207	+/-0.0433	0.0409	+/-0.0425	0.0861	pCi/g					
Lead-212		0.287	+/-0.0675	0.0274	+/-0.0661	0.0574	pCi/g					
Lead-214		0.333	+/-0.0839	0.0272	+/-0.0822	0.0585	pCi/g					
Manganese-54	U	-0.0152	+/-0.0159	0.0108	+/-0.0156	0.0249	pCi/g					
Niobium-94	U	0.0107	+/-0.0176	0.0159	+/-0.0173	0.0344	pCi/g					
Potassium-40		6.88	+/-0.888	0.115	+/-0.870	0.279	pCi/g					
Radium-226		0.305	+/-0.0927	0.0243	+/-0.0908	0.0537	pCi/g					
Silver-108m	U	-0.00436	+/-0.014	0.012	+/-0.0137	0.0263	pCi/g					
Thallium-208		0.101	+/-0.0334	0.0146	+/-0.0328	0.032	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid Quick TAT												
Strontium-90	U	-0.00442	+/-0.0288	0.0281	+/-0.0288	0.0578	pCi/g		JMB1 11/13/04	0122	379964	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	1.17	+/-1.27	1.01	+/-1.27	2.02	pCi/g		ATH1 11/11/04	1150	380128	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	11/10/04	1427	379860
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	11/09/04	1506	379811

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 16, 2004

Client Sample ID: 5502-0002-001-C1C-02
Sample ID: 125166002

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid Quick TAT	69	(25%-125%)

Notes:
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BD Flag for results below the MDC or a flag for low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
U Indicates the target analyte was analyzed for but not detected above the detection limit.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 16, 2004

Client Sample ID:	5502–0002–002–C1C–01	Project:	YANK01304
Sample ID:	125166003	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	26–OCT–04		
Receive Date:	09–NOV–04		
Collector:	Client		
Moisture:	17.2%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)												
Actinium–228		0.439	+/–0.123	0.0451	+/–0.121	0.103	pCi/g		AKB 11/11/04	0955	379926	1
Americium–241	U	–0.177	+/–0.158	0.113	+/–0.155	0.240	pCi/g					
Bismuth–212	U	0.217	+/–0.240	0.114	+/–0.236	0.253	pCi/g					
Bismuth–214		0.460	+/–0.101	0.031	+/–0.0993	0.0674	pCi/g					
Cesium–134	U	0.0273	+/–0.022	0.0213	+/–0.0215	0.0463	pCi/g					
Cesium–137		0.138	+/–0.0431	0.0156	+/–0.0422	0.0344	pCi/g					
Cobalt–60		0.099	+/–0.0344	0.0149	+/–0.0337	0.035	pCi/g					
Europium–152	U	0.0195	+/–0.0523	0.0461	+/–0.0513	0.0987	pCi/g					
Europium–154	U	–0.00202	+/–0.0677	0.0496	+/–0.0664	0.113	pCi/g					
Europium–155	U	0.0499	+/–0.0567	0.0557	+/–0.0556	0.117	pCi/g					
Lead–212		0.324	+/–0.0531	0.027	+/–0.052	0.0571	pCi/g					
Lead–214		0.610	+/–0.090	0.0291	+/–0.0882	0.0628	pCi/g					
Manganese–54	U	–0.000871	+/–0.0183	0.0153	+/–0.0179	0.0339	pCi/g					
Niobium–94	U	–0.00404	+/–0.0157	0.0129	+/–0.0153	0.0287	pCi/g					
Potassium–40		5.94	+/–0.802	0.126	+/–0.786	0.303	pCi/g					
Radium–226		0.460	+/–0.101	0.031	+/–0.0993	0.0674	pCi/g					
Silver–108m	U	–0.0101	+/–0.0174	0.0148	+/–0.0171	0.032	pCi/g					
Thallium–208		0.101	+/–0.0404	0.0317	+/–0.0396	0.0662	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid Quick TAT												
Strontium–90	U	0.00457	+/–0.0403	0.0389	+/–0.0404	0.0799	pCi/g		JMB1 11/13/04	0122	379964	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)												
Tritium	U	0.607	+/–1.24	1.01	+/–1.24	2.03	pCi/g		ATH1 11/11/04	1222	380128	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	11/10/04	1427	379860
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	TC1	11/09/04	1506	379811

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 16, 2004

Client Sample ID: 5502–0002–002–C1C–01
Sample ID: 125166003

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid Quick TAT	55	(25%–125%)

Notes:
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B Target analyte was detected in the sample as well as the associated blank.
BD Flag for results below the MDC or a flag for low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
U Indicates the target analyte was analyzed for but not detected above the detection limit.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 16, 2004

Client Sample ID:	5502-0002-002-C1C-02	Project:	YANK01304
Sample ID:	125166004	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	26-OCT-04		
Receive Date:	09-NOV-04		
Collector:	Client		
Moisture:	5.51%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.602	+/-0.206	0.0597	+/-0.202	0.136	pCi/g		AKB 11/11/04	0959	379926	1
Americium-241	U	0.00334	+/-0.0318	0.0297	+/-0.0312	0.0621	pCi/g					
Bismuth-212		0.533	+/-0.301	0.157	+/-0.295	0.347	pCi/g					
Bismuth-214		0.678	+/-0.113	0.0383	+/-0.111	0.0834	pCi/g					
Cesium-134	U	0.0104	+/-0.0371	0.0275	+/-0.0363	0.0598	pCi/g					
Cesium-137	U	-0.00422	+/-0.0234	0.0201	+/-0.0229	0.0443	pCi/g					
Cobalt-60	U	0.00864	+/-0.0272	0.0244	+/-0.0266	0.0552	pCi/g					
Europium-152	U	-0.023	+/-0.0531	0.0448	+/-0.052	0.0968	pCi/g					
Europium-154	U	0.00959	+/-0.0741	0.065	+/-0.0726	0.147	pCi/g					
Europium-155	U	0.0407	+/-0.056	0.0519	+/-0.0549	0.108	pCi/g					
Lead-212		0.390	+/-0.0581	0.0267	+/-0.0569	0.0567	pCi/g					
Lead-214		0.690	+/-0.114	0.0359	+/-0.112	0.077	pCi/g					
Manganese-54	U	0.034	+/-0.0229	0.0232	+/-0.0225	0.0509	pCi/g					
Niobium-94	U	0.0149	+/-0.0238	0.0221	+/-0.0233	0.0477	pCi/g					
Potassium-40		6.37	+/-0.912	0.203	+/-0.893	0.470	pCi/g					
Radium-226		0.678	+/-0.113	0.0383	+/-0.111	0.0834	pCi/g					
Silver-108m	U	-0.0157	+/-0.0192	0.0149	+/-0.0188	0.0327	pCi/g					
Thallium-208		0.185	+/-0.0529	0.0182	+/-0.0518	0.0401	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid Quick TAT												
Strontium-90	U	-0.0429	+/-0.0421	0.0425	+/-0.047	0.0875	pCi/g		JMB1 11/13/04	0122	379964	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	0.735	+/-1.24	1.01	+/-1.24	2.02	pCi/g		ATH1 11/11/04	1254	380128	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	11/10/04	1427	379860
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	11/09/04	1506	379811

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 16, 2004

Client Sample ID: 5502-0002-002-C1C-02
Sample ID: 125166004

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid Quick TAT	47	(25%-125%)

Notes:
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** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Flag for results below the MDC or a flag for low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
U Indicates the target analyte was analyzed for but not detected above the detection limit.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 16, 2004

Client Sample ID:	5502–0002–002–C3C–01	Project:	YANK01304
Sample ID:	125166005	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	26–OCT–04		
Receive Date:	09–NOV–04		
Collector:	Client		
Moisture:	8.91%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)												
Actinium–228		0.481	+/–0.112	0.0406	+/–0.110	0.0892	pCi/g		AKB 11/11/04	1000	379926	1
Americium–241	U	0.0251	+/–0.127	0.0822	+/–0.124	0.171	pCi/g					
Bismuth–212		0.256	+/–0.233	0.0953	+/–0.228	0.206	pCi/g					
Bismuth–214		0.368	+/–0.064	0.0268	+/–0.0627	0.057	pCi/g					
Cesium–134	U	0.0139	+/–0.0184	0.0166	+/–0.018	0.0355	pCi/g					
Cesium–137	U	–0.0104	+/–0.0175	0.0144	+/–0.0172	0.0307	pCi/g					
Cobalt–60	U	0.000217	+/–0.0175	0.0148	+/–0.0172	0.0325	pCi/g					
Europium–152	U	–0.0019	+/–0.044	0.0378	+/–0.0431	0.0799	pCi/g					
Europium–154	U	–0.0105	+/–0.055	0.0455	+/–0.0539	0.0993	pCi/g					
Europium–155	U	0.0039	+/–0.0562	0.0493	+/–0.0551	0.103	pCi/g					
Lead–212		0.452	+/–0.0463	0.0244	+/–0.0454	0.0509	pCi/g					
Lead–214		0.457	+/–0.0633	0.0266	+/–0.0621	0.0562	pCi/g					
Manganese–54	U	–0.00495	+/–0.0165	0.0135	+/–0.0162	0.0292	pCi/g					
Niobium–94	U	0.0004	+/–0.0168	0.0145	+/–0.0165	0.0307	pCi/g					
Potassium–40		7.93	+/–0.667	0.129	+/–0.654	0.288	pCi/g					
Radium–226		0.368	+/–0.064	0.0268	+/–0.0627	0.057	pCi/g					
Silver–108m	U	–0.00546	+/–0.0142	0.0116	+/–0.0139	0.0247	pCi/g					
Thallium–208		0.152	+/–0.0369	0.0126	+/–0.0362	0.0271	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid Quick TAT												
Strontium–90	U	–0.0172	+/–0.0394	0.0388	+/–0.0399	0.0798	pCi/g		JMB1 11/13/04	0125	379964	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)												
Tritium		3.98	+/–1.35	0.966	+/–1.37	1.93	pCi/g		ATH1 11/11/04	1326	380128	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	11/10/04	1427	379860
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	TC1	11/09/04	1506	379811

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 16, 2004

Client Sample ID: 5502–0002–002–C3C–01
Sample ID: 125166005

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid Quick TAT	59	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Flag for results below the MDC or a flag for low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
U Indicates the target analyte was analyzed for but not detected above the detection limit.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 16, 2004

Client Sample ID:	5502–0002–002–C3C–02	Project:	YANK01304
Sample ID:	125166006	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	26–OCT–04		
Receive Date:	09–NOV–04		
Collector:	Client		
Moisture:	7.42%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)												
Actinium–228		0.511	+/–0.139	0.0328	+/–0.136	0.0732	pCi/g		AKB 11/11/04	1055	379926	1
Americium–241	U	0.0195	+/–0.0712	0.0501	+/–0.0698	0.104	pCi/g					
Bismuth–212		0.340	+/–0.188	0.102	+/–0.184	0.218	pCi/g					
Bismuth–214		0.429	+/–0.0873	0.0261	+/–0.0855	0.0554	pCi/g					
Cesium–134	U	0.0192	+/–0.0181	0.0167	+/–0.0178	0.0356	pCi/g					
Cesium–137	U	–0.0118	+/–0.0165	0.0134	+/–0.0162	0.0288	pCi/g					
Cobalt–60	U	0.00488	+/–0.0167	0.0145	+/–0.0164	0.0318	pCi/g					
Europium–152	U	–0.0131	+/–0.0418	0.0359	+/–0.0409	0.0759	pCi/g					
Europium–154	U	0.0167	+/–0.046	0.0403	+/–0.0451	0.0883	pCi/g					
Europium–155	U	0.0691	+/–0.0651	0.0434	+/–0.0638	0.0904	pCi/g					
Lead–212		0.463	+/–0.0606	0.0227	+/–0.0594	0.0475	pCi/g					
Lead–214		0.457	+/–0.0819	0.0247	+/–0.0802	0.0524	pCi/g					
Manganese–54	U	–0.0114	+/–0.0171	0.0135	+/–0.0168	0.0291	pCi/g					
Niobium–94	U	0.0053	+/–0.0147	0.013	+/–0.0144	0.0277	pCi/g					
Potassium–40		8.03	+/–0.871	0.118	+/–0.854	0.265	pCi/g					
Radium–226		0.429	+/–0.0873	0.0261	+/–0.0855	0.0554	pCi/g					
Silver–108m	U	0.00505	+/–0.0137	0.0121	+/–0.0134	0.0257	pCi/g					
Thallium–208		0.145	+/–0.035	0.0127	+/–0.0343	0.0272	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid Quick TAT												
Strontium–90	U	0.00445	+/–0.0484	0.0468	+/–0.0485	0.0961	pCi/g		JMB1 11/13/04	0125	379964	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)												
Tritium		2.48	+/–1.31	0.995	+/–1.32	1.99	pCi/g		ATH1 11/11/04	1358	380128	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	11/10/04	1427	379860
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	TC1	11/09/04	1506	379811

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 16, 2004

Client Sample ID: 5502–0002–002–C3C–02
Sample ID: 125166006

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid Quick TAT	49	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Flag for results below the MDC or a flag for low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
U Indicates the target analyte was analyzed for but not detected above the detection limit.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 16, 2004

Client Sample ID:	5502–0002–002–S01	Project:	YANK01304
Sample ID:	125166007	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	26–OCT–04		
Receive Date:	09–NOV–04		
Collector:	Client		
Moisture:	16%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gamma,Solid–FSS GAM & ALL Ra–226 In–growth Waived												
Actinium–228		0.812	+/–0.281	0.094	+/–0.275	0.211	pCi/g		AKB 11/11/04	1055	379926	1
Americium–241	U	0.0534	+/–0.0789	0.0664	+/–0.0773	0.138	pCi/g					
Bismuth–212		0.702	+/–0.474	0.211	+/–0.464	0.467	pCi/g					
Bismuth–214		0.653	+/–0.162	0.0493	+/–0.159	0.108	pCi/g					
Cesium–134	U	0.0552	+/–0.0414	0.0341	+/–0.0405	0.0749	pCi/g					
Cesium–137	U	0.0251	+/–0.0915	0.0301	+/–0.0896	0.0658	pCi/g					
Cobalt–60	U	0.050	+/–0.123	0.0297	+/–0.121	0.0681	pCi/g					
Europium–152	U	0.00831	+/–0.0852	0.0751	+/–0.0835	0.160	pCi/g					
Europium–154	U	–0.0721	+/–0.106	0.077	+/–0.104	0.178	pCi/g					
Europium–155	U	–0.00773	+/–0.0888	0.0776	+/–0.087	0.162	pCi/g					
Lead–212		0.623	+/–0.102	0.0415	+/–0.100	0.0872	pCi/g					
Lead–214		0.526	+/–0.139	0.0537	+/–0.136	0.114	pCi/g					
Manganese–54	U	–0.00377	+/–0.0336	0.0285	+/–0.0329	0.063	pCi/g					
Niobium–94	U	–0.00403	+/–0.0339	0.0276	+/–0.0333	0.0602	pCi/g					
Potassium–40		10.3	+/–1.48	0.281	+/–1.45	0.648	pCi/g					
Radium–226		0.653	+/–0.162	0.0493	+/–0.159	0.108	pCi/g					
Silver–108m	U UI	0.00	+/–0.0704	0.0275	+/–0.069	0.0589	pCi/g					
Thallium–208		0.180	+/–0.0738	0.0307	+/–0.0724	0.0665	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid Quick TAT												
Strontium–90	U	0.00906	+/–0.0337	0.0324	+/–0.0338	0.0664	pCi/g		JMB1 11/13/04	0125	379964	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL FSS												
Tritium	U	1.04	+/–1.30	1.04	+/–1.30	2.08	pCi/g		ATH1 11/11/04	1430	380128	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	11/10/04	1427	379860
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	TC1	11/09/04	1506	379811

The following Analytical Methods were performed

Method	Description

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362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 16, 2004

Client Sample ID: 5502-0002-002-S01
Sample ID: 125166007

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
1	EML HASL 300, 4.5.2.3										
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid Quick TAT	80	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

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- ** Indicates the analyte is a surrogate compound.
- B Target analyte was detected in the sample as well as the associated blank.
- BD Flag for results below the MDC or a flag for low tracer recovery.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
- U Indicates the target analyte was analyzed for but not detected above the detection limit.
- UI Uncertain identification for gamma spectroscopy.
- X Lab-specific qualifier–please see case narrative, data summary package or contact your project manager for details.
- h Sample preparation or preservation holding time exceeded.

The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 16, 2004

Client Sample ID:	5502–0002–003–C1C–01	Project:	YANK01304
Sample ID:	125166008	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	26–OCT–04		
Receive Date:	09–NOV–04		
Collector:	Client		
Moisture:	6.8%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)												
Actinium–228		0.456	+/–0.174	0.0722	+/–0.170	0.158	pCi/g		AKB 11/11/04	1118	379926	1
Americium–241	U	0.127	+/–0.0956	0.0963	+/–0.0937	0.201	pCi/g					
Bismuth–212		0.321	+/–0.235	0.132	+/–0.230	0.290	pCi/g					
Bismuth–214		0.449	+/–0.087	0.0795	+/–0.0852	0.165	pCi/g					
Cesium–134	U	0.0225	+/–0.032	0.0241	+/–0.0314	0.052	pCi/g					
Cesium–137		0.202	+/–0.0507	0.0172	+/–0.0496	0.0378	pCi/g					
Cobalt–60		0.127	+/–0.0646	0.018	+/–0.0633	0.0411	pCi/g					
Europium–152	U	0.00141	+/–0.0629	0.0557	+/–0.0616	0.118	pCi/g					
Europium–154	U	0.00691	+/–0.0694	0.060	+/–0.0681	0.134	pCi/g					
Europium–155	U	0.0189	+/–0.0646	0.0597	+/–0.0633	0.125	pCi/g					
Lead–212		0.464	+/–0.0762	0.036	+/–0.0746	0.0752	pCi/g					
Lead–214		0.409	+/–0.100	0.0417	+/–0.0984	0.0883	pCi/g					
Manganese–54	U	9.230E–05	+/–0.0209	0.0179	+/–0.0205	0.0393	pCi/g					
Niobium–94	U	0.0132	+/–0.0221	0.0202	+/–0.0216	0.0435	pCi/g					
Potassium–40		7.84	+/–0.833	0.186	+/–0.816	0.422	pCi/g					
Radium–226		0.449	+/–0.087	0.036	+/–0.0852	0.0777	pCi/g					
Silver–108m	U	–0.00493	+/–0.0211	0.0179	+/–0.0207	0.0383	pCi/g					
Thallium–208		0.147	+/–0.0483	0.0203	+/–0.0474	0.0436	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid Quick TAT												
Strontium–90	U	0.0478	+/–0.0334	0.0308	+/–0.036	0.0631	pCi/g		JMB1 11/13/04	0125	379964	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)												
Tritium	U	0.572	+/–1.25	1.02	+/–1.25	2.05	pCi/g		ATH1 11/11/04	1502	380128	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	11/10/04	1427	379860
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	TC1	11/09/04	1506	379811

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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Company : Connecticut Yankee Atomic Power
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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 16, 2004

Client Sample ID: 5502–0002–003–C1C–01
Sample ID: 125166008

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid Quick TAT	82	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

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** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Flag for results below the MDC or a flag for low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
U Indicates the target analyte was analyzed for but not detected above the detection limit.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 16, 2004

Client Sample ID:	5502-0002-003-C1C-02	Project:	YANK01304
Sample ID:	125166009	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	26-OCT-04		
Receive Date:	09-NOV-04		
Collector:	Client		
Moisture:	6.02%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.490	+/-0.161	0.0503	+/-0.158	0.114	pCi/g		AKB 11/11/04	1118	379926	1
Americium-241	U	-0.0291	+/-0.123	0.101	+/-0.120	0.211	pCi/g					
Bismuth-212		0.279	+/-0.214	0.120	+/-0.210	0.266	pCi/g					
Bismuth-214		0.471	+/-0.0901	0.0235	+/-0.0883	0.0524	pCi/g					
Cesium-134	U	0.0045	+/-0.0215	0.0183	+/-0.021	0.0403	pCi/g					
Cesium-137	U	0.00275	+/-0.0181	0.0155	+/-0.0177	0.0342	pCi/g					
Cobalt-60	U	-0.00782	+/-0.0194	0.0148	+/-0.0191	0.0349	pCi/g					
Europium-152	U	0.0156	+/-0.0515	0.0469	+/-0.0505	0.0999	pCi/g					
Europium-154	U	-0.0103	+/-0.0612	0.0497	+/-0.060	0.113	pCi/g					
Europium-155	U	0.0246	+/-0.0548	0.0507	+/-0.0537	0.106	pCi/g					
Lead-212		0.392	+/-0.0667	0.0256	+/-0.0654	0.0542	pCi/g					
Lead-214		0.483	+/-0.0911	0.0279	+/-0.0893	0.0603	pCi/g					
Manganese-54	U	-0.00856	+/-0.0211	0.0164	+/-0.0207	0.0363	pCi/g					
Niobium-94	U	-0.00427	+/-0.0177	0.0144	+/-0.0174	0.0316	pCi/g					
Potassium-40		6.84	+/-0.940	0.167	+/-0.922	0.387	pCi/g					
Radium-226		0.471	+/-0.0901	0.0235	+/-0.0883	0.0524	pCi/g					
Silver-108m	U	-0.00757	+/-0.0166	0.0139	+/-0.0163	0.030	pCi/g					
Thallium-208		0.123	+/-0.0373	0.0155	+/-0.0365	0.034	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid Quick TAT												
Strontium-90	U	-0.0107	+/-0.0446	0.0436	+/-0.0448	0.0894	pCi/g		JMB1 11/13/04	0124	379964	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	1.58	+/-1.41	1.11	+/-1.41	2.22	pCi/g		ATH1 11/11/04	1534	380128	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	11/10/04	1427	379860
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	11/09/04	1506	379811

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 16, 2004

Client Sample ID: 5502–0002–003–C1C–02
Sample ID: 125166009

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid Quick TAT	59	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Flag for results below the MDC or a flag for low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
U Indicates the target analyte was analyzed for but not detected above the detection limit.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 16, 2004

Client Sample ID:	5502-0002-003-C3C-01	Project:	YANK01304
Sample ID:	125166010	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	26-OCT-04		
Receive Date:	09-NOV-04		
Collector:	Client		
Moisture:	5.87%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.496	+/-0.166	0.0753	+/-0.163	0.165	pCi/g		AKB 11/11/04	1119	379926	1
Americium-241	U	-0.033	+/-0.0933	0.0732	+/-0.0914	0.153	pCi/g					
Bismuth-212	U	0.294	+/-0.406	0.148	+/-0.398	0.322	pCi/g					
Bismuth-214		0.470	+/-0.0966	0.0316	+/-0.0947	0.0691	pCi/g					
Cesium-134	U	0.0232	+/-0.0259	0.0235	+/-0.0254	0.0511	pCi/g					
Cesium-137	U	-0.0137	+/-0.0218	0.0167	+/-0.0213	0.0368	pCi/g					
Cobalt-60	U	0.00338	+/-0.0262	0.0194	+/-0.0257	0.0442	pCi/g					
Europium-152	U	-0.00441	+/-0.057	0.0496	+/-0.0559	0.106	pCi/g					
Europium-154	U	-0.0101	+/-0.0636	0.0514	+/-0.0623	0.118	pCi/g					
Europium-155	U	0.00833	+/-0.0613	0.0541	+/-0.0601	0.113	pCi/g					
Lead-212		0.400	+/-0.059	0.0275	+/-0.0578	0.058	pCi/g					
Lead-214		0.581	+/-0.0905	0.0326	+/-0.0887	0.0699	pCi/g					
Manganese-54	U	0.0125	+/-0.0188	0.0176	+/-0.0185	0.0389	pCi/g					
Niobium-94	U	0.00477	+/-0.0197	0.0168	+/-0.0193	0.0366	pCi/g					
Potassium-40		7.19	+/-0.867	0.198	+/-0.849	0.450	pCi/g					
Radium-226		0.470	+/-0.0966	0.0316	+/-0.0947	0.0691	pCi/g					
Silver-108m	U	-0.0178	+/-0.0242	0.0166	+/-0.0238	0.0358	pCi/g					
Thallium-208		0.183	+/-0.0442	0.0187	+/-0.0433	0.0405	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid Quick TAT												
Strontium-90	U	0.0483	+/-0.0525	0.0492	+/-0.0566	0.101	pCi/g		JMB1 11/13/04	0124	379964	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium		2.33	+/-1.43	1.10	+/-1.44	2.19	pCi/g		ATH1 11/11/04	1605	380128	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	11/10/04	1427	379860
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	11/09/04	1506	379811

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 16, 2004

Client Sample ID: 5502–0002–003–C3C–01
Sample ID: 125166010

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid Quick TAT	53	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Flag for results below the MDC or a flag for low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
U Indicates the target analyte was analyzed for but not detected above the detection limit.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 16, 2004

Client Sample ID:	5502-0002-003-C3C-02	Project:	YANK01304
Sample ID:	125166011	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	26-OCT-04		
Receive Date:	09-NOV-04		
Collector:	Client		
Moisture:	5.79%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.430	+/-0.172	0.0643	+/-0.169	0.142	pCi/g		AKB 11/11/04	1120	379926	1
Americium-241	U	-0.0122	+/-0.0259	0.0213	+/-0.0254	0.0446	pCi/g					
Bismuth-212		0.307	+/-0.253	0.137	+/-0.248	0.301	pCi/g					
Bismuth-214		0.423	+/-0.101	0.0313	+/-0.0988	0.0683	pCi/g					
Cesium-134	U	0.0264	+/-0.0258	0.0242	+/-0.0253	0.0523	pCi/g					
Cesium-137	U	-0.000245	+/-0.0215	0.0186	+/-0.0211	0.0405	pCi/g					
Cobalt-60	U	0.00242	+/-0.0233	0.0198	+/-0.0228	0.0449	pCi/g					
Europium-152	U	-0.0188	+/-0.0486	0.0411	+/-0.0476	0.0883	pCi/g					
Europium-154	U	0.0118	+/-0.0726	0.0624	+/-0.0712	0.139	pCi/g					
Europium-155	U	0.0592	+/-0.0459	0.044	+/-0.0449	0.0917	pCi/g					
Lead-212		0.359	+/-0.0704	0.0344	+/-0.069	0.0716	pCi/g					
Lead-214		0.402	+/-0.0788	0.035	+/-0.0772	0.0743	pCi/g					
Manganese-54	U	0.0205	+/-0.0236	0.0218	+/-0.0232	0.0472	pCi/g					
Niobium-94	U	0.0125	+/-0.0201	0.0179	+/-0.0197	0.0388	pCi/g					
Potassium-40		7.27	+/-1.00	0.151	+/-0.982	0.355	pCi/g					
Radium-226		0.423	+/-0.101	0.0313	+/-0.0988	0.0683	pCi/g					
Silver-108m	U	-0.00611	+/-0.0178	0.0147	+/-0.0174	0.0317	pCi/g					
Thallium-208		0.139	+/-0.0451	0.0174	+/-0.0442	0.0379	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid Quick TAT												
Strontium-90	U	-0.00601	+/-0.0467	0.0454	+/-0.0467	0.0932	pCi/g		JMB1 11/13/04	0123	379964	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium		2.42	+/-1.38	1.06	+/-1.39	2.11	pCi/g		ATH1 11/11/04	1637	380128	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	11/10/04	1427	379860
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	11/09/04	1506	379811

The following Analytical Methods were performed

Method	Description

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Address : Haddam Neck Plant
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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 16, 2004

Client Sample ID: 5502-0002-003-C3C-02
Sample ID: 125166011

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
1	EML HASL 300, 4.5.2.3										
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid Quick TAT	54	(25%-125%)

Notes:
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B Target analyte was detected in the sample as well as the associated blank.
BD Flag for results below the MDC or a flag for low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
U Indicates the target analyte was analyzed for but not detected above the detection limit.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 16, 2004

Client Sample ID:	5502–0002–003–S01	Project:	YANK01304
Sample ID:	125166012	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	26–OCT–04		
Receive Date:	09–NOV–04		
Collector:	Client		
Moisture:	20%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL Ra–226 In–growth Waived													
Actinium–228		0.747	+/–0.203	0.0733	+/–0.199	0.163	pCi/g		AKB	11/11/04	1207	379926	1
Americium–241	U	0.0861	+/–0.194	0.161	+/–0.191	0.335	pCi/g						
Bismuth–212	U	0.271	+/–0.291	0.182	+/–0.285	0.396	pCi/g						
Bismuth–214		0.475	+/–0.137	0.0951	+/–0.135	0.197	pCi/g						
Cesium–134	U	0.0135	+/–0.0277	0.0242	+/–0.0272	0.0531	pCi/g						
Cesium–137	U	–0.00572	+/–0.0264	0.0214	+/–0.0258	0.0467	pCi/g						
Cobalt–60	U	–0.0144	+/–0.0285	0.0215	+/–0.0279	0.0495	pCi/g						
Europium–152	U	–0.0206	+/–0.072	0.0534	+/–0.0705	0.115	pCi/g						
Europium–154	U	0.080	+/–0.0794	0.0758	+/–0.0778	0.169	pCi/g						
Europium–155	U	0.109	+/–0.105	0.0758	+/–0.103	0.158	pCi/g						
Lead–212		0.615	+/–0.0921	0.0794	+/–0.0903	0.163	pCi/g						
Lead–214		0.686	+/–0.131	0.0403	+/–0.129	0.0862	pCi/g						
Manganese–54	U	0.00795	+/–0.0254	0.0227	+/–0.0249	0.0497	pCi/g						
Niobium–94	U	0.0234	+/–0.0241	0.0221	+/–0.0236	0.0477	pCi/g						
Potassium–40		11.6	+/–1.38	0.179	+/–1.36	0.422	pCi/g						
Radium–226		0.475	+/–0.137	0.042	+/–0.135	0.0908	pCi/g						
Silver–108m	U	0.00559	+/–0.0223	0.0197	+/–0.0219	0.0423	pCi/g						
Thallium–208		0.230	+/–0.0573	0.0459	+/–0.0561	0.0955	pCi/g						
Rad Gas Flow Proportional Counting													
GFPC, Sr90, solid Quick TAT													
Strontium–90		0.0749	+/–0.0392	0.0351	+/–0.0479	0.0723	pCi/g		JMB1	11/13/04	0123	379964	2
Rad Liquid Scintillation Analysis													
LSC, Tritium Dist, Solid–HTD2,ALL FSS													
Tritium	U	0.837	+/–1.12	0.902	+/–1.12	1.80	pCi/g		ATH1	11/11/04	1709	380128	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	11/10/04	1427	379860
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	TC1	11/09/04	1506	379811

The following Analytical Methods were performed

Method	Description

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Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 16, 2004

Client Sample ID: 5502-0002-003-S01
Sample ID: 125166012

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
1	EML HASL 300, 4.5.2.3										
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid Quick TAT	67	(25%-125%)

Notes:
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BD Flag for results below the MDC or a flag for low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
U Indicates the target analyte was analyzed for but not detected above the detection limit.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 16, 2004

Client Sample ID:	5502-0002-004-C1C-01	Project:	YANK01304
Sample ID:	125166013	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	25-OCT-04		
Receive Date:	09-NOV-04		
Collector:	Client		
Moisture:	4.6%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.361	+/-0.150	0.0645	+/-0.147	0.144	pCi/g		AKB 11/11/04	1208	379926	1
Americium-241	U	0.00812	+/-0.117	0.0754	+/-0.114	0.158	pCi/g					
Bismuth-212		0.338	+/-0.399	0.132	+/-0.391	0.292	pCi/g					
Bismuth-214		0.441	+/-0.107	0.0335	+/-0.104	0.0732	pCi/g					
Cesium-134	U	0.0241	+/-0.0275	0.0253	+/-0.027	0.0548	pCi/g					
Cesium-137		0.125	+/-0.0596	0.0191	+/-0.0584	0.0418	pCi/g					
Cobalt-60	U	0.0517	+/-0.0397	0.0345	+/-0.0389	0.0747	pCi/g					
Europium-152	U	-0.0174	+/-0.0569	0.0475	+/-0.0558	0.102	pCi/g					
Europium-154	U	-0.0283	+/-0.0793	0.0631	+/-0.0777	0.142	pCi/g					
Europium-155	U	-0.0513	+/-0.0651	0.054	+/-0.0638	0.113	pCi/g					
Lead-212		0.281	+/-0.0735	0.0403	+/-0.0721	0.0837	pCi/g					
Lead-214		0.432	+/-0.101	0.0392	+/-0.099	0.0835	pCi/g					
Manganese-54	U	0.016	+/-0.0236	0.0193	+/-0.0232	0.0425	pCi/g					
Niobium-94	U	0.00294	+/-0.0186	0.0161	+/-0.0182	0.0354	pCi/g					
Potassium-40		6.54	+/-0.952	0.133	+/-0.933	0.324	pCi/g					
Radium-226		0.441	+/-0.107	0.0335	+/-0.104	0.0732	pCi/g					
Silver-108m	U	-0.0058	+/-0.0192	0.0156	+/-0.0188	0.0339	pCi/g					
Thallium-208		0.100	+/-0.0502	0.0195	+/-0.0492	0.0424	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid Quick TAT												
Strontium-90	U	0.0376	+/-0.036	0.0333	+/-0.0383	0.0687	pCi/g		JMB1 11/13/04	0203	379964	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	0.538	+/-1.10	0.899	+/-1.10	1.80	pCi/g		ATH1 11/11/04	1741	380128	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	11/10/04	1427	379860
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	11/09/04	1506	379811

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 16, 2004

Client Sample ID: 5502-0002-004-C1C-01
Sample ID: 125166013

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid Quick TAT	66	(25%–125%)

Notes:
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B Target analyte was detected in the sample as well as the associated blank.
BD Flag for results below the MDC or a flag for low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
U Indicates the target analyte was analyzed for but not detected above the detection limit.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier–please see case narrative, data summary package or contact your project manager for details.
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 16, 2004

Client Sample ID:	5502–0002–004–C1C–02	Project:	YANK01304
Sample ID:	125166014	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	25–OCT–04		
Receive Date:	09–NOV–04		
Collector:	Client		
Moisture:	4.56%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)												
Actinium–228		0.305	+/–0.135	0.069	+/–0.132	0.152	pCi/g		AKB 11/11/04	1210	379926	1
Americium–241	U	–0.149	+/–0.155	0.0966	+/–0.152	0.204	pCi/g					
Bismuth–212		0.276	+/–0.231	0.118	+/–0.227	0.263	pCi/g					
Bismuth–214		0.381	+/–0.0811	0.0315	+/–0.0795	0.0688	pCi/g					
Cesium–134	U	0.0284	+/–0.0255	0.0191	+/–0.025	0.0421	pCi/g					
Cesium–137	U	–0.000297	+/–0.0206	0.0176	+/–0.0202	0.0386	pCi/g					
Cobalt–60	U	0.025	+/–0.0219	0.0218	+/–0.0215	0.0492	pCi/g					
Europium–152	U	–0.024	+/–0.0518	0.0418	+/–0.0507	0.0904	pCi/g					
Europium–154	U	–0.0192	+/–0.0635	0.0508	+/–0.0622	0.116	pCi/g					
Europium–155	U	0.0451	+/–0.0565	0.0551	+/–0.0554	0.116	pCi/g					
Lead–212		0.374	+/–0.054	0.0269	+/–0.0529	0.057	pCi/g					
Lead–214		0.420	+/–0.0776	0.0334	+/–0.076	0.0716	pCi/g					
Manganese–54	U	–0.00443	+/–0.0181	0.0145	+/–0.0177	0.0327	pCi/g					
Niobium–94	U	0.0098	+/–0.0189	0.017	+/–0.0185	0.037	pCi/g					
Potassium–40		7.12	+/–0.912	0.172	+/–0.894	0.398	pCi/g					
Radium–226		0.381	+/–0.0811	0.0315	+/–0.0795	0.0688	pCi/g					
Silver–108m	U	0.00859	+/–0.0167	0.0156	+/–0.0164	0.0338	pCi/g					
Thallium–208		0.130	+/–0.0391	0.0153	+/–0.0383	0.0338	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid Quick TAT												
Strontium–90	U	–0.00664	+/–0.0349	0.0341	+/–0.035	0.0702	pCi/g		JMB1 11/13/04	0203	379964	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)												
Tritium	U	1.35	+/–1.91	1.55	+/–1.91	3.09	pCi/g		ATH1 11/13/04	1006	380128	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	11/10/04	1427	379860
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	TC1	11/09/04	1506	379811

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 16, 2004

Client Sample ID: 5502–0002–004–C1C–02
Sample ID: 125166014

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid Quick TAT	67	(25%–125%)

Notes:
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** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Flag for results below the MDC or a flag for low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
U Indicates the target analyte was analyzed for but not detected above the detection limit.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 16, 2004

Client Sample ID:	5502–0002–004–C3C–01	Project:	YANK01304
Sample ID:	125166015	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	25–OCT–04		
Receive Date:	09–NOV–04		
Collector:	Client		
Moisture:	5.95%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
Rad Gamma Spec Analysis											
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)											
Actinium–228		0.419	+/–0.184	0.0611	+/–0.180	0.137	pCi/g		AKB 11/11/04	1210	379926 1
Americium–241	U	0.00302	+/–0.0364	0.0291	+/–0.0357	0.0606	pCi/g				
Bismuth–212	U	0.328	+/–0.202	0.197	+/–0.198	0.424	pCi/g				
Bismuth–214		0.478	+/–0.108	0.0322	+/–0.105	0.0707	pCi/g				
Cesium–134	U	0.0519	+/–0.0276	0.0255	+/–0.027	0.0554	pCi/g				
Cesium–137	U	0.00685	+/–0.0237	0.0211	+/–0.0232	0.0459	pCi/g				
Cobalt–60	U	0.00778	+/–0.0205	0.0186	+/–0.0201	0.0429	pCi/g				
Europium–152	U	0.0464	+/–0.0637	0.0521	+/–0.0624	0.111	pCi/g				
Europium–154	U	0.0842	+/–0.105	0.0597	+/–0.103	0.135	pCi/g				
Europium–155	U	0.0391	+/–0.0541	0.0521	+/–0.053	0.109	pCi/g				
Lead–212		0.469	+/–0.0772	0.0278	+/–0.0756	0.0586	pCi/g				
Lead–214		0.573	+/–0.100	0.0381	+/–0.0984	0.0811	pCi/g				
Manganese–54	U	0.0226	+/–0.0208	0.0198	+/–0.0204	0.0435	pCi/g				
Niobium–94	U	0.00793	+/–0.0209	0.0187	+/–0.0205	0.0407	pCi/g				
Potassium–40		7.74	+/–1.02	0.129	+/–1.00	0.315	pCi/g				
Radium–226		0.478	+/–0.108	0.0322	+/–0.105	0.0707	pCi/g				
Silver–108m	U	0.0134	+/–0.0204	0.0192	+/–0.0199	0.041	pCi/g				
Thallium–208		0.140	+/–0.053	0.0203	+/–0.0519	0.0441	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid Quick TAT											
Strontium–90	U	0.0119	+/–0.0233	0.0221	+/–0.0235	0.0455	pCi/g		JMB1 11/13/04	0203	379964 2
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)											
Tritium		1.83	+/–1.15	0.891	+/–1.16	1.78	pCi/g		ATH1 11/11/04	1845	380128 3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	11/10/04	1427	379860
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	TC1	11/09/04	1506	379811

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 16, 2004

Client Sample ID: 5502-0002-004-C3C-01
Sample ID: 125166015

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid Quick TAT	106	(25%–125%)

Notes:
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BD Flag for results below the MDC or a flag for low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
U Indicates the target analyte was analyzed for but not detected above the detection limit.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier–please see case narrative, data summary package or contact your project manager for details.
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 16, 2004

Client Sample ID:	5502-0002-004-C3C-02	Project:	YANK01304
Sample ID:	125166016	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	25-OCT-04		
Receive Date:	09-NOV-04		
Collector:	Client		
Moisture:	6.4%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.427	+/-0.175	0.0653	+/-0.172	0.146	pCi/g		AKB 11/11/04	1211	379926	1
Americium-241	U	-0.0933	+/-0.105	0.0799	+/-0.103	0.168	pCi/g					
Bismuth-212	U	0.272	+/-0.496	0.146	+/-0.486	0.322	pCi/g					
Bismuth-214		0.396	+/-0.0788	0.0338	+/-0.0772	0.0739	pCi/g					
Cesium-134	U	0.0353	+/-0.0306	0.0246	+/-0.0299	0.0536	pCi/g					
Cesium-137	U	0.00297	+/-0.0201	0.0177	+/-0.0196	0.039	pCi/g					
Cobalt-60	U	-0.00742	+/-0.0241	0.0192	+/-0.0236	0.0444	pCi/g					
Europium-152	U	0.0366	+/-0.0596	0.0539	+/-0.0584	0.115	pCi/g					
Europium-154	U	0.0344	+/-0.0623	0.0579	+/-0.061	0.132	pCi/g					
Europium-155	U	0.0408	+/-0.0591	0.058	+/-0.0579	0.121	pCi/g					
Lead-212		0.409	+/-0.0679	0.0319	+/-0.0666	0.0671	pCi/g					
Lead-214		0.378	+/-0.106	0.0403	+/-0.104	0.0857	pCi/g					
Manganese-54	U	0.0115	+/-0.0214	0.0193	+/-0.0209	0.0427	pCi/g					
Niobium-94	U	0.00727	+/-0.0188	0.0169	+/-0.0184	0.0372	pCi/g					
Potassium-40		7.50	+/-0.865	0.199	+/-0.847	0.459	pCi/g					
Radium-226		0.396	+/-0.0788	0.0338	+/-0.0772	0.0739	pCi/g					
Silver-108m	U	0.0156	+/-0.0194	0.0177	+/-0.019	0.0381	pCi/g					
Thallium-208		0.147	+/-0.0428	0.0185	+/-0.042	0.0405	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid Quick TAT												
Strontium-90	U	0.00108	+/-0.0448	0.0433	+/-0.0448	0.0893	pCi/g		JMB1 11/13/04	0456	379964	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium		2.52	+/-1.16	0.870	+/-1.17	1.74	pCi/g		ATH1 11/11/04	1917	380128	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	11/10/04	1427	379860
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	11/09/04	1506	379811

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 16, 2004

Client Sample ID: 5502–0002–004–C3C–02
Sample ID: 125166016

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid Quick TAT	45	(25%–125%)

Notes:
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BD Flag for results below the MDC or a flag for low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
U Indicates the target analyte was analyzed for but not detected above the detection limit.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 16, 2004

Client Sample ID:	5502–0002–004–S01	Project:	YANK01304
Sample ID:	125166017	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	25–OCT–04		
Receive Date:	09–NOV–04		
Collector:	Client		
Moisture:	15.2%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL Ra–226 In–growth													
Waived													
Actinium–228		0.896	+/–0.222	0.0718	+/–0.218	0.159	pCi/g		AKB	11/11/04	1211	379926	1
Americium–241	U	–0.0198	+/–0.120	0.101	+/–0.118	0.210	pCi/g						
Bismuth–212		0.569	+/–0.433	0.159	+/–0.424	0.347	pCi/g						
Bismuth–214		0.599	+/–0.115	0.0393	+/–0.112	0.0849	pCi/g						
Cesium–134	U	0.0185	+/–0.0391	0.0299	+/–0.0383	0.0641	pCi/g						
Cesium–137	U	0.0194	+/–0.027	0.022	+/–0.0264	0.0477	pCi/g						
Cobalt–60	U	–0.0178	+/–0.0246	0.0175	+/–0.0241	0.0407	pCi/g						
Europium–152	U	–0.04	+/–0.0607	0.0515	+/–0.0595	0.110	pCi/g						
Europium–154	U	0.00365	+/–0.0793	0.0662	+/–0.0777	0.148	pCi/g						
Europium–155	U	0.0541	+/–0.0696	0.0657	+/–0.0682	0.137	pCi/g						
Lead–212		0.861	+/–0.0756	0.0325	+/–0.0741	0.0681	pCi/g						
Lead–214		0.775	+/–0.121	0.0404	+/–0.119	0.0858	pCi/g						
Manganese–54	U	0.0126	+/–0.0271	0.0245	+/–0.0265	0.0529	pCi/g						
Niobium–94	U	–0.00233	+/–0.0231	0.019	+/–0.0226	0.0413	pCi/g						
Potassium–40		12.8	+/–1.16	0.185	+/–1.13	0.427	pCi/g						
Radium–226		0.599	+/–0.115	0.0393	+/–0.112	0.0849	pCi/g						
Silver–108m	U	–0.0189	+/–0.0212	0.017	+/–0.0207	0.0367	pCi/g						
Thallium–208		0.296	+/–0.0627	0.0202	+/–0.0615	0.0437	pCi/g						
Rad Gas Flow Proportional Counting													
GFPC, Sr90, solid Quick TAT													
Strontium–90		0.0831	+/–0.0293	0.0251	+/–0.0381	0.0517	pCi/g		JMB1	11/13/04	0456	379964	2
Rad Liquid Scintillation Analysis													
LSC, Tritium Dist, Solid–HTD2,ALL FSS													
Tritium	U	1.44	+/–1.22	0.961	+/–1.22	1.92	pCi/g		ATH1	11/11/04	1949	380128	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	11/10/04	1427	379860
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	TC1	11/09/04	1506	379811

The following Analytical Methods were performed

Method	Description

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Company : Connecticut Yankee Atomic Power
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362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 16, 2004

Client Sample ID: 5502–0002–004–S01
Sample ID: 125166017

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
1	EML HASL 300, 4.5.2.3										
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid Quick TAT	81	(25%–125%)

Notes:
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B Target analyte was detected in the sample as well as the associated blank.
BD Flag for results below the MDC or a flag for low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
U Indicates the target analyte was analyzed for but not detected above the detection limit.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 16, 2004

Client Sample ID:	5502–0001–005S	Project:	YANK01304
Sample ID:	125166018	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	05–OCT–04		
Receive Date:	09–NOV–04		
Collector:	Client		
Moisture:	.498%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
Rad Gamma Spec Analysis											
Gamma,Solid–FSS GAM & ALL Ra–226 In–growth Waived											
Actinium–228	U UI	0.00	+/–0.504	0.230	+/–0.494	0.479	pCi/g		AKB 11/11/04	1212	379926 1
Americium–241	U UI	0.00	+/–1.27	0.629	+/–1.24	1.27	pCi/g				
Bismuth–212		4.88	+/–0.888	0.310	+/–0.870	0.658	pCi/g				
Bismuth–214	U UI	0.00	+/–0.162	0.109	+/–0.159	0.225	pCi/g				
Cesium–134	U	0.0358	+/–0.0588	0.0492	+/–0.0576	0.104	pCi/g				
Cesium–137		2.56	+/–0.251	0.0422	+/–0.246	0.0889	pCi/g				
Cobalt–60		3.18	+/–0.293	0.036	+/–0.287	0.0797	pCi/g				
Europium–152	U UI	0.00	+/–0.210	0.127	+/–0.206	0.263	pCi/g				
Europium–154	U	0.0458	+/–0.150	0.111	+/–0.147	0.243	pCi/g				
Europium–155	U UI	0.00	+/–1.48	0.667	+/–1.45	1.34	pCi/g				
Lead–212		9.25	+/–0.759	0.0708	+/–0.744	0.146	pCi/g				
Lead–214		0.343	+/–0.156	0.0844	+/–0.153	0.175	pCi/g				
Manganese–54	U	–0.00283	+/–0.0555	0.0441	+/–0.0544	0.0934	pCi/g				
Niobium–94	U	0.0207	+/–0.0435	0.0365	+/–0.0427	0.0771	pCi/g				
Potassium–40		8.32	+/–1.25	0.345	+/–1.22	0.768	pCi/g				
Radium–226		0.445	+/–0.162	0.070	+/–0.159	0.148	pCi/g				
Silver–108m	U	0.020	+/–0.0431	0.0371	+/–0.0422	0.0775	pCi/g				
Thallium–208		2.73	+/–0.251	0.0403	+/–0.246	0.0849	pCi/g				
Uranium–235		294	+/–48.0	0.880	+/–47.1	1.77	pCi/g				
Uranium–238		41.0	+/–11.3	4.92	+/–11.0	9.92	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid Quick TAT											
Strontium–90	U	0.0141	+/–0.0252	0.0238	+/–0.0256	0.0491	pCi/g		JMB1 11/13/04	0456	379964 2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	11/10/04	1427	379860
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	TC1	11/09/04	1506	379811

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Certificate of Analysis

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 16, 2004

Client Sample ID: 5502-0001-005S
Sample ID: 125166018

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid Quick TAT	87	(25%–125%)

Notes:
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- B Target analyte was detected in the sample as well as the associated blank.
- BD Flag for results below the MDC or a flag for low tracer recovery.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
- U Indicates the target analyte was analyzed for but not detected above the detection limit.
- UI Uncertain identification for gamma spectroscopy.
- X Lab-specific qualifier–please see case narrative, data summary package or contact your project manager for details.
- h Sample preparation or preservation holding time exceeded.

The above sample is reported on a dry weight basis.

QUALITY CONTROL DATA

GENERAL ENGINEERING LABORATORIES, LLC

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QC Summary

Report Date: November 16, 2004
Page 1 of 6

Client : Connecticut Yankee Atomic Power
Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut

Contact: Mr. Pete Hollenbeck

Workorder: 125166

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 379926										
QC1200737004 125166001 DUP										
Actinium-228		0.354		0.299	pCi/g	17		(0% - 100%)	AKB	11/11/04 12:14
	Uncert:	+/-0.157		+/-0.167						
	TPU:	+/-0.154		+/-0.164						
Americium-241	U	-0.00166	U	0.00194	pCi/g	N/A		(0% - 100%)		
	Uncert:	+/-0.0316		+/-0.0259						
	TPU:	+/-0.031		+/-0.0253						
Bismuth-212		0.336	U	0.249	pCi/g	30		(0% - 100%)		
	Uncert:	+/-0.251		+/-0.343						
	TPU:	+/-0.246		+/-0.336						
Bismuth-214		0.338		0.293	pCi/g	14		(0% - 100%)		
	Uncert:	+/-0.123		+/-0.0792						
	TPU:	+/-0.121		+/-0.0776						
Cesium-134	U	0.0126	U	0.0268	pCi/g	72		(0% - 100%)		
	Uncert:	+/-0.0256		+/-0.0227						
	TPU:	+/-0.0251		+/-0.0223						
Cesium-137		0.0958		0.103	pCi/g	7		(0% - 100%)		
	Uncert:	+/-0.0446		+/-0.0347						
	TPU:	+/-0.0438		+/-0.034						
Cobalt-60	UUI	0.00	U	0.0544	pCi/g	4		(0% - 100%)		
	Uncert:	+/-0.059		+/-0.0433						
	TPU:	+/-0.0578		+/-0.0425						
Europium-152	U	-0.0171	U	0.0439	pCi/g	N/A		(0% - 100%)		
	Uncert:	+/-0.0654		+/-0.0516						
	TPU:	+/-0.0641		+/-0.0505						
Europium-154	U	0.0586	U	-0.0329	pCi/g	N/A		(0% - 100%)		
	Uncert:	+/-0.0618		+/-0.0584						
	TPU:	+/-0.0606		+/-0.0572						
Europium-155	U	0.00698	U	0.0198	pCi/g	96		(0% - 100%)		
	Uncert:	+/-0.0504		+/-0.0426						
	TPU:	+/-0.0494		+/-0.0417						
Lead-212		0.356		0.338	pCi/g	5		(0% - 100%)		
	Uncert:	+/-0.0677		+/-0.0494						
	TPU:	+/-0.0663		+/-0.0484						
Lead-214		0.397		0.252	pCi/g	44*		(0% - 100%)		
	Uncert:	+/-0.0943		+/-0.0872						
	TPU:	+/-0.0925		+/-0.0854						
Manganese-54	U	0.00112	U	-0.0138	pCi/g	N/A		(0% - 100%)		
	Uncert:	+/-0.020		+/-0.0207						
	TPU:	+/-0.0196		+/-0.0203						
Niobium-94	U	0.0229	U	0.00722	pCi/g	104		(0% - 100%)		
	Uncert:	+/-0.021		+/-0.021						
	TPU:	+/-0.0206		+/-0.0206						

QC Summary

Workorder: 125166

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 379926										
Potassium-40		4.02		4.29	pCi/g	7		(0% - 100%)		
	Uncert:	+/-0.839		+/-0.746						
	TPU:	+/-0.822		+/-0.731						
Radium-226		0.338		0.293	pCi/g	14		(0% - 100%)		
	Uncert:	+/-0.123		+/-0.0792						
	TPU:	+/-0.121		+/-0.0776						
Silver-108m	U	0.0117	U	-0.00641	pCi/g	N/A		(0% - 100%)		
	Uncert:	+/-0.0198		+/-0.0193						
	TPU:	+/-0.0194		+/-0.0189						
Thallium-208		0.120		0.123	pCi/g	2		(0% - 100%)		
	Uncert:	+/-0.0438		+/-0.0515						
	TPU:	+/-0.0429		+/-0.0504						
Uranium-235	U	-0.0394	U	0.102	pCi/g	N/A		(0%-20%)		
	Uncert:	+/-0.117		+/-0.101						
	TPU:	+/-0.115		+/-0.0991						
Uranium-238	U	0.00246	U	0.108	pCi/g	191		(0% - 20%)		
	Uncert:	+/-0.619		+/-0.594						
	TPU:	+/-0.607		+/-0.582						
QC1200737005 LCS										
Actinium-228			U	0.293	pCi/g					11/12/04 14:39
	Uncert:			+/-0.575						
	TPU:			+/-0.563						
Americium-241	23.4			27.2	pCi/g		116	(75%-125%)		
	Uncert:			+/-1.53						
	TPU:			+/-1.50						
Bismuth-212			U	0.182	pCi/g					
	Uncert:			+/-1.00						
	TPU:			+/-0.980						
Bismuth-214			U	0.0063	pCi/g					
	Uncert:			+/-0.234						
	TPU:			+/-0.229						
Cesium-134			U	-0.0451	pCi/g					
	Uncert:			+/-0.161						
	TPU:			+/-0.157						
Cesium-137	9.16			10.7	pCi/g		117	(75%-125%)		
	Uncert:			+/-0.509						
	TPU:			+/-0.499						
Cobalt-60	13.6			14.8	pCi/g		109	(75%-125%)		
	Uncert:			+/-0.681						
	TPU:			+/-0.667						
Europium-152			U	0.0217	pCi/g					
	Uncert:			+/-0.269						
	TPU:			+/-0.264						
Europium-154			U	-0.143	pCi/g					
	Uncert:			+/-0.288						
	TPU:			+/-0.282						
Europium-155			U	-0.0442	pCi/g					
	Uncert:			+/-0.293						

QC Summary

Workorder: **125166**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 379926										
	TPU:			+/-0.287						
Lead-212			U	0.0654	pCi/g					
	Uncert:			+/-0.150						
	TPU:			+/-0.147						
Lead-214			U	0.061	pCi/g					
	Uncert:			+/-0.202						
	TPU:			+/-0.197						
Manganese-54			U	-0.139	pCi/g					
	Uncert:			+/-0.136						
	TPU:			+/-0.133						
Niobium-94			U	-0.024	pCi/g					
	Uncert:			+/-0.120						
	TPU:			+/-0.117						
Potassium-40			U	0.0187	pCi/g					
	Uncert:			+/-1.02						
	TPU:			+/-0.998						
Radium-226			U	0.0063	pCi/g			(75%-125%)		
	Uncert:			+/-0.234						
	TPU:			+/-0.229						
Silver-108m			U	0.030	pCi/g					
	Uncert:			+/-0.115						
	TPU:			+/-0.113						
Thallium-208			U	0.0453	pCi/g					
	Uncert:			+/-0.123						
	TPU:			+/-0.121						
Uranium-235			U	-0.102	pCi/g			(75%-125%)		
	Uncert:			+/-0.492						
	TPU:			+/-0.482						
Uranium-238			U	-7.59	pCi/g					
	Uncert:			+/-4.37						
	TPU:			+/-4.28						
QC1200737003 MB										
Actinium-228			U	0.100	pCi/g					11/11/04 12:13
	Uncert:			+/-0.0889						
	TPU:			+/-0.0871						
Americium-241			U	0.0266	pCi/g					
	Uncert:			+/-0.088						
	TPU:			+/-0.0863						
Bismuth-212			U	0.172	pCi/g					
	Uncert:			+/-0.373						
	TPU:			+/-0.365						
Bismuth-214			U	0.0618	pCi/g					
	Uncert:			+/-0.0821						
	TPU:			+/-0.0805						
Cesium-134			U	0.00343	pCi/g					
	Uncert:			+/-0.0218						
	TPU:			+/-0.0213						
Cesium-137			U	0.00944	pCi/g					

QC Summary

Workorder: 125166

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch 379926											
	Uncert:			+/-0.025							
	TPU:			+/-0.0245							
Cobalt-60			U	-0.011	pCi/g						
	Uncert:			+/-0.0245							
	TPU:			+/-0.024							
Europium-152			U	0.00247	pCi/g						
	Uncert:			+/-0.0541							
	TPU:			+/-0.053							
Europium-154			U	0.0212	pCi/g						
	Uncert:			+/-0.0689							
	TPU:			+/-0.0675							
Europium-155			U	-0.0596	pCi/g						
	Uncert:			+/-0.0596							
	TPU:			+/-0.0584							
Lead-212			U	0.0264	pCi/g						
	Uncert:			+/-0.0826							
	TPU:			+/-0.0809							
Lead-214			U	0.0323	pCi/g						
	Uncert:			+/-0.0469							
	TPU:			+/-0.0459							
Manganese-54			U	-0.00268	pCi/g						
	Uncert:			+/-0.0403							
	TPU:			+/-0.0395							
Niobium-94			U	-0.021	pCi/g						
	Uncert:			+/-0.023							
	TPU:			+/-0.0225							
Potassium-40			U	0.351	pCi/g						
	Uncert:			+/-0.325							
	TPU:			+/-0.319							
Radium-226			U	0.0618	pCi/g						
	Uncert:			+/-0.0821							
	TPU:			+/-0.0805							
Silver-108m			U	-0.0163	pCi/g						
	Uncert:			+/-0.0194							
	TPU:			+/-0.019							
Thallium-208			U	0.00534	pCi/g						
	Uncert:			+/-0.0542							
	TPU:			+/-0.0531							
Uranium-235			U	-0.0445	pCi/g						
	Uncert:			+/-0.122							
	TPU:			+/-0.119							
Uranium-238			UUI	0.00	pCi/g						
	Uncert:			+/-1.43							
	TPU:			+/-1.41							
Rad Gas Flow											
Batch 379964											
QC1200737122 125166001 DUP											
Strontium-90	U	0.0124		0.168	pCi/g	173*		(0% - 100%)	JMB1	11/16/04	14:48

QC Summary

Workorder: **125166**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gas Flow										
Batch 379964										
	Uncert:	+/-0.0344		+/-0.0494						
	TPU:	+/-0.0346		+/-0.0624						
QC1200737124 LCS										
Strontium-90	3.99			3.12	pCi/g		78	(75%-125%)		11/12/04 17:24
	Uncert:			+/-0.264						
	TPU:			+/-0.929						
QC1200737121 MB										
Strontium-90			U	-0.048	pCi/g					11/13/04 04:56
	Uncert:			+/-0.0248						
	TPU:			+/-0.0287						
QC1200737123 125166001 MS										
Strontium-90	8.49 U	0.0124		8.16	pCi/g		96	(75%-125%)		11/12/04 17:24
	Uncert:	+/-0.0344		+/-0.824						
	TPU:	+/-0.0346		+/-3.88						
Rad Liquid Scintillation										
Batch 380128										
QC1200737485 125166007 DUP										
Tritium	U	1.04	U	1.53	pCi/g	0		(0% - 100%)	ATH1	11/11/04 20:52
	Uncert:	+/-1.30		+/-1.20						
	TPU:	+/-1.30		+/-1.21						
QC1200737488 KNOWN										
Tritium	7.89			8.65	pCi/g		110			11/13/04 10:38
	Uncert:			+/-2.19						
	TPU:			+/-2.34						
QC1200737487 LCS										
Tritium	7.91			8.55	pCi/g		108	(75%-125%)		11/11/04 21:56
	Uncert:			+/-1.41						
	TPU:			+/-1.50						
QC1200737484 MB										
Tritium			U	1.17	pCi/g					11/11/04 20:20
	Uncert:			+/-1.23						
	TPU:			+/-1.23						
QC1200737486 125166007 MS										
Tritium	7.91 U	1.04		8.76	pCi/g		98	(75%-125%)		11/11/04 21:24
	Uncert:	+/-1.30		+/-1.60						
	TPU:	+/-1.30		+/-1.71						

Notes:
The Qualifiers in this report are defined as follows:

- * Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- ** Indicates the analyte is a surrogate compound.
- B Target analyte was detected in the sample as well as the associated blank.
- BD Flag for results below the MDC or a flag for low tracer recovery.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.

QC Summary

Workorder: **125166**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

U Indicates the target analyte was analyzed for but not detected above the detection limit.

UI Uncertain identification for gamma spectroscopy.

X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.

h Sample preparation or preservation holding time exceeded.

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
** Indicates analyte is a surrogate compound.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptence criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

5502-0002-001-C1C-01	MSR#04-3800	125166001	379926	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.354	0.157	PCI/G	0		9/11/2004	38292.54931	9.53	0.137	PCI/G	0.0608	PCI/G	1	6.8	172	G	PCI/G	PR
5502-0002-001-C1C-01	MSR#04-3800	125166001	379926	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.00166	0.0316	PCI/G	0	U	9/11/2004	38292.54931	9.53	0.0565	PCI/G	0.0281	PCI/G	1	6.8	172	G	PCI/G	PR
5502-0002-001-C1C-01	MSR#04-3800	125166001	379926	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.336	0.251	PCI/G	0		9/11/2004	38292.54931	9.53	0.314	PCI/G	0.142	PCI/G	1	6.8	172	G	PCI/G	PR
5502-0002-001-C1C-01	MSR#04-3800	125166001	379926	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.338	0.123	PCI/G	0		9/11/2004	38292.54931	9.53	0.0713	PCI/G	0.0324	PCI/G	1	6.8	172	G	PCI/G	PR
5502-0002-001-C1C-01	MSR#04-3800	125166001	379926	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0126	0.0256	PCI/G	0	U	9/11/2004	38292.54931	9:53	0.0505	PCI/G	0.023	PCI/G	1	6.8	172	G	PCI/G	PR
5502-0002-001-C1C-01	MSR#04-3800	125166001	379926	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.0958	0.0446	PCI/G	0		9/11/2004	38292.54931	9.53	0.0426	PCI/G	0.0194	PCI/G	1	6.8	172	G	PCI/G	PR
5502-0002-001-C1C-01	MSR#04-3800	125166001	379926	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0	0.059	PCI/G	0	UU	9/11/2004	38292.54931	9.53	0.0389	PCI/G	0.0156	PCI/G	1	6.8	172	G	PCI/G	PR
5502-0002-001-C1C-01	MSR#04-3800	125166001	379926	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0171	0.0654	PCI/G	0	U	9/11/2004	38292.54931	9:53	0.102	PCI/G	0.0473	PCI/G	1	6.8	172	G	PCI/G	PR
5502-0002-001-C1C-01	MSR#04-3800	125166001	379926	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0586	0.0618	PCI/G	0	U	9/11/2004	38292.54931	9:53	0.137	PCI/G	0.0604	PCI/G	1	6.8	172	G	PCI/G	PR
5502-0002-001-C1C-01	MSR#04-3800	125166001	379926	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.00698	0.0504	PCI/G	0	U	9/11/2004	38292.54931	9.53	0.0986	PCI/G	0.0471	PCI/G	1	6.8	172	G	PCI/G	PR
5502-0002-001-C1C-01	MSR#04-3800	125166001	379926	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.356	0.0677	PCI/G	0		9/11/2004	38292.54931	9:53	0.0615	PCI/G	0.0292	PCI/G	1	6.8	172	G	PCI/G	PR
5502-0002-001-C1C-01	MSR#04-3800	125166001	379926	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.397	0.0943	PCI/G	0		9/11/2004	38292.54931	9.53	0.0721	PCI/G	0.0336	PCI/G	1	6.8	172	G	PCI/G	PR
5502-0002-001-C1C-01	MSR#04-3800	125166001	379926	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.00112	0.02	PCI/G	0	U	9/11/2004	38292.54931	9.53	0.0382	PCI/G	0.017	PCI/G	1	6.8	172	G	PCI/G	PR
5502-0002-001-C1C-01	MSR#04-3800	125166001	379926	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0229	0.021	PCI/G	0	U	9/11/2004	38292.54931	9.53	0.0434	PCI/G	0.02	PCI/G	1	6.8	172	G	PCI/G	PR
5502-0002-001-C1C-01	MSR#04-3800	125166001	379926	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	4.02	0.839	PCI/G	0		9/11/2004	38292.54931	9:53	0.373	PCI/G	0.157	PCI/G	1	6.8	172	G	PCI/G	PR
5502-0002-001-C1C-01	MSR#04-3800	125166001	379926	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.338	0.123	PCI/G	0		9/11/2004	38292.54931	9.53	0.0713	PCI/G	0.0324	PCI/G	1	6.8	172	G	PCI/G	PR
5502-0002-001-C1C-01	MSR#04-3800	125166001	379926	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.0117	0.0198	PCI/G	0	U	9/11/2004	38292.54931	9:53	0.0398	PCI/G	0.0188	PCI/G	1	6.8	172	G	PCI/G	PR
5502-0002-001-C1C-01	MSR#04-3800	125166001	379964	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.0124	0.0344	PCI/G	0	U	10/11/2004	38293.96736	1:22	0.0675	PCI/G	0.0328	PCI/G	1	6.8	4.29	G	PCI/G	PR
5502-0002-001-C1C-01	MSR#04-3800	125166001	379926	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.12	0.0438	PCI/G	0		9/11/2004	38292.54931	9.53	0.0347	PCI/G	0.0156	PCI/G	1	6.8	172	G	PCI/G	PR
5502-0002-001-C1C-01	MSR#04-3800	125166001	380128	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	0.698	1.08	PCI/G	0	U		11/11/2004	11:19	1.75	PCI/G	0.875	PCI/G	1	6.8			PCI/G	PR
5502-0002-001-C1C-02	MSR#04-3800	125166002	379926	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.334	0.139	PCI/G	0		9/11/2004	38292.54931	9:54	0.116	PCI/G	0.052	PCI/G	1	5.6	179	G	PCI/G	PR
5502-0002-001-C1C-02	MSR#04-3800	125166002	379926	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0306	0.0868	PCI/G	0	U	9/11/2004	38292.54931	9:54	0.135	PCI/G	0.0643	PCI/G	1	5.6	179	G	PCI/G	PR
5502-0002-001-C1C-02	MSR#04-3800	125166002	379926	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.457	0.307	PCI/G	0		9/11/2004	38292.54931	9.54	0.26	PCI/G	0.118	PCI/G	1	5.6	179	G	PCI/G	PR
5502-0002-001-C1C-02	MSR#04-3800	125166002	379926	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.305	0.0927	PCI/G	0		9/11/2004	38292.54931	9:54	0.0537	PCI/G	0.0243	PCI/G	1	5.6	179	G	PCI/G	PR
5502-0002-001-C1C-02	MSR#04-3800	125166002	379926	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.021	0.0243	PCI/G	0	U	9/11/2004	38292.54931	9:54	0.0477	PCI/G	0.0221	PCI/G	1	5.6	179	G	PCI/G	PR
5502-0002-001-C1C-02	MSR#04-3800	125166002	379926	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.000164	0.0161	PCI/G	0	U	9/11/2004	38292.54931	9:54	0.0304	PCI/G	0.0137	PCI/G	1	5.6	179	G	PCI/G	PR
5502-0002-001-C1C-02	MSR#04-3800	125166002	379926	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.00672	0.0211	PCI/G	0	U	9/11/2004	38292.54931	9.54	0.0417	PCI/G	0.0184	PCI/G	1	5.6	179	G	PCI/G	PR
5502-0002-001-C1C-02	MSR#04-3800	125166002	379926	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.00395	0.044	PCI/G	0	U	9/11/2004	38292.54931	9:54	0.0794	PCI/G	0.0369	PCI/G	1	5.6	179	G	PCI/G	PR
5502-0002-001-C1C-02	MSR#04-3800	125166002	379926	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.037	0.067	PCI/G	0	U	9/11/2004	38292.54931	9:54	0.133	PCI/G	0.0601	PCI/G	1	5.6	179	G	PCI/G	PR
5502-0002-001-C1C-02	MSR#04-3800	125166002	379926	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.00207	0.0433	PCI/G	0	U	9/11/2004	38292.54931	9:54	0.0861	PCI/G	0.0409	PCI/G	1	5.6	179	G	PCI/G	PR
5502-0002-001-C1C-02	MSR#04-3800	125166002	379926	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.287	0.0675	PCI/G	0		9/11/2004	38292.54931	9:54	0.0574	PCI/G	0.0274	PCI/G	1	5.6	179	G	PCI/G	PR
5502-0002-001-C1C-02	MSR#04-3800	125166002	379926	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.333	0.0839	PCI/G	0		9/11/2004	38292.54931	9:54	0.0585	PCI/G	0.0272	PCI/G	1	5.6	179	G	PCI/G	PR
5502-0002-001-C1C-02	MSR#04-3800	125166002	379926	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.0152	0.0159	PCI/G	0	U	9/11/2004	38292.54931	9.54	0.0249	PCI/G	0.0108	PCI/G	1	5.6	179	G	PCI/G	PR
5502-0002-001-C1C-02	MSR#04-3800	125166002	379926	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0107	0.0176	PCI/G	0	U	9/11/2004	38292.54931	9:54	0.0344	PCI/G	0.0159	PCI/G	1	5.6	179	G	PCI/G	PR
5502-0002-001-C1C-02	MSR#04-3800	125166002	379926	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	6.88	0.888	PCI/G	0		9/11/2004	38292.54931	9:54	0.279	PCI/G	0.115	PCI/G	1	5.6	179	G	PCI/G	PR
5502-0002-001-C1C-02	MSR#04-3800	125166002	379926	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.305	0.0927	PCI/G	0		9/11/2004	38292.54931	9:54	0.0537	PCI/G	0.0243	PCI/G	1	5.6	179	G	PCI/G	PR
5502-0002-001-C1C-02	MSR#04-3800	125166002	379926	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00436	0.014	PCI/G	0	U	9/11/2004	38292.54931	9:54	0.0263	PCI/G	0.012	PCI/G	1	5.6	179	G	PCI/G	PR
5502-0002-001-C1C-02	MSR#04-3800	125166002	379964	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.00442	0.0288	PCI/G	0	U	10/11/2004	38293.96736	1:22	0.0578	PCI/G	0.0281	PCI/G	1	5.6	4.3	G	PCI/G	PR
5502-0002-001-C1C-02	MSR#04-3800	125166002	379926	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.101	0.0334	PCI/G	0		9/11/2004	38292.54931	9:54	0.032	PCI/G	0.0146	PCI/G	1	5.6	179	G	PCI/G	PR
5502-0002-001-C1C-02	MSR#04-3800	125166002	380128	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	1.17	1.27	PCI/G	0	U		11/11/2004	11:50	2.02	PCI/G	1.01	PCI/G	1	5.6			PCI/G	PR
5502-0002-002-C1C-01	MSR#04-3800	125166003	379926	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.439	0.123	PCI/G	0		9/11/2004	38292.54931	9.55	0.103	PCI/G	0.0451	PCI/G	1	17	174	G	PCI/G	PR
5502-0002-002-C1C-01	MSR#04-3800	125166003	379926	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.177	0.158	PCI/G	0	U	9/11/2004	38292.54931	9.55	0.24	PCI/G	0.113	PCI/G	1	17	174	G	PCI/G	PR
5502-0002-002-C1C-01	MSR#04-3800	125166003	379926	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.217	0.24	PCI/G	0	U	9/11/2004	38292.54931	9.55	0.253	PCI/G	0.114	PCI/G	1	17	174	G	PCI/G	PR
5502-0002-002-C1C-01	MSR#04-3800	125166003	379926	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.46	0.101	PCI/G	0		9/11/2004	38292.54931	9.55	0.0674	PCI/G	0.031	PCI/G	1	17	174	G	PCI/G	PR
5502-0002-002-C1C-01	MSR#04-3800	125166003	379926	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0273	0.022	PCI/G	0	U	9/11/2004	38292.54931	9.55	0.0463	PCI/G	0.0213	PCI/G	1	17	174	G	PCI/G	PR
5502-0002-002-C1C-01	MSR#04-3800	125166003	379926	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.138	0.0431	PCI/G	0		9/11/2004	38292.54931	9.55	0.0344	PCI/G	0.0156	PCI/G	1	17	174	G	PCI/G	PR
5502-0002-002-C1C-01	MSR#04-3800	125166003	379926	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.099	0.0344	PCI/G	0		9/11/2004	38292.54931	9.55	0.035	PCI/G	0.0149	PCI/G	1	17	174	G	PCI/G	PR
5502-0002-002-C1C-01	MSR#04-3800	125166003	379926	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0195	0.0523	PCI/G	0	U	9/11/2004	38292.54931	9.55	0.0987	PCI/G	0.0461	PCI/G	1	17	174	G	PCI/G	PR
5502-0002-002-C1C-01	MSR#04-3800	125166003	379926	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.00202	0.0677	PCI/G	0	U	9/11/2004	38292.54931	9.55	0.113	PCI/G	0.0496	PCI/G	1	17	174	G	PCI/G	PR
5502-0002-002-C1C-01	MSR#04-3800	125166003	379926	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0499	0.0567	PCI/G	0	U	9/11/2004	38292.54931	9.55	0.117	PCI/G	0.0557	PCI/G	1	17	174	G	PCI/G	PR
5502-0002-002-C1C-01	MSR#04-3800	125166003	379926	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.324	0.0531	PCI/G	0		9/11/2004	38292.54931	9.55	0.0571	PCI/G	0.027	PCI/G	1	17	174	G	PCI/G	PR
5502-0002-002-C1C-01	MSR#04-3800	125166003	379926	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.61	0.09	PCI/G	0		9/11/2004	38292.54931	9:55	0.0628	PCI/G	0.0291	PCI/G	1	17	174	G	PCI/G	PR
5502-0002-002-C1C-01	MSR#04-3800	125166003	379926	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.000871	0.0183	PCI/G	0	U	9/11/2004	38292.54931	9:55	0.0339	PCI/G	0.0153	PCI/G	1	17	174	G	PCI/G	PR
5502-0002-002-C1C-01	MSR#04-3800	125166003	379926	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.00404	0.0157	PCI/G	0	U	9/11/2004	38292.54931	9:55	0.0287	PCI/G	0.0129	PCI/G	1	17	174	G	PCI/G	PR
5502-0002-002-C1C-01	MSR#04-3800	125166003	379926	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	5.94	0.802	PCI/G	0		9/11/2004	38292.54931	9:55	0.303	PCI/G	0.126	PCI/G	1	17	174	G	PCI/G	PR
5502-0002-002-C1C-01	MSR#04-3800	125166003	379926	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.46	0.101	PCI/G	0		9/11/2004	38292.54931	9.55	0.0674	PCI/G	0.031	PCI/G	1	17	174	G	PCI/G	PR
5502-0002-002-C1C-01	MSR#04-3800	125166003	379926	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.0101	0.0174	PCI/G	0	U	9/11/2004	38292.54931	9.55	0.032	PCI/G	0.0148	PCI/G	1	17	174	G	PCI/G	PR
5502-0002-002-C1C-01	MSR#04-3800	125166003	379964	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00457	0.0403	PCI/G	0	U	10/11/2004	38293.96736	1.22	0.0799	PCI/G	0.0389	PCI/G	1	17	4.29	G	PCI/G	PR
5502-0002-002-C1C-01	MSR#04-3800	125166003	379926	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.101	0.0404	PCI/G	0		9/11/2004	38292.54931	9.55	0.0662	PCI/G	0.0317	PCI/G	1	17	174	G	PCI/G	PR
5502-0002-002-C1C-01	MSR#04-3800	125166003	380128	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	0.607	1.24	PCI/G	0	U		11/11/2004	12.22	2.03	PCI/G	1.01	PCI/G	1	17			PCI/G	PR
5502-0002-002-C1C-02	MSR#04-3800	125166004	379926	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.602	0.206	PCI/G	0		9/11/2004	38292.54931	9.59	0.136	PCI/G	0.0597	PCI/G	1	5.5	174	G	PCI/G	PR
5502-0002-002-C1C-02	MSR#04-3800	125166004	379926	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.00334	0.0318	PCI/G	0	U	9/11/2004	38292.54931	9.59	0.0621	PCI/G	0.0297	PCI/G	1	5.5	174	G	PCI/G	PR
5502-0002-002-C1C-02	MSR#04-3800	125166004	379926	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.533	0.301	PCI/G	0		9/11/2004	38292.54931	9.59	0.347	PCI/G	0.157	PCI/G	1	5.5	174	G	PCI/G	PR
5502-0002-002-C1C-02	MSR#04-3800	125166004	379926	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.678	0.113	PCI/G	0		9/11/2004	38292.54931	9.59	0.0834	PCI/G	0.0383	PCI/G	1	5.5	174	G	PCI/G	PR
5502-0002-002-C1C-02	MSR#04-3800	125166004	379926	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0104	0.0371	PCI/G	0	U	9/11/2004	38292.54931	9:59	0.0598	PCI/G	0.0275	PCI/G	1	5.5	174	G	PCI/G	PR
5502-0002-002-C1C-02	MSR#04-3800	125166004	379926	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.00422	0.0234	PCI/G	0	U	9/11/2004	38292.54931	9:59	0.0443	PCI/G	0.0201	PCI/G	1	5.5	174	G	PCI/G	PR
5502-0002-002-C1C-02	MSR#04-3800	125166004	379926	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.00864	0.0272	PCI/G	0	U	9/11/2004	38292.54931	9.59	0.0552	PCI/G	0.0244	PCI/G	1	5.5	174	G	PCI/G	PR
5502-0002-002-C1C-02	MSR#04-3800	125166004	379926	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.023	0.0531	PCI/G	0	U	9/11/2004	38292.54931	9:59	0.0968	PCI/G	0.0448	PCI/G	1	5.5	174	G	PCI/G	PR
5502-0002-002-C1C-02	MSR#04-3800	125166004	379926	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.00959	0.0741	PCI/G	0	U	9/11/2004	38292.54931	9.59	0.147	PCI/G	0.065	PCI/G	1	5.5	174	G	PCI/G	PR
5502-0002-002-C1C-02	MSR#04-3800	125166004	379926	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0407	0.056	PCI/G	0	U	9/11/2004	38292.54931	9:59	0.108	PCI/G	0.0519	PCI/G	1	5.5	174	G	PCI/G	PR
5502-0002-002-C1C-02	MSR#04-3800	125166004	379926	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.39	0.0581	PCI/G	0		9/11/2004	38292.54931	9 59	0.0567	PCI/G	0.0267	PCI/G	1	5.5	174	G	PCI/G	PR
5502-0002-002-C1C-02	MSR#04-3800	125166004	379926	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.69	0.114	PCI/G	0		9/11/2004	38292.54931	9:59	0.077	PCI/G	0.0359	PCI/G	1	5.5	174	G	PCI/G	PR
5502-0002-002-C1C-02	MSR#04-3800	125166004	379926	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.034	0.0229	PCI/G	0	U	9/11/2004	38292.54931	9.59	0.0509	PCI/G	0.0232	PCI/G	1	5.5	174	G	PCI/G	PR
5502-0002-002-C1C-02	MSR#04-3800	125166004	379926	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0149	0.0238	PCI/G	0	U	9/11/2004	38292.54931	9:59	0.0477	PCI/G	0.0221	PCI/G	1	5.5	174	G	PCI/G	PR
5502-0002-002-C1C-02	MSR#04-3800	125166004	379926	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	6.37	0.912	PCI/G	0		9/11/2004	38292.54931	9.59	0.47	PCI/G	0.203	PCI/G	1	5.5	174	G	PCI/G	PR
5502-0002-002-C1C-02	MSR#04-3800	125166004	379926	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.678	0.113	PCI/G	0		9/11/2004	38292.54931	9:59	0.0834	PCI/G	0.0383	PCI/G	1	5.5	174	G	PCI/G	PR
5502-0002-002-C1C-02	MSR#04-3800	125166004	379926	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.0157	0.0192	PCI/G	0	U	9/11/2004	38292.54931	9.59	0.0327	PCI/G	0.0149	PCI/G	1	5.5	174	G	PCI/G	PR
5502-0002-002-C1C-02	MSR#04-3800	125166004	379964	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.0429	0.0421	PCI/G	0	U	10/11/2004	38293.96736	1.22	0.0875	PCI/G	0.0425	PCI/G	1	5.5	4.34	G	PCI/G	PR
5502-0002-002-C1C-02	MSR#04-3800	125166004	379926	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.185	0.0529	PCI/G	0		9/11/2004	38292.54931	9:59	0.0401	PCI/G	0.0182	PCI/G	1	5.5	174	G	PCI/G	PR
5502-0002-002-C1C-02	MSR#04-3800	125166004	380128	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	0.735	1.24	PCI/G	0	U		11/11/2004	12.54	2.02	PCI/G	1.01	PCI/G	1	5.5			PCI/G	PR
5502-0002-002-C3C-01	MSR#04-3800	125166005	379926	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.481	0.112	PCI/G	0		9/11/2004	38292.54931	10:00	0.0892	PCI/G	0.0406	PCI/G	1	8.9	168	G	PCI/G	PR
5502-0002-002-C3C-01	MSR#04-3800	125166005	379926	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0251	0.127	PCI/G	0	U	9/11/2004	38292.54931	10:00	0.171	PCI/G	0.0822	PCI/G	1	8.9	168	G	PCI/G	PR
5502-0002-002-C3C-01	MSR#04-3800	125166005	379926	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.256	0.233	PCI/G	0		9/11/2004	38292.54931	10:00	0.206	PCI/G	0.0953	PCI/G	1	8.9	168	G	PCI/G	PR
5502-0002-002-C3C-01	MSR#04-3800	125166005	379926	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.368	0.064	PCI/G	0		9/11/2004	38292.54931	10:00	0.057	PCI/G	0.0268	PCI/G	1	8.9	168	G	PCI/G	PR
5502-0002-002-C3C-01	MSR#04-3800	125166005	379926	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0139	0.0184	PCI/G	0	U	9/11/2004	38292.54931	10:00	0.0355	PCI/G	0.0166	PCI/G	1	8.9	168	G	PCI/G	PR
5502-0002-002-C3C-01	MSR#04-3800	125166005	379926	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.0104	0.0175	PCI/G	0	U	9/11/2004	38292.54931	10:00	0.0307	PCI/G	0.0144	PCI/G	1	8.9	168	G	PCI/G	PR
5502-0002-002-C3C-01	MSR#04-3800	125166005	379926	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.000217	0.0175	PCI/G	0	U	9/11/2004	38292.54931	10:00	0.0325	PCI/G	0.0148	PCI/G	1	8.9	168	G	PCI/G	PR
5502-0002-002-C3C-01	MSR#04-3800	125166005	379926	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0019	0.044	PCI/G	0	U	9/11/2004	38292.54931	10:00	0.0799	PCI/G	0.0378	PCI/G	1	8.9	168	G	PCI/G	PR
5502-0002-002-C3C-01	MSR#04-3800	125166005	379926	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0105	0.055	PCI/G	0	U	9/11/2004	38292.54931	10:00	0.0993	PCI/G	0.0455	PCI/G	1	8.9	168	G	PCI/G	PR
5502-0002-002-C3C-01	MSR#04-3800	125166005	379926	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0039	0.0562	PCI/G	0	U	9/11/2004	38292.54931	10:00	0.103	PCI/G	0.0493	PCI/G	1	8.9	168	G	PCI/G	PR
5502-0002-002-C3C-01	MSR#04-3800	125166005	379926	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.452	0.0463	PCI/G	0		9/11/2004	38292.54931	10:00	0.0509	PCI/G	0.0244	PCI/G	1	8.9	168	G	PCI/G	PR
5502-0002-002-C3C-01	MSR#04-3800	125166005	379926	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.457	0.0633	PCI/G	0		9/11/2004	38292.54931	10:00	0.0562	PCI/G	0.0266	PCI/G	1	8.9	168	G	PCI/G	PR
5502-0002-002-C3C-01	MSR#04-3800	125166005	379926	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.00495	0.0165	PCI/G	0	U	9/11/2004	38292.54931	10:00	0.0292	PCI/G	0.0135	PCI/G	1	8.9	168	G	PCI/G	PR
5502-0002-002-C3C-01	MSR#04-3800	125166005	379926	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0004	0.0168	PCI/G	0	U	9/11/2004	38292.54931	10:00	0.0307	PCI/G	0.0145	PCI/G	1	8.9	168	G	PCI/G	PR
5502-0002-002-C3C-01	MSR#04-3800	125166005	379926	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.93	0.667	PCI/G	0		9/11/2004	38292.54931	10:00	0.288	PCI/G	0.129	PCI/G	1	8.9	168	G	PCI/G	PR
5502-0002-002-C3C-01	MSR#04-3800	125166005	379926	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.368	0.064	PCI/G	0		9/11/2004	38292.54931	10:00	0.057	PCI/G	0.0268	PCI/G	1	8.9	168	G	PCI/G	PR
5502-0002-002-C3C-01	MSR#04-3800	125166005	379926	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00546	0.0142	PCI/G	0	U	9/11/2004	38292.54931	10.00	0.0247	PCI/G	0.0116	PCI/G	1	8.9	168	G	PCI/G	PR
5502-0002-002-C3C-01	MSR#04-3800	125166005	379964	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.0172	0.0394	PCI/G	0	U	10/11/2004	38293.96736	1:25	0.0798	PCI/G	0.0388	PCI/G	1	8.9	4.56	G	PCI/G	PR
5502-0002-002-C3C-01	MSR#04-3800	125166005	379926	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.152	0.0369	PCI/G	0		9/11/2004	38292.54931	10:00	0.0271	PCI/G	0.0126	PCI/G	1	8.9	168	G	PCI/G	PR
5502-0002-002-C3C-01	MSR#04-3800	125166005	380128	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	3.98	1.35	PCI/G	0			11/11/2004	1:26	1.93	PCI/G	0.966	PCI/G	1	8.9			PCI/G	PR
5502-0002-002-C3C-02	MSR#04-3800	125166006	379926	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.511	0.139	PCI/G	0		9/11/2004	38292.54931	10:55	0.0732	PCI/G	0.0328	PCI/G	1	7.4	168	G	PCI/G	PR
5502-0002-002-C3C-02	MSR#04-3800	125166006	379926	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0195	0.0712	PCI/G	0	U	9/11/2004	38292.54931	10:55	0.104	PCI/G	0.0501	PCI/G	1	7.4	168	G	PCI/G	PR
5502-0002-002-C3C-02	MSR#04-3800	125166006	379926	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.34	0.188	PCI/G	0		9/11/2004	38292.54931	10:55	0.218	PCI/G	0.102	PCI/G	1	7.4	168	G	PCI/G	PR
5502-0002-002-C3C-02	MSR#04-3800	125166006	379926	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.429	0.0873	PCI/G	0		9/11/2004	38292.54931	10:55	0.0554	PCI/G	0.0261	PCI/G	1	7.4	168	G	PCI/G	PR
5502-0002-002-C3C-02	MSR#04-3800	125166006	379926	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0192	0.0181	PCI/G	0	U	9/11/2004	38292.54931	10:55	0.0356	PCI/G	0.0167	PCI/G	1	7.4	168	G	PCI/G	PR
5502-0002-002-C3C-02	MSR#04-3800	125166006	379926	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.0118	0.0165	PCI/G	0	U	9/11/2004	38292.54931	10.55	0.0288	PCI/G	0.0134	PCI/G	1	7.4	168	G	PCI/G	PR
5502-0002-002-C3C-02	MSR#04-3800	125166006	379926	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.00488	0.0167	PCI/G	0	U	9/11/2004	38292.54931	10:55	0.0318	PCI/G	0.0145	PCI/G	1	7.4	168	G	PCI/G	PR
5502-0002-002-C3C-02	MSR#04-3800	125166006	379926	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0131	0.0418	PCI/G	0	U	9/11/2004	38292.54931	10.55	0.0759	PCI/G	0.0359	PCI/G	1	7.4	168	G	PCI/G	PR
5502-0002-002-C3C-02	MSR#04-3800	125166006	379926	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0167	0.046	PCI/G	0	U	9/11/2004	38292.54931	10:55	0.0883	PCI/G	0.0403	PCI/G	1	7.4	168	G	PCI/G	PR
5502-0002-002-C3C-02	MSR#04-3800	125166006	379926	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0691	0.0651	PCI/G	0	U	9/11/2004	38292.54931	10:55	0.0904	PCI/G	0.0434	PCI/G	1	7.4	168	G	PCI/G	PR
5502-0002-002-C3C-02	MSR#04-3800	125166006	379926	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.463	0.0606	PCI/G	0		9/11/2004	38292.54931	10:55	0.0475	PCI/G	0.0227	PCI/G	1	7.4	168	G	PCI/G	PR
5502-0002-002-C3C-02	MSR#04-3800	125166006	379926	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.457	0.0819	PCI/G	0		9/11/2004	38292.54931	10:55	0.0524	PCI/G	0.0247	PCI/G	1	7.4	168	G	PCI/G	PR
5502-0002-002-C3C-02	MSR#04-3800	125166006	379926	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.0114	0.0171	PCI/G	0	U	9/11/2004	38292.54931	10:55	0.0291	PCI/G	0.0135	PCI/G	1	7.4	168	G	PCI/G	PR
5502-0002-002-C3C-02	MSR#04-3800	125166006	379926	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0053	0.0147	PCI/G	0	U	9/11/2004	38292.54931	10:55	0.0277	PCI/G	0.013	PCI/G	1	7.4	168	G	PCI/G	PR
5502-0002-002-C3C-02	MSR#04-3800	125166006	379926	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	8.03	0.871	PCI/G	0		9/11/2004	38292.54931	10:55	0.265	PCI/G	0.118	PCI/G	1	7.4	168	G	PCI/G	PR
5502-0002-002-C3C-02	MSR#04-3800	125166006	379926	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.429	0.0873	PCI/G	0		9/11/2004	38292.54931	10:55	0.0554	PCI/G	0.0261	PCI/G	1	7.4	168	G	PCI/G	PR
5502-0002-002-C3C-02	MSR#04-3800	125166006	379926	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00505	0.0137	PCI/G	0	U	9/11/2004	38292.54931	10:55	0.0257	PCI/G	0.0121	PCI/G	1	7.4	168	G	PCI/G	PR
5502-0002-002-C3C-02	MSR#04-3800	125166006	379964	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00445	0.0484	PCI/G	0	U	10/11/2004	38293.96736	1:25	0.0961	PCI/G	0.0468	PCI/G	1	7.4	4.25	G	PCI/G	PR
5502-0002-002-C3C-02	MSR#04-3800	125166006	379926	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.145	0.035	PCI/G	0		9/11/2004	38292.54931	10:55	0.0272	PCI/G	0.0127	PCI/G	1	7.4	168	G	PCI/G	PR
5502-0002-002-C3C-02	MSR#04-3800	125166006	380128	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	2.48	1.31	PCI/G	0			11/11/2004	1:58	1.99	PCI/G	0.995	PCI/G	1	7.4			PCI/G	PR
5502-0002-002-S01	MSR#04-3800	125166007	379926	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.812	0.281	PCI/G	0		9/11/2004	38292.54931	10.55	0.211	PCI/G	0.094	PCI/G	1	16	163	G	PCI/G	PR
5502-0002-002-S01	MSR#04-3800	125166007	379926	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0534	0.0789	PCI/G	0	U	9/11/2004	38292.54931	10:55	0.138	PCI/G	0.0664	PCI/G	1	16	163	G	PCI/G	PR
5502-0002-002-S01	MSR#04-3800	125166007	379926	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.702	0.474	PCI/G	0		9/11/2004	38292.54931	10:55	0.467	PCI/G	0.211	PCI/G	1	16	163	G	PCI/G	PR
5502-0002-002-S01	MSR#04-3800	125166007	379926	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.653	0.162	PCI/G	0		9/11/2004	38292.54931	10.55	0.108	PCI/G	0.0493	PCI/G	1	16	163	G	PCI/G	PR
5502-0002-002-S01	MSR#04-3800	125166007	379926	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0552	0.0414	PCI/G	0	U	9/11/2004	38292.54931	10:55	0.0749	PCI/G	0.0341	PCI/G	1	16	163	G	PCI/G	PR
5502-0002-002-S01	MSR#04-3800	125166007	379926	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.0251	0.0915	PCI/G	0	U	9/11/2004	38292.54931	10:55	0.0658	PCI/G	0.0301	PCI/G	1	16	163	G	PCI/G	PR
5502-0002-002-S01	MSR#04-3800	125166007	379926	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.05	0.123	PCI/G	0	U	9/11/2004	38292.54931	10:55	0.0681	PCI/G	0.0297	PCI/G	1	16	163	G	PCI/G	PR
5502-0002-002-S01	MSR#04-3800	125166007	379926	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.00831	0.0852	PCI/G	0	U	9/11/2004	38292.54931	10:55	0.16	PCI/G	0.0751	PCI/G	1	16	163	G	PCI/G	PR
5502-0002-002-S01	MSR#04-3800	125166007	379926	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0721	0.106	PCI/G	0	U	9/11/2004	38292.54931	10:55	0.178	PCI/G	0.077	PCI/G	1	16	163	G	PCI/G	PR
5502-0002-002-S01	MSR#04-3800	125166007	379926	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	-0.00773	0.0888	PCI/G	0	U	9/11/2004	38292.54931	10:55	0.162	PCI/G	0.0776	PCI/G	1	16	163	G	PCI/G	PR
5502-0002-002-S01	MSR#04-3800	125166007	379926	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.623	0.102	PCI/G	0		9/11/2004	38292.54931	10.55	0.0872	PCI/G	0.0415	PCI/G	1	16	163	G	PCI/G	PR
5502-0002-002-S01	MSR#04-3800	125166007	379926	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.526	0.139	PCI/G	0		9/11/2004	38292.54931	10:55	0.114	PCI/G	0.0537	PCI/G	1	16	163	G	PCI/G	PR
5502-0002-002-S01	MSR#04-3800	125166007	379926	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.00377	0.0336	PCI/G	0	U	9/11/2004	38292.54931	10:55	0.063	PCI/G	0.0285	PCI/G	1	16	163	G	PCI/G	PR
5502-0002-002-S01	MSR#04-3800	125166007	379926	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.00403	0.0339	PCI/G	0	U	9/11/2004	38292.54931	10:55	0.0602	PCI/G	0.0276	PCI/G	1	16	163	G	PCI/G	PR
5502-0002-002-S01	MSR#04-3800	125166007	379926	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	10.3	1.48	PCI/G	0		9/11/2004	38292.54931	10:55	0.648	PCI/G	0.281	PCI/G	1	16	163	G	PCI/G	PR
5502-0002-002-S01	MSR#04-3800	125166007	379926	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.653	0.162	PCI/G	0		9/11/2004	38292.54931	10:55	0.108	PCI/G	0.0493	PCI/G	1	16	163	G	PCI/G	PR
5502-0002-002-S01	MSR#04-3800	125166007	379926	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0	0.0704	PCI/G	0	UU	9/11/2004	38292.54931	10:55	0.0589	PCI/G	0.0275	PCI/G	1	16	163	G	PCI/G	PR
5502-0002-002-S01	MSR#04-3800	125166007	379964	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00906	0.0337	PCI/G	0	U	10/11/2004	38293.96736	1:25	0.0664	PCI/G	0.0324	PCI/G	1	16	4.13	G	PCI/G	PR
5502-0002-002-S01	MSR#04-3800	125166007	379926	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.18	0.0738	PCI/G	0		9/11/2004	38292.54931	10:55	0.0665	PCI/G	0.0307	PCI/G	1	16	163	G	PCI/G	PR
5502-0002-002-S01	MSR#04-3800	125166007	380128	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	1.04	1.3	PCI/G	0	U		11/11/2004	2:30	2.08	PCI/G	1.04	PCI/G	1	16			PCI/G	PR
5502-0002-003-C1C-01	MSR#04-3800	125166008	379926	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.456	0.174	PCI/G	0		9/11/2004	38292.54931	11:18	0.156	PCI/G	0.0722	PCI/G	1	6.8	178	G	PCI/G	PR
5502-0002-003-C1C-01	MSR#04-3800	125166008	379926	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.127	0.0956	PCI/G	0	U	9/11/2004	38292.54931	11:18	0.201	PCI/G	0.0963	PCI/G	1	6.8	178	G	PCI/G	PR
5502-0002-003-C1C-01	MSR#04-3800	125166008	379926	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.321	0.235	PCI/G	0		9/11/2004	38292.54931	11:18	0.29	PCI/G	0.132	PCI/G	1	6.8	178	G	PCI/G	PR
5502-0002-003-C1C-01	MSR#04-3800	125166008	379926	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.449	0.087	PCI/G	0		9/11/2004	38292.54931	11:18	0.165	PCI/G	0.0795	PCI/G	1	6.8	178	G	PCI/G	PR
5502-0002-003-C1C-01	MSR#04-3800	125166008	379926	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0225	0.032	PCI/G	0	U	9/11/2004	38292.54931	11:18	0.052	PCI/G	0.0241	PCI/G	1	6.8	178	G	PCI/G	PR
5502-0002-003-C1C-01	MSR#04-3800	125166008	379926	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.202	0.0507	PCI/G	0		9/11/2004	38292.54931	11:18	0.0378	PCI/G	0.0172	PCI/G	1	6.8	178	G	PCI/G	PR
5502-0002-003-C1C-01	MSR#04-3800	125166008	379926	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.127	0.0646	PCI/G	0		9/11/2004	38292.54931	11:18	0.0411	PCI/G	0.018	PCI/G	1	6.8	178	G	PCI/G	PR
5502-0002-003-C1C-01	MSR#04-3800	125166008	379926	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.00141	0.0629	PCI/G	0	U	9/11/2004	38292.54931	11:18	0.118	PCI/G	0.0557	PCI/G	1	6.8	178	G	PCI/G	PR
5502-0002-003-C1C-01	MSR#04-3800	125166008	379926	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.00691	0.0694	PCI/G	0	U	9/11/2004	38292.54931	11:18	0.134	PCI/G	0.06	PCI/G	1	6.8	178	G	PCI/G	PR
5502-0002-003-C1C-01	MSR#04-3800	125166008	379926	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0189	0.0646	PCI/G	0	U	9/11/2004	38292.54931	11:18	0.125	PCI/G	0.0597	PCI/G	1	6.8	178	G	PCI/G	PR
5502-0002-003-C1C-01	MSR#04-3800	125166008	379926	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.464	0.0762	PCI/G	0		9/11/2004	38292.54931	11:18	0.0752	PCI/G	0.036	PCI/G	1	6.8	178	G	PCI/G	PR
5502-0002-003-C1C-01	MSR#04-3800	125166008	379926	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.409	0.1	PCI/G	0		9/11/2004	38292.54931	11:18	0.0883	PCI/G	0.0417	PCI/G	1	6.8	178	G	PCI/G	PR
5502-0002-003-C1C-01	MSR#04-3800	125166008	379926	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	9.23E-05	0.0209	PCI/G	0	U	9/11/2004	38292.54931	11:18	0.0393	PCI/G	0.0179	PCI/G	1	6.8	178	G	PCI/G	PR
5502-0002-003-C1C-01	MSR#04-3800	125166008	379926	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0132	0.0221	PCI/G	0	U	9/11/2004	38292.54931	11:18	0.0435	PCI/G	0.0202	PCI/G	1	6.8	178	G	PCI/G	PR

5502-0002-003-C1C-01	MSR#04-3800	125166008	379926	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.84	0.833	PCI/G	0		9/11/2004	38292.54931	11:18	0.422	PCI/G	0.186	PCI/G	1	6.8	178	G	PCI/G	PR
5502-0002-003-C1C-01	MSR#04-3800	125166008	379926	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.449	0.087	PCI/G	0		9/11/2004	38292.54931	11:18	0.0777	PCI/G	0.036	PCI/G	1	6.8	178	G	PCI/G	PR
5502-0002-003-C1C-01	MSR#04-3800	125166008	379926	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00493	0.0211	PCI/G	0	U	9/11/2004	38292.54931	11:18	0.0383	PCI/G	0.0179	PCI/G	1	6.8	178	G	PCI/G	PR
5502-0002-003-C1C-01	MSR#04-3800	125166008	379964	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.0478	0.0334	PCI/G	0	U	10/11/2004	38293.96736	1:25	0.0631	PCI/G	0.0308	PCI/G	1	6.8	4.43	G	PCI/G	PR
5502-0002-003-C1C-01	MSR#04-3800	125166008	379926	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.147	0.0483	PCI/G	0		9/11/2004	38292.54931	11:18	0.0436	PCI/G	0.0203	PCI/G	1	6.8	178	G	PCI/G	PR
5502-0002-003-C1C-01	MSR#04-3800	125166008	380128	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	0.572	1.25	PCI/G	0	U		11/11/2004	3:02	2.05	PCI/G	1.02	PCI/G	1	6.8			PCI/G	PR
5502-0002-003-C1C-02	MSR#04-3800	125166009	379926	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.49	0.161	PCI/G	0		9/11/2004	38292.54931	11:18	0.114	PCI/G	0.0503	PCI/G	1	6	161	G	PCI/G	PR
5502-0002-003-C1C-02	MSR#04-3800	125166009	379926	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0291	0.123	PCI/G	0	U	9/11/2004	38292.54931	11:18	0.211	PCI/G	0.101	PCI/G	1	6	161	G	PCI/G	PR
5502-0002-003-C1C-02	MSR#04-3800	125166009	379926	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.279	0.214	PCI/G	0		9/11/2004	38292.54931	11:18	0.266	PCI/G	0.12	PCI/G	1	6	161	G	PCI/G	PR
5502-0002-003-C1C-02	MSR#04-3800	125166009	379926	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.471	0.0901	PCI/G	0		9/11/2004	38292.54931	11:18	0.0524	PCI/G	0.0235	PCI/G	1	6	161	G	PCI/G	PR
5502-0002-003-C1C-02	MSR#04-3800	125166009	379926	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0045	0.0215	PCI/G	0	U	9/11/2004	38292.54931	11:18	0.0403	PCI/G	0.0183	PCI/G	1	6	161	G	PCI/G	PR
5502-0002-003-C1C-02	MSR#04-3800	125166009	379926	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.00275	0.0181	PCI/G	0	U	9/11/2004	38292.54931	11:18	0.0342	PCI/G	0.0155	PCI/G	1	6	161	G	PCI/G	PR
5502-0002-003-C1C-02	MSR#04-3800	125166009	379926	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.00782	0.0194	PCI/G	0	U	9/11/2004	38292.54931	11:18	0.0349	PCI/G	0.0148	PCI/G	1	6	161	G	PCI/G	PR
5502-0002-003-C1C-02	MSR#04-3800	125166009	379926	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0156	0.0515	PCI/G	0	U	9/11/2004	38292.54931	11:18	0.0999	PCI/G	0.0469	PCI/G	1	6	161	G	PCI/G	PR
5502-0002-003-C1C-02	MSR#04-3800	125166009	379926	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0103	0.0612	PCI/G	0	U	9/11/2004	38292.54931	11:18	0.113	PCI/G	0.0497	PCI/G	1	6	161	G	PCI/G	PR
5502-0002-003-C1C-02	MSR#04-3800	125166009	379926	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0246	0.0548	PCI/G	0	U	9/11/2004	38292.54931	11:18	0.106	PCI/G	0.0507	PCI/G	1	6	161	G	PCI/G	PR
5502-0002-003-C1C-02	MSR#04-3800	125166009	379926	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.392	0.0667	PCI/G	0		9/11/2004	38292.54931	11:18	0.0542	PCI/G	0.0256	PCI/G	1	6	161	G	PCI/G	PR
5502-0002-003-C1C-02	MSR#04-3800	125166009	379926	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.483	0.0911	PCI/G	0		9/11/2004	38292.54931	11:18	0.0603	PCI/G	0.0279	PCI/G	1	6	161	G	PCI/G	PR
5502-0002-003-C1C-02	MSR#04-3800	125166009	379926	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.00856	0.0211	PCI/G	0	U	9/11/2004	38292.54931	11:18	0.0363	PCI/G	0.0164	PCI/G	1	6	161	G	PCI/G	PR
5502-0002-003-C1C-02	MSR#04-3800	125166009	379926	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.00427	0.0177	PCI/G	0	U	9/11/2004	38292.54931	11:18	0.0316	PCI/G	0.0144	PCI/G	1	6	161	G	PCI/G	PR
5502-0002-003-C1C-02	MSR#04-3800	125166009	379926	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	6.84	0.94	PCI/G	0		9/11/2004	38292.54931	11:18	0.387	PCI/G	0.187	PCI/G	1	6	161	G	PCI/G	PR
5502-0002-003-C1C-02	MSR#04-3800	125166009	379926	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.471	0.0901	PCI/G	0		9/11/2004	38292.54931	11:18	0.0524	PCI/G	0.0235	PCI/G	1	6	161	G	PCI/G	PR
5502-0002-003-C1C-02	MSR#04-3800	125166009	379926	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00757	0.0166	PCI/G	0	U	9/11/2004	38292.54931	11:18	0.03	PCI/G	0.0139	PCI/G	1	6	161	G	PCI/G	PR
5502-0002-003-C1C-02	MSR#04-3800	125166009	379964	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.0107	0.0446	PCI/G	0	U	10/11/2004	38293.96736	1:24	0.0894	PCI/G	0.0436	PCI/G	1	6	4.46	G	PCI/G	PR
5502-0002-003-C1C-02	MSR#04-3800	125166009	379926	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.123	0.0373	PCI/G	0		9/11/2004	38292.54931	11:18	0.034	PCI/G	0.0155	PCI/G	1	6	161	G	PCI/G	PR
5502-0002-003-C1C-02	MSR#04-3800	125166009	380128	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	1.58	1.41	PCI/G	0	U		11/11/2004	3:34	2.22	PCI/G	1.11	PCI/G	1	6			PCI/G	PR
5502-0002-003-C3C-01	MSR#04-3800	125166010	379926	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.496	0.166	PCI/G	0		9/11/2004	38292.54931	11:19	0.165	PCI/G	0.0753	PCI/G	1	5.9	154	G	PCI/G	PR
5502-0002-003-C3C-01	MSR#04-3800	125166010	379926	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.033	0.0933	PCI/G	0	U	9/11/2004	38292.54931	11:19	0.153	PCI/G	0.0732	PCI/G	1	5.9	154	G	PCI/G	PR
5502-0002-003-C3C-01	MSR#04-3800	125166010	379926	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.294	0.406	PCI/G	0	U	9/11/2004	38292.54931	11:19	0.322	PCI/G	0.148	PCI/G	1	5.9	154	G	PCI/G	PR
5502-0002-003-C3C-01	MSR#04-3800	125166010	379926	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.47	0.0986	PCI/G	0		9/11/2004	38292.54931	11:19	0.0691	PCI/G	0.0316	PCI/G	1	5.9	154	G	PCI/G	PR
5502-0002-003-C3C-01	MSR#04-3800	125166010	379926	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0232	0.0259	PCI/G	0	U	9/11/2004	38292.54931	11:19	0.0511	PCI/G	0.0235	PCI/G	1	5.9	154	G	PCI/G	PR
5502-0002-003-C3C-01	MSR#04-3800	125166010	379926	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.0137	0.0218	PCI/G	0	U	9/11/2004	38292.54931	11:19	0.0368	PCI/G	0.0167	PCI/G	1	5.9	154	G	PCI/G	PR
5502-0002-003-C3C-01	MSR#04-3800	125166010	379926	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.00338	0.0262	PCI/G	0	U	9/11/2004	38292.54931	11:19	0.0442	PCI/G	0.0194	PCI/G	1	5.9	154	G	PCI/G	PR
5502-0002-003-C3C-01	MSR#04-3800	125166010	379926	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.00441	0.057	PCI/G	0	U	9/11/2004	38292.54931	11:19	0.106	PCI/G	0.0496	PCI/G	1	5.9	154	G	PCI/G	PR
5502-0002-003-C3C-01	MSR#04-3800	125166010	379926	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0101	0.0636	PCI/G	0	U	9/11/2004	38292.54931	11:19	0.118	PCI/G	0.0514	PCI/G	1	5.9	154	G	PCI/G	PR
5502-0002-003-C3C-01	MSR#04-3800	125166010	379926	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.00833	0.0613	PCI/G	0	U	9/11/2004	38292.54931	11:19	0.113	PCI/G	0.0541	PCI/G	1	5.9	154	G	PCI/G	PR
5502-0002-003-C3C-01	MSR#04-3800	125166010	379926	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.4	0.059	PCI/G	0		9/11/2004	38292.54931	11:19	0.058	PCI/G	0.0275	PCI/G	1	5.9	154	G	PCI/G	PR
5502-0002-003-C3C-01	MSR#04-3800	125166010	379926	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.581	0.0905	PCI/G	0		9/11/2004	38292.54931	11:19	0.0699	PCI/G	0.0326	PCI/G	1	5.9	154	G	PCI/G	PR
5502-0002-003-C3C-01	MSR#04-3800	125166010	379926	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0125	0.0188	PCI/G	0	U	9/11/2004	38292.54931	11:19	0.0389	PCI/G	0.0176	PCI/G	1	5.9	154	G	PCI/G	PR
5502-0002-003-C3C-01	MSR#04-3800	125166010	379926	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00477	0.0197	PCI/G	0	U	9/11/2004	38292.54931	11:19	0.0366	PCI/G	0.0168	PCI/G	1	5.9	154	G	PCI/G	PR
5502-0002-003-C3C-01	MSR#04-3800	125166010	379926	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.19	0.867	PCI/G	0		9/11/2004	38292.54931	11:19	0.45	PCI/G	0.198	PCI/G	1	5.9	154	G	PCI/G	PR
5502-0002-003-C3C-01	MSR#04-3800	125166010	379926	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.47	0.0986	PCI/G	0		9/11/2004	38292.54931	11:19	0.0691	PCI/G	0.0316	PCI/G	1	5.9	154	G	PCI/G	PR
5502-0002-003-C3C-01	MSR#04-3800	125166010	379926	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.0178	0.0242	PCI/G	0	U	9/11/2004	38292.54931	11:19	0.0358	PCI/G	0.0166	PCI/G	1	5.9	154	G	PCI/G	PR
5502-0002-003-C3C-01	MSR#04-3800	125166010	379964	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.0483	0.0525	PCI/G	0	U	10/11/2004	38293.96736	1:24	0.101	PCI/G	0.0492	PCI/G	1	5.9	4.3	G	PCI/G	PR
5502-0002-003-C3C-01	MSR#04-3800	125166010	379926	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.183	0.0442	PCI/G	0		9/11/2004	38292.54931	11:19	0.0405	PCI/G	0.0187	PCI/G	1	5.9	154	G	PCI/G	PR
5502-0002-003-C3C-01	MSR#04-3800	125166010	380128	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	2.33	1.43	PCI/G	0			11/11/2004	4:05	2.19	PCI/G	1.1	PCI/G	1	5.9			PCI/G	PR
5502-0002-003-C3C-02	MSR#04-3800	125166011	379926	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.43	0.172	PCI/G	0		9/11/2004	38292.54931	11:20	0.142	PCI/G	0.0643	PCI/G	1	5.8	163	G	PCI/G	PR
5502-0002-003-C3C-02	MSR#04-3800	125166011	379926	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0122	0.0259	PCI/G	0	U	9/11/2004	38292.54931	11:20	0.0446	PCI/G	0.0213	PCI/G	1	5.8	163	G	PCI/G	PR
5502-0002-003-C3C-02	MSR#04-3800	125166011	379926	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.307	0.253	PCI/G	0		9/11/2004	38292.54931	11:20	0.301	PCI/G	0.137	PCI/G	1	5.8	163	G	PCI/G	PR
5502-0002-003-C3C-02	MSR#04-3800	125166011	379926	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.423	0.101	PCI/G	0		9/11/2004	38292.54931	11:20	0.0683	PCI/G	0.0313	PCI/G	1	5.8	163	G	PCI/G	PR
5502-0002-003-C3C-02	MSR#04-3800	125166011	379926	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0264	0.0258	PCI/G	0	U	9/11/2004	38292.54931	11:20	0.0523	PCI/G	0.0242	PCI/G	1	5.8	163	G	PCI/G	PR
5502-0002-003-C3C-02	MSR#04-3800	125166011	379926	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.000245	0.0215	PCI/G	0	U	9/11/2004	38292.54931	11:20	0.0405	PCI/G	0.0186	PCI/G	1	5.8	163	G	PCI/G	PR
5502-0002-003-C3C-02	MSR#04-3800	125166011	379926	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.00242	0.0233	PCI/G	0	U	9/11/2004	38292.54931	11:20	0.0449	PCI/G	0.0198	PCI/G	1	5.8	163	G	PCI/G	PR
5502-0002-003-C3C-02	MSR#04-3800	125166011	379926	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0188	0.0486	PCI/G	0	U	9/11/2004	38292.54931	11:20	0.0883	PCI/G	0.0411	PCI/G	1	5.8	163	G	PCI/G	PR
5502-0002-003-C3C-02	MSR#04-3800	125166011	379926	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0118	0.0726	PCI/G	0	U	9/11/2004	38292.54931	11:20	0.139	PCI/G	0.0624	PCI/G	1	5.8	163	G	PCI/G	PR
5502-0002-003-C3C-02	MSR#04-3800	125166011	379926	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0592	0.0459	PCI/G	0	U	9/11/2004	38292.54931	11:20	0.0917	PCI/G	0.044	PCI/G	1	5.8	163	G	PCI/G	PR
5502-0002-003-C3C-02	MSR#04-3800	125166011	379926	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.359	0.0704	PCI/G	0		9/11/2004	38292.54931	11:20	0.0716	PCI/G	0.0344	PCI/G	1	5.8	163	G	PCI/G	PR
5502-0002-003-C3C-02	MSR#04-3800	125166011	379926	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.402	0.0788	PCI/G	0		9/11/2004	38292.54931	11:20	0.0743	PCI/G	0.035	PCI/G	1	5.8	163	G	PCI/G	PR
5502-0002-003-C3C-02	MSR#04-3800	125166011	379926	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0205	0.0236	PCI/G	0	U	9/11/2004	38292.54931	11:20	0.0472	PCI/G	0.0218	PCI/G	1	5.8	163	G	PCI/G	PR
5502-0002-003-C3C-02	MSR#04-3800	125166011	379926	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0125	0.0201	PCI/G	0	U	9/11/2004	38292.54931	11:20	0.0388	PCI/G	0.0179	PCI/G	1	5.8	163	G	PCI/G	PR
5502-0002-003-C3C-02	MSR#04-3800	125166011	379926	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.27	1	PCI/G	0		9/11/2004	38292.54931	11:20	0.355	PCI/G	0.151	PCI/G	1	5.8	163	G	PCI/G	PR
5502-0002-003-C3C-02	MSR#04-3800	125166011	379926	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.423	0.101	PCI/G	0		9/11/2004	38292.54931	11:20	0.0683	PCI/G	0.0313	PCI/G	1	5.8	163	G	PCI/G	PR
5502-0002-003-C3C-02	MSR#04-3800	125166011	379926	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00611	0.0178	PCI/G	0	U	9/11/2004	38292.54931	11:20	0.0317	PCI/G	0.0147	PCI/G	1	5.8	163	G	PCI/G	PR
5502-0002-003-C3C-02	MSR#04-3800	125166011	379964	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.00601	0.0467	PCI/G	0	U	10/11/2004	38293.96736	1:23	0.0932	PCI/G	0.0454	PCI/G	1	5.8	4.4	G	PCI/G	PR
5502-0002-003-C3C-02	MSR#04-3800	125166011	379926	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.139	0.0451	PCI/G	0		9/11/2004	38292.54931	11:20	0.0379	PCI/G	0.0174	PCI/G	1	5.8	163	G	PCI/G	PR
5502-0002-003-C3C-02	MSR#04-3800	125166011	380128	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	2.42	1.38	PCI/G	0			11/11/2004	4:37	2.11	PCI/G	1.06	PCI/G	1	5.8			PCI/G	PR
5502-0002-003-S01	MSR#04-3800	125166012	379926	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.747	0.203	PCI/G	0		9/11/2004	38292.54931	12:07	0.163	PCI/G	0.0733	PCI/G	1	20	158	G	PCI/G	PR
5502-0002-003-S01	MSR#04-3800	125166012	379926	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0861	0.194	PCI/G	0	U	9/11/2004	38292.54931	12:07	0.335	PCI/G	0.161	PCI/G	1	20	158	G	PCI/G	PR
5502-0002-003-S01	MSR#04-3800	125166012	379926	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.271	0.291	PCI/G	0	U	9/11/2004	38292.54931	12:07	0.396	PCI/G	0.182	PCI/G	1	20	158	G	PCI/G	PR
5502-0002-003-S01	MSR#04-3800	125166012	379926	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.475	0.137	PCI/G	0		9/11/2004	38292.54931	12:07	0.197	PCI/G	0.0951	PCI/G	1	20	158	G	PCI/G	PR
5502-0002-003-S01	MSR#04-3800	125166012	379926	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0135	0.0277	PCI/G	0	U	9/11/2004	38292.54931	12:07	0.0531	PCI/G	0.0242	PCI/G	1	20	158	G	PCI/G	PR
5502-0002-003-S01	MSR#04-3800	125166012	379926	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.00572	0.0264	PCI/G	0	U	9/11/2004	38292.54931	12:07	0.0467	PCI/G	0.0214	PCI/G	1	20	158	G	PCI/G	PR
5502-0002-003-S01	MSR#04-3800	125166012	379926	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.0144	0.0285	PCI/G	0	U	9/11/2004	38292.54931	12:07	0.0495	PCI/G	0.0215	PCI/G	1	20	158	G	PCI/G	PR
5502-0002-003-S01	MSR#04-3800	125166012	379926	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0206	0.072	PCI/G	0	U	9/11/2004	38292.54931	12:07	0.115	PCI/G	0.0534	PCI/G	1	20	158	G	PCI/G	PR
5502-0002-003-S01	MSR#04-3800	125166012	379926	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.08	0.0794	PCI/G	0	U	9/11/2004	38292.54931	12:07	0.169	PCI/G	0.0758	PCI/G	1	20	158	G	PCI/G	PR
5502-0002-003-S01	MSR#04-3800	125166012	379926	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.109	0.105	PCI/G	0	U	9/11/2004	38292.54931	12:07	0.158	PCI/G	0.0758	PCI/G	1	20	158	G	PCI/G	PR
5502-0002-003-S01	MSR#04-3800	125166012	379926	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.615	0.0921	PCI/G	0		9/11/2004	38292.54931	12:07	0.163	PCI/G	0.0794	PCI/G	1	20	158	G	PCI/G	PR
5502-0002-003-S01	MSR#04-3800	125166012	379926	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.686	0.131	PCI/G	0		9/11/2004	38292.54931	12:07	0.0862	PCI/G	0.0403	PCI/G	1	20	158	G	PCI/G	PR
5502-0002-003-S01	MSR#04-3800	125166012	379926	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.00795	0.0254	PCI/G	0	U	9/11/2004	38292.54931	12:07	0.0497	PCI/G	0.0227	PCI/G	1	20	158	G	PCI/G	PR
5502-0002-003-S01	MSR#04-3800	125166012	379926	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0234	0.0241	PCI/G	0	U	9/11/2004	38292.54931	12:07	0.0477	PCI/G	0.0221	PCI/G	1	20	158	G	PCI/G	PR
5502-0002-003-S01	MSR#04-3800	125166012	379926	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	11.6	1.38	PCI/G	0		9/11/2004	38292.54931	12:07	0.422	PCI/G	0.179	PCI/G	1	20	158	G	PCI/G	PR
5502-0002-003-S01	MSR#04-3800	125166012	379926	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.475	0.137	PCI/G	0		9/11/2004	38292.54931	12:07	0.0908	PCI/G	0.042	PCI/G	1	20	158	G	PCI/G	PR
5502-0002-003-S01	MSR#04-3800	125166012	379926	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00559	0.0223	PCI/G	0	U	9/11/2004	38292.54931	12:07	0.0423	PCI/G	0.0197	PCI/G	1	20	158	G	PCI/G	PR
5502-0002-003-S01	MSR#04-3800	125166012	379964	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.0749	0.0392	PCI/G	0		10/11/2004	38293.96736	1:23	0.0723	PCI/G	0.0351	PCI/G	1	20	4.17	G	PCI/G	PR
5502-0002-003-S01	MSR#04-3800	125166012	379926	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.23	0.0573	PCI/G	0		9/11/2004	38292.54931	12:07	0.0955	PCI/G	0.0459	PCI/G	1	20	158	G	PCI/G	PR
5502-0002-003-S01	MSR#04-3800	125166012	380128	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	0.837	1.12	PCI/G	0	U		11/11/2004	5:09	1.8	PCI/G	0.902	PCI/G	1	20			PCI/G	PR
5502-0002-004-C1C-01	MSR#04-3800	125166013	379926	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.361	0.15	PCI/G	0		9/11/2004	38292.54931	12:08	0.144	PCI/G	0.0645	PCI/G	1	4.6	146	G	PCI/G	PR
5502-0002-004-C1C-01	MSR#04-3800	125166013	379926	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.00812	0.117	PCI/G	0	U	9/11/2004	38292.54931	12:08	0.158	PCI/G	0.0754	PCI/G	1	4.6	146	G	PCI/G	PR
5502-0002-004-C1C-01	MSR#04-3800	125166013	379926	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.338	0.399	PCI/G	0		9/11/2004	38292.54931	12:08	0.292	PCI/G	0.132	PCI/G	1	4.6	146	G	PCI/G	PR
5502-0002-004-C1C-01	MSR#04-3800	125166013	379926	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.441	0.107	PCI/G	0		9/11/2004	38292.54931	12:08	0.0732	PCI/G	0.0335	PCI/G	1	4.6	146	G	PCI/G	PR
5502-0002-004-C1C-01	MSR#04-3800	125166013	379926	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0241	0.0275	PCI/G	0	U	9/11/2004	38292.54931	12:08	0.0548	PCI/G	0.0253	PCI/G	1	4.6	146	G	PCI/G	PR
5502-0002-004-C1C-01	MSR#04-3800	125166013	379926	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.125	0.0596	PCI/G	0		9/11/2004	38292.54931	12:08	0.0418	PCI/G	0.0191	PCI/G	1	4.6	146	G	PCI/G	PR
5502-0002-004-C1C-01	MSR#04-3800	125166013	379926	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0517	0.0397	PCI/G	0	U	9/11/2004	38292.54931	12:08	0.0747	PCI/G	0.0345	PCI/G	1	4.6	146	G	PCI/G	PR
5502-0002-004-C1C-01	MSR#04-3800	125166013	379926	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0174	0.0569	PCI/G	0	U	9/11/2004	38292.54931	12:08	0.102	PCI/G	0.0475	PCI/G	1	4.6	146	G	PCI/G	PR
5502-0002-004-C1C-01	MSR#04-3800	125166013	379926	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0283	0.0793	PCI/G	0	U	9/11/2004	38292.54931	12:08	0.142	PCI/G	0.0631	PCI/G	1	4.6	146	G	PCI/G	PR
5502-0002-004-C1C-01	MSR#04-3800	125166013	379926	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	-0.0513	0.0651	PCI/G	0	U	9/11/2004	38292.54931	12:08	0.113	PCI/G	0.054	PCI/G	1	4.6	146	G	PCI/G	PR
5502-0002-004-C1C-01	MSR#04-3800	125166013	379926	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.281	0.0735	PCI/G	0		9/11/2004	38292.54931	12:08	0.0837	PCI/G	0.0403	PCI/G	1	4.6	146	G	PCI/G	PR
5502-0002-004-C1C-01	MSR#04-3800	125166013	379926	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.432	0.101	PCI/G	0		9/11/2004	38292.54931	12:08	0.0835	PCI/G	0.0392	PCI/G	1	4.6	146	G	PCI/G	PR
5502-0002-004-C1C-01	MSR#04-3800	125166013	379926	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.016	0.0236	PCI/G	0	U	9/11/2004	38292.54931	12:08	0.0425	PCI/G	0.0193	PCI/G	1	4.6	146	G	PCI/G	PR
5502-0002-004-C1C-01	MSR#04-3800	125166013	379926	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00294	0.0186	PCI/G	0	U	9/11/2004	38292.54931	12:08	0.0354	PCI/G	0.0161	PCI/G	1	4.6	146	G	PCI/G	PR
5502-0002-004-C1C-01	MSR#04-3800	125166013	379926	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	6.54	0.952	PCI/G	0		9/11/2004	38292.54931	12:08	0.324	PCI/G	0.133	PCI/G	1	4.6	146	G	PCI/G	PR
5502-0002-004-C1C-01	MSR#04-3800	125166013	379926	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.441	0.107	PCI/G	0		9/11/2004	38292.54931	12:08	0.0732	PCI/G	0.0335	PCI/G	1	4.6	146	G	PCI/G	PR
5502-0002-004-C1C-01	MSR#04-3800	125166013	379926	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.0058	0.0192	PCI/G	0	U	9/11/2004	38292.54931	12:08	0.0339	PCI/G	0.0156	PCI/G	1	4.6	146	G	PCI/G	PR
5502-0002-004-C1C-01	MSR#04-3800	125166013	379964	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.0376	0.036	PCI/G	0	U	10/11/2004	38293.96736	2:03	0.0687	PCI/G	0.0333	PCI/G	1	4.6	4.47	G	PCI/G	PR
5502-0002-004-C1C-01	MSR#04-3800	125166013	379926	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.1	0.0502	PCI/G	0		9/11/2004	38292.54931	12:08	0.0424	PCI/G	0.0195	PCI/G	1	4.6	146	G	PCI/G	PR
5502-0002-004-C1C-01	MSR#04-3800	125166013	380128	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	0.538	1.1	PCI/G	0	U		11/11/2004	5:41	1.8	PCI/G	0.899	PCI/G	1	4.6			PCI/G	PR
5502-0002-004-C1C-02	MSR#04-3800	125166014	379926	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.305	0.135	PCI/G	0		9/11/2004	38292.54931	12:10	0.152	PCI/G	0.069	PCI/G	1	4.6	164	G	PCI/G	PR
5502-0002-004-C1C-02	MSR#04-3800	125166014	379926	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.149	0.155	PCI/G	0	U	9/11/2004	38292.54931	12:10	0.204	PCI/G	0.0966	PCI/G	1	4.6	164	G	PCI/G	PR
5502-0002-004-C1C-02	MSR#04-3800	125166014	379926	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.276	0.231	PCI/G	0		9/11/2004	38292.54931	12:10	0.263	PCI/G	0.118	PCI/G	1	4.6	164	G	PCI/G	PR
5502-0002-004-C1C-02	MSR#04-3800	125166014	379926	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.381	0.0811	PCI/G	0		9/11/2004	38292.54931	12:10	0.0688	PCI/G	0.0315	PCI/G	1	4.6	164	G	PCI/G	PR
5502-0002-004-C1C-02	MSR#04-3800	125166014	379926	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0284	0.0255	PCI/G	0	U	9/11/2004	38292.54931	12:10	0.0421	PCI/G	0.0191	PCI/G	1	4.6	164	G	PCI/G	PR
5502-0002-004-C1C-02	MSR#04-3800	125166014	379926	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.000297	0.0206	PCI/G	0	U	9/11/2004	38292.54931	12:10	0.0386	PCI/G	0.0176	PCI/G	1	4.6	164	G	PCI/G	PR
5502-0002-004-C1C-02	MSR#04-3800	125166014	379926	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.025	0.0219	PCI/G	0	U	9/11/2004	38292.54931	12:10	0.0492	PCI/G	0.0218	PCI/G	1	4.6	164	G	PCI/G	PR
5502-0002-004-C1C-02	MSR#04-3800	125166014	379926	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.024	0.0518	PCI/G	0	U	9/11/2004	38292.54931	12:10	0.0904	PCI/G	0.0418	PCI/G	1	4.6	164	G	PCI/G	PR
5502-0002-004-C1C-02	MSR#04-3800	125166014	379926	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0192	0.0635	PCI/G	0	U	9/11/2004	38292.54931	12:10	0.116	PCI/G	0.0508	PCI/G	1	4.6	164	G	PCI/G	PR
5502-0002-004-C1C-02	MSR#04-3800	125166014	379926	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0451	0.0565	PCI/G	0	U	9/11/2004	38292.54931	12:10	0.116	PCI/G	0.0551	PCI/G	1	4.6	164	G	PCI/G	PR
5502-0002-004-C1C-02	MSR#04-3800	125166014	379926	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.374	0.054	PCI/G	0		9/11/2004	38292.54931	12:10	0.057	PCI/G	0.0269	PCI/G	1	4.6	164	G	PCI/G	PR
5502-0002-004-C1C-02	MSR#04-3800	125166014	379926	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.42	0.0776	PCI/G	0		9/11/2004	38292.54931	12:10	0.0716	PCI/G	0.0334	PCI/G	1	4.6	164	G	PCI/G	PR
5502-0002-004-C1C-02	MSR#04-3800	125166014	379926	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.00443	0.0181	PCI/G	0	U	9/11/2004	38292.54931	12:10	0.0327	PCI/G	0.0145	PCI/G	1	4.6	164	G	PCI/G	PR
5502-0002-004-C1C-02	MSR#04-3800	125166014	379926	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0098	0.0189	PCI/G	0	U	9/11/2004	38292.54931	12:10	0.037	PCI/G	0.017	PCI/G	1	4.6	164	G	PCI/G	PR
5502-0002-004-C1C-02	MSR#04-3800	125166014	379926	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.12	0.912	PCI/G	0		9/11/2004	38292.54931	12:10	0.398	PCI/G	0.172	PCI/G	1	4.6	164	G	PCI/G	PR
5502-0002-004-C1C-02	MSR#04-3800	125166014	379926	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.381	0.0811	PCI/G	0		9/11/2004	38292.54931	12:10	0.0688	PCI/G	0.0315	PCI/G	1	4.6	164	G	PCI/G	PR
5502-0002-004-C1C-02	MSR#04-3800	125166014	379926	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00859	0.0167	PCI/G	0	U	9/11/2004	38292.54931	12:10	0.0338	PCI/G	0.0156	PCI/G	1	4.6	164	G	PCI/G	PR
5502-0002-004-C1C-02	MSR#04-3800	125166014	379964	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.00664	0.0349	PCI/G	0	U	10/11/2004	38293.96736	2:03	0.0702	PCI/G	0.0341	PCI/G	1	4.6	4.37	G	PCI/G	PR
5502-0002-004-C1C-02	MSR#04-3800	125166014	379926	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.13	0.0391	PCI/G	0		9/11/2004	38292.54931	12:10	0.0338	PCI/G	0.0153	PCI/G	1	4.6	164	G	PCI/G	PR
5502-0002-004-C1C-02	MSR#04-3800	125166014	380128	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	1.35	1.91	PCI/G	0	U		13/11/2004	10:06	3.09	PCI/G	1.55	PCI/G	1	4.6			PCI/G	PR
5502-0002-004-C3C-01	MSR#04-3800	125166015	379926	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.419	0.184	PCI/G	0		9/11/2004	38292.54931	12:10	0.137	PCI/G	0.0611	PCI/G	1	6	176	G	PCI/G	PR
5502-0002-004-C3C-01	MSR#04-3800	125166015	379926	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.00302	0.0364	PCI/G	0	U	9/11/2004	38292.54931	12:10	0.0606	PCI/G	0.0291	PCI/G	1	6	176	G	PCI/G	PR
5502-0002-004-C3C-01	MSR#04-3800	125166015	379926	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.328	0.202	PCI/G	0	U	9/11/2004	38292.54931	12:10	0.424	PCI/G	0.197	PCI/G	1	6	176	G	PCI/G	PR
5502-0002-004-C3C-01	MSR#04-3800	125166015	379926	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.478	0.108	PCI/G	0		9/11/2004	38292.54931	12:10	0.0707	PCI/G	0.0322	PCI/G	1	6	176	G	PCI/G	PR
5502-0002-004-C3C-01	MSR#04-3800	125166015	379926	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0519	0.0276	PCI/G	0	U	9/11/2004	38292.54931	12:10	0.0554	PCI/G	0.0255	PCI/G	1	6	176	G	PCI/G	PR
5502-0002-004-C3C-01	MSR#04-3800	125166015	379926	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.00685	0.0237	PCI/G	0	U	9/11/2004	38292.54931	12:10	0.0459	PCI/G	0.0211	PCI/G	1	6	176	G	PCI/G	PR
5502-0002-004-C3C-01	MSR#04-3800	125166015	379926	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.00778	0.0205	PCI/G	0	U	9/11/2004	38292.54931	12:10	0.0429	PCI/G	0.0186	PCI/G	1	6	176	G	PCI/G	PR
5502-0002-004-C3C-01	MSR#04-3800	125166015	379926	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0464	0.0637	PCI/G	0	U	9/11/2004	38292.54931	12:10	0.111	PCI/G	0.0521	PCI/G	1	6	176	G	PCI/G	PR
5502-0002-004-C3C-01	MSR#04-3800	125166015	379926	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0842	0.105	PCI/G	0	U	9/11/2004	38292.54931	12:10	0.135	PCI/G	0.0597	PCI/G	1	6	176	G	PCI/G	PR
5502-0002-004-C3C-01	MSR#04-3800	125166015	379926	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0391	0.0541	PCI/G	0	U	9/11/2004	38292.54931	12:10	0.109	PCI/G	0.0521	PCI/G	1	6	176	G	PCI/G	PR
5502-0002-004-C3C-01	MSR#04-3800	125166015	379926	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.469	0.0772	PCI/G	0		9/11/2004	38292.54931	12:10	0.0586	PCI/G	0.0278	PCI/G	1	6	176	G	PCI/G	PR
5502-0002-004-C3C-01	MSR#04-3800	125166015	379926	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.573	0.1	PCI/G	0		9/11/2004	38292.54931	12:10	0.0811	PCI/G	0.0381	PCI/G	1	6	176	G	PCI/G	PR
5502-0002-004-C3C-01	MSR#04-3800	125166015	379926	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0226	0.0208	PCI/G	0	U	9/11/2004	38292.54931	12:10	0.0435	PCI/G	0.0198	PCI/G	1	6	176	G	PCI/G	PR
5502-0002-004-C3C-01	MSR#04-3800	125166015	379926	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00793	0.0209	PCI/G	0	U	9/11/2004	38292.54931	12:10	0.0407	PCI/G	0.0187	PCI/G	1	6	176	G	PCI/G	PR
5502-0002-004-C3C-01	MSR#04-3800	125166015	379926	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.74	1.02	PCI/G	0		9/11/2004	38292.54931	12:10	0.315	PCI/G	0.129	PCI/G	1	6	176	G	PCI/G	PR
5502-0002-004-C3C-01	MSR#04-3800	125166015	379926	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.478	0.108	PCI/G	0		9/11/2004	38292.54931	12:10	0.0707	PCI/G	0.0322	PCI/G	1	6	176	G	PCI/G	PR
5502-0002-004-C3C-01	MSR#04-3800	125166015	379926	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.0134	0.0204	PCI/G	0	U	9/11/2004	38292.54931	12:10	0.041	PCI/G	0.0192	PCI/G	1	6	176	G	PCI/G	PR
5502-0002-004-C3C-01	MSR#04-3800	125166015	379964	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.0119	0.0233	PCI/G	0	U	10/11/2004	38293.96736	2:03	0.0455	PCI/G	0.0221	PCI/G	1	6	4.3	G	PCI/G	PR
5502-0002-004-C3C-01	MSR#04-3800	125166015	379926	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.14	0.053	PCI/G	0		9/11/2004	38292.54931	12:10	0.0441	PCI/G	0.0203	PCI/G	1	6	176	G	PCI/G	PR
5502-0002-004-C3C-01	MSR#04-3800	125166015	380128	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	1.83	1.15	PCI/G	0			11/11/2004	6:45	1.78	PCI/G	0.891	PCI/G	1	6			PCI/G	PR
5502-0002-004-C3C-02	MSR#04-3800	125166016	379926	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.427	0.175	PCI/G	0		9/11/2004	38292.54931	12:11	0.146	PCI/G	0.0653	PCI/G	1	6.4	174	G	PCI/G	PR
5502-0002-004-C3C-02	MSR#04-3800	125166016	379926	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0933	0.105	PCI/G	0	U	9/11/2004	38292.54931	12:11	0.168	PCI/G	0.0799	PCI/G	1	6.4	174	G	PCI/G	PR
5502-0002-004-C3C-02	MSR#04-3800	125166016	379926	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.272	0.496	PCI/G	0	U	9/11/2004	38292.54931	12:11	0.322	PCI/G	0.146	PCI/G	1	6.4	174	G	PCI/G	PR
5502-0002-004-C3C-02	MSR#04-3800	125166016	379926	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.396	0.0788	PCI/G	0		9/11/2004	38292.54931	12:11	0.0739	PCI/G	0.0338	PCI/G	1	6.4	174	G	PCI/G	PR
5502-0002-004-C3C-02	MSR#04-3800	125166016	379926	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0353	0.0306	PCI/G	0	U	9/11/2004	38292.54931	12:11	0.0536	PCI/G	0.0246	PCI/G	1	6.4	174	G	PCI/G	PR
5502-0002-004-C3C-02	MSR#04-3800	125166016	379926	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.00297	0.0201	PCI/G	0	U	9/11/2004	38292.54931	12:11	0.039	PCI/G	0.0177	PCI/G	1	6.4	174	G	PCI/G	PR
5502-0002-004-C3C-02	MSR#04-3800	125166016	379926	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.00742	0.0241	PCI/G	0	U	9/11/2004	38292.54931	12:11	0.0444	PCI/G	0.0192	PCI/G	1	6.4	174	G	PCI/G	PR
5502-0002-004-C3C-02	MSR#04-3800	125166016	379926	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0366	0.0596	PCI/G	0	U	9/11/2004	38292.54931	12:11	0.115	PCI/G	0.0539	PCI/G	1	6.4	174	G	PCI/G	PR

5502-0002-004-C3C-02	MSR#04-3800	125166016	379926	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0344	0.0623	PCI/G	0	U	9/11/2004	38292.54931	12:11	0.132	PCI/G	0.0579	PCI/G	1	6.4	174	G		PCI/G	PR	
5502-0002-004-C3C-02	MSR#04-3800	125166016	379926	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0408	0.0591	PCI/G	0	U	9/11/2004	38292.54931	12:11	0.121	PCI/G	0.058	PCI/G	1	6.4	174	G		PCI/G	PR	
5502-0002-004-C3C-02	MSR#04-3800	125166016	379926	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.409	0.0679	PCI/G	0		9/11/2004	38292.54931	12:11	0.0671	PCI/G	0.0319	PCI/G	1	6.4	174	G		PCI/G	PR	
5502-0002-004-C3C-02	MSR#04-3800	125166016	379926	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.378	0.106	PCI/G	0		9/11/2004	38292.54931	12:11	0.0857	PCI/G	0.0403	PCI/G	1	6.4	174	G		PCI/G	PR	
5502-0002-004-C3C-02	MSR#04-3800	125166016	379926	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0115	0.0214	PCI/G	0	U	9/11/2004	38292.54931	12:11	0.0427	PCI/G	0.0193	PCI/G	1	6.4	174	G		PCI/G	PR	
5502-0002-004-C3C-02	MSR#04-3800	125166016	379926	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00727	0.0188	PCI/G	0	U	9/11/2004	38292.54931	12:11	0.0372	PCI/G	0.0169	PCI/G	1	6.4	174	G		PCI/G	PR	
5502-0002-004-C3C-02	MSR#04-3800	125166016	379926	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.5	0.865	PCI/G	0		9/11/2004	38292.54931	12:11	0.459	PCI/G	0.199	PCI/G	1	6.4	174	G		PCI/G	PR	
5502-0002-004-C3C-02	MSR#04-3800	125166016	379926	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.396	0.0788	PCI/G	0		9/11/2004	38292.54931	12:11	0.0739	PCI/G	0.0338	PCI/G	1	6.4	174	G		PCI/G	PR	
5502-0002-004-C3C-02	MSR#04-3800	125166016	379926	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.0156	0.0194	PCI/G	0	U	9/11/2004	38292.54931	12:11	0.0381	PCI/G	0.0177	PCI/G	1	6.4	174	G		PCI/G	PR	
5502-0002-004-C3C-02	MSR#04-3800	125166016	379964	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00108	0.0448	PCI/G	0	U	10/11/2004	38293.96736	4.56	0.0693	PCI/G	0.0433	PCI/G	1	6.4	4.4	G		PCI/G	PR	
5502-0002-004-C3C-02	MSR#04-3800	125166016	379926	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.147	0.0428	PCI/G	0		9/11/2004	38292.54931	12.11	0.0405	PCI/G	0.0185	PCI/G	1	6.4	174	G		PCI/G	PR	
5502-0002-004-C3C-02	MSR#04-3800	125166016	380128	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	2.52	1.16	PCI/G	0			11/11/2004	7:17	1.74	PCI/G	0.87	PCI/G	1	6.4				PCI/G	PR	
5502-0002-004-S01	MSR#04-3800	125166017	379926	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.896	0.222	PCI/G	0		9/11/2004	38292.54931	12:11	0.159	PCI/G	0.0718	PCI/G	1	15	165	G		PCI/G	PR	
5502-0002-004-S01	MSR#04-3800	125166017	379926	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0198	0.12	PCI/G	0	U	9/11/2004	38292.54931	12:11	0.21	PCI/G	0.101	PCI/G	1	15	165	G		PCI/G	PR	
5502-0002-004-S01	MSR#04-3800	125166017	379926	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.569	0.433	PCI/G	0		9/11/2004	38292.54931	12:11	0.347	PCI/G	0.159	PCI/G	1	15	165	G		PCI/G	PR	
5502-0002-004-S01	MSR#04-3800	125166017	379926	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.599	0.115	PCI/G	0		9/11/2004	38292.54931	12:11	0.0849	PCI/G	0.0393	PCI/G	1	15	165	G		PCI/G	PR	
5502-0002-004-S01	MSR#04-3800	125166017	379926	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0165	0.0391	PCI/G	0	U	9/11/2004	38292.54931	12:11	0.0641	PCI/G	0.0299	PCI/G	1	15	165	G		PCI/G	PR	
5502-0002-004-S01	MSR#04-3800	125166017	379926	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.0194	0.027	PCI/G	0	U	9/11/2004	38292.54931	12:11	0.0477	PCI/G	0.022	PCI/G	1	15	165	G		PCI/G	PR	
5502-0002-004-S01	MSR#04-3800	125166017	379926	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.0178	0.0246	PCI/G	0	U	9/11/2004	38292.54931	12:11	0.0407	PCI/G	0.0175	PCI/G	1	15	165	G		PCI/G	PR	
5502-0002-004-S01	MSR#04-3800	125166017	379926	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.04	0.0607	PCI/G	0	U	9/11/2004	38292.54931	12:11	0.11	PCI/G	0.0515	PCI/G	1	15	165	G		PCI/G	PR	
5502-0002-004-S01	MSR#04-3800	125166017	379926	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.00365	0.0793	PCI/G	0	U	9/11/2004	38292.54931	12:11	0.148	PCI/G	0.0662	PCI/G	1	15	165	G		PCI/G	PR	
5502-0002-004-S01	MSR#04-3800	125166017	379926	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0541	0.0696	PCI/G	0	U	9/11/2004	38292.54931	12:11	0.137	PCI/G	0.0657	PCI/G	1	15	165	G		PCI/G	PR	
5502-0002-004-S01	MSR#04-3800	125166017	379926	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.861	0.0756	PCI/G	0		9/11/2004	38292.54931	12.11	0.0681	PCI/G	0.0325	PCI/G	1	15	165	G		PCI/G	PR	
5502-0002-004-S01	MSR#04-3800	125166017	379926	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.775	0.121	PCI/G	0		9/11/2004	38292.54931	12.11	0.0858	PCI/G	0.0404	PCI/G	1	15	165	G		PCI/G	PR	
5502-0002-004-S01	MSR#04-3800	125166017	379926	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0126	0.0271	PCI/G	0	U	9/11/2004	38292.54931	12:11	0.0529	PCI/G	0.0245	PCI/G	1	15	165	G		PCI/G	PR	
5502-0002-004-S01	MSR#04-3800	125166017	379926	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.00233	0.0231	PCI/G	0	U	9/11/2004	38292.54931	12:11	0.0413	PCI/G	0.019	PCI/G	1	15	165	G		PCI/G	PR	
5502-0002-004-S01	MSR#04-3800	125166017	379926	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	12.8	1.16	PCI/G	0		9/11/2004	38292.54931	12:11	0.427	PCI/G	0.185	PCI/G	1	15	165	G		PCI/G	PR	
5502-0002-004-S01	MSR#04-3800	125166017	379926	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.599	0.115	PCI/G	0		9/11/2004	38292.54931	12:11	0.0849	PCI/G	0.0393	PCI/G	1	15	165	G		PCI/G	PR	
5502-0002-004-S01	MSR#04-3800	125166017	379926	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.0189	0.0212	PCI/G	0	U	9/11/2004	38292.54931	12:11	0.0367	PCI/G	0.017	PCI/G	1	15	165	G		PCI/G	PR	
5502-0002-004-S01	MSR#04-3800	125166017	379964	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.0831	0.0293	PCI/G	0		10/11/2004	38293.96736	4:56	0.0517	PCI/G	0.0251	PCI/G	1	15	4.1	G		PCI/G	PR	
5502-0002-004-S01	MSR#04-3800	125166017	379926	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.296	0.0627	PCI/G	0		9/11/2004	38292.54931	12:11	0.0437	PCI/G	0.0202	PCI/G	1	15	165	G		PCI/G	PR	
5502-0002-004-S01	MSR#04-3800	125166017	380128	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	1.44	1.22	PCI/G	0	U		11/11/2004	7:49	1.92	PCI/G	0.961	PCI/G	1	15				PCI/G	PR	
5502-0001-005S	MSR#04-3800	125166018	379926	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0	0.504	PCI/G	0	UU	9/11/2004	38292.54931	12:12	0.479	PCI/G	0.23	PCI/G	1	0.5	110	G		PCI/G	PR	
5502-0001-005S	MSR#04-3800	125166018	379926	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0	1.27	PCI/G	0	UU	9/11/2004	38292.54931	12:12	1.27	PCI/G	0.629	PCI/G	1	0.5	110	G		PCI/G	PR	
5502-0001-005S	MSR#04-3800	125166018	379926	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	4.88	0.888	PCI/G	0		9/11/2004	38292.54931	12:12	0.658	PCI/G	0.31	PCI/G	1	0.5	110	G		PCI/G	PR	
5502-0001-005S	MSR#04-3800	125166018	379926	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0	0.162	PCI/G	0	UU	9/11/2004	38292.54931	12:12	0.225	PCI/G	0.109	PCI/G	1	0.5	110	G		PCI/G	PR	
5502-0001-005S	MSR#04-3800	125166018	379926	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0358	0.0588	PCI/G	0	U	9/11/2004	38292.54931	12:12	0.104	PCI/G	0.0492	PCI/G	1	0.5	110	G		PCI/G	PR	
5502-0001-005S	MSR#04-3800	125166018	379926	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	2.56	0.251	PCI/G	0		9/11/2004	38292.54931	12:12	0.0889	PCI/G	0.0422	PCI/G	1	0.5	110	G		PCI/G	PR	
5502-0001-005S	MSR#04-3800	125166018	379926	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	3.18	0.293	PCI/G	0		9/11/2004	38292.54931	12:12	0.0797	PCI/G	0.036	PCI/G	1	0.5	110	G		PCI/G	PR	
5502-0001-005S	MSR#04-3800	125166018	379926	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0	0.21	PCI/G	0	UU	9/11/2004	38292.54931	12:12	0.263	PCI/G	0.127	PCI/G	1	0.5	110	G		PCI/G	PR	
5502-0001-005S	MSR#04-3800	125166018	379926	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0458	0.15	PCI/G	0	U	9/11/2004	38292.54931	12:12	0.243	PCI/G	0.111	PCI/G	1	0.5	110	G		PCI/G	PR	
5502-0001-005S	MSR#04-3800	125166018	379926	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0	1.48	PCI/G	0	UU	9/11/2004	38292.54931	12:12	1.34	PCI/G	0.667	PCI/G	1	0.5	110	G		PCI/G	PR	
5502-0001-005S	MSR#04-3800	125166018	379926	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	9.25	0.759	PCI/G	0		9/11/2004	38292.54931	12:12	0.146	PCI/G	0.0708	PCI/G	1	0.5	110	G		PCI/G	PR	
5502-0001-005S	MSR#04-3800	125166018	379926	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.343	0.156	PCI/G	0		9/11/2004	38292.54931	12:12	0.175	PCI/G	0.0844	PCI/G	1	0.5	110	G		PCI/G	PR	
5502-0001-005S	MSR#04-3800	125166018	379926	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.00283	0.0555	PCI/G	0	U	9/11/2004	38292.54931	12:12	0.0934	PCI/G	0.0441	PCI/G	1	0.5	110	G		PCI/G	PR	
5502-0001-005S	MSR#04-3800	125166018	379926	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0207	0.0435	PCI/G	0	U	9/11/2004	38292.54931	12:12	0.0771	PCI/G	0.0365	PCI/G	1	0.5	110	G		PCI/G	PR	
5502-0001-005S	MSR#04-3800	125166018	379926	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	8.32	1.25	PCI/G	0		9/11/2004	38292.54931	12:12	0.768	PCI/G	0.345	PCI/G	1	0.5	110	G		PCI/G	PR	
5502-0001-005S	MSR#04-3800	125166018	379926	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.445	0.162	PCI/G	0		9/11/2004	38292.54931	12:12	0.148	PCI/G	0.07	PCI/G	1	0.5	110	G		PCI/G	PR	
5502-0001-005S	MSR#04-3800	125166018	379926	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.02	0.0431	PCI/G	0	U	9/11/2004	38292.54931	12:12	0.0775	PCI/G	0.0371	PCI/G	1	0.5	110	G		PCI/G	PR	
5502-0001-005S	MSR#04-3800	125166018	379964	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.0141	0.0252	PCI/G	0	U	10/11/2004	38293.96736	4:56	0.0491	PCI/G	0.0238	PCI/G	1	0.5	4.15	G		PCI/G	PR	
5502-0001-005S	MSR#04-3800	125166018	379926	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	2.73	0.251	PCI/G	0		9/11/2004	38292.54931	12:12	0.0649	PCI/G	0.0403	PCI/G	1	0.5	110	G		PCI/G	PR	
5502-0001-005S	MSR#04-3800	125166018	379926	15117-96-1	Uranium-235	TRG 8	UHASL300	HASL300	REG	294	48	PCI/G	0		9/11/2004	38292.54931	12:12	1.77	PCI/G	0.88	PCI/G	1	0.5	110	G		PCI/G	PR	
5502-0001-005S	MSR#04-3800	125166018	379926	7440-61-1	Uranium-238	TRG 8	UHASL300	HASL300	REG	41	11.3	PCI/G	0		9/11/2004	38292.54931	12.12	9.92	PCI/G	4.92	PCI/G	1	0.5	110	G		PCI/G	PR	
	MSR#04-3800	1200737003	379926	14331-83-0	Actinium-228	TRG	U	HASL300	LB1	0.1	0.0889	PCI/G	0	U		11/11/2004	12:13	0.193	PCI/G	0.0852	PCI/G	1	0	101	G		PCI/G	PR	
	MSR#04-3800	1200737003	379926	14596-10-2	Americium-241	TRG	U	HASL300	LB1	0.0266	0.088	PCI/G	0	U		11/11/2004	12:13	0.129	PCI/G	0.0587	PCI/G	1	0	101	G		PCI/G	PR	
	MSR#04-3800	1200737003	379926	14913-49-6	Bismuth-212	TRG	U	HASL300	LB1	0.172	0.373	PCI/G	0	U		11/11/2004	12:13	0.34	PCI/G	0.149	PCI/G	1	0	101	G		PCI/G	PR	
	MSR#04-3800	1200737003	379926	14733-03-0	Bismuth-214	TRG	U	HASL300	LB1	0.0618	0.0821	PCI/G	0	U		11/11/2004	12:13	0.0906	PCI/G	0.0407	PCI/G	1	0	101	G		PCI/G	PR	
	MSR#04-3800	1200737003	379926	13967-70-9	Cesium-134	TRG	U	HASL300	LB1	0.00343	0.0218	PCI/G	0	U		11/11/2004	12:13	0.0427	PCI/G	0.0182	PCI/G	1	0	101	G		PCI/G	PR	
	MSR#04-3800	1200737003	379926	10045-97-3	Cesium-137	TRG	U	HASL300	LB1	0.00944	0.025	PCI/G	0	U		11/11/2004	12:13	0.0444	PCI/G	0.0195	PCI/G	1	0	101	G		PCI/G	PR	
	MSR#04-3800	1200737003	379926	10198-40-0	Cobalt-60	TRG	U	HASL300	LB1	-0.011	0.0245	PCI/G	0	U		11/11/2004	12:13	0.0358	PCI/G	0.0134	PCI/G	1	0	101	G		PCI/G	PR	
	MSR#04-3800	1200737003	379926	14683-23-9	Europium-152	TRG	U	HASL300	LB1	0.00247	0.0541	PCI/G	0	U		11/11/2004	12:13	0.0966	PCI/G	0.0431	PCI/G	1	0	101	G		PCI/G	PR	
	MSR#04-3800	1200737003	379926	15585-10-1	Europium-154	TRG	U	HASL300	LB1	0.0212	0.0689	PCI/G	0	U		11/11/2004	12:13	0.133	PCI/G	0.0549	PCI/G	1	0	101	G		PCI/G	PR	
	MSR#04-3800	1200737003	379926	14391-16-3	Europium-155	TRG	U	HASL300	LB1	-0.0596	0.0596	PCI/G	0	U		11/11/2004	12:13	0.0987	PCI/G	0.0457	PCI/G	1	0	101	G		PCI/G	PR	
	MSR#04-3800	1200737003	379926	15092-94-1	Lead-212	TRG	U	HASL300	LB1	0.0264	0.0826	PCI/G	0	U		11/11/2004	12:13	0.066	PCI/G	0.0307	PCI/G	1	0	101	G		PCI/G	PR	
	MSR#04-3800	1200737003	379926	15067-28-4	Lead-214	TRG	U	HASL300	LB1	0.0323	0.0469	PCI/G	0	U		11/11/2004	12:13	0.0881	PCI/G	0.0403	PCI/G	1	0	101	G		PCI/G	PR	
	MSR#04-3800	1200737003	379926	13966-31-9	Manganese-54	TRG	U	HASL300	LB1	-0.00268	0.0403	PCI/G	0	U		11/11/2004	12:13	0.0448	PCI/G	0.0196	PCI/G	1	0	101	G		PCI/G	PR	
	MSR#04-3800	1200737003	379926	14681-63-1	Niobium-94	TRG	U	HASL300	LB1	-0.021	0.023	PCI/G	0	U		11/11/2004	12.13	0.0361	PCI/G	0.0156	PCI/G	1	0	101	G		PCI/G	PR	
	MSR#04-3800	1200737003	379926	13966-00-2	Potassium-40	TRG	U	HASL300	LB1	0.351	0.325	PCI/G	0	U		11/11/2004	12.13	0.689	PCI/G	0.301	PCI/G	1	0	101	G		PCI/G	PR	
	MSR#04-3800	1200737003	379926	13982-63-3	Radium-226	TRG	U	HASL300	LB1	0.0618	0.0821	PCI/G	0	U		11/11/2004	12.13	0.0906	PCI/G	0.0407	PCI/G	1	0	101	G		PCI/G	PR	
	MSR#04-3800	1200737003	379926	14391-65-2	Silver-108m	TRG	U	HASL300	LB1	-0.0163	0.0194	PCI/G	0	U		11/11/2004	12:13	0.0325	PCI/G	0.0143	PCI/G	1	0	101	G		PCI/G	PR	
	MSR#04-3800	1200737003	379926	14913-50-9	Thallium-208	TRG	U	HASL300	LB1	0.00534	0.0542	PCI/G	0	U		11/11/2004	12:13	0.0495	PCI/G	0.0223	PCI/G	1	0	101	G		PCI/G	PR	
	MSR#04-3800	1200737003	379926	15117-96-1	Uranium-235	TRG	U	HASL300	LB1	-0.0445	0.122	PCI/G	0	U		11/11/2004	12:13	0.21	PCI/G	0.0977	PCI/G	1	0	101	G		PCI/G	PR	
	MSR#04-3800	1200737003	379926	7440-61-1	Uranium-238	TRG	U	HASL300	LB1	0	1.43	PCI/G	0	UUI		11/11/2004	12:13	0.991	PCI/G	0.452	PCI/G	1	0	101	G		PCI/G	PR	
5502-0002-001-C1C-01	MSR#04-3800	1200737004	379926	14331-83-0	Actinium-228	TRG	U	HASL300	LR1	0.299	0.167	PCI/G	0			11/11/2004	12:14	0.156	PCI/G	0.0694	PCI/G	1	6.8	172	G		PCI/G 0.35	4 PR	
5502-0002-001-C1C-01	MSR#04-3800	1200737004	379926	14596-10-2	Americium-241	TRG	U	HASL300	LR1	0.00194	0.0259	PCI/G	0	U		11/11/2004	12:14	0.0507	PCI/G	0.0241	PCI/G	1	6.8	172	G		PCI/G -0.0	0168 PR	
5502-0002-001-C1C-01	MSR#04-3800	1200737004	379926	14913-49-6	Bismuth-212	TRG	U	HASL300	LR1	0.249	0.343	PCI/G	0	U		11/11/2004	12:14	0.341	PCI/G	0.154	PCI/G	1	6.8	172	G		PCI/G 0.33	6 PR	
5502-0002-001-C1C-01	MSR#04-3800	1200737004	379926	14733-03-0	Bismuth-214	TRG	U	HASL300	LR1	0.293	0.0792	PCI/G	0			11/11/2004	12:14	0.0719	PCI/G	0.0325	PCI/G	1	6.8	172	G		PCI/G 0.33	8 PR	
5502-0002-001-C1C-01	MSR#04-3800	1200737004	379926	13967-70-9	Cesium-134	TRG	U	HASL300	LR1	0.0268	0.0227	PCI/G	0	U		11/11/2004	12:14	0.0456	PCI/G	0.0203	PCI/G	1	6.8	172	G		PCI/G 0.01	26 PR	
5502-0002-001-C1C-01	MSR#04-3800	1200737004	379926	10045-97-3	Cesium-137	TRG	U	HASL300	LR1	0.103	0.0347	PCI/G	0			11/11/2004	12:14	0.0402	PCI/G	0.018	PCI/G	1	6.8	172	G		PCI/G 0.09	58 PR	
5502-0002-001-C1C-01	MSR#04-3800	1200737004	379926	10198-40-0	Cobalt-60	TRG	U	HASL300	LR1	0.0544	0.0433	PCI/G	0	U		11/11/2004	12:14	0.0712	PCI/G	0.0323	PCI/G	1	6.8	172	G		PCI/G 0.00	PR	
5502-0002-001-C1C-01	MSR#04-3800	1200737004	379926	14683-23-9	Europium-152	TRG	U	HASL300	LR1	0.0439	0.0516	PCI/G	0	U		11/11/2004	12:14	0.105	PCI/G	0.0489	PCI/G	1	6.8	172	G		PCI/G -0.0	171 PR	
5502-0002-001-C1C-01	MSR#04-3800	1200737004	379926	15585-10-1	Europium-154	TRG	U	HASL300	LR1	-0.0329	0.0584	PCI/G	0	U		11/11/2004	12:14	0.106	PCI/G	0.0442	PCI/G	1	6.8	172	G		PCI/G 0.05	86 PR	
5502-0002-001-C1C-01	MSR#04-3800	1200737004	379926	14391-16-3	Europium-155	TRG	U	HASL300	LR1	0.0198	0.0426	PCI/G	0	U		11/11/2004	12:14	0.0828	PCI/G	0.0391	PCI/G	1	6.8	172	G		PCI/G 0.00	698 PR	
5502-0002-001-C1C-01	MSR#04-3800	1200737004	379926	15092-94-1	Lead-212	TRG	U	HASL300	LR1	0.338	0.0494	PCI/G	0			11/11/2004	12:14	0.0498	PCI/G	0.0233	PCI/G	1	6.8	172	G		PCI/G 0.35	6 PR	
5502-0002-001-C1C-01	MSR#04-3800	1200737004	379926	15067-28-4	Lead-214	TRG	U	HASL300	LR1	0.252	0.0872	PCI/G	0			11/11/2004	12:14	0.07	PCI/G	0.0323	PCI/G	1	6.8	172	G		PCI/G 0.39	7 PR	
5502-0002-001-C1C-01	MSR#04-3800	1200737004	379926	13966-31-9	Manganese-54	TRG	U	HASL300	LR1	-0.0138	0.0207	PCI/G	0	U		11/11/2004	12:14	0.0361	PCI/G	0.0158	PCI/G	1	6.8	172	G		PCI/G 0.00	112 PR	
5502-0002-001-C1C-01	MSR#04-3800	1200737004	379926	14681-63-1	Niobium-94	TRG	U	HASL300	LR1	0.00722	0.021	PCI/G	0	U		11/11/2004	12:14	0.038	PCI/G	0.0171	PCI/G	1	6.8	172	G		PCI/G 0.02	29 PR	
5502-0002-001-C1C-01	MSR#04-3800	1200737004	379926	13966-00-2	Potassium-40	TRG	U	HASL300	LR1	4.29	0.746	PCI/G	0			11/11/2004	12:14	0.429	PCI/G	0.182	PCI/G	1	6.8	172	G		PCI/G 4.02	PR	
5502-0002-001-C1C-01	MSR#04-3800	1200737004	379926	13982-63-3	Radium-226	TRG	U	HASL300	LR1	0.293	0.0792	PCI/G	0			11/11/2004	12:14	0.0719	PCI/G	0.0325	PCI/G	1	6.8	172	G		PCI/G 0.33	8 PR	
5502-0002-001-C1C-01	MSR#04-3800	1200737004	379926	14391-65-2	Silver-108m	TRG	U	HASL300	LR1	-0.00641	0.0193	PCI/G	0	U		11/11/2004	12:14	0.0348	PCI/G	0.0159	PCI/G	1	6.8	172	G		PCI/G 0.01	17 PR	
5502-0002-001-C1C-01	MSR#04-3800	1200737004	379926	14913-50-9	Thallium-208	TRG	U	HASL300	LR1	0.123	0.0515	PCI/G	0			11/11/2004	12:14	0.0418	PCI/G	0.019	PCI/G	1	6.8	172	G		PCI/G 0.12	0 PR	
5502-0002-001-C1C-01	MSR#04-3800	1200737004	379926	15117-96-1	Uranium-235	TRG	U	HASL300	LR1	0.102	0.101	PCI/G	0	U		11/11/2004	12:14	0.198	PCI/G	0.0939	PCI/G	1	6.8	172	G		PCI/G -0.0	394 PR	
5502-0002-001-C1C-01	MSR#04-3800	1200737004	379926	7440-61-1	Uranium-238	TRG	U	HASL300	LR1	0.108	0.594	PCI/G	0	U		11/11/2004	12:14	0.551	PCI/G	0.263	PCI/G	1	6.8	172	G		PCI/G 0.00	246 PR	
	MSR#04-3800	1200737005	379926	14331-83-0	Actinium-228	TRG	U	HASL300	BS1	0.293	0.575	PCI/G	0	U		12/11/2004	2:39	1.03	PCI/G	0.491	PCI/G	1	0	100	G		PCI/G	PR	
	MSR#04-3800	1200737005	379926	14596-10-2	Americium-241	TRG	U	HASL300	BS1	27.2	1.53	PCI/G	0			12/11/2004	2:39	0.943	PCI/G	0.46	PCI/G	1	0	100	G	23	.4 PCI/G	PR	
	MSR#04-3800	1200737005	379926	14913-49-6	Bismuth-212	TRG	U	HASL300	BS1	0.182	1	PCI/G	0	U		12/11/2004	2:39	1.71	PCI/G	0.809	PCI/G	1	0	100	G		PCI/G	PR	
	MSR#04-3800	1200737005	379926	14733-03-0	Bismuth-214	TRG	U	HASL300	BS1	0.0063	0.234	PCI/G	0	U		12/11/2004	2:39	0.399	PCI/G	0.19	PCI/G	1	0	100	G		PCI/G	PR	
	MSR#04-3800	1200737005	379926	13967-70-9	Cesium-134	TRG	U	HASL300	BS1	-0.0451	0.161	PCI/G	0	U		12/11/2004	2:39	0.263	PCI/G	0.125	PCI/G	1	0	100	G		PCI/G	PR	
	MSR#04-3800	1200737005	379926	10045-97-3	Cesium-137	TRG	U	HASL300	BS1	10.7	0.509	PCI/G	0			12/11/2004	2:39	0.223	PCI/G	0.106	PCI/G	1	0	100	G	9.	18 PCI/G	PR	
	MSR#04-3800	1200737005	379926	10198-40-0	Cobalt-60	TRG	U	HASL300	BS1	14.8	0.681	PCI/G	0			12/11/2004	2:39	0.229	PCI/G	0.105	PCI/G	1	0	100	G	13	6 PCI/G	PR	
	MSR#04-3800	1200737005	379926	14683-23-9	Europium-152	TRG	U	HASL300	BS1	0.0217	0.269	PCI/G	0	U		12/11/2004	2:39	0.475	PCI/G	0.227	PCI/G	1	0	100	G		PCI/G	PR	
	MSR#04-3800	1200737005	379926	15585-10-1	Europium-154	TRG	U	HASL300	BS1	-0.143	0.288	PCI/G	0	U		12/11/2004	2:39	0.484	PCI/G	0.217	PCI/G	1	0	100	G		PCI/G	PR	
	MSR#04-3800	1200737005	379926	14391-16-3	Europium-155	TRG	U	HASL300	BS1	-0.0442	0.293	PCI/G	0	U		12/11/2004	2:39	0.499	PCI/G	0.242	PCI/G	1	0	100	G		PCI/G	PR	
	MSR#04-3800	1200737005	379926	15092-94-1	Lead-212	TRG	U	HASL300	BS1	0.0654	0.15	PCI/G	0	U		12/11/2004	2:39	0.253	PCI/G	0.122	PCI/G	1	0	100	G		PCI/G	PR	
	MSR#04-3800	1200737005	379926	15067-28-4	Lead-214	TRG	U	HASL300	BS1	0.061	0.202	PCI/G	0	U		12/11/2004	2:39	0.358	PCI/G	0.171	PCI/G	1	0	100	G		PCI/G	PR	
	MSR#04-3800	1200737005	379926	13966-31-9	Manganese-54	TRG	U	HASL300	BS1	-0.139	0.136	PCI/G	0	U		12/11/2004	2:39	0.225	PCI/G	0.106	PCI/G	1	0	100	G		PCI/G	PR	
	MSR#04-3800	1200737005	379926	14681-63-1	Niobium-94	TRG	U	HASL300	BS1	-0.024	0.12	PCI/G	0	U		12/11/2004	2:39	0.199	PCI/G	0.0944	PCI/G	1	0	100	G		PCI/G	PR	
	MSR#04-3800	1200737005	379926	13966-00-2	Potassium-40	TRG	U	HASL300	BS1	0.0187	1.07	PCI/G	0	U		12/11/2004	2:39	1.82	PCI/G	0.817	PCI/G	1	0	100	G		PCI/G	PR	
	MSR#04-3800	1200737005	379926	13982-63-3	Radium-226	TRG	U	HASL300	BS1	0.0063	0.234	PCI/G	0	U		12/11/2004	2:39	0.399	PCI/G	0.19	PCI/G	1	0	100	G		PCI/G	PR	
	MSR#04-3800	1200737005	379926	14391-65-2	Silver-108m	TRG	U	HASL300	BS1	0.03	0.115	PCI/G	0	U		12/11/2004	2:39	0.201	PCI/G	0.0964	PCI/G	1	0	100	G		PCI/G	PR	
	MSR#04-3800	1200737005	379926	14913-50-9	Thallium-208	TRG	U	HASL300	BS1	0.0453	0.123	PCI/G	0	U		12/11/2004	2:39	0.215	PCI/G	0.102	PCI/G	1	0	100	G		PCI/G	PR	
	MSR#04-3800	1200737005	379926	15117-96-1	Uranium-235	TRG	U	HASL300	BS1	-0.102	0.492	PCI/G	0	U		12/11/2004	2:39	0.827	PCI/G	0.398	PCI/G	1	0	100	G		PCI/G	PR	
	MSR#04-3800	1200737005	379926	7440-61-1	Uranium-238	TRG	U	HASL300	BS1	-7.59	4.37	PCI/G	0	U		12/11/2004	2:39	6.33	PCI/G	3.08	PCI/G	1	0	100	G		PCI/G	PR	
	MSR#04-3800	1200737121	379964	10098-97-2	Strontium-90	TRG	U	E905M	LB1	-0.048	0.0248	PCI/G	0	U	13/11/2004		4:56	0.0527	PCI/G	0.0257	PCI/G	1	0	4.56	G		PCI/G	PR	
5502-0002-001-C1C-01	MSR#04-3800	1200737122	379964	10098-97-2	Strontium-90	TRG	U	E905M	LR1	0.168	0.0494	PCI/G	0		16/11/2004		2:48	0.0799	PCI/G	0.037	PCI/G	1	6.8	4.43	G		PCI/G 0.01	24 PR	
5502-0002-001-C1C-01	MSR#04-3800	1200737123	379964	10098-97-2	Strontium-90	TRG	U	E905M	MS1	8.18	0.824	PCI/G	0			12/11/2004	5:24	0.625	PCI/G	0.286	PCI/G	1	6.8	2.15	G	8.	49 PCI/G 8.50	PR	
	MSR#04-3800	1200737124	379964	10098-97-2	Strontium-90	TRG	U	E905M	BS1	3.12	0.264	PCI/G	0			12/11/2004	5:24	0.182	PCI/G	0.0838	PCI/G	1	0	4.56	G	3.	99 PCI/G	PR	
	MSR#04-3800	1200737484	380128	10028-17-8	Tritium	TRG	U	E906.0	LB1	1.17	1.23	PCI/G	0	U		11/11/2004	8:20	1.96	PCI/G	0.978	PCI/G	1	0				PCI/G	PR	
5502-0002-002-S01	MSR#04-3800	1200737485	380128	10028-17-8	Tritium	TRG	U	E906.0	LR1	1.53	1.2	PCI/G	0	U		11/11/2004	8:52	1.89	PCI/G	0.944	PCI/G	1	16				PCI/G 1.04	PR	
5502-0002-002-S01	MSR#04-3800	1200737486	380128	10028-17-8	Tritium	TRG	U	E906.0	MS1	8.76	1.8	PCI/G	0			11/11/2004	9:24	2.01	PCI/G	1.01	PCI/G	1	16			7	91 PCI/G 8.95	PR	
	MSR#04-3800	1200737487	380128	10028-17-8	Tritium	TRG	U	E906.0	BS1	8.55	1.41	PCI/G	0			11/11/2004	9:56	1.72	PCI/G	0.861	PCI/G	1	16			7	91 PCI/G	PR	

Connecticut Yankee Atomic Power Company
362 Injun Hollow Road, East Hampton, CT 06424
860-267-2556

Chain of Custody Form

No. 2004-00236

Project Name: Haddam Neck Decommissioning

Contact Name & Phone:
Pete Hollenbeck 860-267-3923

Analytical Lab (Name, City, State):
On-site

Priority: ☐ 30 D. ☐ 14 D. ☐ 7 D.
Other: 2 days

Lab Use Only
Comments:

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	Analyses Requested: CHGAM						Comment, Preservation	Lab Sample ID
5502-0001-005S	10/5/04	1205	SE	G	BP	X						Dry sample	0410 07012

NOTES: PO #: N/A MSR #: N/A ☐ LTP QA ☐ Radwaste QA ☒ Non QA

Samples Shipped Via:
☐ Fed Ex
☐ UPS
☒ Hand
☐ Other ____
Bill of Lading #

Internal Container Temp.: ____ Deg. C

Custody Sealed? Y ☐ N ☐

Custody Seal Intact? Y ☐ N ☐

1) Relinquished By: P. Hollenbeck	Date/Time 10/6/04 1352	2) Received By: Nicholas W. Fuller	Date/Time 10/6/04 1352
3) Relinquished By	Date/Time	4) Received By	Date/Time
5) Relinquished By	Date/Time	6) Received By	Date/Time

Connecticut Yankee Atomic Power Company
362 Injun Hollow Road, East Hampton, CT 06424
860-267-2556

Chain of Custody Form

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Pete Hollenbeck 860-267-3923

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Comments:

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	Analyses Requested: CHGAM						Comment, Preservation	Lab Sample ID
5502-0001-005S	10/5/04	1205	SE	G	BP	X						Dry sample	

NOTES: PO #: N/A MSR #: N/A ☐ LTP QA ☐ Radwaste QA ☒ Non QA

Samples Shipped Via:
☐ Fed Ex
☐ UPS
☒ Hand
☐ Other ____
Bill of Lading #

Internal Container Temp.: ____ Deg. C

Custody Sealed? Y ☐ N ☐

Custody Seal Intact? Y ☐ N ☐

1) Relinquished By: P Hollenbeck	Date/Time: 10/6/04 1352	2) Received By: Nicholas W. Fuchtato	Date/Time: 10/6/04 1352
3) Relinquished By	Date/Time	4) Received By	Date/Time
5) Relinquished By	Date/Time	6) Received By	Date/Time

****
7-OCT-2004 11:32:12.22

CONNECTICUT YANKEE
HADDAM NECK STATION
****

SAMPLE TITLE : - FSS DIRT 5502-0001-005S
REASON FOR ANALYSIS: Site Characterization
SAMPLE ID : 041007012 * SAMPLE GEOMETRY : 1LMAR
SAMPLE TIME : 5-OCT-2004 12:05: * GEO EFFICIENCY DATE: 30-JUL-2003
SAMPLE TYPE : DIRT/SEDIMENT * SAMPLE QUANTITY : 1.26400E+03 GM
****

DETECTOR : DET 2 * LIBRARY : FSS_DIRT
LAST ENERGY CAL : 7-OCT-2004 00:48: * ENERGY TOLERANCE: 1.00000
KEV/CHANNEL : 5.00738E-01 * HALF LIFE RATIO : 9.00000
START CHANNEL : 100 * END CHANNEL : 4096
ACQ DATE & TIME : 7-OCT-2004 11:15: * DEADTIME (%) : 0.1%
PRESET LIVE TIME : 0 00:16:40 * SENSITIVITY : 5.00000
ELAPSED REAL TIME : 1000.8 Secs * GAUSSIAN SEN : 10.00000
ELAPSED LIVE TIME : 1000.0 Secs * CORRECTION FACTOR: 1.00000E+06
DECAYED TO 1 DAYS HOURS
FILE IDENT : CAS$DISK:[NEU.SAMPLE.RP.NEW]041007012_ADC2_DIRTSEDIMENT.CNF;1

****
ANALYSES : PEAK V16.8 NID V3.2 MINACT V2.8 WTMEAN V1.8
****

Collected by : HOLLENBECK
REVIEWED BY : _____
COMMENTS :

****

Post-NID Peak Search Report

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
3	75.02	124	215	1.00	150.12	144	16	20.8	1.13E+00	PB-212
										PB-214
3	77.17	206	214	0.99	154.42	144	16	13.5		PB-214
										PB-212
0	93.34	91	329	1.12	186.73	182	8	36.1		
0	186.02	118	315	0.73	371.86	367	10	29.9		RA-226
0	238.52	424	245	1.08	476.74	473	8	8.0		PB-212
1	241.27	55	59	1.04	482.23	481	6	19.9	5.01E+00	
1	242.06	47	163	1.25	483.80	481	6	47.8		PB-214
0	294.87	111	144	1.46	589.32	585	8	21.0		PB-214
0	338.03	80	164	1.13	675.56	672	9	31.3		AC-228
0	351.83	168	216	1.03	703.14	698	11	18.6		PB-214
0	511.15	104	130	1.89	1021.55	1014	15	25.9		
0	583.03	142	120	1.24	1165.24	1158	13	18.0		TL-208
0	609.08	130	95	1.34	1217.31	1213	9	16.1		BI-214
0	661.51	1701	96	1.57	1322.13	1316	12	2.7		CS-137
0	911.29	98	144	1.70	1821.64	1816	15	28.4		AC-228
0	969.09	48	65	1.66	1937.28	1933	9	33.6		AC-228
0	1173.00	1612	63	1.99	2345.25	2337	17	2.7		CO-60

Sample ID : 041007012 Acquisition date : 7-OCT-2004 11:15:15

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	1332.20	1459	24	1.84	2663.88	2654	18	2.7		CO-60
0	1460.59	286	4	2.24	2920.92	2912	16	6.1		K-40

Sample ID : 041007012
Acquisition date : 7-OCT-2004 11:15:15

---- Identified Nuclides ----

Nuclide	Activity (pCi/GM)	Act error	MDA (pCi/GM)	MDA error	Act/MDA
K-40	1.002E+01	6.410E-01	3.866E-01	7.164E-03	25.909
CO-60	5.050E+00	1.167E-01	4.604E-02	8.518E-04	109.689
CS-137	3.804E+00	1.337E-01	6.550E-02	1.485E-03	58.074
TL-208	2.880E-01	5.231E-02	5.497E-02	1.303E-03	5.239
PB-212	8.278E-01	7.049E-02	8.071E-02	2.318E-03	10.257
BI-214	4.989E-01	8.101E-02	1.070E-01	2.519E-03	4.661
PB-214	5.399E-01	7.284E-02	1.042E-01	2.093E-03	5.183
RA-226	2.691E+00	8.069E-01	8.808E-01	2.191E-02	3.055
AC-228	8.098E-01	1.449E-01	2.635E-01	4.367E-03	3.074

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GM)	K.L. Ided	Act error	MDA (pCi/GM)	MDA error	Act/MDA
BE-7	2.870E-01		1.474E-01	5.338E-01	1.189E-02	0.538
MN-54	1.664E-02		2.109E-02	8.079E-02	1.456E-03	0.206
NB-94	2.069E-02		1.787E-02	7.120E-02	1.227E-03	0.291
RU-106	-1.188E-01		1.240E-01	4.572E-01	1.069E-02	-0.260
AG-108M	-2.323E-02		1.617E-02	5.776E-02	1.356E-03	-0.402
AG-110M	-2.963E-03		1.669E-02	5.890E-02	1.341E-03	-0.050
SB-125	6.473E-02		4.939E-02	1.730E-01	3.575E-03	0.374
CS-134	4.390E-02		1.666E-02	6.911E-02	1.629E-03	0.635
EU-152	3.873E-02		5.774E-02	2.542E-01	4.724E-03	0.152
EU-154	6.381E-02		4.529E-02	1.945E-01	6.074E-03	0.328
EU-155	6.067E-02		4.090E-02	1.539E-01	3.804E-03	0.394
BI-212	1.987E-01		1.510E-01	5.989E-01	1.258E-02	0.332
RA-223	2.111E-01		8.152E-02	3.058E-01	8.145E-03	0.690
TH-228	6.841E-01		9.560E-01	3.520E+00	8.478E-02	0.194
PA-234	4.317E-01	+	5.918E-02	9.600E-02	2.216E-03	4.496
TH-234	1.408E+00		4.929E-01	1.920E+00	1.605E-01	0.733
U-235	1.632E-01	+	4.894E-02	7.404E-02	1.838E-03	2.204
AM-241	8.924E-02		5.377E-02	2.102E-01	6.838E-03	0.425

REPORT NAME : QA_CHECK (V9.1)
REPORT DATE : 7-OCT-2004 11:32
REQUESTOR : CAS

CYAPCO
HADDAM NECK STATION

POST NID QA ANALYSIS

TITLE : - FSS DIRT 5502-0001-005S

SAMPLE No. : 041007012
SAMPLE TYPE : DIRT/SEDIMENT
COUNT TIME : 7-OCT-2004 11:15:15.
SAMPLE TIME : 5-OCT-2004 12:05:00.
LIBRARY : FSS_DIRT

OPERATOR NAME : CAS
SAMPLE GEOMETRY : 1LMAR
SAMPLE QUANTITY : 1.26400E+03
DETECTOR : DET 2

ISOTOPE	PEAK ENERGY	ENERGY DIFF (KEV)	DECAY CORR pCi/GM	COMMENTS
K-40	1460.80	-0.21	1.002E+01	QA Results OK
CO-60	1332.49	-0.29	5.050E+00	QA Results OK
CS-137	661.65	-0.14	3.804E+00	QA Results OK
TL-208	583.14	-0.11	2.880E-01	QA Results OK
PB-212	238.63	-0.10	8.278E-01	QA Results OK
BI-214	609.31	-0.24	4.989E-01	QA Results OK
PB-214	351.92	-0.09	5.399E-01	QA Results OK
RA-226	186.21	-0.19	2.691E+00	QA Results OK
AC-228	911.07	0.22	8.098E-01	QA Results OK
AVG ENERGY DIFF =		-0.13	2.453E+01 = TOTAL GAMMA ACTIVITY	

75.02 KeV Peak was used in identifying 2 isotopes
77.17 KeV Peak was used in identifying 2 isotopes

UNIDENTIFIED/REJECTED PEAKS

ENERGY	NET AREA	FWHM	GAMMA/SEC	GAMMA/SEC /GM	% ERROR	FLAG	POTENTIAL ID	ACTIVITY
93.34	91.	1.12	3.381E+00	2.675E-03	36.1	P	AC-228	2.079E+00
						U	TH-234	2.691E+00
241.27	55.	1.04	2.243E+00	1.775E-03	19.9	P	PB-214	6.449E-01
511.15	104.	1.89	7.462E+00	5.904E-03	25.9	U	ANN-RD	0.000E+00

Total Unidentified/Rejected Peaks = 3
% Unidentified/Rejected Peaks = 15.79

Flags: U - Unknown Line
R - Rejected During Analysis
P - Positively Identified (line not in analysis library)

CYAPCO
HADDAM NECK STATION

POST NID QA ANALYSIS

Performed by: _____

Reviewed by: _____

**** End Of Report (2 Pages) ****

SITE EXCAVATION PERMIT

Field Engineer:	WP&IR No.:	Permit No.:
LEWIS WOOD	24265-000-GEN-SOO-00132 000	04-056

Description and Location of Excavation:

10" TO 12" ID CORES ~~or~~ AGER THE DISCHARGE TUNNELS TO PROVIDE ACCESS ~~DURING~~ NO 26404 FOR AIR SAMPLING, LIGHTING AND COMMUNICATION.

Excavation Dimensions:

10" TO 2" ID APPROXIMATELY 6 TO 9' BG ALLOW PERMIT TO 15' BGS

Schedule Start of Excavation:	Expected Finish Excavation:
8/2/04	9/30/04

Underground Utilities in Area (Include drawing reference):

Electrical Eng. NO ELECTRICAL UTILITIES IN THE AREAS OF THE CORES.

Mechanical Eng. N/A NO ACTIVE UTILITIES IN AREA

Special Precautions: AIR MONITORING, BORING MUST BE CASED, FINISHED ISOTANK MUST BE LOCKED

Stormwater Pollution Controls:

Approvals:

Health & Safety Philip Maynard Ph.1 Maynard & SG — HP M. Delgiudice DEGIUDICE

Electrical Engineer G. Whitte Gary Lotty — Environmental Safety BW Gritter BRIAN

Mech/Civil Engineer B. Lyon LOUIS — Field Engr/Job Supervisor J. Gil

N/A – Not applicable section may be so annotated by the originator and concurred by the approver

10/25/04

1300
Attended the briefing for the Discharge Tunnel work.

1515
ßegan coring at location #4 in the Discharge Tunnel East Wall. Location is 80 feet from the tunnel opening and 6 feet down from the tunnel ceiling.

1530
Sample location #4, 1C, 9".

1545
Sample location #4, 2C, 12".

1550
Sample location #4, 3C, 3".

1553
Obtained soil sample at location #4.
Work is complete at this location.

10/26/04

0700
Crew briefing was performed.

0830
Began coring at location #3 in the Discharge Tunnel East Wall. Location is 170 feet from the tunnel opening and 6.5 feet down from the tunnel ceiling.

0845
Sample location #3, 1C, 9".

0900
Sample location #3, 2C, 12".

0905
Sample location #3, 3C, 4".

0910
Soil sample taken at location #4.
Work is complete at this location.

1010
Began coring at location #2 in the Discharge Tunnel East Wall. Location is 290 feet from the tunnel opening and 6.5 feet down from the tunnel ceiling.

1025
Sample location #2, 1C, 9".

1040
Sample location #2, 2C, 10.5".

1050
Sample location #2, 3C, 5".

Obtained soil sample at location #2.
Work at this location is complete.

1315
Began coring at location #1 in the Discharge Tunnel East Wall. Location is 390 feet from the tunnel opening and 6.5 feet down from the tunnel ceiling and 2.5 feet from the north wall.

1430
Sample location #1, 1C, 8.5".

1445
Sample location #1, 2C, 10".

1505
Sample location #1, 3C, 13".

1530
Have not penetrated the wall. We are currently at 43". We will relocate drilling location.

1545
Began coring at new location #1a in the Discharge Tunnel East Wall. Location is 379 feet from the tunnel opening and 7 feet down from the tunnel ceiling and 11 feet from the north wall.

1610
Sample location #1a, 1C, 12.5".

1635
Sample location #1a, 2C, 13".

1700
Sample location #1a, 3C, 13".

We have run out of time for today so drilling will stop at this point and we may return to complete this location if the schedule allows.

Attachment 2
ISFSI Records Entry Form
(Page 1 of 1)

NUCLEAR PLANT RECORDS TRANSMITTAL		NPR USE ONLY CONTROL NO. m U.N. NO. 2484
DEPARTMENT OF ORIGIN **Site Closure**	RECORDS CLASSIFICATION (SEE INSTRUCTIONS): ☐ CONFIDENTIAL ☐ SAFEGUARDS ☐ QA RECORD	DATE: **6/27/06**
TFI #: **11.10**	TFI TITLE: **50.75g Release Records**	RETENTION (Ref. Attachment 1): **L(+)LP+10**

ISFSI: ☐ **Type 1 (Dual Storage)** ✓ **Type 2** ☐ **Type 3** (Ref. Attachment 1)

DESCRIPTION OF RECORDS (NOTE: USE MORE THAN ONE TRANSMITTAL IF REQUIRED)

Work Plan and Inspection Record, WPIR, 24265-000-GEN-5000-00137-000, Underslab Subsurface Soil Sampling, 2004 and 2005 Radiological Characterization Activity.

This submittal is only the following portion of this WPIR: West Discharge Tunnel, Survey / Sampling Work Plan SSWP Number BCY-SSWP-05-12-002.

Search the database using the WPIR number in the title field to find indexing information on all other components of this WPIR.

Special Instructions for OD processing: Optical Character Recognition (OCR) Required? ☐ YES ✓ NO

RECORDS ENTERED BY (PRINT NAME):	SUPERVISOR/PERSON ENTERING RECORDS (Signature):
AR Bejma/J. McCarthy	

RECEIPT (BY NPR)

DATE: 6/27/06	RECORDS ARE AS DESCRIBED BY ORIGINATOR: ☒ YES ☐ NO
CONDITION OF RECORDS: ☒ GOOD ☐ OTHER (Describe Below)	
RECEIVED AND ACCEPTED BY (SIGNATURE):	TEMPORARY FILE LOCATION NO.: NPR

PROCESSING (By NPR, Except for Adding 'Alternative Storage Ref.' As Applicable)

DATE PROCESSED	ASSIGNED OD NUMBER	SIGNATURE OF NPR PROCESSING PERSONNEL	ALTERNATIVE STORAGE REFERENCE	
			LOCATION	INDEXING REF. (IF ANY)
6/27/06	CY-034		—	—

Survey/Sampling Work Plan

GENERAL SECTION

SSWP Number : SSWP-05-12-002

Survey Area: 5502-0002

Type of Survey: Characterization

Area Description: West Discharge Tunnel

DATA QUALITY OBJECTIVES (DQO)

1.0 STATE THE PROBLEM

The problem: Obtain the final characterization data in the west Discharge Tunnel concrete to support final status survey (FSS) planning and to meet volumetric sample requirements for the License Termination Plan (LTP). In addition, obtain characterization data in the sediment between the rip-rap on the west bank and stop-log of the west tunnel.

Stakeholders: The primary stakeholders interested in the answer to this problem are Connecticut Yankee, the CT Department of Environmental Protection (CTDEP) and the US Nuclear Regulatory Commission (USNRC).

The Planning Team: The planning team consisted of Site Closure group (SC) personnel. The primary decision maker for this plan was the Site Closure Technical Support Manager with input from SC group personnel.

Schedule: This project has an expected duration of 3 working days including drilling and sample collection.

Resources: The primary resources needed to determine the answer to the problem are one diver, diver support, rescue team, one health physics technician and one Site Closure engineer. Ancillary support will be needed from the offsite lab for sample preparation, gamma spectroscopy and Hard to Detect (HTD) radionuclide analysis.

2.0 IDENTIFY THE DECISION

The *following* decision needs to be defined to address the stated problem.

Principal Study Question: Is the radiological data obtained from sample analysis sufficient to adequately characterize the survey area?

Alternate Actions: Alternative actions include obtaining additional samples, performing additional analyses to confirm gamma spectroscopy results and hard-to-detect (HTD) radionuclides, and no action.

The Decision (1): Determine that the radiological data adequately characterizes the survey area. Consider additional sampling as necessary under a separate addendum to this sampling plan.

3.0 IDENTIFY THE INPUTS TO THE DECISION

Information Needed: Measurements of sample media are needed to identify and determine the concentration of those radionuclides that could potentially be present in the west Discharge Tunnel concrete at the time of final radiological assessment. Information is needed to establish how much, if any, contamination from plant-derived radionuclides exists in concrete. The samples will be collected from four (4) locations at the northern most portion of the tunnel. In addition, sediment data are needed to evaluate the effects of washing the rip-rap in the discharge canal.

Source of the Information: The new measurements will include collection and radionuclide-specific analysis of concrete wafers and sediment. The collection process will use a pneumatic drill for coring concrete. A small jar or plastic tube will be used for collection of the sediment sample. Concrete cores will be sliced

into wafers for analysis. Analysis for hard-to-detect (HTD) radionuclides will be performed under this SSWP as an output of the decision process. All samples will be analyzed for gamma emitting radionuclides.

The action levels for concrete are based on 25 mrem/y. Table 1 shows all the License Termination Plan (LTP) listed radionuclides for analysis and the standard detection sensitivity for the concrete measurement process. The sensitivity or minimum detectable concentration (MDC) is set at 4% of the base-case DCGL values listed in Table 6-4 of the LTP. Note, the specified MDC is lower than 10% of the DCGL that is recommended by the Section 5.5 of the LTP for fixed measurements (fixed measurements include samples). However, the MDC is the same as the MDC specified in recent FSS sample plans designed to achieve a 10 mrem/year Total Effective Dose Equivalent (TEDE).

Table 1 – Analytic matrix for concrete

Nuclide	Action Level (pCi/g)	Required MDC (pCi/g)
H-3	9.05E+01	3.62E+00
C-14	2.05E+01	8.20E-01
Mn-54	5.51E+01	2.20E+00
Fe-55	8.96E+01	3.58E+00
Co-60	9.07E+01	3.63E+00
Ni-63	1.29E+02	5.16E+00
Sr-90	3.77E-01	1.51E-02
Nb-94	7.74E+00	3.10E-01
Tc-99	2.85E+01	1.14E+00
Ag-108m	2.59E+01	1.04E+00
Cs-134	3.21E+02	1.28E+01
Cs-137	6.45E+02	2.58E+01
Eu-152	2.27E+02	9.08E+00
Eu-154	1.94E+02	7.76E+00
Eu-155	9.53E+03	3.81E+02
Pu-238	1.14E+01	4.56E-01
Pu-239/240	1.00E+01	4.00E-01
Pu-241	1.49E+02	5.96E+00
Am-241	4.42E+00	1.77E-01
Cm-243/244	3.83E+00	1.53E-01

The action levels for soil are based upon an administrative TEDE limit of 10 mrem/y. This value is comprised of an 8 mrem/y soil component and a 2 mrem/y future groundwater component. The primary basis for the Action Levels is CY memo ISC 04-049, "Initial Target Operational DCGLs for CY". A secondary basis for the Sr-90 and H-3 Action Levels is a draft memo from the Groundwater Group, "Soil Screening Concentrations for Sr-90, Cs-137, Co-60 and Tritium".

The sensitivity or minimum detectable concentration (MDC) for the soil is set at approximately 12% of the Action Level for all radionuclides except Sr-90 which has been set at approximately 40% and H-3 which has been set at approximately 50% due to the very low concentration for the Action Level, the expected K_d for soil and the MCL for water.

Table 2 – Analytic matrix for soil

Radionuclide	Action Level (pCi/g)	Required MDC (pCi/g)
Co-60	1.22E+00	1.52E-01
Cs-137	2.53E+00	3.16E-01
Sr-90	6.50E-02	2.50E-02
H-3	3.30E+00	1.50E+00

4.0 DEFINE THE BOUNDARIES OF THE SURVEY.

Boundaries of the survey: The focus of this SSWP will be to collect concrete samples from four (4) predetermined locations in the northwest and northeast walls at the northern most portion of the west Discharge Tunnel. All concrete samples will be identified under the building designator of 5502-0002. The sediment sample will be identified under the designator 9106-0001.

The general orientation of the concrete sample measurement locations (SML) is shown in Attachment 1. All four samples will be taken approximately 10 feet from the north wall. Three samples will be taken in a vertical line on the northwest wall near the elevated area identified by scanning. The fourth SML is located on the eastern wall directly opposite the location of the three on the west wall. The sample location may be moved slightly depending upon the condition of the location. Additional sampling may be necessary to determine the need and amount of decontamination and remediation efforts. The sediment sample will be taken between the rip-rap on the west bank and the stop-log on the west tunnel.

Temporal boundaries: Sampling will normally be performed during dayshift.

Constraints: Constraints include underwater drilling, limited access, tidal influence on water level and poor lighting.

5.0 DEVELOP A DECISION RULE

The following decisions rules have been developed to define a logical process for choosing among alternative actions for the principal study questions associated with this survey unit.

Decision Rule (1): If obstruction prevents further travel of the coring drill, determine if there is sufficient sample for analysis. Consider moving the SML location to obtain a new sample of sufficient quantity, otherwise stop sampling at this SML and document the conclusion of the decision in the Daily Survey Journal sheet.

Decision Rule (2): If all analyses meet the required sensitivity with no anomalous or suspect results (e.g., identification of a gamma-emitting radionuclide not contained in Table 1 or Table 2 and not attributable to natural radioactivity) then no further action is required under this SSWP. Otherwise, reanalyze the sample or consider performing additional analyses for hard-to-detect (HTD) radionuclides.

6.0 SPECIFY TOLERABLE LIMITS ON DECISION ERRORS

There are no limits on decision errors for characterization surveys.

7.0 OPTIMIZE DESIGN

Number of Samples and Locations: There are four (4) concrete SMLs in the northern portion of the west discharge tunnel and one sediment SML just outside of the stop-log of the west tunnel for sampling under this SSWP.

DQO STEPS COMPLETE (signature signifies affirmative response)

_____

Site Closure Radiological Engineer/Date

GENERAL INSTRUCTIONS

1. Characterization activities will be performed under WP&IR number 2005-0050-WCN-05.
2. Cognizant engineers to review pictures and plant drawings of the area.
3. Sampling equipment and supplies will consist of some or all of the following; pneumatic concrete coring drill and drill bits, tape and tamper-evident tape, marker and new plastic bags for preparing samples and packaging off-site samples. Other equipment may include utility knifes, poly sheeting, location marker paint.
4. Sample locations should be identified or labeled when possible.
5. Samples will be obtained in accordance with RPM 5.1-3, "*Collection of Surface and Subsurface Soil, Shoreline Sediment, Asphalt and Liquid Samples for Scoping, Characterization and Final Status Surveys*" and in accordance with the Work Plan and Inspection Record (WP&IR) and this SSWP.
6. Sample nomenclature will be as suggested by RPM 5.1-2, "*Preparation of Characterization, Remedial Action and Turnover Survey Plans*" with some modification to align the procedural format with the need to obtain multiple samples from the same location. For example, 5502-0002-021-1C-01 represents the first wafer from the first core taken at SML #21. The dashes ("-") shown in the procedure are optional and are not required.
7. The cognizant radiological engineer will determine whether sufficient sample media has been collected for analysis in instances where only a partial core sample was obtained.
8. Samples will be handled in accordance with procedure RPM 5.1-5, "*Chain of Custody for Final Status Survey Samples.*"
9. Sample analyses should meet the sensitivity requirements provided in Table 1 to this SSWP.
10. Documents generated during the performance of this SSWP will be complete and legible. Corrections will be made using a single line-out followed by an initial and date.

SPECIFIC INSTRUCTIONS

1. Initiate and utilize the Daily Survey Journal Sheet in accordance with RPM 5.1-11, "*Preparation of Final Status Survey Plans*" or equivalent (logbook).
2. Sample instructions (Attachment 1 provides location).
   a. Proceed to the selected SML denoted on Attachment 1 and designated by Table 3.

      Note: All concrete SMLs are approximately 8 to 10 feet from the north wall.

      SML 21 is approximately 5 feet above the floor on the west wall.

      SML 22 is approximately 8 feet above the floor on the west wall.

      SML 23 is approximately 11 feet above the floor on the west wall.

      SML 24 is approximately 5 feet above the floor on the east wall.

      SML 1610 is between the rip-rap on the west bank and the stop-log of the west tunnel.

Table 3 –Sample Measurement Location (SML)

[illegible]	[illegible]	Sample Designation
21	Concrete	5502-0002-021
22	Concrete	5502-0002-022
23	Concrete	5502-0002-023
24	Concrete	5502-0002-024
1610	Sediment	9106-0001-1610

b. Perform concrete coring at the selected location.

(1). Drill approximately 8 to 12 inches into the concrete (estimated thickness is 2 feet).

(2). Identify the top by placing a "T" or arrow on the core, place into a thick plastic bag and seal it to maintain moisture content. The top designates the inside tunnel surface.

(3). Label the concrete cores in accordance with designation number provided in Table 3 followed by a "1C". If required, subsequent cores are identified as "2C", "3C" etc.

c. Perform sediment sampling at the selected location by scooping up a small bottle full or plastic tube of sediment.

d. Generate a Sample Control and Accountability form for the samples.

(1). Record sample information on a Sample Control and Accountability form.

(2). Place a security tamper seal on the container or maintain physical control until sample(s) are transferred to an appropriate locked storage area.

(3). Record sample location information on the Sample Control and Accountability form.

e. Disposition samples for analysis.

(1). Set-up area for sample preparation in the Site Closure Sea/Land container or where directed by health physics.

(2). Slice the concrete cores into approximately 2 inch wafers.

(3). Place the wafers into double plastic bags or into a vacuum sealed single bag, apply tamper proof tape and label each sample with "01", "02" etc, after the core designation.

f. Generate a CoC for samples being analyzed offsite.

(1). Record sample IDs, dates, times and codes.

(2). The analysis codes are "CHGAM", "H-3", and "Sr-90" for all concrete wafers except for two wafers which will have the analysis code "CHALL".

(3). The analysis code for the sediment sample is "CHALL".

(4). Use the LTP QA purchase order for the analyses.

(5). The turn-around-time (TAT) for all samples is 30 days except for the gamma, H-3 and Sr-90 analyses on the sediment which is 3 days.

g. Evaluate the data and determine appropriate actions based upon the decision rules in Section 5.

Prepared by_____ Date_____
Site Closure Radiological Engineer

Reviewed by_____ Date_____

GENERAL ENGINEERING LABORATORIES, LLC
a Member of THE GEL GROUP, INC.
Meeting Today's Needs with a Vision for Tomorrow

September 27, 2005

Mr. Pete Hollenbeck
Connecticut Yankee Atomic Power
Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424

Re: Soils and Concrete PO# 002337
Work Order: 145373
SDG: MSR# 05-2231

Dear Mr. Hollenbeck:

General Engineering Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on September 14, 2005. This data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4243.

Sincerely,

Cheryl Jones
Project Manager

Purchase Order: 002337
Chain of Custody: 2005-00389
Enclosures

P.O. Box 30712 • Charleston, SC 29417 • 2040 Savage Road (29407)
Phone (843) 556-8171 • Fax (843) 766-1178 • www.gel.com

CONNECTICUT YANKEE
RE: Water Sample
PO# 002337
Work Order: 145373
SDG: MSR #05-2231

145373001 West Discharge Tunnel

Table of Contents

General Narrative **1**

Chain of Custody and Supporting Documentation **4**

Radiological Analysis **8**
Sample Data Summary 13
Quality Control Data 17

General Narrative

CASE NARRATIVE
For
CONNECTICUT YANKEE
RE: Water Sample
PO# 002337
Work Order: 145373
SDG: MSR #05-2231

September 27, 2005

Laboratory Identification:
General Engineering Laboratories, LLC

Mailing Address:
P.O. Box 30712
Charleston, South Carolina 29417

Express Mail Delivery and Shipping Address:
2040 Savage Road
Charleston, South Carolina 29407

Telephone Number:
(843) 556-8171

Summary:

Sample receipt
The sample for the Soil Project for work order 145373 arrived at General Engineering Laboratories, LLC, (GEL) in Charleston, South Carolina September 14, 2005 for environmental analysis. All sample containers arrived without any visible signs of tampering or breakage. The chain of custody contained the proper documentation and signatures.

The laboratory received the following samples:

Sample ID	Client Sample ID
145373001	West Discharge Tunnel

Items of Note:
Due to limited sample volume all of the requested analysis could not be performed. As per Pete Hollenbeck's request via telephone on 9/21/2005 the sample was analyzed for Gamma, Sr-90 and Tritium only.

Case Narrative:
Sample analyses were conducted using methodology as outlined in General Engineering Laboratories (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are listed below by analytical parameter.

Analytical Request:

The water sample was analyzed for Gamma, Sr-90 and Tritium.

Internal Chain of Custody:
Custody was maintained for all the samples.

Data Package:
The enclosed data package contains the following sections: Case Narrative, Chain of Custody and Supporting Documentation and all analytical fractions.

I certify that this data package is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or a designee, as verified by the following signature.

Cheryl Jones
Project Manager

Chain of Custody and Supporting Documentation

Chain of Custody Form

Connecticut Yankee Atomic Power Company
362 Injun Hollow Road, East Hampton, CT 06424
860-267-2556

No. 2005-00389

Project Name: Haddam Neck Decommissioning

Contact Name & Phone:
Pete Hollenbeck 860-267-2556 Ext. 3923

Analytical Lab (Name, City, State):
General Engineering Laboratories
2040 Savage Road
Charleston, SC 29407
ATT: Cheryl Jones (843-556-8171)

Priority: ☐ 30 D. ☒ 14 D. ☐ 7 D.
Other:

Lab Use Only
Comments:
1.145373

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	Analyses Requested: CHALL						Comment, Preservation	Lab Sample ID
West Discharge Tunnel	9/12/05	1315	WF	G	1L-P	X							

NOTES: PO #: 002337 MSR #: 05-2231 ☐ LTP QA ☐ Radwaste QA ☒ Non QA
Analyze in accordance with CY-ISC-SOW-001 table 22, dated August 27, 2003

Samples Shipped Via:
☒ Fed Ex
☐ UPS
☐ Hand
☐ Other
7917 2729 6424
Bill of Lading #

Internal Container Temp.: 25.0 Deg. C
Custody Sealed? Y ✓ N
Custody Seal Intact? Y ✓ N

1) Relinquished By [signature] Date/Time 9/13/05 1350	2) Received By [signature] Date/Time 9.14.05 9:15
3) Relinquished By Date/Time	4) Received By Date/Time
5) Relinquished By Date/Time	6) Received By Date/Time

Figure 1. Sample Check-in List

Date/Time Received: 9.14.05 / 9'15

SDG#: MSR# 05-2231

Work Order Number: 145373

Shipping Container ID: 7917 2729 6424 Chain of Custody # 2005 - 00389

1. Custody Seals on shipping container intact? Yes [✓] No [ ]
2. Custody Seals dated and signed? Yes [✓] No [ ]
3. Chain-of-Custody record present? Yes [✓] No [ ]
4. Cooler temperature 25.0°
5. Vermiculite/packing materials is: Wet [ ] Dry [✓]
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? Yes [ ] No [✓]

8. Samples have:

____tape	____hazard labels
✓ custody seals	✓ appropriate sample labels

9. Samples are:

✓ in good condition	____leaking
____broken	____have air bubbles

10. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
11. Description of anomalies (include sample numbers): _____

Sample Custodian/Laboratory: Amiles Date: 9.14.05

Telephoned to: _____ On _____ By _____

SAMPLE RECEIPT & REVIEW FORM

GENERAL ENGINEERING LABORATORIES, LLC

PM use only

Client: Connecticut Yankee	SDG/ARCOC/Work Order: 145373
Date Received: 9.14.05	PM(A) Review (ensure non-conforming items are resolved prior to signing):
Received By: AM	

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?				Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within (4 +/- 2 C)? Record preservation method.				Circle Coolant # ice bags blue ice dry ice none other describe)
3	Chain of custody documents included with shipment?				
4	Sample containers intact and sealed?				Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?				Sample ID's, containers affected and observed pH:
6	VOA vials free of headspace (defined as < 6mm bubble)?				Sample ID's and containers affected:
7	Are Encore containers present? (If yes, immediately deliver to VOA laboratory)				
8	Samples received within holding time?				Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?				Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?				Sample ID's affected:
11	Number of containers received match number indicated on COC?				Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?				
14	Air Bill ,Tracking #'s, & Additional Comments				

	Suspected Hazard Information	Non-Regulated	Regulated	High Level	RSO RAD Receipt # _____ *If > x2 area background is observed on samples identified as "non-regulated/non-radioactive", contact the Radiation Safety group for further investigation.
A	Radiological Classification?		✓		Maximum Counts Observed*: 30cpm
B	PCB Regulated?	✓			Comments:
C	Shipped as DOT Hazardous Material? If yes, contact Waste Manager or ESH Manager.	✓			Hazard Class Shipped: UN#:

PM (or PMA) review of Hazard classification: _____ Initials _____ Date: 9/14/05

RADIOLOGICAL ANALYSIS

Radiochemistry Case Narrative
Connecticut Yankee Atomic Power Co. (YANK)
SDG MSR#05-2231

Method/Analysis Information

Product:	**Gammaspec, Gamma,Liquid-ALL,GAM2,STND,MIX,PENN,LF**
Analytical Method:	EPA 901.1
Analytical Batch Number:	463088

Sample ID	Client ID
145373001	West Discharge Tunnel
1200936878	Method Blank (MB)
1200936879	145401002(SMH South End) Sample Duplicate (DUP)
1200936880	145401002(SMH South End) Matrix Spike (MS)
1200936881	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-013 REV# 10.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 145401002 (SMH South End).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information

Qualifier	Reason	Analyte	Sample
UI	Data rejected due to low abundance.	Thorium-234	1200936879
		Uranium-238	1200936879
UI	Data rejected due to no valid peak.	Bismuth-214	1200936879
		Thorium-230	1200936879

Method/Analysis Information

Product:	**GFPC, Sr90, liquid-ALL,MIX**
Analytical Method:	EPA 905.0 Modified
Analytical Batch Number:	464109

Sample ID	Client ID
145373001	West Discharge Tunnel
1200939407	Method Blank (MB)
1200939408	145373001(West Discharge Tunnel) Sample Duplicate (DUP)
1200939409	145373001(West Discharge Tunnel) Matrix Spike (MS)
1200939410	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-004 REV# 9.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 145373001 (West Discharge Tunnel).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Chemical Recoveries
All chemical recoveries meet the required acceptance limits for this sample set.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**LSC, Tritium Dist, Liquid-ALL,STND,MIX,PENN**
Analytical Method:	EPA 906.0 Modified
Analytical Batch Number:	464147

Sample ID	Client ID
145373001	West Discharge Tunnel
1200939461	Method Blank (MB)
1200939462	145373001(West Discharge Tunnel) Sample Duplicate (DUP)
1200939463	145373001(West Discharge Tunnel) Matrix Spike (MS)
1200939464	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-002 REV# 10.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information

The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 145373001 (West Discharge Tunnel).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information
Manual qualifiers were not required.

Certification Statement
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:
GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.
The following data validator verified the information presented in this case narrative:

Reviewer: [illegible] 9/08/05

SAMPLE DATA SUMMARY

GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

YANK001 Connecticut Yankee Atomic Power Co.

Client SDG: MSR#05-2231 GEL Work Order: 145373

The Qualifiers in this report are defined as follows:

** Indicates the analyte is a surrogate compound.
< Result is less than amount reported.
> Result is greater than amount reported.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
P The response between the confirmation and the primary columns is >40% Different.
R Sample results are rejected.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
Y QC Samples were not spiked with this compound.
Z Paint Filter qualifier: Particulates passed through the filter. No free liquids were observed.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.
** Indicates the analyte is a surrogate compound.
This data report has been prepared and reviewed in accordance with General Engineering Laboratories, LLC standard operating procedures. Please direct any questions to your Project Manager, Cheryl Jones.

Reviewed by

GENERAL ENGINEERING LABORATORIES, LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: September 28, 2005

Client Sample ID:	West Discharge Tunnel	Project:	YANK01304
Sample ID:	145373001	Client ID:	YANK001
Matrix:	WF	Vol. Recv.:	
Collect Date:	12-SEP-05		
Receive Date:	14-SEP-05		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma,Liquid-ALL,GAM2,STND,MIX,PENN,LF												
Americium-241	U	-0.819	+/-11.1	9.21	+/-10.9	19.1	pCi/L		MJH1 09/26/05	2118	463088	1
Cesium-134	U	0.565	+/-2.43	1.99	+/-2.38	4.29	pCi/L					
Cesium-137	U	-0.876	+/-2.40	1.88	+/-2.35	4.02	pCi/L					
Cobalt-60	U	1.60	+/-2.52	2.22	+/-2.47	4.83	pCi/L					
Europium-152	U	0.304	+/-6.37	5.35	+/-6.24	11.2	pCi/L					
Europium-154	U	9.75	+/-7.44	6.89	+/-7.30	14.9	pCi/L					
Europium-155	U	4.07	+/-7.69	6.41	+/-7.54	13.2	pCi/L					
Manganese-54	U	-1.7	+/-2.36	1.74	+/-2.31	3.76	pCi/L					
Niobium-94	U	0.668	+/-2.00	1.66	+/-1.96	3.54	pCi/L					
Silver-108m	U	0.0203	+/-2.32	1.92	+/-2.27	4.03	pCi/L					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, liquid-ALL,MIX												
Strontium-90	U	0.314	+/-0.532	0.514	+/-0.532	1.14	pCi/L		EXW1 09/27/05	1501	464109	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Liquid-ALL,STND,MIX,PENN												
Tritium	U	161	+/-153	123	+/-153	254	pCi/L		MXP1 09/21/05	0958	464147	3

The following Analytical Methods were performed

Method	Description
1	EPA 901.1
2	EPA 905.0 Modified
3	EPA 906.0 Modified

Surrogate/Tracer recovery	Test	Recovery %	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, liquid-ALL,MIX	81	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.

GENERAL ENGINEERING LABORATORIES, LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: September 28, 2005

Client Sample ID: West Discharge Tunnel
Sample ID: 145373001

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on an "as received" basis.

QUALITY CONTROL DATA

GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: September 28, 2005
Page 1 of 4

Client : Connecticut Yankee Atomic Power
Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut

Contact: Mr. Pete Hollenbeck

Workorder: 145373

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 463088										
QC1200936879 145401002 DUP										
Americium-241	U	0.404	U	0.149	pCi/L	92		(0% - 100%)	MJH1	09/27/05 08:04
	Uncert:	+/-4.74		+/-3.76						
Cesium-134	U	1.30	U	+/- 0.631	pCi/L	70		(0% - 100%)		
	Uncert:	+/-3.06		+/-2.59						
Cesium-137	U	3.26	U	+/- -0.144	pCi/L	N/A		(0% - 100%)		
	Uncert:	+/-5.43		+/-2.33						
Cobalt-60	U	7.18	U	+/- 0.467	pCi/L	176*		(0% - 100%)		
	Uncert:	+/-9.94		+/-2.15						
Europium-152	U	0.258	U	+/- 0.587	pCi/L	78		(0% - 100%)		
	Uncert:	+/-7.77		+/-5.86						
Europium-154	U	-0.147	U	+/- -2.58	pCi/L	N/A		(0% - 100%)		
	Uncert:	+/-5.19		+/-8.45						
Europium-155	U	-6.43	U	+/- 1.61	pCi/L	N/A		(0% - 100%)		
	Uncert:	+/-7.77		+/-5.76						
Manganese-54	U	-1.35	U	+/- 2.46	pCi/L	N/A		(0% - 100%)		
	Uncert:	+/-2.86		+/-2.33						
Niobium-94	U	0.964	U	+/- -1.63	pCi/L	N/A		(0% - 100%)		
	Uncert:	+/-3.00		+/-2.14						
Silver-108m	U	1.45	U	+/- 0.643	pCi/L	77		(0% - 20%)		
	Uncert:	+/-2.56		+/-2.20						
QC1200936881 LCS				+/-						
Americium-241	4880			5850	pCi/L		120	(75%-125%)		09/26/05 21:57
	Uncert:			+/-880						
Cesium-134			U	+/- 14.4	pCi/L					
	Uncert:			+/-42.7						
Cesium-137	1880			+/- 2010	pCi/L		107	(75%-125%)		
	Uncert:			+/-188						
Cobalt-60	2850			+/- 3100	pCi/L		109	(75%-125%)		
	Uncert:			+/-305						
				+/-						

QC Summary

Workorder: 145373

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 463088										
Europium-152			U	-27.1	pCi/L					
	Uncert:			+/-106						
				+/-						
Europium-154			U	3.72	pCi/L					
	Uncert:			+/-87.2						
				+/-						
Europium-155			U	49.4	pCi/L					
	Uncert:			+/-114						
				+/-						
Manganese-54			U	16.7	pCi/L					
	Uncert:			+/-37.5						
				+/-						
Niobium-94			U	24.8	pCi/L					
	Uncert:			+/-35.9						
				+/-						
Silver-108m			U	0.0553	pCi/L					
	Uncert:			+/-32.7						
				+/-						
QC1200936878 MB										
Americium-241			U	4.33	pCi/L					09/26/05 21:01
	Uncert:			+/-16.2						
				+/-						
Cesium-134			U	-1.67	pCi/L					
	Uncert:			+/-4.15						
				+/-						
Cesium-137			U	-1.83	pCi/L					
	Uncert:			+/-2.80						
				+/-						
Cobalt-60			U	7.13	pCi/L					
	Uncert:			+/-5.74						
				+/-						
Europium-152			U	-0.267	pCi/L					
	Uncert:			+/-8.61						
				+/-						
Europium-154			U	1.38	pCi/L					
	Uncert:			+/-8.21						
				+/-						
Europium-155			U	0.459	pCi/L					
	Uncert:			+/-9.34						
				+/-						
Manganese-54			U	0.980	pCi/L					
	Uncert:			+/-3.39						
				+/-						
Niobium-94			U	-0.188	pCi/L					
	Uncert:			+/-3.27						
				+/-						
Silver-108m			U	-2.02	pCi/L					
	Uncert:			+/-3.35						
				+/-						

QC Summary

Workorder: 145373

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec											
Batch 463088											
QC1200936880 145401002 MS											
Americium-241	9760	U	0.404		11300	pCi/L		116			09/26/05 21:54
	Uncert:		+/-4.74		+/-1620						
Cesium-134		U	1.30	U	+/- -160	pCi/L					
	Uncert:		+/-3.06		+/-206						
Cesium-137	3760	U	3.26		+/- 3730	pCi/L		99			
	Uncert:		+/-5.43		+/-643						
Cobalt-60	5720	U	7.18		+/- 6020	pCi/L		105			
	Uncert:		+/-9.94		+/-744						
Europium-152		U	0.258	U	+/- -61.8	pCi/L					
	Uncert:		+/-7.77		+/-425						
Europium-154		U	-0.147	U	+/- -318	pCi/L					
	Uncert:		+/-5.19		+/-431						
Europium-155		U	-6.43	U	+/- -244	pCi/L					
	Uncert:		+/-7.77		+/-537						
Manganese-54		U	-1.35	U	+/- 4.14	pCi/L					
	Uncert:		+/-2.86		+/-200						
Niobium-94		U	0.964	U	+/- -21.4	pCi/L					
	Uncert:		+/-3.00		+/-176						
Silver-108m		U	1.45	U	+/- 82.5	pCi/L					
	Uncert:		+/-2.56		+/-158						
					+/-						
Rad Gas Flow											
Batch 464109											
QC1200939408 145373001 DUP											
Strontium-90		U	0.314	U	0.052	pCi/L	0		(0% - 100%)	3XW1	09/27/05 18:29
	Uncert:		+/-0.532		+/-0.477						
	TPU:		+/-0.532		+/-0.477						
QC1200939410 LCS											
Strontium-90	78.1				75.0	pCi/L		96	(75%-125%)		09/27/05 16:58
	Uncert:				+/-4.61						
	TPU:				+/-4.88						
QC1200939407 MB											
Strontium-90				U	0.689	pCi/L					09/27/05 15:02
	Uncert:				+/-0.619						
	TPU:				+/-0.620						
QC1200939409 145373001 MS											
Strontium-90	391	U	0.314		407	pCi/L		104	(75%-125%)		09/27/05 15:02
	Uncert:		+/-0.532		+/-17.9						
	TPU:		+/-0.532		+/-21.6						

QC Summary

Workorder: 145373

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Liquid Scintillation											
Batch 464147											
QC1200939462 145373001 DUP											
Tritium	U	161	U	240	pCi/L	0		(0% - 100%)	MXP1	09/21/05	12:04
Uncert:		+/-153		+/-155							
TPU:		+/-153		+/-155							
QC1200939464 LCS											
Tritium	3030			2350	pCi/L		78	(75%-125%)		09/21/05	14:09
Uncert:				+/-216							
TPU:				+/-220							
QC1200939461 MB											
Tritium			U	104	pCi/L					09/21/05	11:01
Uncert:				+/-151							
TPU:				+/-151							
QC1200939463 145373001 MS											
Tritium	3040 U	161		2730	pCi/L		90	(75%-125%)		09/21/05	13:06
Uncert:		+/-153		+/-228							
TPU:		+/-153		+/-232							

Notes:
The Qualifiers in this report are defined as follows:

- ** Indicates the analyte is a surrogate compound.
- B Target analyte was detected in the sample as well as the associated blank.
- BD Results below the MDC or low tracer recovery.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J Indicates an estimated value.
- U Target analyte was analyzed for but not detected above the MDL or LOD.
- UI Uncertain identification for gamma spectroscopy.
- X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
- d The 2:1 depletion requirement was not met for this sample
- h Sample preparation or preservation holding time exceeded.

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
** Indicates analyte is a surrogate compound.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptence criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

West Discharge Tunnel	MSR#05-2231	145373001	463088	14596-10-2	Americium-241	TRG 8	UE901.1	E901.1	REG	-0.819	11.1	PCI/L	0	U	26/09/2005	9:18	19.1	PCI/L	9.21	PCI/L	1	0	0.5	L		PCI/L		PR
West Discharge Tunnel	MSR#05-2231	145373001	463088	13967-70-9	Cesium-134	TRG 8	UE901.1	E901.1	REG	0.565	2.43	PCI/L	0	U	26/09/2005	9:18	4.29	PCI/L	1.99	PCI/L	1	0	0.5	L		PCI/L		PR
West Discharge Tunnel	MSR#05-2231	145373001	463088	10045-97-3	Cesium-137	TRG 8	UE901.1	E901.1	REG	-0.876	2.4	PCI/L	0	U	26/09/2005	9:18	4.02	PCI/L	1.88	PCI/L	1	0	0.5	L		PCI/L		PR
West Discharge Tunnel	MSR#05-2231	145373001	463088	10198-40-0	Cobalt-60	TRG 8	UE901.1	E901.1	REG	1.6	2.52	PCI/L	0	U	26/09/2005	9:18	4.83	PCI/L	2.22	PCI/L	1	0	0.5	L		PCI/L		PR
West Discharge Tunnel	MSR#05-2231	145373001	463088	14683-23-9	Europium-152	TRG 8	UE901.1	E901.1	REG	0.304	6.37	PCI/L	0	U	26/09/2005	9:18	11.2	PCI/L	5.35	PCI/L	1	0	0.5	L		PCI/L		PR
West Discharge Tunnel	MSR#05-2231	145373001	463088	15585-10-1	Europium-154	TRG 8	UE901.1	E901.1	REG	9.75	7.44	PCI/L	0	U	26/09/2005	9:18	14.9	PCI/L	6.89	PCI/L	1	0	0.5	L		PCI/L		PR
West Discharge Tunnel	MSR#05-2231	145373001	463088	14391-16-3	Europium-155	TRG 8	UE901.1	E901.1	REG	4.07	7.69	PCI/L	0	U	26/09/2005	9:18	13.2	PCI/L	6.41	PCI/L	1	0	0.5	L		PCI/L		PR
West Discharge Tunnel	MSR#05-2231	145373001	463088	13966-31-9	Manganese-54	TRG 8	UE901.1	E901.1	REG	-1.7	2.36	PCI/L	0	U	26/09/2005	9:18	3.76	PCI/L	1.74	PCI/L	1	0	0.5	L		PCI/L		PR
West Discharge Tunnel	MSR#05-2231	145373001	463088	14681-63-1	Niobium-94	TRG 8	UE901.1	E901.1	REG	0.668	2	PCI/L	0	U	26/09/2005	9:18	3.54	PCI/L	1.66	PCI/L	1	0	0.5	L		PCI/L		PR
West Discharge Tunnel	MSR#05-2231	145373001	463088	14391-65-2	Silver-108m	TRG 8	UE901.1	E901.1	REG	0.0203	2.32	PCI/L	0	U	26/09/2005	9:18	4.03	PCI/L	1.92	PCI/L	1	0	0.5	L		PCI/L		PR
West Discharge Tunnel	MSR#05-2231	145373001	464109	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.314	0.532	PCI/L	0	U	27/09/2005	3:01	1.14	PCI/L	0.514	PCI/L	1	0	0.2	L		PCI/L		PR
West Discharge Tunnel	MSR#05-2231	145373001	464147	10028-17-8	Tritium	TRG 21	UE906.0	E906.0	REG	161	153	PCI/L	0	U	21/09/2005	9:58	254	PCI/L	123	PCI/L	1	0	0.05	L		PCI/L		PR
	MSR#05-2231	1200936878	463088	14596-10-2	Americium-241	TRG	U	E901.1	LB1	4.33	16.2	PCI/L	0	U	26/09/2005	9:01	28.3	PCI/L		PCI/L	1	0	2	L		PCI/L		PR
	MSR#05-2231	1200936878	463088	13967-70-9	Cesium-134	TRG	U	E901.1	LB1	-1.67	4.15	PCI/L	0	U	26/09/2005	9:01	6.14	PCI/L		PCI/L	1	0	2	L		PCI/L		PR
	MSR#05-2231	1200936878	463088	10045-97-3	Cesium-137	TRG	U	E901.1	LB1	-1.83	2.8	PCI/L	0	U	26/09/2005	9:01	4.75	PCI/L		PCI/L	1	0	2	L		PCI/L		PR
	MSR#05-2231	1200936878	463088	10198-40-0	Cobalt-60	TRG	U	E901.1	LB1	7.13	5.74	PCI/L	0	U	26/09/2005	9:01	10.4	PCI/L		PCI/L	1	0	2	L		PCI/L		PR
	MSR#05-2231	1200936878	463088	14683-23-9	Europium-152	TRG	U	E901.1	LB1	-0.267	8.61	PCI/L	0	U	26/09/2005	9:01	15.1	PCI/L		PCI/L	1	0	2	L		PCI/L		PR
	MSR#05-2231	1200936878	463088	15585-10-1	Europium-154	TRG	U	E901.1	LB1	1.38	8.21	PCI/L	0	U	26/09/2005	9:01	16.8	PCI/L		PCI/L	1	0	2	L		PCI/L		PR
	MSR#05-2231	1200936878	463088	14391-16-3	Europium-155	TRG	U	E901.1	LB1	0.459	9.34	PCI/L	0	U	26/09/2005	9:01	17.2	PCI/L		PCI/L	1	0	2	L		PCI/L		PR
	MSR#05-2231	1200936878	463088	13966-31-9	Manganese-54	TRG	U	E901.1	LB1	0.98	3.39	PCI/L	0	U	26/09/2005	9:01	6.41	PCI/L		PCI/L	1	0	2	L		PCI/L		PR
	MSR#05-2231	1200936878	463088	14681-63-1	Niobium-94	TRG	U	E901.1	LB1	-0.188	3.27	PCI/L	0	U	26/09/2005	9:01	5.91	PCI/L		PCI/L	1	0	2	L		PCI/L		PR
	MSR#05-2231	1200936878	463088	14391-65-2	Silver-108m	TRG	U	E901.1	LB1	-2.02	3.35	PCI/L	0	U	26/09/2005	9:01	5.39	PCI/L		PCI/L	1	0	2	L		PCI/L		PR
	MSR#05-2231	1200936881	463088	14596-10-2	Americium-241	TRG	U	E901.1	BS1	5850	880	PCI/L	0		26/09/2005	9:57	371	PCI/L		PCI/L	1	0	0.5	L	4880	PCI/L		PR
	MSR#05-2231	1200936881	463088	13967-70-9	Cesium-134	TRG	U	E901.1	BS1	14.4	42.7	PCI/L	0	U	26/09/2005	9:57	75.9	PCI/L		PCI/L	1	0	0.5	L		PCI/L		PR
	MSR#05-2231	1200936881	463088	10045-97-3	Cesium-137	TRG	U	E901.1	BS1	2010	188	PCI/L	0		26/09/2005	9:57	76	PCI/L		PCI/L	1	0	0.5	L	1880	PCI/L		PR
	MSR#05-2231	1200936881	463088	10198-40-0	Cobalt-60	TRG	U	E901.1	BS1	3100	305	PCI/L	0		26/09/2005	9:57	79.1	PCI/L		PCI/L	1	0	0.5	L	2850	PCI/L		PR
	MSR#05-2231	1200936881	463088	14683-23-9	Europium-152	TRG	U	E901.1	BS1	-27.1	106	PCI/L	0	U	26/09/2005	9:57	156	PCI/L		PCI/L	1	0	0.5	L		PCI/L		PR
	MSR#05-2231	1200936881	463088	15585-10-1	Europium-154	TRG	U	E901.1	BS1	3.72	87.2	PCI/L	0	U	26/09/2005	9:57	154	PCI/L		PCI/L	1	0	0.5	L		PCI/L		PR
	MSR#05-2231	1200936881	463088	14391-16-3	Europium-155	TRG	U	E901.1	BS1	49.4	114	PCI/L	0	U	26/09/2005	9:57	194	PCI/L		PCI/L	1	0	0.5	L		PCI/L		PR
	MSR#05-2231	1200936881	463088	13966-31-9	Manganese-54	TRG	U	E901.1	BS1	16.7	37.5	PCI/L	0	U	26/09/2005	9:57	66.9	PCI/L		PCI/L	1	0	0.5	L		PCI/L		PR
	MSR#05-2231	1200936881	463088	14681-63-1	Niobium-94	TRG	U	E901.1	BS1	24.8	35.9	PCI/L	0	U	26/09/2005	9:57	62.2	PCI/L		PCI/L	1	0	0.5	L		PCI/L		PR
	MSR#05-2231	1200936881	463088	14391-65-2	Silver-108m	TRG	U	E901.1	BS1	0.0553	32.7	PCI/L	0	U	26/09/2005	9:57	56	PCI/L		PCI/L	1	0	0.5	L		PCI/L		PR
	MSR#05-2231	1200939407	464109	10098-97-2	Strontium-90	TRG	U	E905M	LB1	0.689	0.619	PCI/L	0	U	27/09/2005	3:02	1.23	PCI/L	0.56	PCI/L	1	0	0.2	L		PCI/L		PR
West Discharge Tunnel	MSR#05-2231	1200939408	464109	10098-97-2	Strontium-90	TRG	U	E905M	LR1	0.052	0.477	PCI/L	0	U	27/09/2005	6:29	1.1	PCI/L	0.501	PCI/L	1	0	0.2	L		PCI/L	0.31	4	PR
West Discharge Tunnel	MSR#05-2231	1200939409	464109	10098-97-2	Strontium-90	TRG	U	E905M	MS1	407	17.9	PCI/L	0		27/09/2005	3:02	6.74	PCI/L	3.1	PCI/L	1	0	0.04	L	391	PCI/L	391	PR
	MSR#05-2231	1200939410	464109	10098-97-2	Strontium-90	TRG	U	E905M	BS1	75	4.61	PCI/L	0		27/09/2005	4:58	1.67	PCI/L	0.736	PCI/L	1	0	0.2	L	78.1	PCI/L		PR
	MSR#05-2231	1200939461	464147	10028-17-8	Tritium	TRG	U	E906.0	LB1	104	151	PCI/L	0	U	21/09/2005	11:01	254	PCI/L	123	PCI/L	1	0	0.05	L		PCI/L		PR
West Discharge Tunnel	MSR#05-2231	1200939462	464147	10028-17-8	Tritium	TRG	U	E906.0	LR1	240	155	PCI/L	0	U	21/09/2005	12:04	253	PCI/L	123	PCI/L	1	0	0.05	L		PCI/L	161	PR
West Discharge Tunnel	MSR#05-2231	1200939463	464147	10028-17-8	Tritium	TRG	U	E906.0	MS1	2730	228	PCI/L	0		21/09/2005	1:06	255	PCI/L	123	PCI/L	1	0	0.05	L	3040	PCI/L	3200	PR
	MSR#05-2231	1200939464	464147	10028-17-8	Tritium	TRG	U	E906.0	BS1	2350	216	PCI/L	0		21/09/2005	2:09	251	PCI/L	122	PCI/L	1	0	0.05	L	3030	PCI/L		PR

GENERAL ENGINEERING LABORATORIES, LLC
a Member of THE GEL GROUP, INC.
Meeting Today's Needs with a Vision for Tomorrow

November 7, 2005

Mr. Pete Hollenbeck
Connecticut Yankee Atomic Power
Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424

Re: Soils PO# 002332
Work Order: 147673
SDG: MSR# 05-2443

Dear Mr. Hollenbeck:

General Engineering Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on October 12, 2005. This data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4243.

Sincerely,

Cheryl Jones
Project Manager

Purchase Order: 002332
Chain of Custody: 2005-00420, 2005-00421, 2005-00422
Enclosures

P.O. Box 30712 • Charleston, SC 29417 • 2040 Savage Road (29407)
Phone (843) 556-8171 • Fax (843) 766-1178 • www.gel.com

CONNECTICUT YANKEE
RE: Concrete
PO# 002332
Work Order: 147673
SDG: MSR #05-2443

147673001	5502-0000-015-C-1C-01	147673016	5502-0000-018-C-2C-02
147673002	5502-0000-015-C-1C-02	147673017	5502-0000-018-C-5C-03
147673003	5502-0000-015-C-2C-03	147673018	5502-0000-018-C-8C-04
147673004	5502-0000-015-C-3C-04	147673019	5502-0000-018-C-8C-05
147673005	5502-0000-015-C-3C-05	147673020	5502-0000-019-C-1C-01
147673006	5502-0000-016-C-1C-01	147673021	5502-0000-019-C-1C-02
147673007	5502-0000-016-C-1C-02	147673022	5502-0000-019-C-3C-03
147673008	5502-0000-016-C-3C-03	147673023	5502-0000-019-C-4C-04
147673009	5502-0000-016-C-4C-04	147673024	5502-0000-020-C-1C-01
147673010	5502-0000-017-C-1C-01	147673025	5502-0000-020-C-1C-02
147673011	5502-0000-017-C-1C-02	147673026	5502-0000-020-C-2C-03
147673012	5502-0000-017-C-2C-03	147673027	5502-0000-020-C-3C-04
147673013	5502-0000-017-C-4C-04	147673028	5502-0000-020-C-3C-05
147673014	5502-0000-017-C-4C-05	147673029	5502-0000-016-C-4C-05
147673015	5502-0000-018-C-1C-01	147673030	5502-0000-019-C-4C-05

CASE NARRATIVE
For
CONNECTICUT YANKEE
RE: Concrete
PO# 002332
Work Order: 147673
SDG: MSR #05-2443

November 7, 2005

Laboratory Identification:
General Engineering Laboratories, LLC

Mailing Address:
P.O. Box 30712
Charleston, South Carolina 29417

Express Mail Delivery and Shipping Address:
2040 Savage Road
Charleston, South Carolina 29407

Telephone Number:
(843) 556-8171

Summary:

Sample receipt
The samples for the Project for work order 147673 arrived at General Engineering Laboratories, LLC, (GEL) in Charleston, South Carolina on October 12, 2005. All sample containers arrived without any visible signs of tampering or breakage. The chain of custody contained the proper documentation and signatures.

The laboratory received the following samples:

Sample ID	Client Sample ID
147673001	5502-0000-015-C-1C-01
147673002	5502-0000-015-C-1C-02
147673003	5502-0000-015-C-2C-03
147673004	5502-0000-015-C-3C-04
147673005	5502-0000-015-C-3C-05
147673006	5502-0000-016-C-1C-01
147673007	5502-0000-016-C-1C-02
147673008	5502-0000-016-C-3C-03

Sample ID	Client Sample ID
147673009	5502-0000-016-C-4C-04
147673010	5502-0000-017-C-1C-01
147673011	5502-0000-017-C-1C-02
147673012	5502-0000-017-C-2C-03
147673013	5502-0000-017-C-4C-04
147673014	5502-0000-017-C-4C-05
147673015	5502-0000-018-C-1C-01
147673016	5502-0000-018-C-2C-02
147673017	5502-0000-018-C-5C-03
147673018	5502-0000-018-C-8C-04
147673019	5502-0000-018-C-8C-05
147673020	5502-0000-019-C-1C-01
147673021	5502-0000-019-C-1C-02
147673022	5502-0000-019-C-3C-03
147673023	5502-0000-019-C-4C-04
147673024	5502-0000-020-C-1C-01
147673025	5502-0000-020-C-1C-02
147673026	5502-0000-020-C-2C-03
147673027	5502-0000-020-C-3C-04
147673028	5502-0000-020-C-3C-05
147673029	5502-0000-016-C-4C-05
147673030	5502-0000-019-C-4C-05

Items of Note:

There are no items of note.

Case Narrative:
Sample analyses were conducted using methodology as outlined in General Engineering Laboratories (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are listed below by analytical parameter.

Analytical Request:

Twenty-eight soil samples were analyzed for CHGAM, Sr-90 and H-3.
Two soil samples were analyzed for CHALL.

Internal Chain of Custody:
Custody was maintained for all the samples.

Data Package:
The enclosed data package contains the following sections: Case Narrative, Chain of Custody and Supporting Documentation and all analytical fractions.

I certify that this data package is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or a designee, as verified by the following signature.

Cheryl Jones
Project Manager

GENERAL ENGINEERING LABORATORIES, LLC
a Member of THE GEL GROUP, INC.
P.O. Box 30712 • Charleston, SC 29417 • 2040 Savage Road (29407)
Phone (843) 556-8171 • Fax (843) 766-1178 • www.gel.com

Chain of Custody and Supporting Documentation

Connecticut Yankee Atomic Power Company
362 Injun Hollow Road, East Hampton, CT 06424
860-267-2556

Chain of Custody Form

No. 2005-00420

Project Name: Haddam Neck Decommissioning

Contact Name & Phone:
Pete Hollenbeck 860-267-3923

Analytical Lab (Name, City, State):
General Engineering Laboratories
2040 Savage Road
Charleston, SC 29407
ATT: Cheryl Jones (843-556-8171)

Priority: ☒ 30 D. ☐ 15 D. ☐ 7 D.
Other:

Lab Use Only
Comments:
% 147673

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	CHGAM	H-3	Sr-90	CHALL			Comment, Preservation	Lab Sample ID
5502-0000-015-C-1C-01	9/29/05	1005	CT	CR	BP	X	X	X					
5502-0000-015-C-1C-02	9/29/05	1005	CT	CR	BP	X	X	X					
5502-0000-015-C-2C-03	9/29/05	1005	CT	CR	BP	X	X	X					
5502-0000-015-C-3C-04	9/29/05	1005	CT	CR	BP	X	X	X					
5502-0000-015-C-3C-05	9/29/05	1005	CT	CR	BP	X	X	X					
5502-0000-016-C-1C-01	9/29/05	1145	CT	CR	BP	X	X	X					
5502-0000-016-C-1C-02	9/29/05	1145	CT	CR	BP	X	X	X					
5502-0000-016-C-3C-03	9/29/05	1145	CT	CR	BP	X	X	X					
5502-0000-016-C-4C-04	9/29/05	1145	CT	CR	BP	X	X	X					
5502-0000-016-C-4C-05	9/29/05	1145	CT	CR	BP				X				
5502-0000-017-C-1C-01	9/28/05	1350	CT	CR	BP	X	X	X					

NOTES: PO #: 002332 MSR #: 05-2443 ☒ LTP QA ☐ Radwaste QA ☐ Non QA

Samples Shipped Via:
☒ Fed Ex
☐ UPS
☐ Hand
☐ Other
7924 07445790
Bill of Lading #

Internal Container Temp.: ____ Deg. C

Custody Sealed? Y N

Custody Seal Intact? Y N

1) Relinquished By — Date/Time 10/11/05 1330	2) Received By — Date/Time 10/12/05 900
3) Relinquished By — Date/Time	4) Received By — Date/Time
5) Relinquished By — Date/Time	6) Received By — Date/Time

Chain of Custody Form

No. 2005-00421

Connecticut Yankee Atomic Power Company
362 Injun Hollow Road, East Hampton, CT 06424
860-267-2556

Project Name: Haddam Neck Decommissioning

Contact Name & Phone:
Pete Hollenbeck 860-267-3923

Analytical Lab (Name, City, State):
General Engineering Laboratories
2040 Savage Road
Charleston, SC 29407
ATT: Cheryl Jones (843-556-8171)

Priority: ☒ 30 D. ☐ 15 D. ☐ 7 D.
Other:

Lab Use Only
Comments:
8147673

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	CHGAM	H-3	Sr-90	CHALL			Comment, Preservation	Lab Sample ID
5502-0000-017-C-1C-02	9/28/05	1350	CT	CR	BP	X	X	X					
5502-0000-017-C-2C-03	9/28/05	1350	CT	CR	BP	X	X	X					
5502-0000-017-C-4C-04	9/28/05	1350	CT	CR	BP	X	X	X					
5502-0000-017-C-4C-05	9/28/05	1350	CT	CR	BP	X	X	X					
5502-0000-018-C-1C-01	9/28/05	1000	CT	CR	BP	X	X	X					
5502-0000-018-C-2C-02	9/28/05	1000	CT	CR	BP	X	X	X					
5502-0000-018-C-5C-03	9/28/05	1000	CT	CR	BP	X	X	X					
5502-0000-018-C-8C-04	9/28/05	1000	CT	CR	BP	X	X	X					
5502-0000-018-C-8C-05	9/28/05	1000	CT	CR	BP	X	X	X					
5502-0000-019-C-1C-01	9/27/05	1145	CT	CR	BP	X	X	X					
5502-0000-019-C-1C-02	9/27/05	1145	CT	CR	BP	X	X	X					

NOTES: PO #: 002332 MSR #: 05-2443 ☒ LTP QA ☐ Radwaste QA ☐ Non QA

Samples Shipped Via:
☒ Fed Ex
☐ UPS
☐ Hand
☐ Other
7924 0744 5790
Bill of Lading #

Internal Container Temp.: ____ Deg. C

Custody Sealed? Y N

Custody Seal Intact? Y N

1) Relinquished By [signature] Date/Time 10/11/05 1330	2) Received By [signature] Date/Time 10/12/05 900
3) Relinquished By Date/Time	4) Received By Date/Time
5) Relinquished By Date/Time	6) Received By Date/Time

Chain of Custody Form

Connecticut Yankee Atomic Power Company
362 Injun Hollow Road, East Hampton, CT 06424
860-267-2556

No. 2005-00422

Project Name: Haddam Neck Decommissioning

Contact Name & Phone:
Pete Hollenbeck 860-267-3923

Analytical Lab (Name, City, State):
General Engineering Laboratories
2040 Savage Road
Charleston, SC 29407
ATT: Cheryl Jones (843-556-8171)

Priority: ☒ 30 D. ☐ 15 D. ☐ 7 D.
Other:

Lab Use Only
Comments:
2147673

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	CHGAM	H-3	Sr-90	CHALL			Comment, Preservation	Lab Sample ID
5502-0000-019-C-3C-03	9/27/05	1145	CT	CR	BP	X	X	X					
5502-0000-019-C-4C-04	9/27/05	1145	CT	CR	BP	X	X	X					
5502-0000-019-C-4C-05	9/27/05	1145	CT	CR	BP				X				
5502-0000-020-C-1C-01	9/26/05	1558	CT	CR	BP	X	X	X					
5502-0000-020-C-1C-02	9/26/05	1558	CT	CR	BP	X	X	X					
5502-0000-020-C-2C-03	9/26/05	1558	CT	CR	BP	X	X	X					
5502-0000-020-C-3C-04	9/26/05	1558	CT	CR	BP	X	X	X					
5502-0000-020-C-3C-05	9/26/05	1558	CT	CR	BP	X	X	X					

NOTES: PO #: 002332 MSR #: 05-2443 ☒ LTP QA ☐ Radwaste QA ☐ Non QA

Samples Shipped Via:
☒ Fed Ex
☐ UPS
☐ Hand
☐ Other
7924 0744 5790
Bill of Lading #

Internal Container Temp.: ____ Deg. C

Custody Sealed? Y N
Custody Seal Intact? Y N

1) Relinquished By	Date/Time	2) Received By	Date/Time
[signature]	10/11/05 1330	[signature]	10/12/05 900
3) Relinquished By	Date/Time	4) Received By	Date/Time
5) Relinquished By	Date/Time	6) Received By	Date/Time

Figure 1. Sample Check-in List

Date/Time Received: 10/12/05 900

SDG#: MSR#05-243

Work Order Number: 2147673

Shipping Container ID: 7924 0744 5790 Chain of Custody # 2005-00420-00421-00422

1. Custody Seals on shipping container intact? Yes [✓] No [ ]
2. Custody Seals dated and signed? Yes [ ] No [✓]
3. Chain-of-Custody record present? Yes [✓] No [ ]
4. Cooler temperature 21°C
5. Vermiculite/packing materials is: Wet [ ] Dry [ ]
6. Number of samples in shipping container: 30 samples
7. Sample holding times exceeded? Yes [✓] No [ ]

8. Samples have:

_____tape _____hazard labels

_____custody seals ✓ appropriate sample labels

9. Samples are:

✓ in good condition _____leaking

_____broken _____have air bubbles

10. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
11. Description of anomalies (include sample numbers): _____

Sample Custodian/Laboratory: Marion Gathers Date: 10/12/05 900

Telephoned to:_____On_____By_____

SAMPLE RECEIPT & REVIEW FORM

GENERAL ENGINEERING LABORATORIES, LLC

PM use only

Client: Connecticut Yankee	SDG/ARCOC/Work Order: 147673
Date Received: 10/12/05	PM(A) Review (ensure non-conforming items are resolved prior to signing):
Received By:	

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?				Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within (4 +/- 2 C)? Record preservation method.				Circle Coolant # ice bags blue ice dry ice none other describe)
3	Chain of custody documents included with shipment?				
4	Sample containers intact and sealed?				Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?				Sample ID's, containers affected and observed pH:
6	VOA vials free of headspace (defined as < 6mm bubble)?				Sample ID's and containers affected:
7	Are Encore containers present? (If yes, immediately deliver to VOA laboratory)				
8	Samples received within holding time?				Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?				Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?				Sample ID's affected:
11	Number of containers received match number indicated on COC?				Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?				
14	Air Bill ,Tracking #'s, & Additional Comments				

	Suspected Hazard Information	Non-Regulated	Regulated	High Level	RSO RAD Receipt # _____ *If > x2 area background is observed on samples identified as "non-regulated/non-radioactive", contact the Radiation Safety group for further investigation.
A	Radiological Classification?		✓		Maximum Counts Observed*: CPM 30
B	PCB Regulated?	✓			Comments:
C	Shipped as DOT Hazardous Material? If yes, contact Waste Manager or ESH Manager.	✓			Hazard Class Shipped: UN#:

PM (or PMA) review of Hazard classification: _____ Initials CD Date: 10/12/05

RADIOLOGICAL ANALYSIS

Radiochemistry Case Narrative
Connecticut Yankee Atomic Power Co. (YANK)
SDG MSR#05-2443

Method/Analysis Information

Product:	**Alphaspec Am241, Cm, Solid-TRU2,ALL2 (CT)**
Analytical Method:	DOE EML HASL-300, Am-05-RC Modified
Prep Method:	Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method:	Dry Soil Prep
Analytical Batch Number:	475273
Prep Batch Number:	471602
Dry Soil Prep GL-RAD-A-021 Batch Number:	471601

Sample ID	Client ID
147673029	5502-0000-016-C-4C-05
147673030	5502-0000-019-C-4C-05
1200966093	Method Blank (MB)
1200966094	148416002(9801-0000-007-RA EXV) Sample Duplicate (DUP)
1200966095	148416002(9801-0000-007-RA EXV) Matrix Spike (MS)
1200966096	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 14.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 148416002 (9801-0000-007-RA EXV).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Manual Integration
No manual integrations were performed on data in this batch.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Alphaspec Pu, Solid-TRU2,ALL2 (CT)**
Analytical Method:	DOE EML HASL-300, Pu-11-RC Modified
Prep Method:	Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method:	Dry Soil Prep
Analytical Batch Number:	475274
Prep Batch Number:	471602
Dry Soil Prep GL-RAD-A-021 Batch Number:	471601

Sample ID	Client ID
147673029	5502-0000-016-C-4C-05
147673030	5502-0000-019-C-4C-05
1200966097	Method Blank (MB)
1200966098	148416002(9801-0000-007-RA EXV) Sample Duplicate (DUP)
1200966099	148416002(9801-0000-007-RA EXV) Matrix Spike (MS)
1200966100	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 14.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC

The following sample was used for QC: 148416002 (9801-0000-007-RA EXV).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Manual Integration
No manual integrations were performed on data in this batch.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Liquid Scint Pu241, Solid-TRU2,ALL2 (CT)**
Analytical Method:	DOE EML HASL-300, Pu-11-RC Modified
Prep Method:	Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method:	Dry Soil Prep
Analytical Batch Number:	475275
Prep Batch Number:	471602
Dry Soil Prep GL-RAD-A-021 Batch Number:	471601

Sample ID	Client ID
147673029	5502-0000-016-C-4C-05
147673030	5502-0000-019-C-4C-05
1200966101	Method Blank (MB)
1200966102	148416002(9801-0000-007-RA EXV) Sample Duplicate (DUP)
1200966103	148416002(9801-0000-007-RA EXV) Matrix Spike (MS)
1200966104	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-035 REV# 7.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 148416002 (9801-0000-007-RA EXV).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Manual Integration
No manual integrations were performed on data in this batch.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)**
Analytical Method:	EML HASL 300, 4.5.2.3
Prep Method:	Dry Soil Prep
Analytical Batch Number:	472777
Prep Batch Number:	471597

Sample ID	Client ID
147673001	5502-0000-015-C-1C-01
147673002	5502-0000-015-C-1C-02
147673003	5502-0000-015-C-2C-03
147673004	5502-0000-015-C-3C-04
147673005	5502-0000-015-C-3C-05
147673006	5502-0000-016-C-1C-01
147673007	5502-0000-016-C-1C-02

147673008	5502-0000-016-C-3C-03
147673009	5502-0000-016-C-4C-04
147673010	5502-0000-017-C-1C-01
147673011	5502-0000-017-C-1C-02
147673012	5502-0000-017-C-2C-03
147673013	5502-0000-017-C-4C-04
147673014	5502-0000-017-C-4C-05
147673015	5502-0000-018-C-1C-01
147673016	5502-0000-018-C-2C-02
147673017	5502-0000-018-C-5C-03
147673018	5502-0000-018-C-8C-04
147673019	5502-0000-018-C-8C-05
147673020	5502-0000-019-C-1C-01
1200960048	Method Blank (MB)
1200960049	147673001(5502-0000-015-C-1C-01) Sample Duplicate (DUP)
1200960050	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-013 REV# 10.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 147673001 (5502-0000-015-C-1C-01).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information

Qualifier	Reason	Analyte	Sample
UI	Data rejected due to interference.	Manganese-54	147673014
UI	Data rejected due to low abundance.	Bismuth-212	147673008
			147673015
		Cesium-134	147673004
			147673011
			147673012
			147673015
		Lead-214	1200960048
UI	Data rejected due to no valid peak.	Bismuth-212	147673007
			147673012
			147673013
			147673014
			147673019
		Potassium-40	1200960048

Method/Analysis Information

Product:	**Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)**
Analytical Method:	EML HASL 300, 4.5.2.3
Prep Method:	Dry Soil Prep
Analytical Batch Number:	472779
Prep Batch Number:	471601

Sample ID	Client ID
147673021	5502-0000-019-C-1C-02
147673022	5502-0000-019-C-3C-03
147673023	5502-0000-019-C-4C-04
147673024	5502-0000-020-C-1C-01
147673025	5502-0000-020-C-1C-02
147673026	5502-0000-020-C-2C-03
147673027	5502-0000-020-C-3C-04
147673028	5502-0000-020-C-3C-05
147673029	5502-0000-016-C-4C-05
147673030	5502-0000-019-C-4C-05
1200960053	Method Blank (MB)
1200960054	147673021(5502-0000-019-C-1C-02) Sample Duplicate (DUP)
1200960055	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-013 REV# 10.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 147673021 (5502-0000-019-C-1C-02).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information

Qualifier	Reason	Analyte	Sample
UI	Data rejected due to no valid peak.	Cesium-134	1200960054

Method/Analysis Information

Product:	**GFPC, Sr90, solid-HTD2,ALL2 (CT)**
Analytical Method:	EPA 905.0 Modified
Prep Method:	Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method:	Dry Soil Prep
Analytical Batch Number:	476640
Prep Batch Number:	471599
Dry Soil Prep GL-RAD-A-021 Batch Number:	471597

Sample ID	Client ID
147673001	5502-0000-015-C-1C-01
147673002	5502-0000-015-C-1C-02
147673003	5502-0000-015-C-2C-03
147673004	5502-0000-015-C-3C-04
147673005	5502-0000-015-C-3C-05
147673006	5502-0000-016-C-1C-01
147673007	5502-0000-016-C-1C-02

147673008	5502-0000-016-C-3C-03
147673009	5502-0000-016-C-4C-04
147673010	5502-0000-017-C-1C-01
147673011	5502-0000-017-C-1C-02
147673012	5502-0000-017-C-2C-03
147673013	5502-0000-017-C-4C-04
147673014	5502-0000-017-C-4C-05
147673015	5502-0000-018-C-1C-01
147673016	5502-0000-018-C-2C-02
147673017	5502-0000-018-C-5C-03
147673018	5502-0000-018-C-8C-04
147673019	5502-0000-018-C-8C-05
147673020	5502-0000-019-C-1C-01
1200969214	Method Blank (MB)
1200969215	147673001(5502-0000-015-C-1C-01) Sample Duplicate (DUP)
1200969216	147673001(5502-0000-015-C-1C-01) Matrix Spike (MS)
1200969217	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-004 REV# 9.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 147673001 (5502-0000-015-C-1C-01).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
Sample 147673005 (5502-0000-015-C-3C-05) was recounted due to a negative result greater than three times the error.

Sample 1200969216 (5502-0000-015-C-1C-01) was recounted due to low/high recovery.

Chemical Recoveries
All chemical recoveries meet the required acceptance limits for this sample set.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**GFPC, Sr90, solid-HTD2,ALL2 (CT)**
Analytical Method:	EPA 905.0 Modified
Prep Method:	Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method:	Dry Soil Prep
Analytical Batch Number:	476641
Prep Batch Number:	471602
Dry Soil Prep GL-RAD-A-021 Batch Number:	471601

Sample ID	Client ID
147673021	5502-0000-019-C-1C-02
147673022	5502-0000-019-C-3C-03
147673023	5502-0000-019-C-4C-04
147673024	5502-0000-020-C-1C-01
147673025	5502-0000-020-C-1C-02
147673026	5502-0000-020-C-2C-03
147673027	5502-0000-020-C-3C-04
147673028	5502-0000-020-C-3C-05
147673029	5502-0000-016-C-4C-05
147673030	5502-0000-019-C-4C-05
1200969218	Method Blank (MB)
1200969219	147673021(5502-0000-019-C-1C-02) Sample Duplicate (DUP)
1200969220	147673021(5502-0000-019-C-1C-02) Matrix Spike (MS)
1200969221	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-004 REV# 9.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 147673021 (5502-0000-019-C-1C-02).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
Sample 147673026 (5502-0000-020-C-2C-03) was recounted due to a negative result greater than three times the error.
Sample 147673021 (5502-0000-019-C-1C-02) was recounted due to high MDA.
Sample 1200969220 (5502-0000-019-C-1C-02) was recounted due to low/high recovery.

Chemical Recoveries
All chemical recoveries meet the required acceptance limits for this sample set.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Liquid Scint Tc99, Solid-HTD2,ALL2 (CT)**
Analytical Method:	DOE EML HASL-300, Tc-02-RC Modified
Analytical Batch Number:	473504

Sample ID	Client ID
147673029	5502-0000-016-C-4C-05
147673030	5502-0000-019-C-4C-05
1200961847	Method Blank (MB)
1200961848	147548017(9801-0000-011-1C-RAEXV-01) Sample Duplicate (DUP)
1200961849	147548017(9801-0000-011-1C-RAEXV-01) Matrix Spike (MS)
1200961850	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-005 REV# 12.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 147548017 (9801-0000-011-1C-RAEXV-01).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Liquid Scint Fe55, Solid-HTD2,ALL2 (CT)**
Analytical Method:	DOE RESL Fe-1, Modified
Prep Method:	Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method:	Dry Soil Prep
Analytical Batch Number:	473497
Prep Batch Number:	471602
Dry Soil Prep GL-RAD-A-021 Batch Number:	471601

Sample ID	Client ID
147673029	5502-0000-016-C-4C-05
147673030	5502-0000-019-C-4C-05
1200961819	Method Blank (MB)

1200961820	147548017(9801-0000-011-1C-RAEXV-01) Sample Duplicate (DUP)
1200961821	147548017(9801-0000-011-1C-RAEXV-01) Matrix Spike (MS)
1200961822	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-040 REV# 3.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 147548017 (9801-0000-011-1C-RAEXV-01).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Liquid Scint Ni63, Solid-HTD2,ALL2 (CT)**
Analytical Method:	DOE RESL Ni-1, Modified
Prep Method:	Ash Soil Prep

Dry Soil Prep GL-RAD-A-021 Method:	Dry Soil Prep
Analytical Batch Number:	473499
Prep Batch Number:	471602
Dry Soil Prep GL-RAD-A-021 Batch Number:	471601

Sample ID	Client ID
147673029	5502-0000-016-C-4C-05
147673030	5502-0000-019-C-4C-05
1200961827	Method Blank (MB)
1200961828	147548017(9801-0000-011-1C-RAEXV-01) Sample Duplicate (DUP)
1200961829	147548017(9801-0000-011-1C-RAEXV-01) Matrix Spike (MS)
1200961830	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-022 REV# 7.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 147548017 (9801-0000-011-1C-RAEXV-01).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)**
Analytical Method:	EPA 906.0 Modified
Analytical Batch Number:	476953

Sample ID	Client ID
147673016	5502-0000-018-C-2C-02
147673017	5502-0000-018-C-5C-03
147673018	5502-0000-018-C-8C-04
147673019	5502-0000-018-C-8C-05
147673020	5502-0000-019-C-1C-01
147673021	5502-0000-019-C-1C-02
147673022	5502-0000-019-C-3C-03
147673023	5502-0000-019-C-4C-04
147673024	5502-0000-020-C-1C-01
147673025	5502-0000-020-C-1C-02
147673026	5502-0000-020-C-2C-03
147673027	5502-0000-020-C-3C-04
147673028	5502-0000-020-C-3C-05
147673029	5502-0000-016-C-4C-05
147673030	5502-0000-019-C-4C-05
1200970073	Method Blank (MB)
1200970074	147673016(5502-0000-018-C-2C-02) Sample Duplicate (DUP)
1200970075	147673016(5502-0000-018-C-2C-02) Matrix Spike (MS)
1200970076	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-002 REV# 10.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 147673016 (5502-0000-018-C-2C-02).

QC Information

All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
Sample 147673029 (5502-0000-016-C-4C-05) was recounted due to high MDA.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Liquid Scint C14, Solid-HTD2,ALL2 (CT)**
Analytical Method:	EPA EERF C-01 Modified
Analytical Batch Number:	475769

Sample ID	Client ID
147673029	5502-0000-016-C-4C-05
147673030	5502-0000-019-C-4C-05
1200967206	Method Blank (MB)
1200967207	147673029(5502-0000-016-C-4C-05) Sample Duplicate (DUP)
1200967208	147673029(5502-0000-016-C-4C-05) Matrix Spike (MS)
1200967209	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-003 REV# 8.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 147673029 (5502-0000-016-C-4C-05).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
Batch was reprepped due to interference in the sample and duplicate.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Additional Comments
Sample spectrum did not print for sample 1200967207 (5502-0000-016-C-4C-05). There is no activity in the sample. The project manager was notified.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)**
Analytical Method:	EPA 906.0 Modified
Analytical Batch Number:	476952

Sample ID	Client ID
147673001	5502-0000-015-C-1C-01
147673002	5502-0000-015-C-1C-02
147673003	5502-0000-015-C-2C-03
147673004	5502-0000-015-C-3C-04
147673005	5502-0000-015-C-3C-05
147673006	5502-0000-016-C-1C-01
147673007	5502-0000-016-C-1C-02
147673008	5502-0000-016-C-3C-03
147673009	5502-0000-016-C-4C-04
147673010	5502-0000-017-C-1C-01
147673011	5502-0000-017-C-1C-02
147673012	5502-0000-017-C-2C-03
147673013	5502-0000-017-C-4C-04
147673014	5502-0000-017-C-4C-05
147673015	5502-0000-018-C-1C-01
1200970069	Method Blank (MB)
1200970070	147673004(5502-0000-015-C-3C-04) Sample Duplicate (DUP)

1200970071	147673004(5502-0000-015-C-3C-04) Matrix Spike (MS)
1200970072	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-002 REV# 10.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 147673004 (5502-0000-015-C-3C-04).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
Samples 1200970070 (5502-0000-015-C-3C-04), 147673001 (5502-0000-015-C-1C-01), 147673002 (5502-0000-015-C-1C-02), 147673003 (5502-0000-015-C-2C-03), 147673004 (5502-0000-015-C-3C-04), 147673005 (5502-0000-015-C-3C-05), 147673006 (5502-0000-016-C-1C-01), 147673007 (5502-0000-016-C-1C-02), 147673008 (5502-0000-016-C-3C-03), 147673009 (5502-0000-016-C-4C-04), 147673010 (5502-0000-017-C-1C-01), 147673011 (5502-0000-017-C-1C-02), 147673012 (5502-0000-017-C-2C-03), 147673013 (5502-0000-017-C-4C-04), 147673014 (5502-0000-017-C-4C-05) and 147673015 (5502-0000-018-C-1C-01) were recounted due to high MDAs.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information
Manual qualifiers were not required.

Certification Statement
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:
GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.
The following data validator verified the information presented in this case narrative:

Reviewer: [illegible] 11/11/05

SAMPLE DATA SUMMARY

GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

YANK001 Connecticut Yankee Atomic Power Co.

Client SDG: MSR#05-2443 GEL Work Order: 147673

The Qualifiers in this report are defined as follows:

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
< Result is less than amount reported.
> Result is greater than amount reported.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
D Sample has been diluted and reanalyzed after initially exceeding inst. calibration range
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
P The response between the confirmation and the primary columns is >40% Different.
R Sample results are rejected.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
Y QC Samples were not spiked with this compound.
Z Paint Filter qualifier: Particulates passed through the filter. No free liquids were observed.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
ND The analyte concentration is not detected above the reporting limit.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.
** Indicates the analyte is a surrogate compound.
This data report has been prepared and reviewed in accordance with General Engineering Laboratories, LLC standard operating procedures. Please direct any questions to your Project Manager, Cheryl Jones.

Reviewed by

GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID:	5502-0000-015-C-1C-01	Project:	YANK01204
Sample ID:	147673001	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	29-SEP-05		
Receive Date:	12-OCT-05		
Collector:	Client		
Moisture:	5.53%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.484	+/-0.138	0.0468	+/-0.135	0.0987	pCi/g		MJH1 10/26/05	1938	472777	1
Americium-241	U	0.014	+/-0.0259	0.0199	+/-0.0254	0.0405	pCi/g					
Bismuth-212		0.287	+/-0.204	0.109	+/-0.199	0.228	pCi/g					
Bismuth-214		0.670	+/-0.0978	0.0257	+/-0.0958	0.0536	pCi/g					
Cesium-134	U	0.0364	+/-0.0202	0.0179	+/-0.0198	0.0373	pCi/g					
Cesium-137		0.0401	+/-0.0283	0.0142	+/-0.0277	0.0296	pCi/g					
Cobalt-60	U	-0.00788	+/-0.0163	0.0128	+/-0.016	0.0275	pCi/g					
Europium-152	U	-0.00562	+/-0.0421	0.0355	+/-0.0412	0.0733	pCi/g					
Europium-154	U	0.013	+/-0.0509	0.0427	+/-0.0498	0.0907	pCi/g					
Europium-155	U	0.0166	+/-0.0396	0.0337	+/-0.0388	0.0688	pCi/g					
Lead-212		0.486	+/-0.0654	0.021	+/-0.0641	0.0431	pCi/g					
Lead-214		0.706	+/-0.100	0.0258	+/-0.0983	0.0533	pCi/g					
Manganese-54	U	-0.000982	+/-0.0153	0.0129	+/-0.015	0.0272	pCi/g					
Niobium-94	U	0.00753	+/-0.0155	0.013	+/-0.0152	0.0271	pCi/g					
Potassium-40		8.43	+/-0.775	0.121	+/-0.759	0.262	pCi/g					
Radium-226		0.670	+/-0.0978	0.0257	+/-0.0958	0.0536	pCi/g					
Silver-108m	U	-0.00357	+/-0.0142	0.0118	+/-0.0139	0.0245	pCi/g					
Thallium-208		0.155	+/-0.0377	0.0136	+/-0.037	0.0284	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	-0.00205	+/-0.00675	0.00574	+/-0.00675	0.0119	pCi/g		EXW1 11/04/05	2351	476640	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	-1.39	+/-1.64	1.41	+/-1.64	2.89	pCi/g		MXP1 11/09/05	1544	476952	4
Solid Preparation												
Laboratory Composite - CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	10/17/05	0931	471599
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	AXP2	10/13/05	1818	471597
GL-RAD-A-026	Laboratory sample composite				471596

GENERAL ENGINEERING LABORATORIES, LLC
2040 Savage Road Charleston SC 29407 – (843) 556–8171 – www.gel.com

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID: 5502–0000–015–C–1C–01
Sample ID: 147673001

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 905.0 Modified
4	EPA 906.0 Modified
5	GL–RAD–A–026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	*GFPC, Sr90, solid–HTD2,ALL2 (C*	*65*	*(25%–125%)*

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID:	5502-0000-015-C-1C-02	Project:	YANK01204
Sample ID:	147673002	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	29-SEP-05		
Receive Date:	12-OCT-05		
Collector:	Client		
Moisture:	5.56%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.448	+/-0.118	0.0353	+/-0.115	0.0747	pCi/g		MJH1 10/26/05	1944	472777	1
Americium-241	U	0.0042	+/-0.0137	0.0119	+/-0.0134	0.0244	pCi/g					
Bismuth-212		0.268	+/-0.221	0.0742	+/-0.217	0.156	pCi/g					
Bismuth-214		0.614	+/-0.0851	0.0188	+/-0.0834	0.0392	pCi/g					
Cesium-134	U	0.0121	+/-0.016	0.0127	+/-0.0156	0.0266	pCi/g					
Cesium-137	U	0.00948	+/-0.0132	0.0114	+/-0.0129	0.0237	pCi/g					
Cobalt-60	U	0.00592	+/-0.0136	0.0115	+/-0.0134	0.0246	pCi/g					
Europium-152	U	-0.0301	+/-0.0299	0.0234	+/-0.0293	0.0485	pCi/g					
Europium-154	U	0.0256	+/-0.0418	0.0357	+/-0.041	0.0757	pCi/g					
Europium-155	U	0.0307	+/-0.0383	0.0194	+/-0.0376	0.0398	pCi/g					
Lead-212		0.440	+/-0.0563	0.0138	+/-0.0551	0.0283	pCi/g					
Lead-214		0.600	+/-0.0815	0.018	+/-0.0799	0.0373	pCi/g					
Manganese-54	U	-0.0118	+/-0.0144	0.011	+/-0.0141	0.0231	pCi/g					
Niobium-94	U	0.0129	+/-0.0143	0.00996	+/-0.014	0.0208	pCi/g					
Potassium-40		8.19	+/-0.711	0.105	+/-0.697	0.226	pCi/g					
Radium-226		0.614	+/-0.0851	0.0188	+/-0.0834	0.0392	pCi/g					
Silver-108m	U	0.0053	+/-0.0112	0.00883	+/-0.011	0.0184	pCi/g					
Thallium-208		0.148	+/-0.0285	0.0101	+/-0.0279	0.0211	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.00436	+/-0.00559	0.00452	+/-0.00559	0.0094	pCi/g		EXW1 11/04/05	2351	476640	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	-0.182	+/-1.65	1.39	+/-1.65	2.84	pCi/g		MXP1 11/09/05	1717	476952	4
Solid Preparation												
Laboratory Composite - CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	10/17/05	0931	471599
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	AXP2	10/13/05	1818	471597
GL-RAD-A-026	Laboratory sample composite				471596

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID: 5502-0000-015-C-1C-02
Sample ID: 147673002

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 905.0 Modified
4	EPA 906.0 Modified
5	GL-RAD-A-026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	75	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID:	5502-0000-015-C-2C-03	Project:	YANK01204
Sample ID:	147673003	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	29-SEP-05		
Receive Date:	12-OCT-05		
Collector:	Client		
Moisture:	5.86%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.449	+/-0.091	0.032	+/-0.0891	0.0669	pCi/g		MJH1 10/26/05	1944	472777	1
Americium-241	U	0.0333	+/-0.0683	0.053	+/-0.0669	0.109	pCi/g					
Bismuth-212		0.323	+/-0.135	0.0686	+/-0.133	0.143	pCi/g					
Bismuth-214		0.603	+/-0.0535	0.0172	+/-0.0524	0.0356	pCi/g					
Cesium-134	U	0.0123	+/-0.0224	0.0107	+/-0.022	0.0222	pCi/g					
Cesium-137	U	0.0177	+/-0.00896	0.00851	+/-0.00878	0.0177	pCi/g					
Cobalt-60	U	0.0158	+/-0.0116	0.0103	+/-0.0114	0.0216	pCi/g					
Europium-152	U	0.00404	+/-0.0289	0.0252	+/-0.0283	0.0519	pCi/g					
Europium-154	U	-0.038	+/-0.0336	0.025	+/-0.033	0.0529	pCi/g					
Europium-155	U	0.0454	+/-0.0348	0.0318	+/-0.0341	0.065	pCi/g					
Lead-212		0.492	+/-0.0361	0.0149	+/-0.0354	0.0306	pCi/g					
Lead-214		0.793	+/-0.0535	0.0172	+/-0.0525	0.0355	pCi/g					
Manganese-54	U	0.0129	+/-0.0123	0.00949	+/-0.012	0.0198	pCi/g					
Niobium-94	U	-0.00579	+/-0.0125	0.00856	+/-0.0122	0.0178	pCi/g					
Potassium-40		9.14	+/-0.466	0.0864	+/-0.457	0.183	pCi/g					
Radium-226		0.603	+/-0.0535	0.0172	+/-0.0524	0.0356	pCi/g					
Silver-108m	U	0.0022	+/-0.00952	0.00817	+/-0.00933	0.0169	pCi/g					
Thallium-208		0.153	+/-0.026	0.00939	+/-0.0255	0.0195	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.00359	+/-0.0041	0.00331	+/-0.0041	0.00687	pCi/g		EXW1 11/04/05	2351	476640	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	0.0677	+/-1.64	1.38	+/-1.64	2.82	pCi/g		MXP1 11/09/05	1851	476952	4
Solid Preparation												
Laboratory Composite - CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	10/17/05	0931	471599
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	AXP2	10/13/05	1818	471597
GL-RAD-A-026	Laboratory sample composite				471596

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Certificate of Analysis

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID: 5502-0000-015-C-2C-03
Sample ID: 147673003

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 905.0 Modified
4	EPA 906.0 Modified
5	GL-RAD-A-026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	104	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID:	5502–0000–015–C–3C–04	Project:	YANK01204
Sample ID:	147673004	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	29–SEP–05		
Receive Date:	12–OCT–05		
Collector:	Client		
Moisture:	5.39%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)												
Actinium–228		0.448	+/–0.090	0.0263	+/–0.0882	0.0549	pCi/g		MJH1 10/26/05	1945	472777	1
Americium–241	U	–0.00534	+/–0.0316	0.0286	+/–0.031	0.0583	pCi/g					
Bismuth–212		0.384	+/–0.147	0.0614	+/–0.144	0.127	pCi/g					
Bismuth–214		0.547	+/–0.0754	0.0154	+/–0.0739	0.0318	pCi/g					
Cesium–134	UUI	0.00	+/–0.016	0.00949	+/–0.0157	0.0197	pCi/g					
Cesium–137	U	–0.00697	+/–0.00993	0.00807	+/–0.00973	0.0167	pCi/g					
Cobalt–60	U	–0.00648	+/–0.0207	0.00832	+/–0.0202	0.0175	pCi/g					
Europium–152	U	–0.00585	+/–0.0255	0.0215	+/–0.025	0.0441	pCi/g					
Europium–154	U	–0.0107	+/–0.032	0.0257	+/–0.0314	0.0538	pCi/g					
Europium–155	U	0.00566	+/–0.029	0.0254	+/–0.0284	0.0519	pCi/g					
Lead–212		0.490	+/–0.0511	0.013	+/–0.0501	0.0265	pCi/g					
Lead–214		0.671	+/–0.0772	0.0153	+/–0.0757	0.0314	pCi/g					
Manganese–54	U	0.0126	+/–0.012	0.00907	+/–0.0118	0.0188	pCi/g					
Niobium–94	U	0.0129	+/–0.00929	0.00812	+/–0.0091	0.0168	pCi/g					
Potassium–40		8.09	+/–0.636	0.073	+/–0.623	0.155	pCi/g					
Radium–226		0.547	+/–0.0754	0.0154	+/–0.0739	0.0318	pCi/g					
Silver–108m	U	–0.00138	+/–0.00887	0.0073	+/–0.00869	0.0151	pCi/g					
Thallium–208		0.136	+/–0.0237	0.00814	+/–0.0232	0.0168	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid–HTD2,ALL2 (CT)												
Strontium–90	U	0.00213	+/–0.00375	0.00307	+/–0.00375	0.00638	pCi/g		EXW1 11/04/05	2351	476640	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)												
Tritium	U	–0.261	+/–1.72	1.45	+/–1.72	2.97	pCi/g		MXP1 11/09/05	2024	476952	4
Solid Preparation												
Laboratory Composite – CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	10/17/05	0931	471599
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	AXP2	10/13/05	1818	471597
GL–RAD–A–026	Laboratory sample composite				471596

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID: 5502-0000-015-C-3C-04
Sample ID: 147673004

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 905.0 Modified
4	EPA 906.0 Modified
5	GL-RAD-A-026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	94	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID:	5502-0000-015-C-3C-05	Project:	YANK01204
Sample ID:	147673005	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	29-SEP-05		
Receive Date:	12-OCT-05		
Collector:	Client		
Moisture:	6.47%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.431	+/-0.141	0.0463	+/-0.138	0.0981	pCi/g		MJH1 10/26/05	2131	472777	1
Americium-241	U	-0.000874	+/-0.0204	0.0161	+/-0.0199	0.0331	pCi/g					
Bismuth-212		0.385	+/-0.305	0.0962	+/-0.299	0.203	pCi/g					
Bismuth-214		0.683	+/-0.0929	0.0223	+/-0.0911	0.0468	pCi/g					
Cesium-134	U	0.0272	+/-0.0256	0.0161	+/-0.0251	0.0337	pCi/g					
Cesium-137	U	0.00122	+/-0.0167	0.0143	+/-0.0163	0.030	pCi/g					
Cobalt-60	U	-0.0116	+/-0.0153	0.012	+/-0.015	0.026	pCi/g					
Europium-152	U	-0.017	+/-0.0364	0.030	+/-0.0356	0.0623	pCi/g					
Europium-154	U	-0.0241	+/-0.0481	0.0367	+/-0.0472	0.0791	pCi/g					
Europium-155	U	0.0498	+/-0.0476	0.026	+/-0.0466	0.0535	pCi/g					
Lead-212		0.465	+/-0.0544	0.0156	+/-0.0533	0.0323	pCi/g					
Lead-214		0.708	+/-0.0888	0.0215	+/-0.087	0.0446	pCi/g					
Manganese-54	U	-0.00456	+/-0.0164	0.0135	+/-0.0161	0.0285	pCi/g					
Niobium-94	U	0.00583	+/-0.0146	0.0127	+/-0.0144	0.0267	pCi/g					
Potassium-40		7.81	+/-0.805	0.123	+/-0.789	0.267	pCi/g					
Radium-226		0.683	+/-0.0929	0.0223	+/-0.0911	0.0468	pCi/g					
Silver-108m	U	-0.00739	+/-0.0143	0.0102	+/-0.014	0.0212	pCi/g					
Thallium-208		0.158	+/-0.0383	0.0119	+/-0.0376	0.0249	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.00358	+/-0.00224	0.00196	+/-0.00225	0.00411	pCi/g		EXW1 11/08/05	1137	476640	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	-0.826	+/-1.65	1.40	+/-1.65	2.87	pCi/g		MXP1 11/09/05	2158	476952	4
Solid Preparation												
Laboratory Composite - CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	10/17/05	0931	471599
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	AXP2	10/13/05	1818	471597
GL-RAD-A-026	Laboratory sample composite				471596

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID: 5502–0000–015–C–3C–05
Sample ID: 147673005

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 905.0 Modified
4	EPA 906.0 Modified
5	GL–RAD–A–026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	90	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID:	5502-0000-016-C-1C-01	Project:	YANK01204
Sample ID:	147673006	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	29-SEP-05		
Receive Date:	12-OCT-05		
Collector:	Client		
Moisture:	5.67%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.465	+/-0.159	0.0643	+/-0.156	0.138	pCi/g		MJH1 10/27/05	0549	472777	1
Americium-241	U	0.0255	+/-0.0379	0.0298	+/-0.0372	0.0611	pCi/g					
Bismuth-212		0.535	+/-0.285	0.148	+/-0.280	0.314	pCi/g					
Bismuth-214		1.25	+/-0.159	0.0358	+/-0.156	0.0757	pCi/g					
Cesium-134	U	0.0164	+/-0.0299	0.0233	+/-0.0293	0.0494	pCi/g					
Cesium-137	U	0.00644	+/-0.0261	0.0219	+/-0.0255	0.0461	pCi/g					
Cobalt-60	U	-0.0153	+/-0.0288	0.0185	+/-0.0282	0.0406	pCi/g					
Europium-152	U	0.000815	+/-0.0655	0.0487	+/-0.0642	0.102	pCi/g					
Europium-154	U	-0.03	+/-0.0721	0.057	+/-0.0707	0.124	pCi/g					
Europium-155	U	0.037	+/-0.0571	0.0498	+/-0.056	0.102	pCi/g					
Lead-212		0.506	+/-0.0802	0.0284	+/-0.0786	0.0588	pCi/g					
Lead-214		1.32	+/-0.168	0.0339	+/-0.165	0.0709	pCi/g					
Manganese-54	U	-0.000961	+/-0.027	0.0198	+/-0.0265	0.0422	pCi/g					
Niobium-94	U	0.00914	+/-0.0235	0.0199	+/-0.0231	0.0418	pCi/g					
Potassium-40		8.58	+/-0.910	0.144	+/-0.892	0.325	pCi/g					
Radium-226		1.25	+/-0.159	0.0358	+/-0.156	0.0757	pCi/g					
Silver-108m	U	0.000793	+/-0.0206	0.0174	+/-0.0201	0.0365	pCi/g					
Thallium-208		0.181	+/-0.0494	0.0238	+/-0.0484	0.0498	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.00221	+/-0.00387	0.00386	+/-0.00387	0.0081	pCi/g		EXW1 11/07/05	1537	476640	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	-0.388	+/-1.65	1.39	+/-1.65	2.86	pCi/g		MXP1 11/09/05	2332	476952	4
Solid Preparation												
Laboratory Composite - CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	10/17/05	0931	471599
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	AXP2	10/13/05	1818	471597
GL-RAD-A-026	Laboratory sample composite				471596

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID: 5502–0000–016–C–1C–01
Sample ID: 147673006

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 905.0 Modified
4	EPA 906.0 Modified
5	GL–RAD–A–026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	77	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID:	5502–0000–016–C–1C–02	Project:	YANK01204
Sample ID:	147673007	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	29–SEP–05		
Receive Date:	12–OCT–05		
Collector:	Client		
Moisture:	5.31%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)												
Actinium–228		0.610	+/–0.196	0.0761	+/–0.192	0.162	pCi/g		MJH1 10/27/05	0644	472777	1
Americium–241	U	0.00731	+/–0.0375	0.0332	+/–0.0367	0.0681	pCi/g					
Bismuth–212	UUI	0.00	+/–0.512	0.184	+/–0.502	0.388	pCi/g					
Bismuth–214		0.856	+/–0.147	0.0428	+/–0.144	0.0897	pCi/g					
Cesium–134	U	0.0422	+/–0.0613	0.0291	+/–0.060	0.0611	pCi/g					
Cesium–137	U	–0.00292	+/–0.0292	0.0246	+/–0.0286	0.0515	pCi/g					
Cobalt–60	U	–0.00528	+/–0.0311	0.0255	+/–0.0305	0.0546	pCi/g					
Europium–152	U	0.00192	+/–0.0712	0.0603	+/–0.0698	0.125	pCi/g					
Europium–154	U	–0.0527	+/–0.0838	0.0659	+/–0.0821	0.142	pCi/g					
Europium–155	U	0.000286	+/–0.0636	0.0544	+/–0.0624	0.112	pCi/g					
Lead–212		0.506	+/–0.0782	0.0318	+/–0.0766	0.0658	pCi/g					
Lead–214		1.02	+/–0.143	0.0424	+/–0.140	0.0881	pCi/g					
Manganese–54	U	0.00875	+/–0.032	0.027	+/–0.0314	0.0566	pCi/g					
Niobium–94	U	0.0225	+/–0.0257	0.0227	+/–0.0252	0.0475	pCi/g					
Potassium–40		7.66	+/–1.04	0.226	+/–1.02	0.489	pCi/g					
Radium–226		0.856	+/–0.147	0.0428	+/–0.144	0.0897	pCi/g					
Silver–108m	U	–0.0242	+/–0.0242	0.0189	+/–0.0237	0.0396	pCi/g					
Thallium–208		0.160	+/–0.0654	0.0226	+/–0.0641	0.0474	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid–HTD2,ALL2 (CT)												
Strontium–90	U	–0.00164	+/–0.00278	0.00302	+/–0.00278	0.00635	pCi/g		EXW1 11/07/05	1537	476640	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)												
Tritium	U	0.631	+/–1.66	1.38	+/–1.66	2.82	pCi/g		MXP1 11/10/05	0105	476952	4
Solid Preparation												
Laboratory Composite – CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	10/17/05	0932	471599
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	AXP2	10/13/05	1818	471597
GL–RAD–A–026	Laboratory sample composite				471596

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Certificate of Analysis

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Address : Haddam Neck Plant
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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID: 5502-0000-016-C-1C-02
Sample ID: 147673007

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 905.0 Modified
4	EPA 906.0 Modified
5	GL-RAD-A-026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	91	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID:	5502–0000–016–C–3C–03	Project:	YANK01204
Sample ID:	147673008	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	29–SEP–05		
Receive Date:	12–OCT–05		
Collector:	Client		
Moisture:	6.2%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)												
Actinium–228		0.454	+/–0.169	0.0651	+/–0.165	0.140	pCi/g		MJH1 10/29/05	1352	472777	1
Americium–241	U	–0.0116	+/–0.118	0.0713	+/–0.116	0.147	pCi/g					
Bismuth–212	UUI	0.00	+/–0.184	0.174	+/–0.180	0.367	pCi/g					
Bismuth–214		0.978	+/–0.150	0.0355	+/–0.147	0.075	pCi/g					
Cesium–134	U	0.00552	+/–0.0269	0.0223	+/–0.0263	0.0473	pCi/g					
Cesium–137	U	0.0175	+/–0.0229	0.0179	+/–0.0225	0.0381	pCi/g					
Cobalt–60	U	0.00196	+/–0.0217	0.0179	+/–0.0213	0.0395	pCi/g					
Europium–152	U	–0.0199	+/–0.0565	0.0457	+/–0.0554	0.0957	pCi/g					
Europium–154	U	0.0623	+/–0.0497	0.0571	+/–0.0487	0.124	pCi/g					
Europium–155	U	0.0236	+/–0.0628	0.0527	+/–0.0615	0.109	pCi/g					
Lead–212		0.469	+/–0.0727	0.0286	+/–0.0713	0.0592	pCi/g					
Lead–214		1.22	+/–0.149	0.0332	+/–0.146	0.0695	pCi/g					
Manganese–54	U	–0.0116	+/–0.0233	0.0181	+/–0.0228	0.0387	pCi/g					
Niobium–94	U	0.0017	+/–0.0205	0.017	+/–0.0201	0.0361	pCi/g					
Potassium–40		8.37	+/–1.05	0.184	+/–1.03	0.404	pCi/g					
Radium–226		0.978	+/–0.150	0.0355	+/–0.147	0.075	pCi/g					
Silver–108m	U	0.00993	+/–0.0195	0.0163	+/–0.0191	0.0344	pCi/g					
Thallium–208		0.147	+/–0.0415	0.0191	+/–0.0406	0.0404	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid–HTD2,ALL2 (CT)												
Strontium–90	U	0.00208	+/–0.00389	0.0039	+/–0.00389	0.00818	pCi/g		EXW1 11/07/05	1538	476640	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)												
Tritium	U	–0.247	+/–1.63	1.37	+/–1.63	2.81	pCi/g		MXP1 11/10/05	0239	476952	4
Solid Preparation												
Laboratory Composite – CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	10/17/05	0932	471599
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	AXP2	10/13/05	1818	471597
GL–RAD–A–026	Laboratory sample composite				471596

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Certificate of Analysis

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Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID: 5502-0000-016-C-3C-03
Sample ID: 147673008

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 905.0 Modified
4	EPA 906.0 Modified
5	GL-RAD-A-026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	74	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

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362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID:	5502–0000–016–C–4C–04	Project:	YANK01204
Sample ID:	147673009	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	29–SEP–05		
Receive Date:	12–OCT–05		
Collector:	Client		
Moisture:	6.14%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)												
Actinium–228		0.486	+/–0.156	0.060	+/–0.153	0.130	pCi/g		MJH1 10/29/05	1352	472777	1
Americium–241	U	0.0192	+/–0.106	0.088	+/–0.104	0.183	pCi/g					
Bismuth–212		0.383	+/–0.243	0.137	+/–0.239	0.292	pCi/g					
Bismuth–214		0.596	+/–0.110	0.0269	+/–0.108	0.0578	pCi/g					
Cesium–134	U	0.0195	+/–0.0242	0.0191	+/–0.0237	0.0409	pCi/g					
Cesium–137	U	0.0102	+/–0.0184	0.0144	+/–0.018	0.031	pCi/g					
Cobalt–60	U	0.000348	+/–0.0198	0.0163	+/–0.0194	0.0362	pCi/g					
Europium–152	U	–0.00883	+/–0.0498	0.0399	+/–0.0488	0.0841	pCi/g					
Europium–154	U	–0.0149	+/–0.0587	0.0467	+/–0.0575	0.103	pCi/g					
Europium–155	U	0.0245	+/–0.054	0.0483	+/–0.0529	0.100	pCi/g					
Lead–212		0.509	+/–0.0741	0.0251	+/–0.0727	0.0523	pCi/g					
Lead–214		0.672	+/–0.0999	0.0273	+/–0.0979	0.0577	pCi/g					
Manganese–54	U	–0.0109	+/–0.0208	0.0159	+/–0.0204	0.0344	pCi/g					
Niobium–94	U	–0.00602	+/–0.0157	0.0124	+/–0.0154	0.0268	pCi/g					
Potassium–40		8.65	+/–0.965	0.127	+/–0.946	0.291	pCi/g					
Radium–226		0.596	+/–0.110	0.0269	+/–0.108	0.0578	pCi/g					
Silver–108m	U	–0.0107	+/–0.0166	0.0135	+/–0.0162	0.0288	pCi/g					
Thallium–208		0.156	+/–0.0413	0.0153	+/–0.0405	0.0327	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid–HTD2,ALL2 (CT)												
Strontium–90	U	–0.00278	+/–0.00311	0.00345	+/–0.00311	0.00722	pCi/g		EXW1 11/07/05	1549	476640	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)												
Tritium	U	–0.497	+/–1.56	1.32	+/–1.56	2.70	pCi/g		MXP1 11/10/05	0450	476952	4
Solid Preparation												
Laboratory Composite – CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	10/17/05	0932	471599
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	AXP2	10/13/05	1818	471597
GL–RAD–A–026	Laboratory sample composite				471596

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Certificate of Analysis

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362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID: 5502-0000-016-C-4C-04
Sample ID: 147673009

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 905.0 Modified
4	EPA 906.0 Modified
5	GL-RAD-A-026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	86	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID:	5502-0000-017-C-1C-01	Project:	YANK01204
Sample ID:	147673010	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	28-SEP-05		
Receive Date:	12-OCT-05		
Collector:	Client		
Moisture:	5.6%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.497	+/-0.194	0.0537	+/-0.190	0.117	pCi/g		MJH1 10/29/05	1353	472777	1
Americium-241	U	0.0545	+/-0.0765	0.0662	+/-0.075	0.137	pCi/g					
Bismuth-212		0.326	+/-0.242	0.148	+/-0.237	0.315	pCi/g					
Bismuth-214		0.531	+/-0.0958	0.0338	+/-0.0939	0.0716	pCi/g					
Cesium-134	U	0.0314	+/-0.0391	0.0215	+/-0.0383	0.0459	pCi/g					
Cesium-137	U	0.00587	+/-0.0213	0.0177	+/-0.0209	0.0377	pCi/g					
Cobalt-60	U	0.0209	+/-0.0192	0.018	+/-0.0188	0.0398	pCi/g					
Europium-152	U	-0.00148	+/-0.0532	0.0446	+/-0.0521	0.0939	pCi/g					
Europium-154	U	0.0433	+/-0.0613	0.0543	+/-0.0601	0.119	pCi/g					
Europium-155	U	0.0573	+/-0.0562	0.0484	+/-0.0551	0.100	pCi/g					
Lead-212		0.438	+/-0.0667	0.0253	+/-0.0654	0.0527	pCi/g					
Lead-214		0.553	+/-0.0866	0.0285	+/-0.0848	0.0604	pCi/g					
Manganese-54	U	0.0206	+/-0.0252	0.0194	+/-0.0247	0.0414	pCi/g					
Niobium-94	U	-0.0029	+/-0.0212	0.0169	+/-0.0208	0.036	pCi/g					
Potassium-40		7.65	+/-0.943	0.150	+/-0.924	0.338	pCi/g					
Radium-226		0.531	+/-0.0958	0.0338	+/-0.0939	0.0716	pCi/g					
Silver-108m	U	-0.0069	+/-0.0187	0.0152	+/-0.0184	0.0321	pCi/g					
Thallium-208		0.143	+/-0.0408	0.0191	+/-0.040	0.0403	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.000115	+/-0.00327	0.0034	+/-0.00327	0.00713	pCi/g		EXW1 11/07/05	1549	476640	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	2.05	+/-1.65	1.33	+/-1.65	2.73	pCi/g		MXP1 11/10/05	0624	476952	4
Solid Preparation												
Laboratory Composite - CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	10/17/05	0932	471599
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	AXP2	10/13/05	1818	471597
GL-RAD-A-026	Laboratory sample composite				471596

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID: 5502–0000–017–C–1C–01
Sample ID: 147673010

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 905.0 Modified
4	EPA 906.0 Modified
5	GL–RAD–A–026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	91	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID:	5502–0000–017–C–1C–02	Project:	YANK01204
Sample ID:	147673011	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	28–SEP–05		
Receive Date:	12–OCT–05		
Collector:	Client		
Moisture:	6.67%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)												
Actinium–228		0.576	+/–0.182	0.0699	+/–0.178	0.153	pCi/g		MJH1 10/29/05	1353	472777	1
Americium–241	U	0.00776	+/–0.0305	0.0258	+/–0.0299	0.0534	pCi/g					
Bismuth–212	U	0.309	+/–0.374	0.175	+/–0.367	0.375	pCi/g					
Bismuth–214		0.611	+/–0.140	0.0383	+/–0.137	0.0817	pCi/g					
Cesium–134	UUI	0.00	+/–0.0456	0.0236	+/–0.0447	0.051	pCi/g					
Cesium–137	U	0.019	+/–0.0266	0.0237	+/–0.0261	0.0503	pCi/g					
Cobalt–60	U	–0.0111	+/–0.0261	0.0207	+/–0.0255	0.0463	pCi/g					
Europium–152	U	–0.0496	+/–0.0561	0.0435	+/–0.055	0.0923	pCi/g					
Europium–154	U	0.0128	+/–0.0789	0.0643	+/–0.0773	0.142	pCi/g					
Europium–155	U	0.0821	+/–0.0665	0.0418	+/–0.0652	0.0869	pCi/g					
Lead–212		0.478	+/–0.0698	0.0232	+/–0.0684	0.0489	pCi/g					
Lead–214		0.608	+/–0.110	0.036	+/–0.108	0.0759	pCi/g					
Manganese–54	U	0.00686	+/–0.0277	0.0235	+/–0.0271	0.0504	pCi/g					
Niobium–94	U	0.0144	+/–0.0231	0.0203	+/–0.0226	0.0434	pCi/g					
Potassium–40		8.87	+/–1.12	0.190	+/–1.10	0.430	pCi/g					
Radium–226		0.611	+/–0.140	0.0383	+/–0.137	0.0817	pCi/g					
Silver–108m	U	0.0093	+/–0.0199	0.0168	+/–0.0195	0.0357	pCi/g					
Thallium–208		0.196	+/–0.0531	0.0191	+/–0.052	0.0409	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid–HTD2,ALL2 (CT)												
Strontium–90	U	–0.00055	+/–0.00285	0.00301	+/–0.00285	0.00631	pCi/g		EXW1 11/07/05	1552	476640	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)												
Tritium	U	0.262	+/–1.60	1.33	+/–1.60	2.74	pCi/g		MXP1 11/10/05	0758	476952	4
Solid Preparation												
Laboratory Composite – CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	10/17/05	0932	471599
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	AXP2	10/13/05	1818	471597
GL–RAD–A–026	Laboratory sample composite				471596

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID: 5502–0000–017–C–1C–02
Sample ID: 147673011

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 905.0 Modified
4	EPA 906.0 Modified
5	GL–RAD–A–026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	105	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID:	5502–0000–017–C–2C–03	Project:	YANK01204
Sample ID:	147673012	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	28–SEP–05		
Receive Date:	12–OCT–05		
Collector:	Client		
Moisture:	6.06%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)												
Actinium–228		0.645	+/–0.130	0.0481	+/–0.127	0.103	pCi/g		MJH1 10/30/05	1846	472777	1
Americium–241	U	–0.0182	+/–0.110	0.0806	+/–0.108	0.167	pCi/g					
Bismuth–212	UUI	0.00	+/–0.226	0.102	+/–0.222	0.218	pCi/g					
Bismuth–214		0.641	+/–0.090	0.028	+/–0.0882	0.0588	pCi/g					
Cesium–134	UUI	0.00	+/–0.041	0.0176	+/–0.0401	0.0372	pCi/g					
Cesium–137	U	0.0119	+/–0.0165	0.0141	+/–0.0162	0.0298	pCi/g					
Cobalt–60	U	0.00727	+/–0.0174	0.0146	+/–0.017	0.0316	pCi/g					
Europium–152	U	–0.00754	+/–0.0415	0.0351	+/–0.0407	0.0737	pCi/g					
Europium–154	U	0.0386	+/–0.0524	0.0451	+/–0.0513	0.0969	pCi/g					
Europium–155	U	0.0235	+/–0.0531	0.0467	+/–0.0521	0.0965	pCi/g					
Lead–212		0.556	+/–0.0543	0.0231	+/–0.0532	0.0479	pCi/g					
Lead–214		0.783	+/–0.0793	0.0258	+/–0.0777	0.0541	pCi/g					
Manganese–54	U	0.0174	+/–0.0189	0.0126	+/–0.0186	0.0269	pCi/g					
Niobium–94	U	–0.0136	+/–0.0166	0.0126	+/–0.0163	0.0266	pCi/g					
Potassium–40		9.37	+/–0.653	0.125	+/–0.640	0.274	pCi/g					
Radium–226		0.641	+/–0.090	0.028	+/–0.0882	0.0588	pCi/g					
Silver–108m	U	–0.00547	+/–0.0149	0.0122	+/–0.0146	0.0257	pCi/g					
Thallium–208		0.153	+/–0.0408	0.0138	+/–0.040	0.0291	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid–HTD2,ALL2 (CT)												
Strontium–90	U	–5.340E–05	+/–0.00251	0.00256	+/–0.00251	0.00537	pCi/g		EXW1 11/07/05	1552	476640	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)												
Tritium	U	–1.08	+/–1.33	1.14	+/–1.33	2.34	pCi/g		MXP1 11/10/05	0931	476952	4
Solid Preparation												
Laboratory Composite – CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	10/17/05	0932	471599
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	AXP2	10/13/05	1818	471597
GL–RAD–A–026	Laboratory sample composite				471596

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Certificate of Analysis

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID: 5502-0000-017-C-2C-03
Sample ID: 147673012

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 905.0 Modified
4	EPA 906.0 Modified
5	GL-RAD-A-026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	102	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID:	5502–0000–017–C–4C–04	Project:	YANK01204
Sample ID:	147673013	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	28–SEP–05		
Receive Date:	12–OCT–05		
Collector:	Client		
Moisture:	4.81%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)												
Actinium–228		0.502	+/–0.144	0.0514	+/–0.141	0.111	pCi/g		MJH1 10/30/05	2338	472777	1
Americium–241	U	0.00954	+/–0.0312	0.0239	+/–0.0306	0.0491	pCi/g					
Bismuth–212	UUI	0.00	+/–0.245	0.125	+/–0.240	0.265	pCi/g					
Bismuth–214		0.688	+/–0.0987	0.0293	+/–0.0967	0.0619	pCi/g					
Cesium–134	U	0.0158	+/–0.0234	0.020	+/–0.0229	0.0423	pCi/g					
Cesium–137	U	–0.00538	+/–0.0195	0.0157	+/–0.0192	0.0334	pCi/g					
Cobalt–60	U	–0.0092	+/–0.0181	0.0139	+/–0.0178	0.0309	pCi/g					
Europium–152	U	–0.041	+/–0.0538	0.044	+/–0.0527	0.0917	pCi/g					
Europium–154	U	0.0264	+/–0.0613	0.0527	+/–0.0601	0.114	pCi/g					
Europium–155	U	0.0203	+/–0.0486	0.0417	+/–0.0476	0.0856	pCi/g					
Lead–212		0.493	+/–0.0757	0.0253	+/–0.0742	0.0523	pCi/g					
Lead–214		0.705	+/–0.112	0.0332	+/–0.109	0.069	pCi/g					
Manganese–54	U	–0.00573	+/–0.0207	0.0172	+/–0.0203	0.0366	pCi/g					
Niobium–94	U	–0.0232	+/–0.0191	0.0141	+/–0.0187	0.0299	pCi/g					
Potassium–40		9.05	+/–0.870	0.135	+/–0.853	0.300	pCi/g					
Radium–226		0.688	+/–0.0987	0.0293	+/–0.0967	0.0619	pCi/g					
Silver–108m	U	–0.00582	+/–0.0183	0.0151	+/–0.0179	0.0316	pCi/g					
Thallium–208		0.128	+/–0.0552	0.0171	+/–0.0541	0.036	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid–HTD2,ALL2 (CT)												
Strontium–90	U	–0.000277	+/–0.0027	0.00278	+/–0.0027	0.00584	pCi/g		EXW1 11/07/05	1553	476640	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)												
Tritium	U	–0.0663	+/–1.61	1.35	+/–1.61	2.77	pCi/g		MXP1 11/10/05	1105	476952	4
Solid Preparation												
Laboratory Composite – CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	10/17/05	0932	471599
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	AXP2	10/13/05	1818	471597
GL–RAD–A–026	Laboratory sample composite				471596

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID: 5502–0000–017–C–4C–04
Sample ID: 147673013

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 905.0 Modified
4	EPA 906.0 Modified
5	GL–RAD–A–026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	94	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID:	5502-0000-017-C-4C-05	Project:	YANK01204
Sample ID:	147673014	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	28-SEP-05		
Receive Date:	12-OCT-05		
Collector:	Client		
Moisture:	4.94%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.324	+/-0.102	0.0469	+/-0.0996	0.0985	pCi/g		MJH1 10/30/05	2339	472777	1
Americium-241	U	-0.0769	+/-0.0912	0.0657	+/-0.0894	0.136	pCi/g					
Bismuth-212	UUI	0.00	+/-0.219	0.0954	+/-0.215	0.200	pCi/g					
Bismuth-214		0.503	+/-0.0644	0.0244	+/-0.0632	0.0508	pCi/g					
Cesium-134	U	0.0252	+/-0.0249	0.0144	+/-0.0244	0.0301	pCi/g					
Cesium-137	U	0.000972	+/-0.0141	0.0115	+/-0.0138	0.0243	pCi/g					
Cobalt-60	U	0.0095	+/-0.0138	0.0118	+/-0.0135	0.0255	pCi/g					
Europium-152	U	0.00896	+/-0.0387	0.0337	+/-0.0379	0.070	pCi/g					
Europium-154	U	0.0687	+/-0.0811	0.0358	+/-0.0795	0.0765	pCi/g					
Europium-155	U	0.0377	+/-0.044	0.0397	+/-0.0431	0.0818	pCi/g					
Lead-212		0.431	+/-0.0418	0.0196	+/-0.041	0.0405	pCi/g					
Lead-214		0.666	+/-0.0681	0.0223	+/-0.0668	0.0464	pCi/g					
Manganese-54	UUI	0.00	+/-0.0269	0.0119	+/-0.0264	0.0251	pCi/g					
Niobium-94	U	0.0178	+/-0.013	0.0115	+/-0.0128	0.024	pCi/g					
Potassium-40		9.73	+/-0.612	0.113	+/-0.600	0.243	pCi/g					
Radium-226		0.503	+/-0.0644	0.0244	+/-0.0632	0.0508	pCi/g					
Silver-108m	U	-0.00247	+/-0.0121	0.0101	+/-0.0119	0.0212	pCi/g					
Thallium-208		0.143	+/-0.0287	0.0112	+/-0.0281	0.0236	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.00118	+/-0.00219	0.00217	+/-0.00219	0.00462	pCi/g		EXW1 11/07/05	1557	476640	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	-1.12	+/-1.57	1.35	+/-1.57	2.76	pCi/g		MXP1 11/10/05	1238	476952	4
Solid Preparation												
Laboratory Composite - CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	10/17/05	0932	471599
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	AXP2	10/13/05	1818	471597
GL-RAD-A-026	Laboratory sample composite				471596

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Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID: 5502–0000–017–C–4C–05
Sample ID: 147673014

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 905.0 Modified
4	EPA 906.0 Modified
5	GL–RAD–A–026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	107	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID:	5502-0000-018-C-1C-01	Project:	YANK01204
Sample ID:	147673015	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	28-SEP-05		
Receive Date:	12-OCT-05		
Collector:	Client		
Moisture:	5.91%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.301	+/-0.257	0.0686	+/-0.252	0.142	pCi/g		MJH1 11/08/05	2223	472777	1
Americium-241	U	-0.00803	+/-0.0709	0.0502	+/-0.0695	0.103	pCi/g					
Bismuth-212	UUI	0.00	+/-0.217	0.171	+/-0.213	0.353	pCi/g					
Bismuth-214		0.262	+/-0.126	0.0395	+/-0.123	0.0811	pCi/g					
Cesium-134	UUI	0.00	+/-0.0328	0.0215	+/-0.0322	0.0445	pCi/g					
Cesium-137	U	0.011	+/-0.0241	0.0188	+/-0.0236	0.0389	pCi/g					
Cobalt-60	U	-0.0206	+/-0.0284	0.0211	+/-0.0278	0.0443	pCi/g					
Europium-152	U	-0.0461	+/-0.0609	0.0444	+/-0.0597	0.0909	pCi/g					
Europium-154	U	-0.0238	+/-0.0816	0.0627	+/-0.080	0.131	pCi/g					
Europium-155	U	0.000617	+/-0.0642	0.0456	+/-0.0629	0.093	pCi/g					
Lead-212		0.421	+/-0.0834	0.0245	+/-0.0817	0.0501	pCi/g					
Lead-214		0.444	+/-0.116	0.0333	+/-0.114	0.0682	pCi/g					
Manganese-54	U	0.028	+/-0.0282	0.0222	+/-0.0277	0.0458	pCi/g					
Niobium-94	U	0.000948	+/-0.0241	0.0186	+/-0.0236	0.0382	pCi/g					
Potassium-40		7.93	+/-1.05	0.215	+/-1.03	0.451	pCi/g					
Radium-226		0.262	+/-0.126	0.0395	+/-0.123	0.0811	pCi/g					
Silver-108m	U	0.00459	+/-0.0208	0.0155	+/-0.0204	0.0319	pCi/g					
Thallium-208		0.137	+/-0.0608	0.0175	+/-0.0596	0.0361	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	-0.0013	+/-0.00226	0.00247	+/-0.00226	0.00522	pCi/g		EXW1 11/07/05	1642	476640	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	-0.348	+/-1.57	1.33	+/-1.57	2.72	pCi/g		MXP1 11/10/05	1412	476952	4
Solid Preparation												
Laboratory Composite - CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	10/17/05	0932	471599
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	AXP2	10/13/05	1818	471597
GL-RAD-A-026	Laboratory sample composite				471596

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID: 5502-0000-018-C-1C-01
Sample ID: 147673015

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 905.0 Modified
4	EPA 906.0 Modified
5	GL-RAD-A-026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	101	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID:	5502–0000–018–C–2C–02	Project:	YANK01204
Sample ID:	147673016	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	28–SEP–05		
Receive Date:	12–OCT–05		
Collector:	Client		
Moisture:	6.15%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)												
Actinium–228		0.436	+/–0.113	0.0498	+/–0.111	0.106	pCi/g		MJH1 10/31/05	0731	472777	1
Americium–241	U	–0.0243	+/–0.110	0.0799	+/–0.108	0.166	pCi/g					
Bismuth–212		0.282	+/–0.209	0.115	+/–0.205	0.243	pCi/g					
Bismuth–214		0.614	+/–0.0808	0.0274	+/–0.0792	0.0577	pCi/g					
Cesium–134	U	0.0281	+/–0.0288	0.0182	+/–0.0283	0.0383	pCi/g					
Cesium–137	U	0.00428	+/–0.0177	0.0128	+/–0.0174	0.0274	pCi/g					
Cobalt–60	U	0.0139	+/–0.0258	0.0145	+/–0.0253	0.0316	pCi/g					
Europium–152	U	–0.0125	+/–0.043	0.0361	+/–0.0422	0.0757	pCi/g					
Europium–154	U	–0.0245	+/–0.0568	0.0437	+/–0.0557	0.0941	pCi/g					
Europium–155	U	0.0715	+/–0.0527	0.0478	+/–0.0517	0.0988	pCi/g					
Lead–212		0.524	+/–0.0533	0.023	+/–0.0522	0.0477	pCi/g					
Lead–214		0.612	+/–0.088	0.0286	+/–0.0862	0.0597	pCi/g					
Manganese–54	U	–0.00662	+/–0.0179	0.0124	+/–0.0175	0.0266	pCi/g					
Niobium–94	U	–0.00144	+/–0.017	0.0135	+/–0.0166	0.0285	pCi/g					
Potassium–40		9.44	+/–0.697	0.141	+/–0.683	0.307	pCi/g					
Radium–226		0.614	+/–0.0808	0.0274	+/–0.0792	0.0577	pCi/g					
Silver–108m	U	0.0102	+/–0.0149	0.0126	+/–0.0146	0.0265	pCi/g					
Thallium–208		0.155	+/–0.0414	0.0144	+/–0.0406	0.0304	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid–HTD2,ALL2 (CT)												
Strontium–90	U	–0.00154	+/–0.00275	0.00299	+/–0.00275	0.00628	pCi/g		EXW1 11/07/05	1642	476640	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)												
Tritium	U	0.688	+/–1.73	1.42	+/–1.73	2.97	pCi/g		MXP1 11/07/05	2134	476953	4
Solid Preparation												
Laboratory Composite – CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	10/17/05	0932	471599
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	AXP2	10/13/05	1818	471597
GL–RAD–A–026	Laboratory sample composite				471596

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Certificate of Analysis

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID: 5502–0000–018–C–2C–02
Sample ID: 147673016

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 905.0 Modified
4	EPA 906.0 Modified
5	GL–RAD–A–026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	95	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID:	5502-0000-018-C-5C-03	Project:	YANK01204
Sample ID:	147673017	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	28-SEP-05		
Receive Date:	12-OCT-05		
Collector:	Client		
Moisture:	5.74%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.498	+/-0.138	0.0571	+/-0.136	0.123	pCi/g		MJH1 11/08/05	1517	472777	1
Americium-241	U	0.00789	+/-0.0195	0.0168	+/-0.0191	0.0348	pCi/g					
Bismuth-212	U	0.270	+/-0.192	0.127	+/-0.188	0.272	pCi/g					
Bismuth-214		0.504	+/-0.0908	0.0282	+/-0.089	0.060	pCi/g					
Cesium-134	U	0.0218	+/-0.0217	0.0191	+/-0.0213	0.0409	pCi/g					
Cesium-137	U	0.00217	+/-0.0195	0.0162	+/-0.0191	0.0346	pCi/g					
Cobalt-60	U	-0.00395	+/-0.0219	0.0173	+/-0.0215	0.0381	pCi/g					
Europium-152	U	0.0133	+/-0.0472	0.0392	+/-0.0463	0.0824	pCi/g					
Europium-154	U	-0.0133	+/-0.0551	0.0434	+/-0.054	0.0961	pCi/g					
Europium-155	U	0.0501	+/-0.0361	0.0312	+/-0.0354	0.0648	pCi/g					
Lead-212		0.439	+/-0.065	0.0204	+/-0.0637	0.0425	pCi/g					
Lead-214		0.562	+/-0.104	0.0269	+/-0.102	0.0566	pCi/g					
Manganese-54	U	0.00805	+/-0.0209	0.0174	+/-0.0204	0.0373	pCi/g					
Niobium-94	U	0.0107	+/-0.0181	0.0155	+/-0.0178	0.033	pCi/g					
Potassium-40		8.40	+/-0.909	0.137	+/-0.890	0.310	pCi/g					
Radium-226		0.504	+/-0.0908	0.0282	+/-0.089	0.060	pCi/g					
Silver-108m	U	0.00686	+/-0.0139	0.0123	+/-0.0136	0.0262	pCi/g					
Thallium-208		0.115	+/-0.0369	0.0151	+/-0.0362	0.0322	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.0013	+/-0.00244	0.00244	+/-0.00244	0.00513	pCi/g		EXW1 11/07/05	1643	476640	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	0.669	+/-1.56	1.28	+/-1.56	2.67	pCi/g		MXP1 11/07/05	2206	476953	4
Solid Preparation												
Laboratory Composite - CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	10/17/05	0932	471599
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	AXP2	10/13/05	1818	471597
GL-RAD-A-026	Laboratory sample composite				471596

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID: 5502–0000–018–C–5C–03
Sample ID: 147673017

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 905.0 Modified
4	EPA 906.0 Modified
5	GL–RAD–A–026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	107	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

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362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID:	5502–0000–018–C–8C–04	Project:	YANK01204
Sample ID:	147673018	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	28–SEP–05		
Receive Date:	12–OCT–05		
Collector:	Client		
Moisture:	5.87%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)												
Actinium–228		0.454	+/–0.153	0.0489	+/–0.150	0.107	pCi/g		MJH1 11/08/05	1518	472777	1
Americium–241	U	0.0708	+/–0.093	0.0606	+/–0.0912	0.125	pCi/g					
Bismuth–212		0.303	+/–0.214	0.113	+/–0.210	0.245	pCi/g					
Bismuth–214		0.570	+/–0.103	0.0302	+/–0.101	0.0641	pCi/g					
Cesium–134	U	0.0409	+/–0.0385	0.0195	+/–0.0377	0.0417	pCi/g					
Cesium–137	U	0.000787	+/–0.0176	0.0144	+/–0.0173	0.031	pCi/g					
Cobalt–60	U	0.00346	+/–0.021	0.0154	+/–0.0206	0.0342	pCi/g					
Europium–152	U	–0.0245	+/–0.0498	0.0411	+/–0.0488	0.0864	pCi/g					
Europium–154	U	–0.0366	+/–0.059	0.0447	+/–0.0578	0.0987	pCi/g					
Europium–155	U	0.0212	+/–0.054	0.0462	+/–0.0529	0.0954	pCi/g					
Lead–212		0.481	+/–0.0672	0.0233	+/–0.0658	0.0486	pCi/g					
Lead–214		0.625	+/–0.103	0.0296	+/–0.101	0.0623	pCi/g					
Manganese–54	U	0.0186	+/–0.0203	0.0177	+/–0.0199	0.0378	pCi/g					
Niobium–94	U	0.00831	+/–0.0182	0.0153	+/–0.0178	0.0326	pCi/g					
Potassium–40		8.83	+/–0.991	0.132	+/–0.971	0.299	pCi/g					
Radium–226		0.570	+/–0.103	0.0302	+/–0.101	0.0641	pCi/g					
Silver–108m	U	0.00138	+/–0.0162	0.0137	+/–0.0159	0.029	pCi/g					
Thallium–208		0.158	+/–0.0427	0.0153	+/–0.0418	0.0327	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid–HTD2,ALL2 (CT)												
Strontium–90	U	–0.00092	+/–0.00264	0.00282	+/–0.00264	0.00594	pCi/g		EXW1 11/07/05	1643	476640	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)												
Tritium	U	0.207	+/–1.51	1.26	+/–1.51	2.62	pCi/g		MXP1 11/07/05	2238	476953	4
Solid Preparation												
Laboratory Composite – CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	10/17/05	0932	471599
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	AXP2	10/13/05	1818	471597
GL–RAD–A–026	Laboratory sample composite				471596

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Certificate of Analysis

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID: 5502-0000-018-C-8C-04
Sample ID: 147673018

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 905.0 Modified
4	EPA 906.0 Modified
5	GL-RAD-A-026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	100	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID:	5502-0000-018-C-8C-05	Project:	YANK01204
Sample ID:	147673019	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	28-SEP-05		
Receive Date:	12-OCT-05		
Collector:	Client		
Moisture:	6.51%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.474	+/-0.148	0.0468	+/-0.145	0.103	pCi/g		MJH1 11/08/05	1532	472777	1
Americium-241	U	-0.0957	+/-0.111	0.0852	+/-0.109	0.178	pCi/g					
Bismuth-212	UUI	0.00	+/-0.245	0.116	+/-0.240	0.252	pCi/g					
Bismuth-214		0.556	+/-0.112	0.0316	+/-0.110	0.0673	pCi/g					
Cesium-134	U	0.0292	+/-0.0211	0.0194	+/-0.0207	0.0416	pCi/g					
Cesium-137	U	-0.00894	+/-0.0206	0.0163	+/-0.0202	0.035	pCi/g					
Cobalt-60	U	-0.00451	+/-0.0226	0.018	+/-0.0222	0.0399	pCi/g					
Europium-152	U	0.0396	+/-0.0499	0.0426	+/-0.0489	0.0897	pCi/g					
Europium-154	U	0.0323	+/-0.0727	0.0556	+/-0.0712	0.122	pCi/g					
Europium-155	U	0.00608	+/-0.0539	0.0473	+/-0.0528	0.0982	pCi/g					
Lead-212		0.453	+/-0.0688	0.0245	+/-0.0674	0.0512	pCi/g					
Lead-214		0.628	+/-0.112	0.0274	+/-0.109	0.0582	pCi/g					
Manganese-54	U	0.0139	+/-0.0202	0.0174	+/-0.0198	0.0376	pCi/g					
Niobium-94	U	0.0139	+/-0.0172	0.0151	+/-0.0169	0.0323	pCi/g					
Potassium-40		8.58	+/-0.960	0.151	+/-0.941	0.341	pCi/g					
Radium-226		0.556	+/-0.112	0.0316	+/-0.110	0.0673	pCi/g					
Silver-108m	U	0.0128	+/-0.0157	0.0141	+/-0.0154	0.030	pCi/g					
Thallium-208		0.124	+/-0.0474	0.0146	+/-0.0464	0.0315	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.0018	+/-0.00431	0.00437	+/-0.00431	0.00913	pCi/g		EXW1 11/07/05	1644	476640	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	-0.0437	+/-1.79	1.51	+/-1.79	3.14	pCi/g		MXP1 11/07/05	2309	476953	4
Solid Preparation												
Laboratory Composite - CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	10/17/05	0932	471599
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	AXP2	10/13/05	1818	471597
GL-RAD-A-026	Laboratory sample composite				471596

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID: 5502-0000-018-C-8C-05
Sample ID: 147673019

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 905.0 Modified
4	EPA 906.0 Modified
5	GL-RAD-A-026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	75	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID:	5502–0000–019–C–1C–01	Project:	YANK01204
Sample ID:	147673020	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	27–SEP–05		
Receive Date:	12–OCT–05		
Collector:	Client		
Moisture:	5.75%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)												
Actinium–228		0.294	+/–0.133	0.0554	+/–0.131	0.120	pCi/g		MJH1 11/08/05	1533	472777	1
Americium–241	U	0.00763	+/–0.0789	0.0596	+/–0.0774	0.124	pCi/g					
Bismuth–212	U	0.205	+/–0.188	0.141	+/–0.185	0.300	pCi/g					
Bismuth–214		0.756	+/–0.0988	0.030	+/–0.0969	0.0637	pCi/g					
Cesium–134	U	0.0361	+/–0.042	0.0197	+/–0.0411	0.0421	pCi/g					
Cesium–137	U	0.014	+/–0.020	0.0174	+/–0.0196	0.0371	pCi/g					
Cobalt–60	U	0.00825	+/–0.0228	0.0194	+/–0.0223	0.0424	pCi/g					
Europium–152	U	0.0246	+/–0.0521	0.0434	+/–0.051	0.0912	pCi/g					
Europium–154	U	0.0355	+/–0.0664	0.0575	+/–0.0651	0.125	pCi/g					
Europium–155	U	0.0388	+/–0.0575	0.0404	+/–0.0564	0.0839	pCi/g					
Lead–212		0.465	+/–0.0524	0.0259	+/–0.0513	0.0538	pCi/g					
Lead–214		0.976	+/–0.0924	0.0306	+/–0.0905	0.0643	pCi/g					
Manganese–54	U	–0.00728	+/–0.022	0.0171	+/–0.0215	0.0368	pCi/g					
Niobium–94	U	0.00183	+/–0.0175	0.0145	+/–0.0171	0.0309	pCi/g					
Potassium–40		7.64	+/–0.837	0.138	+/–0.820	0.312	pCi/g					
Radium–226		0.756	+/–0.0988	0.030	+/–0.0969	0.0637	pCi/g					
Silver–108m	U	0.00602	+/–0.0161	0.0141	+/–0.0158	0.0299	pCi/g					
Thallium–208		0.142	+/–0.0384	0.0166	+/–0.0376	0.0353	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid–HTD2,ALL2 (CT)												
Strontium–90	U	0.00156	+/–0.00273	0.00271	+/–0.00273	0.00572	pCi/g		EXW1 11/07/05	1644	476640	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)												
Tritium	U	2.40	+/–1.89	1.49	+/–1.89	3.10	pCi/g		MXP1 11/07/05	2341	476953	4
Solid Preparation												
Laboratory Composite – CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	10/17/05	0932	471599
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	AXP2	10/13/05	1818	471597
GL–RAD–A–026	Laboratory sample composite				471596

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID: 5502-0000-019-C-1C-01
Sample ID: 147673020

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 905.0 Modified
4	EPA 906.0 Modified
5	GL-RAD-A-026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	101	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier--please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID:	5502-0000-019-C-1C-02	Project:	YANK01204
Sample ID:	147673021	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	27-SEP-05		
Receive Date:	12-OCT-05		
Collector:	Client		
Moisture:	6.59%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.591	+/-0.148	0.047	+/-0.145	0.0997	pCi/g		MJH1 11/01/05	2342	472779	1
Americium-241	U	0.0664	+/-0.0539	0.0488	+/-0.0528	0.100	pCi/g					
Bismuth-212	U	0.199	+/-0.199	0.0959	+/-0.195	0.203	pCi/g					
Bismuth-214		0.708	+/-0.110	0.0271	+/-0.107	0.0565	pCi/g					
Cesium-134	U	0.0245	+/-0.0193	0.0169	+/-0.019	0.0355	pCi/g					
Cesium-137	U	0.00353	+/-0.0164	0.0138	+/-0.0161	0.0289	pCi/g					
Cobalt-60	U	0.0146	+/-0.0186	0.0143	+/-0.0182	0.0307	pCi/g					
Europium-152	U	0.00089	+/-0.0454	0.0377	+/-0.0445	0.0783	pCi/g					
Europium-154	U	-0.0798	+/-0.0526	0.0364	+/-0.0516	0.0785	pCi/g					
Europium-155	U	0.0136	+/-0.0465	0.0397	+/-0.0455	0.0818	pCi/g					
Lead-212		0.512	+/-0.0662	0.0213	+/-0.0648	0.044	pCi/g					
Lead-214		0.823	+/-0.104	0.0261	+/-0.101	0.0543	pCi/g					
Manganese-54	U	0.00447	+/-0.019	0.0156	+/-0.0186	0.0328	pCi/g					
Niobium-94	U	0.0119	+/-0.0161	0.0137	+/-0.0157	0.0287	pCi/g					
Potassium-40		9.99	+/-0.869	0.106	+/-0.852	0.233	pCi/g					
Radium-226		0.708	+/-0.110	0.0271	+/-0.107	0.0565	pCi/g					
Silver-108m	U	0.0162	+/-0.0145	0.0125	+/-0.0142	0.0261	pCi/g					
Thallium-208		0.147	+/-0.0377	0.0136	+/-0.0369	0.0286	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.00285	+/-0.00485	0.00455	+/-0.00485	0.00946	pCi/g		EXW1 11/08/05	2258	476641	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	0.830	+/-1.84	1.51	+/-1.84	3.15	pCi/g		MXP1 11/08/05	0013	476953	3
Solid Preparation												
Laboratory Composite - CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	10/17/05	0944	471602
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	AXP2	10/13/05	1822	471601
GL-RAD-A-026	Laboratory sample composite				471600

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID: 5502-0000-019-C-1C-02
Sample ID: 147673021

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 906.0 Modified
4	GL-RAD-A-026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	65	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID:	5502-0000-019-C-3C-03	Project:	YANK01204
Sample ID:	147673022	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	27-SEP-05		
Receive Date:	12-OCT-05		
Collector:	Client		
Moisture:	5.38%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.472	+/-0.169	0.0628	+/-0.165	0.135	pCi/g		MJH1 11/09/05	1115	472779	1
Americium-241	U	-0.02	+/-0.0844	0.0644	+/-0.0827	0.133	pCi/g					
Bismuth-212	U	0.260	+/-0.287	0.136	+/-0.282	0.289	pCi/g					
Bismuth-214		0.699	+/-0.119	0.0303	+/-0.117	0.0643	pCi/g					
Cesium-134	U	-0.00275	+/-0.0235	0.019	+/-0.023	0.0407	pCi/g					
Cesium-137	U	0.000309	+/-0.0206	0.0172	+/-0.0202	0.0365	pCi/g					
Cobalt-60	U	-0.00086	+/-0.0217	0.0177	+/-0.0213	0.0389	pCi/g					
Europium-152	U	-0.00399	+/-0.0546	0.0451	+/-0.0535	0.0944	pCi/g					
Europium-154	U	0.0358	+/-0.0632	0.055	+/-0.062	0.120	pCi/g					
Europium-155	U	0.0439	+/-0.0555	0.0478	+/-0.0544	0.0988	pCi/g					
Lead-212		0.494	+/-0.0719	0.0254	+/-0.0705	0.0527	pCi/g					
Lead-214		0.734	+/-0.110	0.0316	+/-0.108	0.0663	pCi/g					
Manganese-54	U	-0.00538	+/-0.0237	0.0189	+/-0.0232	0.0404	pCi/g					
Niobium-94	U	0.00439	+/-0.0195	0.0164	+/-0.0191	0.0347	pCi/g					
Potassium-40		7.49	+/-0.904	0.140	+/-0.885	0.316	pCi/g					
Radium-226		0.699	+/-0.119	0.0303	+/-0.117	0.0643	pCi/g					
Silver-108m	U	-0.0119	+/-0.0174	0.0135	+/-0.0171	0.0286	pCi/g					
Thallium-208		0.144	+/-0.0478	0.016	+/-0.0469	0.034	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.00261	+/-0.00467	0.00381	+/-0.00467	0.00794	pCi/g		EXW1 11/04/05	2206	476641	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	1.44	+/-1.85	1.49	+/-1.85	3.11	pCi/g		MXP1 11/08/05	0045	476953	3
Solid Preparation												
Laboratory Composite - CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	10/17/05	0944	471602
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	AXP2	10/13/05	1822	471601
GL-RAD-A-026	Laboratory sample composite				471600

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID: 5502-0000-019-C-3C-03
Sample ID: 147673022

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 906.0 Modified
4	GL-RAD-A-026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	82	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

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362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID:	5502–0000–019–C–4C–04	Project:	YANK01204
Sample ID:	147673023	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	27–SEP–05		
Receive Date:	12–OCT–05		
Collector:	Client		
Moisture:	6.04%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)												
Actinium–228		0.467	+/–0.163	0.073	+/–0.160	0.157	pCi/g		MJH1 11/09/05	1115	472779	1
Americium–241	U	0.0173	+/–0.0367	0.0278	+/–0.036	0.0573	pCi/g					
Bismuth–212	U	0.113	+/–0.277	0.157	+/–0.271	0.337	pCi/g					
Bismuth–214		0.654	+/–0.119	0.0396	+/–0.117	0.0838	pCi/g					
Cesium–134	U	–0.0113	+/–0.0285	0.0221	+/–0.0279	0.0475	pCi/g					
Cesium–137	U	–0.00631	+/–0.0251	0.020	+/–0.0246	0.0427	pCi/g					
Cobalt–60	U	–0.00658	+/–0.0259	0.0205	+/–0.0254	0.0453	pCi/g					
Europium–152	U	–0.0245	+/–0.0639	0.0525	+/–0.0626	0.110	pCi/g					
Europium–154	U	–0.0718	+/–0.0715	0.0507	+/–0.0701	0.113	pCi/g					
Europium–155	U	0.0861	+/–0.0595	0.0517	+/–0.0583	0.106	pCi/g					
Lead–212		0.537	+/–0.0891	0.0306	+/–0.0873	0.0635	pCi/g					
Lead–214		0.669	+/–0.136	0.0385	+/–0.133	0.0806	pCi/g					
Manganese–54	U	0.00202	+/–0.0256	0.0216	+/–0.025	0.0464	pCi/g					
Niobium–94	U	8.750E–05	+/–0.0252	0.0205	+/–0.0247	0.0434	pCi/g					
Potassium–40		8.70	+/–0.978	0.188	+/–0.958	0.418	pCi/g					
Radium–226		0.654	+/–0.119	0.0396	+/–0.117	0.0838	pCi/g					
Silver–108m	U	–0.0119	+/–0.0238	0.0163	+/–0.0233	0.0345	pCi/g					
Thallium–208		0.191	+/–0.0558	0.0205	+/–0.0547	0.0436	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid–HTD2,ALL2 (CT)												
Strontium–90	U	–0.00317	+/–0.00645	0.00553	+/–0.00645	0.0114	pCi/g		EXW1 11/04/05	2206	476641	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)												
Tritium	U	0.141	+/–1.75	1.46	+/–1.75	3.05	pCi/g		MXP1 11/08/05	0117	476953	3
Solid Preparation												
Laboratory Composite – CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	10/17/05	0944	471602
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	AXP2	10/13/05	1822	471601
GL–RAD–A–026	Laboratory sample composite				471600

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Certificate of Analysis

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID: 5502-0000-019-C-4C-04
Sample ID: 147673023

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 906.0 Modified
4	GL-RAD-A-026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	72	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID:	5502-0000-020-C-1C-01	Project:	YANK01204
Sample ID:	147673024	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	26-SEP-05		
Receive Date:	12-OCT-05		
Collector:	Client		
Moisture:	6.86%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.588	+/-0.152	0.0552	+/-0.149	0.122	pCi/g		MJH1 11/09/05	1154	472779	1
Americium-241	U	0.0181	+/-0.0823	0.0715	+/-0.0807	0.149	pCi/g					
Bismuth-212		0.358	+/-0.286	0.132	+/-0.281	0.288	pCi/g					
Bismuth-214		0.526	+/-0.0787	0.030	+/-0.0771	0.065	pCi/g					
Cesium-134	U	0.0321	+/-0.033	0.0223	+/-0.0324	0.0482	pCi/g					
Cesium-137	U	2.570E-05	+/-0.0185	0.0152	+/-0.0181	0.0332	pCi/g					
Cobalt-60	U	0.0105	+/-0.022	0.0195	+/-0.0216	0.0438	pCi/g					
Europium-152	U	0.00212	+/-0.0547	0.0468	+/-0.0536	0.099	pCi/g					
Europium-154	U	-0.0279	+/-0.0602	0.0462	+/-0.059	0.105	pCi/g					
Europium-155	U	0.0237	+/-0.0588	0.0505	+/-0.0576	0.105	pCi/g					
Lead-212		0.463	+/-0.0553	0.0249	+/-0.0541	0.0524	pCi/g					
Lead-214		0.456	+/-0.088	0.0339	+/-0.0862	0.0717	pCi/g					
Manganese-54	U	-0.00712	+/-0.0278	0.0188	+/-0.0273	0.0409	pCi/g					
Niobium-94	U	0.00985	+/-0.0187	0.0161	+/-0.0183	0.0349	pCi/g					
Potassium-40		8.21	+/-0.879	0.183	+/-0.861	0.413	pCi/g					
Radium-226		0.526	+/-0.0787	0.030	+/-0.0771	0.065	pCi/g					
Silver-108m	U	-0.0043	+/-0.0186	0.0153	+/-0.0182	0.0328	pCi/g					
Thallium-208		0.145	+/-0.0453	0.0167	+/-0.0444	0.0361	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.00174	+/-0.0041	0.00337	+/-0.0041	0.00702	pCi/g		EXW1 11/04/05	2206	476641	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	0.498	+/-1.83	1.52	+/-1.83	3.16	pCi/g		MXP1 11/08/05	0148	476953	3
Solid Preparation												
Laboratory Composite - CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	10/17/05	0944	471602
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	AXP2	10/13/05	1822	471601
GL-RAD-A-026	Laboratory sample composite				471600

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID: 5502-0000-020-C-1C-01
Sample ID: 147673024

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 906.0 Modified
4	GL-RAD-A-026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	98	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID:	5502-0000-020-C-1C-02	Project:	YANK01204
Sample ID:	147673025	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	26-SEP-05		
Receive Date:	12-OCT-05		
Collector:	Client		
Moisture:	6.37%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.519	+/-0.117	0.0433	+/-0.115	0.0921	pCi/g		MJH1 11/09/05	1325	472779	1
Americium-241	U	0.0877	+/-0.0754	0.0684	+/-0.0739	0.140	pCi/g					
Bismuth-212		0.399	+/-0.199	0.101	+/-0.195	0.213	pCi/g					
Bismuth-214		0.704	+/-0.0841	0.0239	+/-0.0824	0.0501	pCi/g					
Cesium-134	U	0.0119	+/-0.0192	0.0167	+/-0.0188	0.035	pCi/g					
Cesium-137	U	-0.00475	+/-0.0162	0.0135	+/-0.0159	0.0285	pCi/g					
Cobalt-60	U	0.0016	+/-0.0166	0.014	+/-0.0163	0.0301	pCi/g					
Europium-152	U	-0.00323	+/-0.0457	0.0385	+/-0.0448	0.0799	pCi/g					
Europium-154	U	-0.0394	+/-0.0544	0.0356	+/-0.0533	0.0767	pCi/g					
Europium-155	U	0.0427	+/-0.0497	0.0435	+/-0.0487	0.0891	pCi/g					
Lead-212		0.504	+/-0.0478	0.023	+/-0.0468	0.0473	pCi/g					
Lead-214		0.836	+/-0.075	0.0282	+/-0.0735	0.0584	pCi/g					
Manganese-54	U	0.0145	+/-0.0177	0.0134	+/-0.0174	0.0284	pCi/g					
Niobium-94	U	0.0074	+/-0.0149	0.013	+/-0.0146	0.0272	pCi/g					
Potassium-40		8.02	+/-0.589	0.125	+/-0.577	0.271	pCi/g					
Radium-226		0.704	+/-0.0841	0.0239	+/-0.0824	0.0501	pCi/g					
Silver-108m	U	0.00344	+/-0.0151	0.0127	+/-0.0148	0.0266	pCi/g					
Thallium-208		0.171	+/-0.0333	0.0161	+/-0.0327	0.0336	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.000137	+/-0.00456	0.00383	+/-0.00456	0.00793	pCi/g		EXW1 11/04/05	2206	476641	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	0.388	+/-1.79	1.49	+/-1.79	3.10	pCi/g		MXP1 11/08/05	0220	476953	3
Solid Preparation												
Laboratory Composite - CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	10/17/05	0944	471602
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	AXP2	10/13/05	1822	471601
GL-RAD-A-026	Laboratory sample composite				471600

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID: 5502-0000-020-C-1C-02
Sample ID: 147673025

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 906.0 Modified
4	GL-RAD-A-026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	94	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

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362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID:	5502–0000–020–C–2C–03	Project:	YANK01204
Sample ID:	147673026	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	26–SEP–05		
Receive Date:	12–OCT–05		
Collector:	Client		
Moisture:	6.32%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)												
Actinium–228		0.579	+/–0.185	0.0542	+/–0.182	0.119	pCi/g		MJH1 11/09/05	1325	472779	1
Americium–241	U	–0.0041	+/–0.0207	0.0178	+/–0.0203	0.0372	pCi/g					
Bismuth–212		0.439	+/–0.314	0.119	+/–0.308	0.259	pCi/g					
Bismuth–214		0.571	+/–0.104	0.0282	+/–0.102	0.0607	pCi/g					
Cesium–134	U	0.0148	+/–0.027	0.0207	+/–0.0265	0.0445	pCi/g					
Cesium–137	U	0.0117	+/–0.0212	0.0185	+/–0.0208	0.0396	pCi/g					
Cobalt–60	U	0.00441	+/–0.0209	0.0176	+/–0.0205	0.0393	pCi/g					
Europium–152	U	0.0116	+/–0.0489	0.0413	+/–0.0479	0.0872	pCi/g					
Europium–154	U	0.0316	+/–0.0585	0.0515	+/–0.0574	0.114	pCi/g					
Europium–155	U	0.0197	+/–0.0387	0.0332	+/–0.038	0.0691	pCi/g					
Lead–212		0.443	+/–0.0667	0.0222	+/–0.0654	0.0466	pCi/g					
Lead–214		0.554	+/–0.0944	0.0282	+/–0.0926	0.0598	pCi/g					
Manganese–54	U	0.0031	+/–0.0208	0.0172	+/–0.0203	0.0372	pCi/g					
Niobium–94	U	–0.00241	+/–0.0191	0.0156	+/–0.0187	0.0335	pCi/g					
Potassium–40		8.74	+/–0.925	0.142	+/–0.907	0.324	pCi/g					
Radium–226		0.571	+/–0.104	0.0282	+/–0.102	0.0607	pCi/g					
Silver–108m	U	0.0048	+/–0.0162	0.0144	+/–0.0159	0.0306	pCi/g					
Thallium–208		0.163	+/–0.0368	0.0141	+/–0.0361	0.0305	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid–HTD2,ALL2 (CT)												
Strontium–90	U	–0.00111	+/–0.00249	0.00247	+/–0.00249	0.00513	pCi/g		EXW1 11/08/05	0035	476641	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)												
Tritium	U	1.64	+/–1.86	1.49	+/–1.86	3.11	pCi/g		MXP1 11/08/05	0252	476953	3
Solid Preparation												
Laboratory Composite – CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	10/17/05	0944	471602
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	AXP2	10/13/05	1822	471601
GL–RAD–A–026	Laboratory sample composite				471600

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID: 5502-0000-020-C-2C-03
Sample ID: 147673026

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 906.0 Modified
4	GL-RAD-A-026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	89	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

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Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID:	5502-0000-020-C-3C-04	Project:	YANK01204
Sample ID:	147673027	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	26-SEP-05		
Receive Date:	12-OCT-05		
Collector:	Client		
Moisture:	4.67%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.475	+/-0.171	0.0701	+/-0.168	0.154	pCi/g		MJH1 11/09/05	1326	472779	1
Americium-241	U	-0.00202	+/-0.0267	0.0234	+/-0.0262	0.0488	pCi/g					
Bismuth-212	U	0.218	+/-0.195	0.183	+/-0.191	0.392	pCi/g					
Bismuth-214		0.463	+/-0.0939	0.0321	+/-0.0921	0.0696	pCi/g					
Cesium-134	U	0.00242	+/-0.025	0.0215	+/-0.0245	0.0469	pCi/g					
Cesium-137	U	-0.00675	+/-0.0231	0.0194	+/-0.0226	0.042	pCi/g					
Cobalt-60	U	-0.011	+/-0.0204	0.0156	+/-0.020	0.0365	pCi/g					
Europium-152	U	-0.0635	+/-0.0523	0.0401	+/-0.0512	0.0859	pCi/g					
Europium-154	U	-0.038	+/-0.0785	0.0587	+/-0.0769	0.131	pCi/g					
Europium-155	U	0.0398	+/-0.0468	0.0416	+/-0.0459	0.0868	pCi/g					
Lead-212		0.414	+/-0.0623	0.0234	+/-0.0611	0.0495	pCi/g					
Lead-214		0.487	+/-0.0937	0.0304	+/-0.0918	0.0648	pCi/g					
Manganese-54	U	0.0205	+/-0.0317	0.0201	+/-0.031	0.0438	pCi/g					
Niobium-94	U	-0.00477	+/-0.0241	0.0178	+/-0.0236	0.0385	pCi/g					
Potassium-40		7.40	+/-1.00	0.191	+/-0.980	0.434	pCi/g					
Radium-226		0.463	+/-0.0939	0.0321	+/-0.0921	0.0696	pCi/g					
Silver-108m	U	0.0026	+/-0.0183	0.0156	+/-0.018	0.0334	pCi/g					
Thallium-208		0.133	+/-0.0503	0.0209	+/-0.0493	0.0447	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.000747	+/-0.00392	0.00326	+/-0.00392	0.00678	pCi/g		EXW1 11/04/05	2206	476641	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	0.841	+/-1.59	1.30	+/-1.59	2.71	pCi/g		MXP1 11/08/05	0324	476953	3
Solid Preparation												
Laboratory Composite - CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	10/17/05	0944	471602
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	AXP2	10/13/05	1822	471601
GL-RAD-A-026	Laboratory sample composite				471600

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Certificate of Analysis

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID: 5502-0000-020-C-3C-04
Sample ID: 147673027

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 906.0 Modified
4	GL-RAD-A-026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	101	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Company : Connecticut Yankee Atomic Power
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362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID:	5502-0000-020-C-3C-05	Project:	YANK01204
Sample ID:	147673028	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	26-SEP-05		
Receive Date:	12-OCT-05		
Collector:	Client		
Moisture:	5.79%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.508	+/-0.161	0.0517	+/-0.158	0.116	pCi/g		MJH1 11/09/05	1556	472779	1
Americium-241	U	0.0192	+/-0.111	0.0686	+/-0.109	0.143	pCi/g					
Bismuth-212		0.444	+/-0.353	0.135	+/-0.346	0.295	pCi/g					
Bismuth-214		0.442	+/-0.089	0.0334	+/-0.0872	0.0717	pCi/g					
Cesium-134	U	0.013	+/-0.0237	0.0205	+/-0.0232	0.0445	pCi/g					
Cesium-137	U	0.0105	+/-0.0215	0.0166	+/-0.0211	0.0362	pCi/g					
Cobalt-60	U	-0.00683	+/-0.0239	0.0189	+/-0.0234	0.0426	pCi/g					
Europium-152	U	-0.00962	+/-0.055	0.0463	+/-0.0539	0.098	pCi/g					
Europium-154	U	0.0164	+/-0.0687	0.0588	+/-0.0674	0.130	pCi/g					
Europium-155	U	-0.000577	+/-0.0603	0.0506	+/-0.0591	0.105	pCi/g					
Lead-212		0.501	+/-0.0604	0.0249	+/-0.0592	0.0524	pCi/g					
Lead-214		0.546	+/-0.0891	0.028	+/-0.0873	0.0598	pCi/g					
Manganese-54	U	0.00195	+/-0.0252	0.0205	+/-0.0247	0.0444	pCi/g					
Niobium-94	U	0.00609	+/-0.0202	0.017	+/-0.0198	0.0366	pCi/g					
Potassium-40		7.34	+/-0.892	0.149	+/-0.874	0.346	pCi/g					
Radium-226		0.442	+/-0.089	0.0334	+/-0.0872	0.0717	pCi/g					
Silver-108m	U	0.0152	+/-0.0167	0.0151	+/-0.0163	0.0324	pCi/g					
Thallium-208		0.157	+/-0.0414	0.0205	+/-0.0405	0.0436	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.00139	+/-0.00376	0.00309	+/-0.00376	0.00649	pCi/g		EXW1 11/04/05	2207	476641	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	1.86	+/-1.89	1.51	+/-1.90	3.15	pCi/g		MXP1 11/08/05	0356	476953	3
Solid Preparation												
Laboratory Composite - CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	10/17/05	0944	471602
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	AXP2	10/13/05	1822	471601
GL-RAD-A-026	Laboratory sample composite				471600

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID: 5502-0000-020-C-3C-05
Sample ID: 147673028

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 906.0 Modified
4	GL-RAD-A-026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	87	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID:	5502-0000-016-C-4C-05	Project:	YANK01204
Sample ID:	147673029	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	29-SEP-05		
Receive Date:	12-OCT-05		
Collector:	Client		
Moisture:	5.86%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Alpha Spec Analysis													
Alphaspec Am241, Cm, Solid-TRU2,ALL2 (CT)													
Americium-241	U	0.0145	+/-0.023	0.00	+/-0.0231	0.0258	pCi/g		JXG1	11/03/05	1215	475273	1
Curium-242	U	-0.00266	+/-0.00521	0.0126	+/-0.00522	0.0552	pCi/g						
Curium-243/244	U	0.00955	+/-0.0187	0.00	+/-0.0188	0.0259	pCi/g						
Alphaspec Pu, Solid-TRU2,ALL2 (CT)													
Plutonium-238	U	-0.00153	+/-0.0128	0.00726	+/-0.0129	0.0318	pCi/g		JXG1	11/03/05	0907	475274	2
Plutonium-239/240	U	-0.00433	+/-0.0148	0.0192	+/-0.0148	0.0556	pCi/g						
Liquid Scint Pu241, Solid-TRU2,ALL2 (CT)													
Plutonium-241	U	-0.346	+/-1.95	1.65	+/-1.95	3.38	pCi/g		JXG1	11/04/05	2247	475275	3
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)													
Actinium-228		0.403	+/-0.171	0.0586	+/-0.168	0.127	pCi/g		MJH1	11/09/05	1557	472779	4
Americium-241	U	-0.0318	+/-0.0791	0.0698	+/-0.0775	0.145	pCi/g						
Bismuth-212		0.575	+/-0.278	0.129	+/-0.273	0.277	pCi/g						
Bismuth-214		0.556	+/-0.109	0.0327	+/-0.106	0.0695	pCi/g						
Cesium-134	U	0.017	+/-0.0285	0.0207	+/-0.0279	0.0444	pCi/g						
Cesium-137	U	0.0131	+/-0.0195	0.0175	+/-0.0191	0.0374	pCi/g						
Cobalt-60	U	-0.00874	+/-0.0227	0.0178	+/-0.0222	0.0394	pCi/g						
Europium-152	U	-0.00367	+/-0.0545	0.0462	+/-0.0534	0.097	pCi/g						
Europium-154	U	-0.0597	+/-0.0629	0.0454	+/-0.0617	0.101	pCi/g						
Europium-155	U	0.00671	+/-0.0554	0.0483	+/-0.0543	0.100	pCi/g						
Lead-212		0.428	+/-0.062	0.026	+/-0.0607	0.0542	pCi/g						
Lead-214		0.549	+/-0.0865	0.0323	+/-0.0847	0.0679	pCi/g						
Manganese-54	U	0.0181	+/-0.0213	0.0172	+/-0.0209	0.0372	pCi/g						
Niobium-94	U	0.010	+/-0.019	0.0167	+/-0.0186	0.0356	pCi/g						
Potassium-40		7.50	+/-0.898	0.119	+/-0.880	0.278	pCi/g						
Radium-226		0.556	+/-0.109	0.0327	+/-0.106	0.0695	pCi/g						
Silver-108m	U	0.00505	+/-0.0173	0.0147	+/-0.0169	0.0312	pCi/g						
Thallium-208		0.146	+/-0.0471	0.0157	+/-0.0461	0.0337	pCi/g						
Rad Gas Flow Proportional Counting													
GFPC, Sr90, solid-HTD2,ALL2 (CT)													
Strontium-90	U	-0.00155	+/-0.00306	0.00264	+/-0.00306	0.00554	pCi/g		EXW1	11/04/05	2207	476641	5
Rad Liquid Scintillation Analysis													
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)													
Tritium	U	0.471	+/-1.90	1.58	+/-1.90	3.24	pCi/g		MXP1	11/08/05	1545	476953	6
Liquid Scint C14, Solid-HTD2,ALL2 (CT)													

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Certificate of Analysis

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID: 5502–0000–016–C–4C–05
Sample ID: 147673029

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Liquid Scintillation Analysis												
Liquid Scint C14, Solid–HTD2,ALL2 (CT)												
Carbon–14	U	0.0934	+/–0.241	0.201	+/–0.241	0.409	pCi/g		SLN1 10/31/05	2314	475769	7
Liquid Scint Fe55, Solid–HTD2,ALL2 (CT)												
Iron–55	U	–1.8	+/–1.68	1.24	+/–1.68	2.52	pCi/g		BXF1 10/22/05	1757	473497	9
Liquid Scint Ni63, Solid–HTD2,ALL2 (CT)												
Nickel–63	U	–0.351	+/–1.62	1.37	+/–1.62	2.81	pCi/g		BXF1 10/26/05	0314	473499	10
Liquid Scint Tc99, Solid–HTD2,ALL2 (CT)												
Technetium–99	U	0.136	+/–0.265	0.219	+/–0.265	0.448	pCi/g		BXF1 10/29/05	0252	473504	11
Solid Preparation												
Laboratory Composite – CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	10/17/05	0944	471602
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	AXP2	10/13/05	1822	471601
GL–RAD–A–026	Laboratory sample composite				471600

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL–300, Am–05–RC Modified
2	DOE EML HASL–300, Pu–11–RC Modified
3	DOE EML HASL–300, Pu–11–RC Modified
4	EML HASL 300, 4.5.2.3
5	EPA 905.0 Modified
6	EPA 906.0 Modified
7	EPA EERF C–01 Modified
8	EPA EERF C–01 Modified
9	DOE RESL Fe–1, Modified
10	DOE RESL Ni–1, Modified
11	DOE EML HASL–300, Tc–02–RC Modified
12	GL–RAD–A–026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium–243	Alphaspec Am241, Cm, Solid–TR1	67	(15%–125%)

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID: 5502-0000-016-C-4C-05
Sample ID: 147673029

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
Plutonium-242		Alphaspec Pu, Solid-TRU2,ALL2			93		(15%-125%)				
Carrier/Tracer Recovery		Liquid Scint Pu241, Solid-TRU2,/			70		(25%-125%)				
Carrier/Tracer Recovery		GFPC, Sr90, solid-HTD2,ALL2 ((			104		(25%-125%)				
Carrier/Tracer Recovery		Liquid Scint Fe55, Solid-HTD2,Al			48		(15%-125%)				
Carrier/Tracer Recovery		Liquid Scint Ni63, Solid-HTD2,Al			86		(25%-125%)				
Carrier/Tracer Recovery		Liquid Scint Tc99, Solid-HTD2,A			86		(15%-125%)				

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID:	5502–0000–019–C–4C–05	Project:	YANK01204
Sample ID:	147673030	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	27–SEP–05		
Receive Date:	12–OCT–05		
Collector:	Client		
Moisture:	6.56%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Alpha Spec Analysis												
Alphaspec Am241, Cm, Solid–TRU2,ALL2 (CT)												
Americium–241	U	0.00468	+/–0.0127	0.00	+/–0.0128	0.0245	pCi/g		JXG1 11/03/05	1215	475273	1
Curium–242	U	0.00	+/–0.0208	0.00	+/–0.0208	0.0287	pCi/g					
Curium–243/244	U	0.00	+/–0.0178	0.00	+/–0.0178	0.0246	pCi/g					
Alphaspec Pu, Solid–TRU2,ALL2 (CT)												
Plutonium–238	U	0.000281	+/–0.0153	0.016	+/–0.0153	0.051	pCi/g		JXG1 11/03/05	0907	475274	2
Plutonium–239/240	U	–0.00449	+/–0.0223	0.0265	+/–0.0223	0.0721	pCi/g					
Liquid Scint Pu241, Solid–TRU2,ALL2 (CT)												
Plutonium–241	U	0.912	+/–1.85	1.53	+/–1.85	3.13	pCi/g		JXG1 11/04/05	2335	475275	3
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)												
Actinium–228		0.370	+/–0.181	0.0731	+/–0.177	0.158	pCi/g		MJH1 11/09/05	1557	472779	4
Americium–241	U	–0.0728	+/–0.150	0.0948	+/–0.147	0.199	pCi/g					
Bismuth–212		0.520	+/–0.244	0.116	+/–0.239	0.255	pCi/g					
Bismuth–214		0.597	+/–0.0975	0.0301	+/–0.0955	0.0653	pCi/g					
Cesium–134	U	0.0378	+/–0.0288	0.0247	+/–0.0282	0.0529	pCi/g					
Cesium–137	U	–0.00214	+/–0.0197	0.0161	+/–0.0193	0.0352	pCi/g					
Cobalt–60	U	0.00332	+/–0.0231	0.0194	+/–0.0227	0.0436	pCi/g					
Europium–152	U	0.0415	+/–0.0582	0.050	+/–0.057	0.106	pCi/g					
Europium–154	U	–0.0533	+/–0.0816	0.0502	+/–0.080	0.113	pCi/g					
Europium–155	U	0.0165	+/–0.0609	0.0546	+/–0.0597	0.114	pCi/g					
Lead–212		0.474	+/–0.0752	0.027	+/–0.0737	0.0567	pCi/g					
Lead–214		0.661	+/–0.114	0.0343	+/–0.112	0.0727	pCi/g					
Manganese–54	U	0.0128	+/–0.0242	0.0207	+/–0.0237	0.0449	pCi/g					
Niobium–94	U	0.0109	+/–0.0182	0.0159	+/–0.0178	0.0345	pCi/g					
Potassium–40		9.10	+/–1.12	0.162	+/–1.09	0.371	pCi/g					
Radium–226		0.597	+/–0.0975	0.0301	+/–0.0955	0.0653	pCi/g					
Silver–108m	U	–0.00547	+/–0.0163	0.0136	+/–0.016	0.0294	pCi/g					
Thallium–208		0.194	+/–0.0506	0.0152	+/–0.0496	0.0331	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid–HTD2,ALL2 (CT)												
Strontium–90	U	0.000393	+/–0.00455	0.0038	+/–0.00455	0.00795	pCi/g		EXW1 11/04/05	2207	476641	5
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)												
Tritium	U	1.36	+/–1.86	1.50	+/–1.86	3.13	pCi/g		MXP1 11/08/05	0459	476953	6
Liquid Scint C14, Solid–HTD2,ALL2 (CT)												

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Certificate of Analysis

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID: 5502-0000-019-C-4C-05
Sample ID: 147673030

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Liquid Scintillation Analysis												
Liquid Scint C14, Solid-HTD2,ALL2 (CT)												
Carbon-14	U	-0.173	+/-0.229	0.196	+/-0.230	0.398	pCi/g		SLN1 11/01/05	0047	475769	7
Liquid Scint Fe55, Solid-HTD2,ALL2 (CT)												
Iron-55	U	1.45	+/-1.93	1.37	+/-1.93	2.79	pCi/g		BXF1 10/22/05	1930	473497	9
Liquid Scint Ni63, Solid-HTD2,ALL2 (CT)												
Nickel-63	U	-1.36	+/-1.87	1.61	+/-1.87	3.30	pCi/g		BXF1 10/26/05	0402	473499	10
Liquid Scint Tc99, Solid-HTD2,ALL2 (CT)												
Technetium-99	U	0.00768	+/-0.246	0.207	+/-0.246	0.423	pCi/g		BXF1 10/29/05	0324	473504	11
Solid Preparation												
Laboratory Composite - CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	10/17/05	0944	471602
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	AXP2	10/13/05	1822	471601
GL-RAD-A-026	Laboratory sample composite				471600

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, Pu-11-RC Modified
4	EML HASL 300, 4.5.2.3
5	EPA 905.0 Modified
6	EPA 906.0 Modified
7	EPA EERF C-01 Modified
8	EPA EERF C-01 Modified
9	DOE RESL Fe-1, Modified
10	DOE RESL Ni-1, Modified
11	DOE EML HASL-300, Tc-02-RC Modified
12	GL-RAD-A-026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243	Alphaspec Am241, Cm, Solid-TR1	70	(15%-125%)

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Certificate of Analysis

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: November 11, 2005

Client Sample ID: 5502-0000-019-C-4C-05
Sample ID: 147673030

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
Plutonium-242		Alphaspec Pu, Solid-TRU2,ALL2			88		(15%-125%)				
Carrier/Tracer Recovery		Liquid Scint Pu241, Solid-TRU2,/			81		(25%-125%)				
Carrier/Tracer Recovery		GFPC, Sr90, solid-HTD2,ALL2 ((			85		(25%-125%)				
Carrier/Tracer Recovery		Liquid Scint Fe55, Solid-HTD2,Al			51		(15%-125%)				
Carrier/Tracer Recovery		Liquid Scint Ni63, Solid-HTD2,Al			79		(25%-125%)				
Carrier/Tracer Recovery		Liquid Scint Tc99, Solid-HTD2,A			91		(15%-125%)				

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

QUALITY CONTROL DATA

GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: November 11, 2005

Client : Connecticut Yankee Atomic Power
Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut

Contact: Mr. Pete Hollenbeck

Workorder: 147673

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Alpha Spec										
Batch 475273										
QC1200966094 148416002 DUP										
Americium-241	U	0.132	U	0.00241	pCi/g	193		(0% - 100%)	JXG1	11/03/05 12:15
	Uncert:	+/-0.132		+/-0.0369						
	TPU:	+/-0.134		+/-0.0369						
Curium-242	U	0.00	U	0.00	pCi/g	0		(0% - 100%)		
	Uncert:	+/-0.0642		+/-0.0681						
	TPU:	+/-0.0642		+/-0.0681						
Curium-243/244	U	0.160	U	0.0307	pCi/g	136		(0% - 100%)		
	Uncert:	+/-0.140		+/-0.0603						
	TPU:	+/-0.142		+/-0.0604						
QC1200966096 LCS										
Americium-241	2.58			2.31	pCi/g		90	(75%-125%)		11/03/05 12:15
	Uncert:			+/-0.227						
	TPU:			+/-0.391						
Curium-242			U	-0.00142	pCi/g					
	Uncert:			+/-0.00277						
	TPU:			+/-0.00278						
Curium-243/244	3.15			2.68	pCi/g		85	(75%-125%)		
	Uncert:			+/-0.245						
	TPU:			+/-0.444						
QC1200966093 MB										
Americium-241			U	0.0164	pCi/g					11/03/05 12:15
	Uncert:			+/-0.0209						
	TPU:			+/-0.0211						
Curium-242			U	-0.00169	pCi/g					
	Uncert:			+/-0.00331						
	TPU:			+/-0.00332						
Curium-243/244			U	-0.00333	pCi/g					
	Uncert:			+/-0.00461						
	TPU:			+/-0.00464						
QC1200966095 148416002 MS										
Americium-241	13.0 U	0.132		12.9	pCi/g		99	(75%-125%)		
	Uncert:	+/-0.132		+/-1.30						
	TPU:	+/-0.134		+/-2.29						
Curium-242	U	0.00	U	0.00	pCi/g					
	Uncert:	+/-0.0642		+/-0.0756						
	TPU:	+/-0.0642		+/-0.0756						
Curium-243/244	15.9 U	0.160		14.1	pCi/g		89	(75%-125%)		
	Uncert:	+/-0.140		+/-1.36						
	TPU:	+/-0.142		+/-2.48						
Batch 475274										
QC1200966098 148416002 DUP										
Plutonium-238	U	-0.0699	U	0.016	pCi/g	N/A		(0% - 100%)	JXG1	11/03/05 09:07

QC Summary

Workorder: 147673

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Alpha Spec										
Batch 475274										
	Uncert:	+/-0.143		+/-0.0637						
	TPU:	+/-0.144		+/-0.0638						
Plutonium-239/240	U	-0.015	U	0.00862	pCi/g	N/A		(0% - 100%)		
	Uncert:	+/-0.0645		+/-0.0653						
	TPU:	+/-0.0645		+/-0.0653						
QC1200966100 LCS										
Plutonium-238			U	0.0133	pCi/g			(75%-125%)		11/03/05 09:07
	Uncert:			+/-0.0257						
	TPU:			+/-0.0257						
Plutonium-239/240	2.39			2.10	pCi/g		88	(75%-125%)		
	Uncert:			+/-0.202						
	TPU:			+/-0.280						
QC1200966097 MB										
Plutonium-238			U	0.0128	pCi/g					11/03/05 09:07
	Uncert:			+/-0.0283						
	TPU:			+/-0.0283						
Plutonium-239/240			U	-0.0058	pCi/g					
	Uncert:			+/-0.0131						
	TPU:			+/-0.0131						
QC1200966099 148416002 MS										
Plutonium-238	U	-0.0699	U	-0.0191	pCi/g			(75%-125%)		
	Uncert:	+/-0.143		+/-0.0653						
	TPU:	+/-0.144		+/-0.0653						
Plutonium-239/240	12.0 U	-0.015		11.9	pCi/g		99	(75%-125%)		
	Uncert:	+/-0.0645		+/-1.14						
	TPU:	+/-0.0645		+/-1.65						
Batch 475275										
QC1200966102 148416002 DUP										
Plutonium-241	U	1.12	U	2.36	pCi/g	71		(0% - 100%)	JXG1	11/05/05 01:59
	Uncert:	+/-4.32		+/-12.9						
	TPU:	+/-4.32		+/-12.9						
QC1200966104 LCS										
Plutonium-241	44.9			38.1	pCi/g		85	(75%-125%)		11/05/05 03:34
	Uncert:			+/-2.38						
	TPU:			+/-4.60						
QC1200966101 MB										
Plutonium-241			U	0.660	pCi/g					11/05/05 01:11
	Uncert:			+/-1.48						
	TPU:			+/-1.48						
QC1200966103 148416002 MS										
Plutonium-241	146 U	1.12		174	pCi/g		119	(75%-125%)		11/05/05 02:47
	Uncert:	+/-4.32		+/-35.1						
	TPU:	+/-4.32		+/-52.1						
Rad Gamma Spec										
Batch 472777										
QC1200960049 147673001 DUP										
Actinium-228		0.484		0.383	pCi/g	23		(0% - 100%)	MJH1	11/08/05 15:19
	Uncert:	+/-0.138		+/-0.131						
				+/-0.128						

QC Summary

Workorder: 147673

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch 472777											
	TPU:	+/-0.135									
Americium-241	U	0.014	U	0.00861	pCi/g	48		(0% - 100%)			
	Uncert:	+/-0.0259		+/-0.0956							
	TPU:	+/-0.0254		+/-0.0937							
Bismuth-212		0.287		0.352	pCi/g	20		(0% - 100%)			
	Uncert:	+/-0.204		+/-0.243							
	TPU:	+/-0.199		+/-0.238							
Bismuth-214		0.670		0.620	pCi/g	8		(0% - 100%)			
	Uncert:	+/-0.0978		+/-0.0805							
	TPU:	+/-0.0958		+/-0.0789							
Cesium-134	U	0.0364	U	0.0078	pCi/g	129		(0% - 100%)			
	Uncert:	+/-0.0202		+/-0.0177							
	TPU:	+/-0.0198		+/-0.0173							
Cesium-137		0.0401		0.0454	pCi/g	13		(0% - 100%)			
	Uncert:	+/-0.0283		+/-0.0238							
	TPU:	+/-0.0277		+/-0.0233							
Cobalt-60	U	-0.00788	U	-0.0113	pCi/g	N/A		(0% - 100%)			
	Uncert:	+/-0.0163		+/-0.0164							
	TPU:	+/-0.016		+/-0.0161							
Europium-152	U	-0.00562	U	0.00144	pCi/g	N/A		(0% - 100%)			
	Uncert:	+/-0.0421		+/-0.042							
	TPU:	+/-0.0412		+/-0.0412							
Europium-154	U	0.013	U	-0.0248	pCi/g	N/A		(0% - 100%)			
	Uncert:	+/-0.0509		+/-0.0492							
	TPU:	+/-0.0498		+/-0.0482							
Europium-155	U	0.0166	U	0.0302	pCi/g	58		(0% - 100%)			
	Uncert:	+/-0.0396		+/-0.0492							
	TPU:	+/-0.0388		+/-0.0482							
Lead-212		0.486		0.513	pCi/g	6					
	Uncert:	+/-0.0654		+/-0.0507							
	TPU:	+/-0.0641		+/-0.0496							
Lead-214		0.706		0.790	pCi/g	11		(0% - 20%)			
	Uncert:	+/-0.100		+/-0.0743							
	TPU:	+/-0.0983		+/-0.0728							
Manganese-54	U	-0.000982	U	-0.00695	pCi/g	N/A		(0% - 100%)			
	Uncert:	+/-0.0153		+/-0.0177							
	TPU:	+/-0.015		+/-0.0174							
Niobium-94	U	0.00753	U	0.00682	pCi/g	10		(0% - 100%)			
	Uncert:	+/-0.0155		+/-0.0146							
	TPU:	+/-0.0152		+/-0.0143							
Potassium-40		8.43		8.46	pCi/g	0		(0% - 20%)			
	Uncert:	+/-0.775		+/-0.630							
	TPU:	+/-0.759		+/-0.617							
Radium-226		0.670		0.620	pCi/g	8		(0% - 100%)			
	Uncert:	+/-0.0978		+/-0.0805							
	TPU:	+/-0.0958		+/-0.0789							
Silver-108m	U	-0.00357	U	-0.00717	pCi/g	N/A		(0% - 100%)			
	Uncert:	+/-0.0142		+/-0.0136							

QC Summary

Workorder: **147673**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 472777										
	TPU:	+/-0.0139		+/-0.0133						
Thallium-208		0.155		0.144	pCi/g	7		(0% - 100%)		
	Uncert:	+/-0.0377		+/-0.0347						
	TPU:	+/-0.037		+/-0.034						
QC1200960050 LCS										
Actinium-228			U	0.196	pCi/g					10/26/05 21:40
	Uncert:			+/-0.816						
	TPU:			+/-0.800						
Americium-241	24.4			25.8	pCi/g		106	(75%-125%)		
	Uncert:			+/-1.27						
	TPU:			+/-1.24						
Bismuth-212			U	1.12	pCi/g					
	Uncert:			+/-1.65						
	TPU:			+/-1.62						
Bismuth-214			U	-0.214	pCi/g					
	Uncert:			+/-0.367						
	TPU:			+/-0.360						
Cesium-134			U	0.0446	pCi/g					
	Uncert:			+/-0.227						
	TPU:			+/-0.223						
Cesium-137	9.38			9.73	pCi/g		104	(75%-125%)		
	Uncert:			+/-0.683						
	TPU:			+/-0.669						
Cobalt-60	14.1			14.8	pCi/g		105	(75%-125%)		
	Uncert:			+/-0.845						
	TPU:			+/-0.828						
Europium-152			U	0.211	pCi/g					
	Uncert:			+/-0.420						
	TPU:			+/-0.411						
Europium-154			U	-0.435	pCi/g					
	Uncert:			+/-0.422						
	TPU:			+/-0.413						
Europium-155			U	0.00093	pCi/g					
	Uncert:			+/-0.436						
	TPU:			+/-0.428						
Lead-212			U	0.0431	pCi/g					
	Uncert:			+/-0.282						
	TPU:			+/-0.276						
Lead-214			U	0.145	pCi/g					
	Uncert:			+/-0.307						
	TPU:			+/-0.301						
Manganese-54			U	-0.0336	pCi/g					
	Uncert:			+/-0.198						
	TPU:			+/-0.195						
Niobium-94			U	-0.0612	pCi/g					
	Uncert:			+/-0.204						
	TPU:			+/-0.199						
Potassium-40			U	-1.35	pCi/g					

QC Summary

Workorder: **147673**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 472777										
	Uncert:			+/-1.72						
	TPU:			+/-1.69						
Radium-226			U	-0.214	pCi/g			(75%-125%)		
	Uncert:			+/-0.367						
	TPU:			+/-0.360						
Silver-108m			U	-0.139	pCi/g					
	Uncert:			+/-0.148						
	TPU:			+/-0.145						
Thallium-208			U	-0.0531	pCi/g					
	Uncert:			+/-0.192						
	TPU:			+/-0.188						
QC1200960048 MB										
Actinium-228			U	0.0325	pCi/g					11/09/05 06:49
	Uncert:			+/-0.0624						
	TPU:			+/-0.0611						
Americium-241			U	-0.0392	pCi/g					
	Uncert:			+/-0.0204						
	TPU:			+/-0.020						
Bismuth-212			U	0.0594	pCi/g					
	Uncert:			+/-0.128						
	TPU:			+/-0.126						
Bismuth-214			U	0.032	pCi/g					
	Uncert:			+/-0.0398						
	TPU:			+/-0.039						
Cesium-134			U	0.00238	pCi/g					
	Uncert:			+/-0.0153						
	TPU:			+/-0.015						
Cesium-137			U	-0.000576	pCi/g					
	Uncert:			+/-0.0158						
	TPU:			+/-0.0155						
Cobalt-60			U	0.00502	pCi/g					
	Uncert:			+/-0.0176						
	TPU:			+/-0.0172						
Europium-152			U	0.0289	pCi/g					
	Uncert:			+/-0.0471						
	TPU:			+/-0.0461						
Europium-154			U	-0.0256	pCi/g					
	Uncert:			+/-0.0457						
	TPU:			+/-0.0448						
Europium-155			U	-0.037	pCi/g					
	Uncert:			+/-0.0351						
	TPU:			+/-0.0344						
Lead-212			U	0.0178	pCi/g					
	Uncert:			+/-0.0248						
	TPU:			+/-0.0243						
Lead-214			UUI	0.00	pCi/g					
	Uncert:			+/-0.0727						
	TPU:			+/-0.0713						

QC Summary

Workorder: **147673**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 472777										
Manganese-54			U	-0.00523	pCi/g					
	Uncert:			+/-0.0161						
	TPU:			+/-0.0158						
Niobium-94			U	-0.00417	pCi/g					
	Uncert:			+/-0.0165						
	TPU:			+/-0.0161						
Potassium-40			UUI	0.00	pCi/g					
	Uncert:			+/-0.298						
	TPU:			+/-0.292						
Radium-226			U	0.032	pCi/g					
	Uncert:			+/-0.0398						
	TPU:			+/-0.039						
Silver-108m			U	0.0153	pCi/g					
	Uncert:			+/-0.0148						
	TPU:			+/-0.0145						
Thallium-208			U	0.00484	pCi/g					
	Uncert:			+/-0.0268						
	TPU:			+/-0.0262						
Batch 472779										
QC1200960054 147673021 DUP										
Actinium-228		0.591		0.564	pCi/g	5		(0% - 100%)	MJH1	11/09/05 15:58
	Uncert:	+/-0.148		+/-0.188						
	TPU:	+/-0.145		+/-0.184						
Americium-241	U	0.0664	U	-0.0372	pCi/g	N/A		(0% - 100%)		
	Uncert:	+/-0.0539		+/-0.122						
	TPU:	+/-0.0528		+/-0.119						
Bismuth-212	U	0.199		0.408	pCi/g	69		(0% - 100%)		
	Uncert:	+/-0.199		+/-0.406						
	TPU:	+/-0.195		+/-0.398						
Bismuth-214		0.708		0.705	pCi/g	0		(0% - 100%)		
	Uncert:	+/-0.110		+/-0.138						
	TPU:	+/-0.107		+/-0.135						
Cesium-134	U	0.0245	UUI	0.00	pCi/g	110		(0% - 100%)		
	Uncert:	+/-0.0193		+/-0.0382						
	TPU:	+/-0.019		+/-0.0374						
Cesium-137	U	0.00353	U	0.00802	pCi/g	78		(0% - 100%)		
	Uncert:	+/-0.0164		+/-0.0266						
	TPU:	+/-0.0161		+/-0.0261						
Cobalt-60	U	0.0146	U	-0.0144	pCi/g	N/A		(0% - 100%)		
	Uncert:	+/-0.0186		+/-0.0273						
	TPU:	+/-0.0182		+/-0.0267						
Europium-152	U	0.00089	U	0.0506	pCi/g	193		(0% - 100%)		
	Uncert:	+/-0.0454		+/-0.0728						
	TPU:	+/-0.0445		+/-0.0713						
Europium-154	U	-0.0798	U	-0.0194	pCi/g	N/A		(0% - 100%)		
	Uncert:	+/-0.0526		+/-0.0773						
	TPU:	+/-0.0516		+/-0.0758						
Europium-155	U	0.0136	U	0.00138	pCi/g	163		(0% - 100%)		

QC Summary

Workorder: 147673

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch 472779											
	Uncert:	+/-0.0465		+/-0.0691							
	TPU:	+/-0.0455		+/-0.0677							
Lead-212		0.512		0.551	pCi/g	7		(0% - 20%)			
	Uncert:	+/-0.0662		+/-0.068							
	TPU:	+/-0.0648		+/-0.0667							
Lead-214		0.823		0.750	pCi/g	9		(0% - 20%)			
	Uncert:	+/-0.104		+/-0.117							
	TPU:	+/-0.101		+/-0.115							
Manganese-54	U	0.00447	U	-0.00318	pCi/g	N/A		(0% - 100%)			
	Uncert:	+/-0.019		+/-0.0296							
	TPU:	+/-0.0186		+/-0.029							
Niobium-94	U	0.0119	U	0.00516	pCi/g	79		(0% - 100%)			
	Uncert:	+/-0.0161		+/-0.0232							
	TPU:	+/-0.0157		+/-0.0227							
Potassium-40		9.99		9.01	pCi/g	10		(0% - 20%)			
	Uncert:	+/-0.869		+/-1.02							
	TPU:	+/-0.852		+/-1.00							
Radium-226		0.708		0.705	pCi/g	0		(0% - 100%)			
	Uncert:	+/-0.110		+/-0.138							
	TPU:	+/-0.107		+/-0.135							
Silver-108m	U	0.0162	U	0.00211	pCi/g	154		(0% - 100%)			
	Uncert:	+/-0.0145		+/-0.0259							
	TPU:	+/-0.0142		+/-0.0254							
Thallium-208		0.147		0.164	pCi/g	11		(0% - 100%)			
	Uncert:	+/-0.0377		+/-0.0522							
	TPU:	+/-0.0369		+/-0.0511							
QC1200960055 LCS											
Actinium-228			U	-0.0939	pCi/g					11/09/05	13:26
	Uncert:			+/-0.820							
	TPU:			+/-0.804							
Americium-241	24.4			24.9	pCi/g		102	(75%-125%)			
	Uncert:			+/-1.27							
	TPU:			+/-1.25							
Bismuth-212			U	-1.24	pCi/g						
	Uncert:			+/-1.57							
	TPU:			+/-1.54							
Bismuth-214			U	-0.042	pCi/g						
	Uncert:			+/-0.339							
	TPU:			+/-0.332							
Cesium-134			U	0.0853	pCi/g						
	Uncert:			+/-0.220							
	TPU:			+/-0.215							
Cesium-137	9.38			10.0	pCi/g		107	(75%-125%)			
	Uncert:			+/-0.624							
	TPU:			+/-0.611							
Cobalt-60	14.1			14.8	pCi/g		105	(75%-125%)			
	Uncert:			+/-0.851							
	TPU:			+/-0.834							

QC Summary

Workorder: **147673**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 472779										
Europium-152			U	-0.0476	pCi/g					
	Uncert:			+/-0.410						
	TPU:			+/-0.402						
Europium-154			U	-0.0795	pCi/g					
	Uncert:			+/-0.373						
	TPU:			+/-0.365						
Europium-155			U	0.102	pCi/g					
	Uncert:			+/-0.444						
	TPU:			+/-0.435						
Lead-212			U	-0.0503	pCi/g					
	Uncert:			+/-0.211						
	TPU:			+/-0.206						
Lead-214			U	-0.0765	pCi/g					
	Uncert:			+/-0.304						
	TPU:			+/-0.298						
Manganese-54			U	-0.0169	pCi/g					
	Uncert:			+/-0.204						
	TPU:			+/-0.200						
Niobium-94			U	-0.0239	pCi/g					
	Uncert:			+/-0.181						
	TPU:			+/-0.177						
Potassium-40			U	-0.722	pCi/g					
	Uncert:			+/-1.79						
	TPU:			+/-1.76						
Radium-226			U	-0.042	pCi/g			(75%-125%)		
	Uncert:			+/-0.339						
	TPU:			+/-0.332						
Silver-108m			U	0.124	pCi/g					
	Uncert:			+/-0.166						
	TPU:			+/-0.163						
Thallium-208			U	-0.0196	pCi/g					
	Uncert:			+/-0.187						
	TPU:			+/-0.183						
QC1200960053 MB										
Actinium-228			U	0.0641	pCi/g					11/09/05 15:58
	Uncert:			+/-0.0533						
	TPU:			+/-0.0522						
Americium-241			U	0.0154	pCi/g					
	Uncert:			+/-0.0216						
	TPU:			+/-0.0212						
Bismuth-212			U	0.0218	pCi/g					
	Uncert:			+/-0.134						
	TPU:			+/-0.132						
Bismuth-214			U	0.0319	pCi/g					
	Uncert:			+/-0.0382						
	TPU:			+/-0.0374						
Cesium-134			U	-0.00159	pCi/g					
	Uncert:			+/-0.0186						

QC Summary

Workorder: **147673**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 472779										
	TPU:			+/-0.0182						
Cesium-137			U	0.030	pCi/g					
	Uncert:			+/-0.0272						
	TPU:			+/-0.0266						
Cobalt-60			U	-0.00194	pCi/g					
	Uncert:			+/-0.0164						
	TPU:			+/-0.016						
Europium-152			U	0.0152	pCi/g					
	Uncert:			+/-0.0447						
	TPU:			+/-0.0438						
Europium-154			U	-0.0221	pCi/g					
	Uncert:			+/-0.0459						
	TPU:			+/-0.045						
Europium-155			U	-0.00388	pCi/g					
	Uncert:			+/-0.0359						
	TPU:			+/-0.0352						
Lead-212			U	0.00987	pCi/g					
	Uncert:			+/-0.0412						
	TPU:			+/-0.0403						
Lead-214			U	0.0231	pCi/g					
	Uncert:			+/-0.0337						
	TPU:			+/-0.033						
Manganese-54			U	-0.00517	pCi/g					
	Uncert:			+/-0.020						
	TPU:			+/-0.0196						
Niobium-94			U	-0.0074	pCi/g					
	Uncert:			+/-0.0171						
	TPU:			+/-0.0168						
Potassium-40			U	0.0989	pCi/g					
	Uncert:			+/-0.170						
	TPU:			+/-0.166						
Radium-226			U	0.0319	pCi/g					
	Uncert:			+/-0.0382						
	TPU:			+/-0.0374						
Silver-108m			U	0.00625	pCi/g					
	Uncert:			+/-0.0157						
	TPU:			+/-0.0153						
Thallium-208			U	0.0164	pCi/g					
	Uncert:			+/-0.024						
	TPU:			+/-0.0235						
Rad Gas Flow										
Batch 476640										
QC1200969215 147673001 DUP										
Strontium-90	U	-0.00205	U	0.000582	pCi/g	N/A		(0% - 100%)	3XW1	11/07/05 16:44
	Uncert:	+/-0.00675		+/-0.00214						
	TPU:	+/-0.00675		+/-0.00214						
QC1200969217 LCS										
Strontium-90	0.700			0.644	pCi/g		92	(75%-125%)		11/07/05 16:45

QC Summary

Workorder: 147673

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gas Flow										
Batch 476640										
	Uncert:			+/-0.0338						
	TPU:			+/-0.0388						
QC1200969214 MB										
Strontium-90			U	0.000715	pCi/g					11/07/05 16:44
	Uncert:			+/-0.00209						
	TPU:			+/-0.00209						
QC1200969216 147673001 MS										
Strontium-90	14.5 U	-0.00205		10.9	pCi/g		76	(75%-125%)		11/08/05 11:37
	Uncert:	+/-0.00675		+/-0.876						
	TPU:	+/-0.00675		+/-0.940						
Batch 476641										
QC1200969219 147673021 DUP										
Strontium-90	U	0.00285	U	-0.00137	pCi/g	N/A		(0% - 100%)	EXW1	11/04/05 22:07
	Uncert:	+/-0.00485		+/-0.0051						
	TPU:	+/-0.00485		+/-0.0051						
QC1200969221 LCS										
Strontium-90	0.772			0.632	pCi/g		82	(75%-125%)		11/07/05 15:18
	Uncert:			+/-0.0362						
	TPU:			+/-0.0388						
QC1200969218 MB										
Strontium-90			U	-0.000402	pCi/g					11/04/05 22:07
	Uncert:			+/-0.00492						
	TPU:			+/-0.00492						
QC1200969220 147673021 MS										
Strontium-90	12.4 U	0.00285		9.35	pCi/g		75	(75%-125%)		11/08/05 09:20
	Uncert:	+/-0.00485		+/-0.633						
	TPU:	+/-0.00485		+/-0.674						
Rad Liquid Scintillation										
Batch 473497										
QC1200961820 147548017 DUP										
Iron-55	U	-1.64	U	-0.702	pCi/g	N/A		(0% - 100%)	BXF1	10/22/05 22:38
	Uncert:	+/-1.44		+/-1.50						
	TPU:	+/-1.44		+/-1.50						
QC1200961822 LCS										
Iron-55	58.5			54.0	pCi/g		92	(75%-125%)		10/23/05 01:45
	Uncert:			+/-2.59						
	TPU:			+/-3.62						
QC1200961819 MB										
Iron-55			U	-1.17	pCi/g					10/22/05 21:04
	Uncert:			+/-1.68						
	TPU:			+/-1.68						
QC1200961821 147548017 MS										
Iron-55	63.2 U	-1.64		56.1	pCi/g		89	(75%-125%)		10/23/05 00:12
	Uncert:	+/-1.44		+/-2.28						
	TPU:	+/-1.44		+/-3.53						
Batch 473499										
QC1200961828 147548017 DUP										
Nickel-63		169		185	pCi/g	9		(0% - 20%)	BXF1	10/26/05 05:37

QC Summary

Workorder: 147673

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Liquid Scintillation										
Batch 473499										
	Uncert:	+/-4.66		+/-4.90						
	TPU:	+/-6.31		+/-6.75						
QC1200961830 LCS										
Nickel-63	166			153	pCi/g		92	(75%-125%)		10/26/05 07:04
	Uncert:			+/-4.04						
	TPU:			+/-5.57						
QC1200961827 MB										
Nickel-63			U	-2.12	pCi/g					10/26/05 04:49
	Uncert:			+/-1.45						
	TPU:			+/-1.45						
QC1200961829 147548017 MS										
Nickel-63	177	169		353	pCi/g		104	(75%-125%)		10/26/05 06:24
	Uncert:	+/-4.66		+/-7.32						
	TPU:	+/-6.31		+/-11.5						
Batch 473504										
QC1200961848 147548017 DUP										
Technetium-99	U	0.148	U	0.0388	pCi/g	0		(0% - 100%)	BXF1	10/29/05 04:29
	Uncert:	+/-0.259		+/-0.257						
	TPU:	+/-0.259		+/-0.257						
QC1200961850 LCS										
Technetium-99	23.0			19.9	pCi/g		87	(75%-125%)		10/29/05 05:34
	Uncert:			+/-0.562						
	TPU:			+/-0.721						
QC1200961847 MB										
Technetium-99			U	0.0515	pCi/g					10/29/05 03:57
	Uncert:			+/-0.247						
	TPU:			+/-0.247						
QC1200961849 147548017 MS										
Technetium-99	23.1 U	0.148		19.9	pCi/g		86	(75%-125%)		10/29/05 05:01
	Uncert:	+/-0.259		+/-0.590						
	TPU:	+/-0.259		+/-0.743						
Batch 475769										
QC1200967207 147673029 DUP										
Carbon-14	U	0.0934	U	-0.159	pCi/g	N/A		(0% - 100%)	SLN1	11/01/05 05:31
	Uncert:	+/-0.241		+/-0.229						
	TPU:	+/-0.241		+/-0.229						
QC1200967209 LCS										
Carbon-14	7.12			6.91	pCi/g		97	(75%-125%)		11/01/05 08:39
	Uncert:			+/-0.169						
	TPU:			+/-0.201						
QC1200967206 MB										
Carbon-14			U	-0.0629	pCi/g					11/01/05 03:57
	Uncert:			+/-0.0794						
	TPU:			+/-0.0794						
QC1200967208 147673029 MS										
Carbon-14	17.7 U	0.0934		17.3	pCi/g		98	(75%-125%)		11/01/05 07:05
	Uncert:	+/-0.241		+/-0.424						
	TPU:	+/-0.241		+/-0.503						
Batch 476952										

QC Summary

Workorder: 147673

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Liquid Scintillation										
Batch 476952										
QC1200970070 147673004 DUP										
Tritium	U	-0.261	U	0.0675	pCi/g	N/A		(0% - 100%)	MXP1	11/10/05 15:46
Uncert:		+/-1.72		+/-1.64						
TPU:		+/-1.72		+/-1.64						
QC1200970072 LCS										
Tritium	16.0			16.5	pCi/g		103	(75%-125%)		11/08/05 11:33
Uncert:				+/-2.09						
TPU:				+/-2.11						
QC1200970069 MB										
Tritium			U	-0.251	pCi/g					11/08/05 09:56
Uncert:				+/-1.44						
TPU:				+/-1.44						
QC1200970071 147673004 MS										
Tritium	16.6 U	-0.261		15.1	pCi/g		91	(75%-125%)		11/08/05 11:01
Uncert:		+/-1.72		+/-3.65						
TPU:		+/-1.72		+/-3.66						
Batch 476953										
QC1200970074 147673016 DUP										
Tritium	U	0.688	U	0.756	pCi/g	0		(0% - 100%)	MXP1	11/08/05 06:03
Uncert:		+/-1.73		+/-1.76						
TPU:		+/-1.73		+/-1.77						
QC1200970076 LCS										
Tritium	11.7			12.6	pCi/g		108	(75%-125%)		11/08/05 07:06
Uncert:				+/-1.32						
TPU:				+/-1.33						
QC1200970073 MB										
Tritium			U	0.822	pCi/g					11/08/05 05:31
Uncert:				+/-0.886						
TPU:				+/-0.886						
QC1200970075 147673016 MS										
Tritium	12.5 U	0.688		13.6	pCi/g		108	(75%-125%)		11/08/05 06:35
Uncert:		+/-1.73		+/-2.40						
TPU:		+/-1.73		+/-2.41						

Notes:
The Qualifiers in this report are defined as follows:

- B Target analyte was detected in the sample as well as the associated blank.
- BD Results below the MDC or low tracer recovery.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J Indicates an estimated value.
- U Target analyte was analyzed for but not detected above the MDL or LOD.
- UI Uncertain identification for gamma spectroscopy.
- X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
- d The 2:1 depletion requirement was not met for this sample
- h Sample preparation or preservation holding time exceeded.

QC Summary

Workorder: 147673

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
** Indicates analyte is a surrogate compound.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptence criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

5502-0000-015-C-1C-01	MSR#05-2443	147673001	472777	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.484	0.138	PCI/G	0		13/10/2005	38627.51806	7:38	0.0987	PCI/G	0.0468	PCI/G	1	5.5	125	G	PCI/G	PR				
5502-0000-015-C-1C-01	MSR#05-2443	147673001	472777	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.014	0.0259	PCI/G	0	U	13/10/2005	38627.51806	7:38	0.0405	PCI/G	0.0199	PCI/G	1	5.5	125	G	PCI/G	PR				
5502-0000-015-C-1C-01	MSR#05-2443	147673001	472777	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.287	0.204	PCI/G	0		13/10/2005	38627.51806	7:38	0.228	PCI/G	0.109	PCI/G	1	5.5	125	G	PCI/G	PR				
5502-0000-015-C-1C-01	MSR#05-2443	147673001	472777	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.67	0.0978	PCI/G	0		13/10/2005	38627.51806	7:38	0.0536	PCI/G	0.0257	PCI/G	1	5.5	125	G	PCI/G	PR				
5502-0000-015-C-1C-01	MSR#05-2443	147673001	472777	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0364	0.0202	PCI/G	0	U	13/10/2005	38627.51806	7:38	0.0373	PCI/G	0.0179	PCI/G	1	5.5	125	G	PCI/G	PR				
5502-0000-015-C-1C-01	MSR#05-2443	147673001	472777	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.0401	0.0283	PCI/G	0		13/10/2005	38627.51806	7:38	0.0296	PCI/G	0.0142	PCI/G	1	5.5	125	G	PCI/G	PR				
5502-0000-015-C-1C-01	MSR#05-2443	147673001	472777	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.00788	0.0163	PCI/G	0	U	13/10/2005	38627.51806	7:38	0.0275	PCI/G	0.0128	PCI/G	1	5.5	125	G	PCI/G	PR				
5502-0000-015-C-1C-01	MSR#05-2443	147673001	472777	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.00562	0.0421	PCI/G	0	U	13/10/2005	38627.51806	7:38	0.0733	PCI/G	0.0355	PCI/G	1	5.5	125	G	PCI/G	PR				
5502-0000-015-C-1C-01	MSR#05-2443	147673001	472777	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.013	0.0509	PCI/G	0	U	13/10/2005	38627.51806	7:38	0.0907	PCI/G	0.0427	PCI/G	1	5.5	125	G	PCI/G	PR				
5502-0000-015-C-1C-01	MSR#05-2443	147673001	472777	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0166	0.0396	PCI/G	0	U	13/10/2005	38627.51806	7:38	0.0688	PCI/G	0.0337	PCI/G	1	5.5	125	G	PCI/G	PR				
5502-0000-015-C-1C-01	MSR#05-2443	147673001	472777	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.486	0.0654	PCI/G	0		13/10/2005	38627.51806	7:38	0.0431	PCI/G	0.021	PCI/G	1	5.5	125	G	PCI/G	PR				
5502-0000-015-C-1C-01	MSR#05-2443	147673001	472777	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.706	0.1	PCI/G	0		13/10/2005	38627.51806	7:38	0.0533	PCI/G	0.0258	PCI/G	1	5.5	125	G	PCI/G	PR				
5502-0000-015-C-1C-01	MSR#05-2443	147673001	472777	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.000982	0.0153	PCI/G	0	U	13/10/2005	38627.51806	7:38	0.0272	PCI/G	0.0129	PCI/G	1	5.5	125	G	PCI/G	PR				
5502-0000-015-C-1C-01	MSR#05-2443	147673001	472777	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00753	0.0155	PCI/G	0	U	13/10/2005	38627.51806	7:38	0.0271	PCI/G	0.013	PCI/G	1	5.5	125	G	PCI/G	PR				
5502-0000-015-C-1C-01	MSR#05-2443	147673001	472777	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	8.43	0.775	PCI/G	0		13/10/2005	38627.51806	7:38	0.262	PCI/G	0.121	PCI/G	1	5.5	125	G	PCI/G	PR				
5502-0000-015-C-1C-01	MSR#05-2443	147673001	472777	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.67	0.0978	PCI/G	0		13/10/2005	38627.51806	7:38	0.0536	PCI/G	0.0257	PCI/G	1	5.5	125	G	PCI/G	PR				
5502-0000-015-C-1C-01	MSR#05-2443	147673001	472777	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00357	0.0142	PCI/G	0	U	13/10/2005	38627.51806	7:38	0.0245	PCI/G	0.0118	PCI/G	1	5.5	125	G	PCI/G	PR				
5502-0000-015-C-1C-01	MSR#05-2443	147673001	476640	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.00205	0.00675	PCI/G	0		17/10/2005	38659.53056	11:51	0.0119	PCI/G	0.00574	PCI/G	1	5.5	18.7	G	PCI/G	PR				
5502-0000-015-C-1C-01	MSR#05-2443	147673001	472777	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.155	0.0377	PCI/G	0		13/10/2005	38627.51806	7:38	0.0284	PCI/G	0.0136	PCI/G	1	5.5	125	G	PCI/G	PR				
5502-0000-015-C-1C-01	MSR#05-2443	147673001	476952	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-1.39	1.64	PCI/G	0	U		9/11/2005	3:44	2.89	PCI/G	1.41	PCI/G	1	5.5	9.07	G	PCI/G	PR				
5502-0000-015-C-1C-02	MSR#05-2443	147673002	472777	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.448	0.118	PCI/G	0		13/10/2005	38627.51806	7:44	0.0747	PCI/G	0.0353	PCI/G	1	5.6	134	G	PCI/G	PR				
5502-0000-015-C-1C-02	MSR#05-2443	147673002	472777	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0042	0.0137	PCI/G	0	U	13/10/2005	38627.51806	7:44	0.0244	PCI/G	0.0119	PCI/G	1	5.6	134	G	PCI/G	PR				
5502-0000-015-C-1C-02	MSR#05-2443	147673002	472777	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.268	0.221	PCI/G	0		13/10/2005	38627.51806	7:44	0.156	PCI/G	0.0742	PCI/G	1	5.6	134	G	PCI/G	PR				
5502-0000-015-C-1C-02	MSR#05-2443	147673002	472777	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.614	0.0851	PCI/G	0		13/10/2005	38627.51806	7:44	0.0392	PCI/G	0.0188	PCI/G	1	5.6	134	G	PCI/G	PR				
5502-0000-015-C-1C-02	MSR#05-2443	147673002	472777	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0121	0.016	PCI/G	0	U	13/10/2005	38627.51806	7:44	0.0266	PCI/G	0.0127	PCI/G	1	5.6	134	G	PCI/G	PR				
5502-0000-015-C-1C-02	MSR#05-2443	147673002	472777	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.00948	0.0132	PCI/G	0	U	13/10/2005	38627.51806	7:44	0.0237	PCI/G	0.0114	PCI/G	1	5.6	134	G	PCI/G	PR				
5502-0000-015-C-1C-02	MSR#05-2443	147673002	472777	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.00592	0.0136	PCI/G	0	U	13/10/2005	38627.51806	7:44	0.0246	PCI/G	0.0115	PCI/G	1	5.6	134	G	PCI/G	PR				
5502-0000-015-C-1C-02	MSR#05-2443	147673002	472777	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0301	0.0299	PCI/G	0	U	13/10/2005	38627.51806	7:44	0.0485	PCI/G	0.0234	PCI/G	1	5.6	134	G	PCI/G	PR				
5502-0000-015-C-1C-02	MSR#05-2443	147673002	472777	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0256	0.0418	PCI/G	0	U	13/10/2005	38627.51806	7:44	0.0757	PCI/G	0.0357	PCI/G	1	5.6	134	G	PCI/G	PR				
5502-0000-015-C-1C-02	MSR#05-2443	147673002	472777	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0307	0.0383	PCI/G	0	U	13/10/2005	38627.51806	7:44	0.0398	PCI/G	0.0194	PCI/G	1	5.6	134	G	PCI/G	PR				
5502-0000-015-C-1C-02	MSR#05-2443	147673002	472777	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.44	0.0563	PCI/G	0		13/10/2005	38627.51806	7:44	0.0283	PCI/G	0.0138	PCI/G	1	5.6	134	G	PCI/G	PR				
5502-0000-015-C-1C-02	MSR#05-2443	147673002	472777	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.6	0.0815	PCI/G	0		13/10/2005	38627.51806	7:44	0.0373	PCI/G	0.018	PCI/G	1	5.6	134	G	PCI/G	PR				
5502-0000-015-C-1C-02	MSR#05-2443	147673002	472777	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.0118	0.0144	PCI/G	0	U	13/10/2005	38627.51806	7:44	0.0231	PCI/G	0.011	PCI/G	1	5.6	134	G	PCI/G	PR				
5502-0000-015-C-1C-02	MSR#05-2443	147673002	472777	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0129	0.0143	PCI/G	0	U	13/10/2005	38627.51806	7:44	0.0208	PCI/G	0.00996	PCI/G	1	5.6	134	G	PCI/G	PR				
5502-0000-015-C-1C-02	MSR#05-2443	147673002	472777	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	8.19	0.711	PCI/G	0		13/10/2005	38627.51806	7:44	0.226	PCI/G	0.105	PCI/G	1	5.6	134	G	PCI/G	PR				
5502-0000-015-C-1C-02	MSR#05-2443	147673002	472777	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.614	0.0851	PCI/G	0		13/10/2005	38627.51806	7:44	0.0392	PCI/G	0.0188	PCI/G	1	5.6	134	G	PCI/G	PR				
5502-0000-015-C-1C-02	MSR#05-2443	147673002	472777	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.0053	0.0112	PCI/G	0	U	13/10/2005	38627.51806	7:44	0.0184	PCI/G	0.00883	PCI/G	1	5.6	134	G	PCI/G	PR				
5502-0000-015-C-1C-02	MSR#05-2443	147673002	476640	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00436	0.00559	PCI/G	0	U	17/10/2005	38659.53056	11:51	0.0094	PCI/G	0.00452	PCI/G	1	5.6	18.7	G	PCI/G	PR				
5502-0000-015-C-1C-02	MSR#05-2443	147673002	472777	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.148	0.0285	PCI/G	0		13/10/2005	38627.51806	7:44	0.0211	PCI/G	0.0101	PCI/G	1	5.6	134	G	PCI/G	PR				
5502-0000-015-C-1C-02	MSR#05-2443	147673002	476952	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-0.182	1.65	PCI/G	0	U		9/11/2005	5:17	2.84	PCI/G	1.39	PCI/G	1	5.6	9.14	G	PCI/G	PR				
5502-0000-015-C-2C-03	MSR#05-2443	147673003	472777	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.449	0.091	PCI/G	0		13/10/2005	38627.51806	7:44	0.0669	PCI/G	0.032	PCI/G	1	5.9	129	G	PCI/G	PR				
5502-0000-015-C-2C-03	MSR#05-2443	147673003	472777	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0333	0.0683	PCI/G	0	U	13/10/2005	38627.51806	7:44	0.109	PCI/G	0.053	PCI/G	1	5.9	129	G	PCI/G	PR				
5502-0000-015-C-2C-03	MSR#05-2443	147673003	472777	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.323	0.135	PCI/G	0		13/10/2005	38627.51806	7:44	0.143	PCI/G	0.0686	PCI/G	1	5.9	129	G	PCI/G	PR				
5502-0000-015-C-2C-03	MSR#05-2443	147673003	472777	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.603	0.0535	PCI/G	0		13/10/2005	38627.51806	7:44	0.0356	PCI/G	0.0172	PCI/G	1	5.9	129	G	PCI/G	PR				
5502-0000-015-C-2C-03	MSR#05-2443	147673003	472777	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0123	0.0224	PCI/G	0	U	13/10/2005	38627.51806	7:44	0.0222	PCI/G	0.0107	PCI/G	1	5.9	129	G	PCI/G	PR				
5502-0000-015-C-2C-03	MSR#05-2443	147673003	472777	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.0177	0.00896	PCI/G	0	U	13/10/2005	38627.51806	7:44	0.0177	PCI/G	0.00851	PCI/G	1	5.9	129	G	PCI/G	PR				
5502-0000-015-C-2C-03	MSR#05-2443	147673003	472777	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0158	0.0116	PCI/G	0	U	13/10/2005	38627.51806	7:44	0.0216	PCI/G	0.0103	PCI/G	1	5.9	129	G	PCI/G	PR				
5502-0000-015-C-2C-03	MSR#05-2443	147673003	472777	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.00404	0.0289	PCI/G	0	U	13/10/2005	38627.51806	7:44	0.0519	PCI/G	0.0252	PCI/G	1	5.9	129	G	PCI/G	PR				
5502-0000-015-C-2C-03	MSR#05-2443	147673003	472777	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.038	0.0336	PCI/G	0	U	13/10/2005	38627.51806	7:44	0.0529	PCI/G	0.025	PCI/G	1	5.9	129	G	PCI/G	PR				
5502-0000-015-C-2C-03	MSR#05-2443	147673003	472777	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0454	0.0348	PCI/G	0	U	13/10/2005	38627.51806	7:44	0.065	PCI/G	0.0318	PCI/G	1	5.9	129	G	PCI/G	PR				
5502-0000-015-C-2C-03	MSR#05-2443	147673003	472777	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.492	0.0361	PCI/G	0		13/10/2005	38627.51806	7:44	0.0306	PCI/G	0.0149	PCI/G	1	5.9	129	G	PCI/G	PR				
5502-0000-015-C-2C-03	MSR#05-2443	147673003	472777	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.793	0.0535	PCI/G	0		13/10/2005	38627.51806	7:44	0.0355	PCI/G	0.0172	PCI/G	1	5.9	129	G	PCI/G	PR				
5502-0000-015-C-2C-03	MSR#05-2443	147673003	472777	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0129	0.0123	PCI/G	0	U	13/10/2005	38627.51806	7:44	0.0198	PCI/G	0.00949	PCI/G	1	5.9	129	G	PCI/G	PR				
5502-0000-015-C-2C-03	MSR#05-2443	147673003	472777	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.00579	0.0125	PCI/G	0	U	13/10/2005	38627.51806	7:44	0.0178	PCI/G	0.00856	PCI/G	1	5.9	129	G	PCI/G	PR				
5502-0000-015-C-2C-03	MSR#05-2443	147673003	472777	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	9.14	0.466	PCI/G	0		13/10/2005	38627.51806	7:44	0.183	PCI/G	0.0864	PCI/G	1	5.9	129	G	PCI/G	PR				
5502-0000-015-C-2C-03	MSR#05-2443	147673003	472777	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.603	0.0535	PCI/G	0		13/10/2005	38627.51806	7:44	0.0356	PCI/G	0.0172	PCI/G	1	5.9	129	G	PCI/G	PR				
5502-0000-015-C-2C-03	MSR#05-2443	147673003	472777	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.0022	0.00952	PCI/G	0	U	13/10/2005	38627.51806	7:44	0.0169	PCI/G	0.00817	PCI/G	1	5.9	129	G	PCI/G	PR				
5502-0000-015-C-2C-03	MSR#05-2443	147673003	476640	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00359	0.0041	PCI/G	0	U	17/10/2005	38659.53056	11:51	0.00687	PCI/G	0.00331	PCI/G	1	5.9	19.1	G	PCI/G	PR				
5502-0000-015-C-2C-03	MSR#05-2443	147673003	472777	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.153	0.026	PCI/G	0		13/10/2005	38627.51806	7:44	0.0195	PCI/G	0.00939	PCI/G	1	5.9	129	G	PCI/G	PR				
5502-0000-015-C-2C-03	MSR#05-2443	147673003	476952	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	0.0677	1.64	PCI/G	0	U		9/11/2005	6:51	2.82	PCI/G	1.38	PCI/G	1	5.9	9.13	G	PCI/G	PR				
5502-0000-015-C-3C-04	MSR#05-2443	147673004	472777	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.448	0.09	PCI/G	0		13/10/2005	38627.51806	7:45	0.0549	PCI/G	0.0263	PCI/G	1	5.4	136	G	PCI/G	PR				
5502-0000-015-C-3C-04	MSR#05-2443	147673004	472777	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.00534	0.0316	PCI/G	0	U	13/10/2005	38627.51806	7:45	0.0583	PCI/G	0.0286	PCI/G	1	5.4	136	G	PCI/G	PR				
5502-0000-015-C-3C-04	MSR#05-2443	147673004	472777	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.384	0.147	PCI/G	0		13/10/2005	38627.51806	7:45	0.127	PCI/G	0.0614	PCI/G	1	5.4	136	G	PCI/G	PR				
5502-0000-015-C-3C-04	MSR#05-2443	147673004	472777	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.547	0.0754	PCI/G	0		13/10/2005	38627.51806	7:45	0.0318	PCI/G	0.0154	PCI/G	1	5.4	136	G	PCI/G	PR				
5502-0000-015-C-3C-04	MSR#05-2443	147673004	472777	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0	0.016	PCI/G	0	UU	13/10/2005	38627.51806	7:45	0.0197	PCI/G	0.00949	PCI/G	1	5.4	136	G	PCI/G	PR				
5502-0000-015-C-3C-04	MSR#05-2443	147673004	472777	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.00697	0.00993	PCI/G	0	U	13/10/2005	38627.51806	7:45	0.0167	PCI/G	0.00807	PCI/G	1	5.4	136	G	PCI/G	PR				
5502-0000-015-C-3C-04	MSR#05-2443	147673004	472777	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.00648	0.0207	PCI/G	0	U	13/10/2005	38627.51806	7:45	0.0175	PCI/G	0.00832	PCI/G	1	5.4	136	G	PCI/G	PR				
5502-0000-015-C-3C-04	MSR#05-2443	147673004	472777	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.00585	0.0255	PCI/G	0	U	13/10/2005	38627.51806	7:45	0.0441	PCI/G	0.0215	PCI/G	1	5.4	136	G	PCI/G	PR				
5502-0000-015-C-3C-04	MSR#05-2443	147673004	472777	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0107	0.032	PCI/G	0	U	13/10/2005	38627.51806	7:45	0.0538	PCI/G	0.0257	PCI/G	1	5.4	136	G	PCI/G	PR				
5502-0000-015-C-3C-04	MSR#05-2443	147673004	472777	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.00586	0.029	PCI/G	0	U	13/10/2005	38627.51806	7:45	0.0519	PCI/G	0.0254	PCI/G	1	5.4	136	G	PCI/G	PR				
5502-0000-015-C-3C-04	MSR#05-2443	147673004	472777	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.49	0.0511	PCI/G	0		13/10/2005	38627.51806	7:45	0.0265	PCI/G	0.013	PCI/G	1	5.4	136	G	PCI/G	PR				
5502-0000-015-C-3C-04	MSR#05-2443	147673004	472777	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.671	0.0772	PCI/G	0		13/10/2005	38627.51806	7:45	0.0314	PCI/G	0.0153	PCI/G	1	5.4	136	G	PCI/G	PR				
5502-0000-015-C-3C-04	MSR#05-2443	147673004	472777	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0126	0.012	PCI/G	0	U	13/10/2005	38627.51806	7:45	0.0188	PCI/G	0.00907	PCI/G	1	5.4	136	G	PCI/G	PR				
5502-0000-015-C-3C-04	MSR#05-2443	147673004	472777	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0129	0.00929	PCI/G	0	U	13/10/2005	38627.51806	7:45	0.0168	PCI/G	0.00812	PCI/G	1	5.4	136	G	PCI/G	PR				
5502-0000-015-C-3C-04	MSR#05-2443	147673004	472777	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	8.09	0.636	PCI/G	0		13/10/2005	38627.51806	7:45	0.155	PCI/G	0.073	PCI/G	1	5.4	136	G	PCI/G	PR				
5502-0000-015-C-3C-04	MSR#05-2443	147673004	472777	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.547	0.0754	PCI/G	0		13/10/2005	38627.51806	7:45	0.0318	PCI/G	0.0154	PCI/G	1	5.4	136	G	PCI/G	PR				
5502-0000-015-C-3C-04	MSR#05-2443	147673004	472777	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00138	0.00887	PCI/G	0	U	13/10/2005	38627.51806	7:45	0.0151	PCI/G	0.0073	PCI/G	1	5.4	136	G	PCI/G	PR				
5502-0000-015-C-3C-04	MSR#05-2443	147673004	476640	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00213	0.00375	PCI/G	0	U	17/10/2005	38659.53056	11:51	0.00638	PCI/G	0.00307	PCI/G	1	5.4	22.2	G	PCI/G	PR				
5502-0000-015-C-3C-04	MSR#05-2443	147673004	472777	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.136	0.0237	PCI/G	0		13/10/2005	38627.51806	7:45	0.0168	PCI/G	0.00814	PCI/G	1	5.4	136	G	PCI/G	PR				
5502-0000-015-C-3C-04	MSR#05-2443	147673004	476952	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-0.261	1.72	PCI/G	0	U		9/11/2005	8:24	2.97	PCI/G	1.45	PCI/G	1	5.4	9	G	PCI/G	PR				
5502-0000-015-C-3C-05	MSR#05-2443	147673005	472777	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.431	0.141	PCI/G	0		13/10/2005	38627.51806	9:31	0.0981	PCI/G	0.0463	PCI/G	1	6.5	131	G	PCI/G	PR				
5502-0000-015-C-3C-05	MSR#05-2443	147673005	472777	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.000874	0.0204	PCI/G	0	U	13/10/2005	38627.51806	9:31	0.0331	PCI/G	0.0161	PCI/G	1	6.5	131	G	PCI/G	PR				
5502-0000-015-C-3C-05	MSR#05-2443	147673005	472777	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.385	0.305	PCI/G	0		13/10/2005	38627.51806	9:31	0.203	PCI/G	0.0962	PCI/G	1	6.5	131	G	PCI/G	PR				
5502-0000-015-C-3C-05	MSR#05-2443	147673005	472777	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.683	0.0929	PCI/G	0		13/10/2005	38627.51806	9:31	0.0468	PCI/G	0.0223	PCI/G	1	6.5	131	G	PCI/G	PR				
5502-0000-015-C-3C-05	MSR#05-2443	147673005	472777	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0272	0.0256	PCI/G	0	U	13/10/2005	38627.51806	9:31	0.0337	PCI/G	0.0161	PCI/G	1	6.5	131	G	PCI/G	PR				
5502-0000-015-C-3C-05	MSR#05-2443	147673005	472777	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.00122	0.0167	PCI/G	0	U	13/10/2005	38627.51806	9:31	0.03	PCI/G	0.0143	PCI/G	1	6.5	131	G	PCI/G	PR				

5502-0000-015-C-3C-05	MSR#05-2443	147673005	472777	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.0116	0.0153	PCI/G	0	U	13/10/2005	38627.51806	9:31	0.026	PCI/G	0.012	PCI/G	1	6.5	131	G	PCI/G	PR				
5502-0000-015-C-3C-05	MSR#05-2443	147673005	472777	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.017	0.0364	PCI/G	0	U	13/10/2005	38627.51806	9:31	0.0623	PCI/G	0.03	PCI/G	1	6.5	131	G	PCI/G	PR				
5502-0000-015-C-3C-05	MSR#05-2443	147673005	472777	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0241	0.0481	PCI/G	0	U	13/10/2005	38627.51806	9:31	0.0791	PCI/G	0.0367	PCI/G	1	6.5	131	G	PCI/G	PR				
5502-0000-015-C-3C-05	MSR#05-2443	147673005	472777	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0498	0.0476	PCI/G	0	U	13/10/2005	38627.51806	9:31	0.0535	PCI/G	0.026	PCI/G	1	6.5	131	G	PCI/G	PR				
5502-0000-015-C-3C-05	MSR#05-2443	147673005	472777	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.465	0.0544	PCI/G	0		13/10/2005	38627.51806	9:31	0.0323	PCI/G	0.0156	PCI/G	1	6.5	131	G	PCI/G	PR				
5502-0000-015-C-3C-05	MSR#05-2443	147673005	472777	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.708	0.0888	PCI/G	0		13/10/2005	38627.51806	9:31	0.0446	PCI/G	0.0215	PCI/G	1	6.5	131	G	PCI/G	PR				
5502-0000-015-C-3C-05	MSR#05-2443	147673005	472777	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.00456	0.0164	PCI/G	0	U	13/10/2005	38627.51806	9:31	0.0285	PCI/G	0.0135	PCI/G	1	6.5	131	G	PCI/G	PR				
5502-0000-015-C-3C-05	MSR#05-2443	147673005	472777	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00583	0.0146	PCI/G	0	U	13/10/2005	38627.51806	9:31	0.0267	PCI/G	0.0127	PCI/G	1	6.5	131	G	PCI/G	PR				
5502-0000-015-C-3C-05	MSR#05-2443	147673005	472777	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.81	0.805	PCI/G	0		13/10/2005	38627.51806	9:31	0.267	PCI/G	0.123	PCI/G	1	6.5	131	G	PCI/G	PR				
5502-0000-015-C-3C-05	MSR#05-2443	147673005	472777	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.683	0.0929	PCI/G	0		13/10/2005	38627.51806	9:31	0.0468	PCI/G	0.0223	PCI/G	1	6.5	131	G	PCI/G	PR				
5502-0000-015-C-3C-05	MSR#05-2443	147673005	472777	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00739	0.0143	PCI/G	0	U	13/10/2005	38627.51806	9:31	0.0212	PCI/G	0.0102	PCI/G	1	6.5	131	G	PCI/G	PR				
5502-0000-015-C-3C-05	MSR#05-2443	147673005	476640	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00358	0.00224	PCI/G	0	U	17/10/2005	38659.53333	11:37	0.00411	PCI/G	0.00196	PCI/G	1	6.5	18.8	G	PCI/G	PR				
5502-0000-015-C-3C-05	MSR#05-2443	147673005	472777	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.158	0.0383	PCI/G	0		13/10/2005	38627.51806	9:31	0.0249	PCI/G	0.0119	PCI/G	1	6.5	131	G	PCI/G	PR				
5502-0000-015-C-3C-05	MSR#05-2443	147673005	476952	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-0.826	1.65	PCI/G	0	U		9/11/2005	9:58	2.87	PCI/G	1.4	PCI/G	1	6.5	9.12	G	PCI/G	PR				
5502-0000-016-C-1C-01	MSR#05-2443	147673006	472777	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.465	0.159	PCI/G	0		13/10/2005	38627.51875	5:49	0.138	PCI/G	0.0643	PCI/G	1	5.7	135	G	PCI/G	PR				
5502-0000-016-C-1C-01	MSR#05-2443	147673006	472777	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0255	0.0379	PCI/G	0	U	13/10/2005	38627.51875	5:49	0.0611	PCI/G	0.0298	PCI/G	1	5.7	135	G	PCI/G	PR				
5502-0000-016-C-1C-01	MSR#05-2443	147673006	472777	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.535	0.285	PCI/G	0		13/10/2005	38627.51875	5:49	0.314	PCI/G	0.148	PCI/G	1	5.7	135	G	PCI/G	PR				
5502-0000-016-C-1C-01	MSR#05-2443	147673006	472777	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	1.25	0.159	PCI/G	0		13/10/2005	38627.51875	5:49	0.0757	PCI/G	0.0358	PCI/G	1	5.7	135	G	PCI/G	PR				
5502-0000-016-C-1C-01	MSR#05-2443	147673006	472777	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0164	0.0299	PCI/G	0	U	13/10/2005	38627.51875	5:49	0.0494	PCI/G	0.0233	PCI/G	1	5.7	135	G	PCI/G	PR				
5502-0000-016-C-1C-01	MSR#05-2443	147673006	472777	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.00644	0.0261	PCI/G	0	U	13/10/2005	38627.51875	5:49	0.0461	PCI/G	0.0219	PCI/G	1	5.7	135	G	PCI/G	PR				
5502-0000-016-C-1C-01	MSR#05-2443	147673006	472777	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.0153	0.0288	PCI/G	0	U	13/10/2005	38627.51875	5:49	0.0406	PCI/G	0.0185	PCI/G	1	5.7	135	G	PCI/G	PR				
5502-0000-016-C-1C-01	MSR#05-2443	147673006	472777	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.000815	0.0655	PCI/G	0	U	13/10/2005	38627.51875	5:49	0.102	PCI/G	0.0487	PCI/G	1	5.7	135	G	PCI/G	PR				
5502-0000-016-C-1C-01	MSR#05-2443	147673006	472777	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.03	0.0721	PCI/G	0	U	13/10/2005	38627.51875	5:49	0.124	PCI/G	0.057	PCI/G	1	5.7	135	G	PCI/G	PR				
5502-0000-016-C-1C-01	MSR#05-2443	147673006	472777	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.037	0.0571	PCI/G	0	U	13/10/2005	38627.51875	5:49	0.102	PCI/G	0.0498	PCI/G	1	5.7	135	G	PCI/G	PR				
5502-0000-016-C-1C-01	MSR#05-2443	147673006	472777	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.506	0.0802	PCI/G	0		13/10/2005	38627.51875	5:49	0.0588	PCI/G	0.0284	PCI/G	1	5.7	135	G	PCI/G	PR				
5502-0000-016-C-1C-01	MSR#05-2443	147673006	472777	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	1.32	0.168	PCI/G	0		13/10/2005	38627.51875	5:49	0.0709	PCI/G	0.0339	PCI/G	1	5.7	135	G	PCI/G	PR				
5502-0000-016-C-1C-01	MSR#05-2443	147673006	472777	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.000961	0.027	PCI/G	0	U	13/10/2005	38627.51875	5:49	0.0422	PCI/G	0.0198	PCI/G	1	5.7	135	G	PCI/G	PR				
5502-0000-016-C-1C-01	MSR#05-2443	147673006	472777	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00914	0.0235	PCI/G	0	U	13/10/2005	38627.51875	5:49	0.0418	PCI/G	0.0199	PCI/G	1	5.7	135	G	PCI/G	PR				
5502-0000-016-C-1C-01	MSR#05-2443	147673006	472777	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	8.58	0.91	PCI/G	0		13/10/2005	38627.51875	5:49	0.325	PCI/G	0.144	PCI/G	1	5.7	135	G	PCI/G	PR				
5502-0000-016-C-1C-01	MSR#05-2443	147673006	472777	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	1.25	0.159	PCI/G	0		13/10/2005	38627.51875	5:49	0.0757	PCI/G	0.0358	PCI/G	1	5.7	135	G	PCI/G	PR				
5502-0000-016-C-1C-01	MSR#05-2443	147673006	472777	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.000793	0.0206	PCI/G	0	U	13/10/2005	38627.51875	5:49	0.0365	PCI/G	0.0174	PCI/G	1	5.7	135	G	PCI/G	PR				
5502-0000-016-C-1C-01	MSR#05-2443	147673006	476640	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00221	0.00387	PCI/G	0	U	17/10/2005	38659.53264	3:37	0.0081	PCI/G	0.00386	PCI/G	1	5.7	18.7	G	PCI/G	PR				
5502-0000-016-C-1C-01	MSR#05-2443	147673006	472777	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.181	0.0494	PCI/G	0		13/10/2005	38627.51875	5:49	0.0498	PCI/G	0.0238	PCI/G	1	5.7	135	G	PCI/G	PR				
5502-0000-016-C-1C-01	MSR#05-2443	147673006	476952	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-0.388	1.65	PCI/G	0	U		9/11/2005	11:32	2.86	PCI/G	1.39	PCI/G	1	5.7	9.16	G	PCI/G	PR				
5502-0000-016-C-1C-02	MSR#05-2443	147673007	472777	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.61	0.196	PCI/G	0		13/10/2005	38627.51875	6:44	0.162	PCI/G	0.0761	PCI/G	1	5.3	129	G	PCI/G	PR				
5502-0000-016-C-1C-02	MSR#05-2443	147673007	472777	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.00731	0.0375	PCI/G	0	U	13/10/2005	38627.51875	6:44	0.0681	PCI/G	0.0332	PCI/G	1	5.3	129	G	PCI/G	PR				
5502-0000-016-C-1C-02	MSR#05-2443	147673007	472777	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0	0.512	PCI/G	0	UU	13/10/2005	38627.51875	6:44	0.388	PCI/G	0.184	PCI/G	1	5.3	129	G	PCI/G	PR				
5502-0000-016-C-1C-02	MSR#05-2443	147673007	472777	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.856	0.147	PCI/G	0		13/10/2005	38627.51875	6:44	0.0897	PCI/G	0.0428	PCI/G	1	5.3	129	G	PCI/G	PR				
5502-0000-016-C-1C-02	MSR#05-2443	147673007	472777	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0422	0.0613	PCI/G	0	U	13/10/2005	38627.51875	6:44	0.0611	PCI/G	0.0291	PCI/G	1	5.3	129	G	PCI/G	PR				
5502-0000-016-C-1C-02	MSR#05-2443	147673007	472777	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.00292	0.0292	PCI/G	0	U	13/10/2005	38627.51875	6:44	0.0515	PCI/G	0.0246	PCI/G	1	5.3	129	G	PCI/G	PR				
5502-0000-016-C-1C-02	MSR#05-2443	147673007	472777	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.00528	0.0311	PCI/G	0	U	13/10/2005	38627.51875	6:44	0.0546	PCI/G	0.0255	PCI/G	1	5.3	129	G	PCI/G	PR				
5502-0000-016-C-1C-02	MSR#05-2443	147673007	472777	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.00192	0.0712	PCI/G	0	U	13/10/2005	38627.51875	6:44	0.125	PCI/G	0.0603	PCI/G	1	5.3	129	G	PCI/G	PR				
5502-0000-016-C-1C-02	MSR#05-2443	147673007	472777	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0527	0.0838	PCI/G	0	U	13/10/2005	38627.51875	6:44	0.142	PCI/G	0.0659	PCI/G	1	5.3	129	G	PCI/G	PR				
5502-0000-016-C-1C-02	MSR#05-2443	147673007	472777	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.000286	0.0636	PCI/G	0	U	13/10/2005	38627.51875	6:44	0.112	PCI/G	0.0544	PCI/G	1	5.3	129	G	PCI/G	PR				
5502-0000-016-C-1C-02	MSR#05-2443	147673007	472777	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.506	0.0782	PCI/G	0		13/10/2005	38627.51875	6:44	0.0658	PCI/G	0.0318	PCI/G	1	5.3	129	G	PCI/G	PR				
5502-0000-016-C-1C-02	MSR#05-2443	147673007	472777	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	1.02	0.143	PCI/G	0		13/10/2005	38627.51875	6:44	0.0881	PCI/G	0.0424	PCI/G	1	5.3	129	G	PCI/G	PR				
5502-0000-016-C-1C-02	MSR#05-2443	147673007	472777	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.00875	0.032	PCI/G	0	U	13/10/2005	38627.51875	6:44	0.0566	PCI/G	0.027	PCI/G	1	5.3	129	G	PCI/G	PR				
5502-0000-016-C-1C-02	MSR#05-2443	147673007	472777	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0225	0.0257	PCI/G	0	U	13/10/2005	38627.51875	6:44	0.0475	PCI/G	0.0227	PCI/G	1	5.3	129	G	PCI/G	PR				
5502-0000-016-C-1C-02	MSR#05-2443	147673007	472777	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.66	1.04	PCI/G	0		13/10/2005	38627.51875	6:44	0.489	PCI/G	0.226	PCI/G	1	5.3	129	G	PCI/G	PR				
5502-0000-016-C-1C-02	MSR#05-2443	147673007	472777	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.856	0.147	PCI/G	0		13/10/2005	38627.51875	6:44	0.0897	PCI/G	0.0428	PCI/G	1	5.3	129	G	PCI/G	PR				
5502-0000-016-C-1C-02	MSR#05-2443	147673007	472777	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.0242	0.0242	PCI/G	0	U	13/10/2005	38627.51875	6:44	0.0396	PCI/G	0.0189	PCI/G	1	5.3	129	G	PCI/G	PR				
5502-0000-016-C-1C-02	MSR#05-2443	147673007	476640	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.00164	0.00278	PCI/G	0	U	17/10/2005	38659.60208	3:37	0.00635	PCI/G	0.00302	PCI/G	1	5.3	20.4	G	PCI/G	PR				
5502-0000-016-C-1C-02	MSR#05-2443	147673007	472777	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.16	0.0654	PCI/G	0		13/10/2005	38627.51875	6:44	0.0474	PCI/G	0.0226	PCI/G	1	5.3	129	G	PCI/G	PR				
5502-0000-016-C-1C-02	MSR#05-2443	147673007	476952	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	0.631	1.66	PCI/G	0	U		10/11/2005	1:05	2.82	PCI/G	1.38	PCI/G	1	5.3	9.07	G	PCI/G	PR				
5502-0000-016-C-3C-03	MSR#05-2443	147673008	472777	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.454	0.169	PCI/G	0		13/10/2005	38627.52014	1:52	0.14	PCI/G	0.0651	PCI/G	1	6.2	111	G	PCI/G	PR				
5502-0000-016-C-3C-03	MSR#05-2443	147673008	472777	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0116	0.118	PCI/G	0	U	13/10/2005	38627.52014	1:52	0.147	PCI/G	0.0713	PCI/G	1	6.2	111	G	PCI/G	PR				
5502-0000-016-C-3C-03	MSR#05-2443	147673008	472777	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0	0.184	PCI/G	0	UU	13/10/2005	38627.52014	1:52	0.367	PCI/G	0.174	PCI/G	1	6.2	111	G	PCI/G	PR				
5502-0000-016-C-3C-03	MSR#05-2443	147673008	472777	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.978	0.15	PCI/G	0		13/10/2005	38627.52014	1:52	0.075	PCI/G	0.0355	PCI/G	1	6.2	111	G	PCI/G	PR				
5502-0000-016-C-3C-03	MSR#05-2443	147673008	472777	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.00552	0.0269	PCI/G	0	U	13/10/2005	38627.52014	1:52	0.0473	PCI/G	0.0223	PCI/G	1	6.2	111	G	PCI/G	PR				
5502-0000-016-C-3C-03	MSR#05-2443	147673008	472777	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.0175	0.0229	PCI/G	0	U	13/10/2005	38627.52014	1:52	0.0381	PCI/G	0.0179	PCI/G	1	6.2	111	G	PCI/G	PR				
5502-0000-016-C-3C-03	MSR#05-2443	147673008	472777	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.00196	0.0217	PCI/G	0	U	13/10/2005	38627.52014	1:52	0.0395	PCI/G	0.0179	PCI/G	1	6.2	111	G	PCI/G	PR				
5502-0000-016-C-3C-03	MSR#05-2443	147673008	472777	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0199	0.0565	PCI/G	0	U	13/10/2005	38627.52014	1:52	0.0957	PCI/G	0.0457	PCI/G	1	6.2	111	G	PCI/G	PR				
5502-0000-016-C-3C-03	MSR#05-2443	147673008	472777	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0623	0.0497	PCI/G	0	U	13/10/2005	38627.52014	1:52	0.124	PCI/G	0.0571	PCI/G	1	6.2	111	G	PCI/G	PR				
5502-0000-016-C-3C-03	MSR#05-2443	147673008	472777	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0236	0.0628	PCI/G	0	U	13/10/2005	38627.52014	1:52	0.109	PCI/G	0.0527	PCI/G	1	6.2	111	G	PCI/G	PR				
5502-0000-016-C-3C-03	MSR#05-2443	147673008	472777	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.469	0.0727	PCI/G	0		13/10/2005	38627.52014	1:52	0.0592	PCI/G	0.0286	PCI/G	1	6.2	111	G	PCI/G	PR				
5502-0000-016-C-3C-03	MSR#05-2443	147673008	472777	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	1.22	0.149	PCI/G	0		13/10/2005	38627.52014	1:52	0.0695	PCI/G	0.0332	PCI/G	1	6.2	111	G	PCI/G	PR				
5502-0000-016-C-3C-03	MSR#05-2443	147673008	472777	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.0116	0.0233	PCI/G	0	U	13/10/2005	38627.52014	1:52	0.0387	PCI/G	0.0181	PCI/G	1	6.2	111	G	PCI/G	PR				
5502-0000-016-C-3C-03	MSR#05-2443	147673008	472777	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0017	0.0205	PCI/G	0	U	13/10/2005	38627.52014	1:52	0.0361	PCI/G	0.017	PCI/G	1	6.2	111	G	PCI/G	PR				
5502-0000-016-C-3C-03	MSR#05-2443	147673008	472777	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	8.37	1.05	PCI/G	0		13/10/2005	38627.52014	1:52	0.404	PCI/G	0.184	PCI/G	1	6.2	111	G	PCI/G	PR				
5502-0000-016-C-3C-03	MSR#05-2443	147673008	472777	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.978	0.15	PCI/G	0		13/10/2005	38627.52014	1:52	0.075	PCI/G	0.0355	PCI/G	1	6.2	111	G	PCI/G	PR				
5502-0000-016-C-3C-03	MSR#05-2443	147673008	472777	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00993	0.0195	PCI/G	0	U	13/10/2005	38627.52014	1:52	0.0344	PCI/G	0.0163	PCI/G	1	6.2	111	G	PCI/G	PR				
5502-0000-016-C-3C-03	MSR#05-2443	147673008	472777	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.147	0.0415	PCI/G	0		13/10/2005	38627.52014	1:52	0.0404	PCI/G	0.0191	PCI/G	1	6.2	111	G	PCI/G	PR				
5502-0000-016-C-3C-03	MSR#05-2443	147673008	476952	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-0.247	1.63	PCI/G	0	U		10/11/2005	2:39	2.81	PCI/G	1.37	PCI/G	1	6.2	9.14	G	PCI/G	PR				
5502-0000-016-C-4C-04	MSR#05-2443	147673009	472777	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.486	0.156	PCI/G	0		13/10/2005	38627.52014	1:52	0.13	PCI/G	0.06	PCI/G	1	6.1	121	G	PCI/G	PR				
5502-0000-016-C-4C-04	MSR#05-2443	147673009	472777	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0192	0.106	PCI/G	0	U	13/10/2005	38627.52014	1:52	0.183	PCI/G	0.088	PCI/G	1	6.1	121	G	PCI/G	PR				
5502-0000-016-C-4C-04	MSR#05-2443	147673009	472777	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.383	0.243	PCI/G	0		13/10/2005	38627.52014	1:52	0.292	PCI/G	0.137	PCI/G	1	6.1	121	G	PCI/G	PR				
5502-0000-016-C-4C-04	MSR#05-2443	147673009	472777	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.596	0.11	PCI/G	0		13/10/2005	38627.52014	1:52	0.0578	PCI/G	0.0269	PCI/G	1	6.1	121	G	PCI/G	PR				
5502-0000-016-C-4C-04	MSR#05-2443	147673009	472777	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0195	0.0242	PCI/G	0	U	13/10/2005	38627.52014	1:52	0.0409	PCI/G	0.0191	PCI/G	1	6.1	121	G	PCI/G	PR				
5502-0000-016-C-4C-04	MSR#05-2443	147673009	472777	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.0102	0.0184	PCI/G	0	U	13/10/2005	38627.52014	1:52	0.031	PCI/G	0.0144	PCI/G	1	6.1	121	G	PCI/G	PR				
5502-0000-016-C-4C-04	MSR#05-2443	147673009	472777	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.000348	0.0198	PCI/G	0	U	13/10/2005	38627.52014	1:52	0.0362	PCI/G	0.0163	PCI/G	1	6.1	121	G	PCI/G	PR				
5502-0000-016-C-4C-04	MSR#05-2443	147673009	472777	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.00883	0.0498	PCI/G	0	U	13/10/2005	38627.52014	1:52	0.0841	PCI/G	0.0399	PCI/G	1	6.1	121	G	PCI/G	PR				
5502-0000-016-C-4C-04	MSR#05-2443	147673009	472777	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0149	0.0587	PCI/G	0	U	13/10/2005	38627.52014	1:52	0.103	PCI/G	0.0467	PCI/G	1	6.1	121	G	PCI/G	PR				
5502-0000-016-C-4C-04	MSR#05-2443	147673009	472777	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0245	0.054	PCI/G	0	U	13/10/2005	38627.52014	1:52	0.1	PCI/G	0.0483	PCI/G	1	6.1	121	G	PCI/G	PR				
5502-0000-016-C-4C-04	MSR#05-2443	147673009	472777	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.509	0.0741	PCI/G	0		13/10/2005	38627.52014	1:52	0.0523	PCI/G	0.0251	PCI/G	1	6.1	121	G	PCI/G	PR				
5502-0000-016-C-4C-04	MSR#05-2443	147673009	472777	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.672	0.0999	PCI/G	0		13/10/2005	38627.52014	1:52	0.0577	PCI/G	0.0273	PCI/G	1	6.1	121	G	PCI/G	PR				
5502-0000-016-C-4C-04	MSR#05-2443	147673009	472777	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.0109	0.0208	PCI/G	0	U	13/10/2005	38627.52014	1:52	0.0344	PCI/G	0.0159	PCI/G	1	6.1	121	G	PCI/G	PR				

5502-0000-016-C-4C-04	MSR#05-2443	147673009	472777	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.00602	0.0157	PCI/G	0	U	13/10/2005	38627.52014	1:52	0.0268	PCI/G	0.0124	PCI/G	1	6.1	121	G	PCI/G	PR	
5502-0000-016-C-4C-04	MSR#05-2443	147673009	472777	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	8.65	0.965	PCI/G	0		13/10/2005	38627.52014	1:52	0.291	PCI/G	0.127	PCI/G	1	6.1	121	G	PCI/G	PR	
5502-0000-016-C-4C-04	MSR#05-2443	147673009	472777	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.596	0.11	PCI/G	0		13/10/2005	38627.52014	1:52	0.0578	PCI/G	0.0269	PCI/G	1	6.1	121	G	PCI/G	PR	
5502-0000-016-C-4C-04	MSR#05-2443	147673009	472777	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.0107	0.0166	PCI/G	0	U	13/10/2005	38627.52014	1:52	0.0288	PCI/G	0.0135	PCI/G	1	6.1	121	G	PCI/G	PR	
5502-0000-016-C-4C-04	MSR#05-2443	147673009	476640	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.00278	0.00311	PCI/G	0	U	17/10/2005	38659.60208	3:49	0.00722	PCI/G	0.00345	PCI/G	1	6.1	19.8	G	PCI/G	PR	
5502-0000-016-C-4C-04	MSR#05-2443	147673009	472777	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.156	0.0413	PCI/G	0		13/10/2005	38627.52014	1:52	0.0327	PCI/G	0.0153	PCI/G	1	6.1	121	G	PCI/G	PR	
5502-0000-016-C-4C-04	MSR#05-2443	147673009	476952	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-0.497	1.56	PCI/G	0	U		10/11/2005	4:50	2.7	PCI/G	1.32	PCI/G	1	6.1	9.4	G	PCI/G	PR	
5502-0000-017-C-1C-01	MSR#05-2443	147673010	472777	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.497	0.194	PCI/G	0		13/10/2005	38627.52014	1:53	0.117	PCI/G	0.0537	PCI/G	1	5.6	109	G	PCI/G	PR	
5502-0000-017-C-1C-01	MSR#05-2443	147673010	472777	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0545	0.0765	PCI/G	0	U	13/10/2005	38627.52014	1:53	0.137	PCI/G	0.0662	PCI/G	1	5.6	109	G	PCI/G	PR	
5502-0000-017-C-1C-01	MSR#05-2443	147673010	472777	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.326	0.242	PCI/G	0		13/10/2005	38627.52014	1:53	0.315	PCI/G	0.148	PCI/G	1	5.6	109	G	PCI/G	PR	
5502-0000-017-C-1C-01	MSR#05-2443	147673010	472777	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.531	0.0958	PCI/G	0		13/10/2005	38627.52014	1:53	0.0716	PCI/G	0.0338	PCI/G	1	5.6	109	G	PCI/G	PR	
5502-0000-017-C-1C-01	MSR#05-2443	147673010	472777	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0314	0.0391	PCI/G	0	U	13/10/2005	38627.52014	1:53	0.0459	PCI/G	0.0215	PCI/G	1	5.6	109	G	PCI/G	PR	
5502-0000-017-C-1C-01	MSR#05-2443	147673010	472777	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.00587	0.0213	PCI/G	0	U	13/10/2005	38627.52014	1:53	0.0377	PCI/G	0.0177	PCI/G	1	5.6	109	G	PCI/G	PR	
5502-0000-017-C-1C-01	MSR#05-2443	147673010	472777	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0209	0.0192	PCI/G	0	U	13/10/2005	38627.52014	1:53	0.0398	PCI/G	0.018	PCI/G	1	5.6	109	G	PCI/G	PR	
5502-0000-017-C-1C-01	MSR#05-2443	147673010	472777	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.00148	0.0532	PCI/G	0	U	13/10/2005	38627.52014	1:53	0.0939	PCI/G	0.0446	PCI/G	1	5.6	109	G	PCI/G	PR	
5502-0000-017-C-1C-01	MSR#05-2443	147673010	472777	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0433	0.0613	PCI/G	0	U	13/10/2005	38627.52014	1:53	0.119	PCI/G	0.0543	PCI/G	1	5.6	109	G	PCI/G	PR	
5502-0000-017-C-1C-01	MSR#05-2443	147673010	472777	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0573	0.0562	PCI/G	0	U	13/10/2005	38627.52014	1:53	0.1	PCI/G	0.0484	PCI/G	1	5.6	109	G	PCI/G	PR	
5502-0000-017-C-1C-01	MSR#05-2443	147673010	472777	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.438	0.0667	PCI/G	0		13/10/2005	38627.52014	1:53	0.0527	PCI/G	0.0253	PCI/G	1	5.6	109	G	PCI/G	PR	
5502-0000-017-C-1C-01	MSR#05-2443	147673010	472777	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.553	0.0866	PCI/G	0		13/10/2005	38627.52014	1:53	0.0604	PCI/G	0.0285	PCI/G	1	5.6	109	G	PCI/G	PR	
5502-0000-017-C-1C-01	MSR#05-2443	147673010	472777	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0206	0.0252	PCI/G	0	U	13/10/2005	38627.52014	1:53	0.0414	PCI/G	0.0194	PCI/G	1	5.6	109	G	PCI/G	PR	
5502-0000-017-C-1C-01	MSR#05-2443	147673010	472777	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.0029	0.0212	PCI/G	0	U	13/10/2005	38627.52014	1:53	0.036	PCI/G	0.0169	PCI/G	1	5.6	109	G	PCI/G	PR	
5502-0000-017-C-1C-01	MSR#05-2443	147673010	472777	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.65	0.943	PCI/G	0		13/10/2005	38627.52014	1:53	0.338	PCI/G	0.15	PCI/G	1	5.6	109	G	PCI/G	PR	
5502-0000-017-C-1C-01	MSR#05-2443	147673010	472777	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.531	0.0958	PCI/G	0		13/10/2005	38627.52014	1:53	0.0716	PCI/G	0.0338	PCI/G	1	5.6	109	G	PCI/G	PR	
5502-0000-017-C-1C-01	MSR#05-2443	147673010	472777	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.0069	0.0187	PCI/G	0	U	13/10/2005	38627.52014	1:53	0.0321	PCI/G	0.0152	PCI/G	1	5.6	109	G	PCI/G	PR	
5502-0000-017-C-1C-01	MSR#05-2443	147673010	476640	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.000115	0.00327	PCI/G	0	U	17/10/2005	38659.60208	3:49	0.00713	PCI/G	0.0034	PCI/G	1	5.6	18.6	G	PCI/G	PR	
5502-0000-017-C-1C-01	MSR#05-2443	147673010	472777	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.143	0.0408	PCI/G	0		13/10/2005	38627.52014	1:53	0.0403	PCI/G	0.0191	PCI/G	1	5.6	109	G	PCI/G	PR	
5502-0000-017-C-1C-01	MSR#05-2443	147673010	476952	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	2.05	1.65	PCI/G	0	U		10/11/2005	6:24	2.73	PCI/G	1.33	PCI/G	1	5.6	9.42	G	PCI/G	PR	
5502-0000-017-C-1C-02	MSR#05-2443	147673011	472777	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.576	0.182	PCI/G	0		13/10/2005	38627.52014	1:53	0.153	PCI/G	0.0699	PCI/G	1	6.7	113	G	PCI/G	PR	
5502-0000-017-C-1C-02	MSR#05-2443	147673011	472777	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.00776	0.0305	PCI/G	0	U	13/10/2005	38627.52014	1:53	0.0534	PCI/G	0.0258	PCI/G	1	6.7	113	G	PCI/G	PR	
5502-0000-017-C-1C-02	MSR#05-2443	147673011	472777	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.309	0.374	PCI/G	0	U	13/10/2005	38627.52014	1:53	0.375	PCI/G	0.175	PCI/G	1	6.7	113	G	PCI/G	PR	
5502-0000-017-C-1C-02	MSR#05-2443	147673011	472777	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.611	0.14	PCI/G	0		13/10/2005	38627.52014	1:53	0.0817	PCI/G	0.0383	PCI/G	1	6.7	113	G	PCI/G	PR	
5502-0000-017-C-1C-02	MSR#05-2443	147673011	472777	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0	0.0456	PCI/G	0	UU	13/10/2005	38627.52014	1:53	0.051	PCI/G	0.0236	PCI/G	1	6.7	113	G	PCI/G	PR	
5502-0000-017-C-1C-02	MSR#05-2443	147673011	472777	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.019	0.0266	PCI/G	0	U	13/10/2005	38627.52014	1:53	0.0503	PCI/G	0.0237	PCI/G	1	6.7	113	G	PCI/G	PR	
5502-0000-017-C-1C-02	MSR#05-2443	147673011	472777	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.0111	0.0261	PCI/G	0	U	13/10/2005	38627.52014	1:53	0.0463	PCI/G	0.0207	PCI/G	1	6.7	113	G	PCI/G	PR	
5502-0000-017-C-1C-02	MSR#05-2443	147673011	472777	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0496	0.0561	PCI/G	0	U	13/10/2005	38627.52014	1:53	0.0923	PCI/G	0.0435	PCI/G	1	6.7	113	G	PCI/G	PR	
5502-0000-017-C-1C-02	MSR#05-2443	147673011	472777	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0128	0.0789	PCI/G	0	U	13/10/2005	38627.52014	1:53	0.142	PCI/G	0.0643	PCI/G	1	6.7	113	G	PCI/G	PR	
5502-0000-017-C-1C-02	MSR#05-2443	147673011	472777	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0821	0.0665	PCI/G	0	U	13/10/2005	38627.52014	1:53	0.0869	PCI/G	0.0418	PCI/G	1	6.7	113	G	PCI/G	PR	
5502-0000-017-C-1C-02	MSR#05-2443	147673011	472777	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.478	0.0698	PCI/G	0		13/10/2005	38627.52014	1:53	0.0489	PCI/G	0.0232	PCI/G	1	6.7	113	G	PCI/G	PR	
5502-0000-017-C-1C-02	MSR#05-2443	147673011	472777	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.608	0.11	PCI/G	0		13/10/2005	38627.52014	1:53	0.0759	PCI/G	0.036	PCI/G	1	6.7	113	G	PCI/G	PR	
5502-0000-017-C-1C-02	MSR#05-2443	147673011	472777	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.00686	0.0277	PCI/G	0	U	13/10/2005	38627.52014	1:53	0.0504	PCI/G	0.0235	PCI/G	1	6.7	113	G	PCI/G	PR	
5502-0000-017-C-1C-02	MSR#05-2443	147673011	472777	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0144	0.0231	PCI/G	0	U	13/10/2005	38627.52014	1:53	0.0434	PCI/G	0.0203	PCI/G	1	6.7	113	G	PCI/G	PR	
5502-0000-017-C-1C-02	MSR#05-2443	147673011	472777	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	8.87	1.12	PCI/G	0		13/10/2005	38627.52014	1:53	0.43	PCI/G	0.19	PCI/G	1	6.7	113	G	PCI/G	PR	
5502-0000-017-C-1C-02	MSR#05-2443	147673011	472777	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.611	0.14	PCI/G	0		13/10/2005	38627.52014	1:53	0.0817	PCI/G	0.0383	PCI/G	1	6.7	113	G	PCI/G	PR	
5502-0000-017-C-1C-02	MSR#05-2443	147673011	472777	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.0093	0.0199	PCI/G	0	U	13/10/2005	38627.52014	1:53	0.0357	PCI/G	0.0168	PCI/G	1	6.7	113	G	PCI/G	PR	
5502-0000-017-C-1C-02	MSR#05-2443	147673011	476640	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.00055	0.00285	PCI/G	0	U	17/10/2005	38659.60208	3:52	0.00631	PCI/G	0.00301	PCI/G	1	6.7	19.1	G	PCI/G	PR	
5502-0000-017-C-1C-02	MSR#05-2443	147673011	472777	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.196	0.0531	PCI/G	0		13/10/2005	38627.52014	1:53	0.0409	PCI/G	0.0191	PCI/G	1	6.7	113	G	PCI/G	PR	
5502-0000-017-C-1C-02	MSR#05-2443	147673011	476952	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	0.262	1.6	PCI/G	0	U		10/11/2005	7:58	2.74	PCI/G	1.33	PCI/G	1	6.7	9.42	G	PCI/G	PR	
5502-0000-017-C-2C-03	MSR#05-2443	147673012	472777	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.645	0.13	PCI/G	0		13/10/2005	38627.52083	6:46	0.103	PCI/G	0.0481	PCI/G	1	6.1	113	G	PCI/G	PR	
5502-0000-017-C-2C-03	MSR#05-2443	147673012	472777	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0182	0.11	PCI/G	0	U	13/10/2005	38627.52083	6:46	0.167	PCI/G	0.0806	PCI/G	1	6.1	113	G	PCI/G	PR	
5502-0000-017-C-2C-03	MSR#05-2443	147673012	472777	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0	0.226	PCI/G	0	UU	13/10/2005	38627.52083	6:46	0.218	PCI/G	0.102	PCI/G	1	6.1	113	G	PCI/G	PR	
5502-0000-017-C-2C-03	MSR#05-2443	147673012	472777	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.641	0.09	PCI/G	0		13/10/2005	38627.52083	6:46	0.0588	PCI/G	0.028	PCI/G	1	6.1	113	G	PCI/G	PR	
5502-0000-017-C-2C-03	MSR#05-2443	147673012	472777	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0	0.041	PCI/G	0	UU	13/10/2005	38627.52083	6:46	0.0372	PCI/G	0.0176	PCI/G	1	6.1	113	G	PCI/G	PR	
5502-0000-017-C-2C-03	MSR#05-2443	147673012	472777	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.0119	0.0165	PCI/G	0	U	13/10/2005	38627.52083	6:46	0.0298	PCI/G	0.0141	PCI/G	1	6.1	113	G	PCI/G	PR	
5502-0000-017-C-2C-03	MSR#05-2443	147673012	472777	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.00727	0.0174	PCI/G	0	U	13/10/2005	38627.52083	6:46	0.0316	PCI/G	0.0146	PCI/G	1	6.1	113	G	PCI/G	PR	
5502-0000-017-C-2C-03	MSR#05-2443	147673012	472777	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.00754	0.0415	PCI/G	0	U	13/10/2005	38627.52083	6:46	0.0737	PCI/G	0.0351	PCI/G	1	6.1	113	G	PCI/G	PR	
5502-0000-017-C-2C-03	MSR#05-2443	147673012	472777	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0386	0.0524	PCI/G	0	U	13/10/2005	38627.52083	6:46	0.0969	PCI/G	0.0451	PCI/G	1	6.1	113	G	PCI/G	PR	
5502-0000-017-C-2C-03	MSR#05-2443	147673012	472777	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0235	0.0531	PCI/G	0	U	13/10/2005	38627.52083	6:46	0.0965	PCI/G	0.0467	PCI/G	1	6.1	113	G	PCI/G	PR	
5502-0000-017-C-2C-03	MSR#05-2443	147673012	472777	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.556	0.0543	PCI/G	0		13/10/2005	38627.52083	6:46	0.0479	PCI/G	0.0231	PCI/G	1	6.1	113	G	PCI/G	PR	
5502-0000-017-C-2C-03	MSR#05-2443	147673012	472777	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.783	0.0793	PCI/G	0		13/10/2005	38627.52083	6:46	0.0541	PCI/G	0.0258	PCI/G	1	6.1	113	G	PCI/G	PR	
5502-0000-017-C-2C-03	MSR#05-2443	147673012	472777	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0174	0.0189	PCI/G	0	U	13/10/2005	38627.52083	6:46	0.0269	PCI/G	0.0126	PCI/G	1	6.1	113	G	PCI/G	PR	
5502-0000-017-C-2C-03	MSR#05-2443	147673012	472777	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.0136	0.0166	PCI/G	0	U	13/10/2005	38627.52083	6:46	0.0266	PCI/G	0.0126	PCI/G	1	6.1	113	G	PCI/G	PR	
5502-0000-017-C-2C-03	MSR#05-2443	147673012	472777	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	9.37	0.653	PCI/G	0		13/10/2005	38627.52083	6:46	0.274	PCI/G	0.125	PCI/G	1	6.1	113	G	PCI/G	PR	
5502-0000-017-C-2C-03	MSR#05-2443	147673012	472777	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.641	0.09	PCI/G	0		13/10/2005	38627.52083	6:46	0.0588	PCI/G	0.028	PCI/G	1	6.1	113	G	PCI/G	PR	
5502-0000-017-C-2C-03	MSR#05-2443	147673012	472777	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00547	0.0149	PCI/G	0	U	13/10/2005	38627.52083	6:46	0.0257	PCI/G	0.0122	PCI/G	1	6.1	113	G	PCI/G	PR	
5502-0000-017-C-2C-03	MSR#05-2443	147673012	476640	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-5.34E-05	0.00251	PCI/G	0	U	17/10/2005	38659.60208	3:52	0.00537	PCI/G	0.00256	PCI/G	1	6.1	19.6	G	PCI/G	PR	
5502-0000-017-C-2C-03	MSR#05-2443	147673012	472777	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.153	0.0408	PCI/G	0		13/10/2005	38627.52083	6:46	0.0291	PCI/G	0.0138	PCI/G	1	6.1	113	G	PCI/G	PR	
5502-0000-017-C-2C-03	MSR#05-2443	147673012	476952	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-1.08	1.33	PCI/G	0	U		10/11/2005	9:31	2.34	PCI/G	1.14	PCI/G	1	6.1	9.36	G	PCI/G	PR	
5502-0000-017-C-4C-04	MSR#05-2443	147673013	472777	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.502	0.144	PCI/G	0		13/10/2005	38627.52083	11:38	0.111	PCI/G	0.0514	PCI/G	1	4.8	129	G	PCI/G	PR	
5502-0000-017-C-4C-04	MSR#05-2443	147673013	472777	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.00954	0.0312	PCI/G	0	U	13/10/2005	38627.52083	11:38	0.0491	PCI/G	0.0239	PCI/G	1	4.8	129	G	PCI/G	PR	
5502-0000-017-C-4C-04	MSR#05-2443	147673013	472777	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0	0.245	PCI/G	0	UU	13/10/2005	38627.52083	11:38	0.265	PCI/G	0.125	PCI/G	1	4.8	129	G	PCI/G	PR	
5502-0000-017-C-4C-04	MSR#05-2443	147673013	472777	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.688	0.0987	PCI/G	0		13/10/2005	38627.52083	11:38	0.0619	PCI/G	0.0293	PCI/G	1	4.8	129	G	PCI/G	PR	
5502-0000-017-C-4C-04	MSR#05-2443	147673013	472777	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0158	0.0234	PCI/G	0	U	13/10/2005	38627.52083	11:38	0.0423	PCI/G	0.02	PCI/G	1	4.8	129	G	PCI/G	PR	
5502-0000-017-C-4C-04	MSR#05-2443	147673013	472777	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.00538	0.0195	PCI/G	0	U	13/10/2005	38627.52083	11:38	0.0334	PCI/G	0.0157	PCI/G	1	4.8	129	G	PCI/G	PR	
5502-0000-017-C-4C-04	MSR#05-2443	147673013	472777	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.0092	0.0181	PCI/G	0	U	13/10/2005	38627.52083	11:38	0.0309	PCI/G	0.0139	PCI/G	1	4.8	129	G	PCI/G	PR	
5502-0000-017-C-4C-04	MSR#05-2443	147673013	472777	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.041	0.0538	PCI/G	0	U	13/10/2005	38627.52083	11:38	0.0917	PCI/G	0.044	PCI/G	1	4.8	129	G	PCI/G	PR	
5502-0000-017-C-4C-04	MSR#05-2443	147673013	472777	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0264	0.0613	PCI/G	0	U	13/10/2005	38627.52083	11:38	0.114	PCI/G	0.0527	PCI/G	1	4.8	129	G	PCI/G	PR	
5502-0000-017-C-4C-04	MSR#05-2443	147673013	472777	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0203	0.0486	PCI/G	0	U	13/10/2005	38627.52083	11:38	0.0856	PCI/G	0.0417	PCI/G	1	4.8	129	G	PCI/G	PR	
5502-0000-017-C-4C-04	MSR#05-2443	147673013	472777	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.493	0.0757	PCI/G	0		13/10/2005	38627.52083	11:38	0.0523	PCI/G	0.0253	PCI/G	1	4.8	129	G	PCI/G	PR	
5502-0000-017-C-4C-04	MSR#05-2443	147673013	472777	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.705	0.112	PCI/G	0		13/10/2005	38627.52083	11:38	0.069	PCI/G	0.0332	PCI/G	1	4.8	129	G	PCI/G	PR	
5502-0000-017-C-4C-04	MSR#05-2443	147673013	472777	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.00573	0.0207	PCI/G	0	U	13/10/2005	38627.52083	11:38	0.0366	PCI/G	0.0172	PCI/G	1	4.8	129	G	PCI/G	PR	
5502-0000-017-C-4C-04	MSR#05-2443	147673013	472777	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.0232	0.0191	PCI/G	0	U	13/10/2005	38627.52083	11:38	0.0299	PCI/G	0.0141	PCI/G	1	4.8	129	G	PCI/G	PR	
5502-0000-017-C-4C-04	MSR#05-2443	147673013	472777	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	9.05	0.87	PCI/G	0		13/10/2005	38627.52083	11:38	0.3	PCI/G	0.135	PCI/G	1	4.8	129	G	PCI/G	PR	
5502-0000-017-C-4C-04	MSR#05-2443	147673013	472777	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.688	0.0987	PCI/G	0		13/10/2005	38627.52083	11:38	0.0619	PCI/G	0.0293	PCI/G	1	4.8	129	G	PCI/G	PR	
5502-0000-017-C-4C-04	MSR#05-2443	147673013	472777	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00582	0.0183	PCI/G	0	U	13/10/2005	38627.52083	11:38	0.0316	PCI/G	0.0151	PCI/G	1	4.8	129	G	PCI/G	PR	
5502-0000-017-C-4C-04	MSR#05-2443	147673013	476640	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.000277	0.0027	PCI/G	0	U	17/10/2005	38659.60208	3:53	0.00584	PCI/G	0.00278	PCI/G	1	4.8	18.9	G	PCI/G	PR	
5502-0000-017-C-4C-04	MSR#05-2443	147673013	472777	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.128	0.0552	PCI/G	0		13/10/2005	38627.52083	11:38	0.036	PCI/G	0.0171	PCI/G	1	4.8	129	G	PCI/G	PR	

5502-0000-017-C-4C-04	MSR#05-2443	147673013	476952	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-0.0663	1.61	PCI/G	0	U		10/11/2005	11:05	2.77	PCI/G	1.35	PCI/G	1	4.8	9.18	G	PCI/G	PR				
5502-0000-017-C-4C-05	MSR#05-2443	147673014	472777	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.324	0.102	PCI/G	0		13/10/2005	38627.52083	11:39	0.0985	PCI/G	0.0469	PCI/G	1	4.9	124	G	PCI/G	PR				
5502-0000-017-C-4C-05	MSR#05-2443	147673014	472777	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0769	0.0912	PCI/G	0	U	13/10/2005	38627.52083	11:39	0.136	PCI/G	0.0657	PCI/G	1	4.9	124	G	PCI/G	PR				
5502-0000-017-C-4C-05	MSR#05-2443	147673014	472777	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0	0.219	PCI/G	0	UU	13/10/2005	38627.52083	11:39	0.2	PCI/G	0.0954	PCI/G	1	4.9	124	G	PCI/G	PR				
5502-0000-017-C-4C-05	MSR#05-2443	147673014	472777	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.503	0.0644	PCI/G	0		13/10/2005	38627.52083	11:39	0.0508	PCI/G	0.0244	PCI/G	1	4.9	124	G	PCI/G	PR				
5502-0000-017-C-4C-05	MSR#05-2443	147673014	472777	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0252	0.0249	PCI/G	0	U	13/10/2005	38627.52083	11:39	0.0301	PCI/G	0.0144	PCI/G	1	4.9	124	G	PCI/G	PR				
5502-0000-017-C-4C-05	MSR#05-2443	147673014	472777	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.000972	0.0141	PCI/G	0	U	13/10/2005	38627.52083	11:39	0.0243	PCI/G	0.0115	PCI/G	1	4.9	124	G	PCI/G	PR				
5502-0000-017-C-4C-05	MSR#05-2443	147673014	472777	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0095	0.0138	PCI/G	0	U	13/10/2005	38627.52083	11:39	0.0255	PCI/G	0.0118	PCI/G	1	4.9	124	G	PCI/G	PR				
5502-0000-017-C-4C-05	MSR#05-2443	147673014	472777	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.00896	0.0387	PCI/G	0	U	13/10/2005	38627.52083	11:39	0.07	PCI/G	0.0337	PCI/G	1	4.9	124	G	PCI/G	PR				
5502-0000-017-C-4C-05	MSR#05-2443	147673014	472777	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0687	0.0811	PCI/G	0	U	13/10/2005	38627.52083	11:39	0.0765	PCI/G	0.0358	PCI/G	1	4.9	124	G	PCI/G	PR				
5502-0000-017-C-4C-05	MSR#05-2443	147673014	472777	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0377	0.044	PCI/G	0	U	13/10/2005	38627.52083	11:39	0.0818	PCI/G	0.0397	PCI/G	1	4.9	124	G	PCI/G	PR				
5502-0000-017-C-4C-05	MSR#05-2443	147673014	472777	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.431	0.0418	PCI/G	0		13/10/2005	38627.52083	11:39	0.0405	PCI/G	0.0196	PCI/G	1	4.9	124	G	PCI/G	PR				
5502-0000-017-C-4C-05	MSR#05-2443	147673014	472777	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.666	0.0681	PCI/G	0		13/10/2005	38627.52083	11:39	0.0464	PCI/G	0.0223	PCI/G	1	4.9	124	G	PCI/G	PR				
5502-0000-017-C-4C-05	MSR#05-2443	147673014	472777	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0	0.0269	PCI/G	0	UU	13/10/2005	38627.52083	11:39	0.0251	PCI/G	0.0119	PCI/G	1	4.9	124	G	PCI/G	PR				
5502-0000-017-C-4C-05	MSR#05-2443	147673014	472777	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0178	0.013	PCI/G	0	U	13/10/2005	38627.52083	11:39	0.024	PCI/G	0.0115	PCI/G	1	4.9	124	G	PCI/G	PR				
5502-0000-017-C-4C-05	MSR#05-2443	147673014	472777	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	9.73	0.612	PCI/G	0		13/10/2005	38627.52083	11:39	0.243	PCI/G	0.113	PCI/G	1	4.9	124	G	PCI/G	PR				
5502-0000-017-C-4C-05	MSR#05-2443	147673014	472777	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.503	0.0644	PCI/G	0		13/10/2005	38627.52083	11:39	0.0508	PCI/G	0.0244	PCI/G	1	4.9	124	G	PCI/G	PR				
5502-0000-017-C-4C-05	MSR#05-2443	147673014	472777	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00247	0.0121	PCI/G	0	U	13/10/2005	38627.52083	11:39	0.0212	PCI/G	0.0101	PCI/G	1	4.9	124	G	PCI/G	PR				
5502-0000-017-C-4C-05	MSR#05-2443	147673014	476640	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00118	0.00219	PCI/G	0	U	17/10/2005	38659.60208	3:57	0.00462	PCI/G	0.00217	PCI/G	1	4.9	18.6	G	PCI/G	PR				
5502-0000-017-C-4C-05	MSR#05-2443	147673014	472777	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.143	0.0287	PCI/G	0		13/10/2005	38627.52083	11:39	0.0236	PCI/G	0.0112	PCI/G	1	4.9	124	G	PCI/G	PR				
5502-0000-017-C-4C-05	MSR#05-2443	147673014	476952	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-1.12	1.57	PCI/G	0	U		10/11/2005	12:38	2.76	PCI/G	1.35	PCI/G	1	4.9	9.23	G	PCI/G	PR				
5502-0000-018-C-1C-01	MSR#05-2443	147673015	472777	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.301	0.257	PCI/G	0		13/10/2005	38658.50556	10:23	0.142	PCI/G	0.0686	PCI/G	1	5.9	15.8	G	PCI/G	PR				
5502-0000-018-C-1C-01	MSR#05-2443	147673015	472777	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.00803	0.0709	PCI/G	0	U	13/10/2005	38658.50556	10:23	0.103	PCI/G	0.0502	PCI/G	1	5.9	15.8	G	PCI/G	PR				
5502-0000-018-C-1C-01	MSR#05-2443	147673015	472777	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0	0.217	PCI/G	0	UU	13/10/2005	38658.50556	10:23	0.353	PCI/G	0.171	PCI/G	1	5.9	15.8	G	PCI/G	PR				
5502-0000-018-C-1C-01	MSR#05-2443	147673015	472777	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.262	0.126	PCI/G	0		13/10/2005	38658.50556	10:23	0.0811	PCI/G	0.0395	PCI/G	1	5.9	15.8	G	PCI/G	PR				
5502-0000-018-C-1C-01	MSR#05-2443	147673015	472777	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0	0.0328	PCI/G	0	UU	13/10/2005	38658.50556	10:23	0.0445	PCI/G	0.0215	PCI/G	1	5.9	15.8	G	PCI/G	PR				
5502-0000-018-C-1C-01	MSR#05-2443	147673015	472777	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.011	0.0241	PCI/G	0	U	13/10/2005	38658.50556	10:23	0.0389	PCI/G	0.0188	PCI/G	1	5.9	15.8	G	PCI/G	PR				
5502-0000-018-C-1C-01	MSR#05-2443	147673015	472777	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.0206	0.0284	PCI/G	0	U	13/10/2005	38658.50556	10:23	0.0443	PCI/G	0.0211	PCI/G	1	5.9	15.8	G	PCI/G	PR				
5502-0000-018-C-1C-01	MSR#05-2443	147673015	472777	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0461	0.0609	PCI/G	0	U	13/10/2005	38658.50556	10:23	0.0909	PCI/G	0.0444	PCI/G	1	5.9	15.8	G	PCI/G	PR				
5502-0000-018-C-1C-01	MSR#05-2443	147673015	472777	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0238	0.0816	PCI/G	0	U	13/10/2005	38658.50556	10:23	0.131	PCI/G	0.0627	PCI/G	1	5.9	15.8	G	PCI/G	PR				
5502-0000-018-C-1C-01	MSR#05-2443	147673015	472777	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.000617	0.0642	PCI/G	0	U	13/10/2005	38658.50556	10:23	0.093	PCI/G	0.0456	PCI/G	1	5.9	15.8	G	PCI/G	PR				
5502-0000-018-C-1C-01	MSR#05-2443	147673015	472777	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.421	0.0834	PCI/G	0		13/10/2005	38658.50556	10:23	0.0501	PCI/G	0.0245	PCI/G	1	5.9	15.8	G	PCI/G	PR				
5502-0000-018-C-1C-01	MSR#05-2443	147673015	472777	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.444	0.116	PCI/G	0		13/10/2005	38658.50556	10:23	0.0682	PCI/G	0.0333	PCI/G	1	5.9	15.8	G	PCI/G	PR				
5502-0000-018-C-1C-01	MSR#05-2443	147673015	472777	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.028	0.0282	PCI/G	0	U	13/10/2005	38658.50556	10:23	0.0458	PCI/G	0.0222	PCI/G	1	5.9	15.8	G	PCI/G	PR				
5502-0000-018-C-1C-01	MSR#05-2443	147673015	472777	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.000948	0.0241	PCI/G	0	U	13/10/2005	38658.50556	10:23	0.0382	PCI/G	0.0186	PCI/G	1	5.9	15.8	G	PCI/G	PR				
5502-0000-018-C-1C-01	MSR#05-2443	147673015	472777	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.93	1.05	PCI/G	0		13/10/2005	38658.50556	10:23	0.451	PCI/G	0.215	PCI/G	1	5.9	15.8	G	PCI/G	PR				
5502-0000-018-C-1C-01	MSR#05-2443	147673015	472777	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.262	0.126	PCI/G	0		13/10/2005	38658.50556	10:23	0.0811	PCI/G	0.0395	PCI/G	1	5.9	15.8	G	PCI/G	PR				
5502-0000-018-C-1C-01	MSR#05-2443	147673015	472777	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00459	0.0208	PCI/G	0	U	13/10/2005	38658.50556	10:23	0.0319	PCI/G	0.0155	PCI/G	1	5.9	15.8	G	PCI/G	PR				
5502-0000-018-C-1C-01	MSR#05-2443	147673015	476640	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.0013	0.00226	PCI/G	0	U	17/10/2005	38659.60208	4:42	0.00522	PCI/G	0.00247	PCI/G	1	5.9	19.2	G	PCI/G	PR				
5502-0000-018-C-1C-01	MSR#05-2443	147673015	472777	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.137	0.0608	PCI/G	0		13/10/2005	38658.50556	10:23	0.0361	PCI/G	0.0175	PCI/G	1	5.9	15.8	G	PCI/G	PR				
5502-0000-018-C-1C-01	MSR#05-2443	147673015	476952	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-0.348	1.57	PCI/G	0	U		10/11/2005	2:12	2.72	PCI/G	1.33	PCI/G	1	5.9	9.34	G	PCI/G	PR				
5502-0000-018-C-2C-02	MSR#05-2443	147673016	472777	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.436	0.113	PCI/G	0		13/10/2005	38627.52153	7:31	0.106	PCI/G	0.0498	PCI/G	1	6.2	110	G	PCI/G	PR				
5502-0000-018-C-2C-02	MSR#05-2443	147673016	472777	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0243	0.11	PCI/G	0	U	13/10/2005	38627.52153	7:31	0.166	PCI/G	0.0799	PCI/G	1	6.2	110	G	PCI/G	PR				
5502-0000-018-C-2C-02	MSR#05-2443	147673016	472777	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.282	0.209	PCI/G	0		13/10/2005	38627.52153	7:31	0.243	PCI/G	0.115	PCI/G	1	6.2	110	G	PCI/G	PR				
5502-0000-018-C-2C-02	MSR#05-2443	147673016	472777	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.614	0.0808	PCI/G	0		13/10/2005	38627.52153	7:31	0.0577	PCI/G	0.0274	PCI/G	1	6.2	110	G	PCI/G	PR				
5502-0000-018-C-2C-02	MSR#05-2443	147673016	472777	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0281	0.0288	PCI/G	0	U	13/10/2005	38627.52153	7:31	0.0383	PCI/G	0.0182	PCI/G	1	6.2	110	G	PCI/G	PR				
5502-0000-018-C-2C-02	MSR#05-2443	147673016	472777	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.00428	0.0177	PCI/G	0	U	13/10/2005	38627.52153	7:31	0.0274	PCI/G	0.0128	PCI/G	1	6.2	110	G	PCI/G	PR				
5502-0000-018-C-2C-02	MSR#05-2443	147673016	472777	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0139	0.0258	PCI/G	0	U	13/10/2005	38627.52153	7:31	0.0316	PCI/G	0.0145	PCI/G	1	6.2	110	G	PCI/G	PR				
5502-0000-018-C-2C-02	MSR#05-2443	147673016	472777	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0125	0.043	PCI/G	0	U	13/10/2005	38627.52153	7:31	0.0757	PCI/G	0.0361	PCI/G	1	6.2	110	G	PCI/G	PR				
5502-0000-018-C-2C-02	MSR#05-2443	147673016	472777	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0245	0.0568	PCI/G	0	U	13/10/2005	38627.52153	7:31	0.0941	PCI/G	0.0437	PCI/G	1	6.2	110	G	PCI/G	PR				
5502-0000-018-C-2C-02	MSR#05-2443	147673016	472777	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0715	0.0527	PCI/G	0	U	13/10/2005	38627.52153	7:31	0.0988	PCI/G	0.0478	PCI/G	1	6.2	110	G	PCI/G	PR				
5502-0000-018-C-2C-02	MSR#05-2443	147673016	472777	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.524	0.0533	PCI/G	0		13/10/2005	38627.52153	7:31	0.0477	PCI/G	0.023	PCI/G	1	6.2	110	G	PCI/G	PR				
5502-0000-018-C-2C-02	MSR#05-2443	147673016	472777	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.612	0.088	PCI/G	0		13/10/2005	38627.52153	7:31	0.0597	PCI/G	0.0286	PCI/G	1	6.2	110	G	PCI/G	PR				
5502-0000-018-C-2C-02	MSR#05-2443	147673016	472777	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.00662	0.0179	PCI/G	0	U	13/10/2005	38627.52153	7:31	0.0266	PCI/G	0.0124	PCI/G	1	6.2	110	G	PCI/G	PR				
5502-0000-018-C-2C-02	MSR#05-2443	147673016	472777	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.00144	0.017	PCI/G	0	U	13/10/2005	38627.52153	7:31	0.0285	PCI/G	0.0135	PCI/G	1	6.2	110	G	PCI/G	PR				
5502-0000-018-C-2C-02	MSR#05-2443	147673016	472777	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	9.44	0.697	PCI/G	0		13/10/2005	38627.52153	7:31	0.307	PCI/G	0.141	PCI/G	1	6.2	110	G	PCI/G	PR				
5502-0000-018-C-2C-02	MSR#05-2443	147673016	472777	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.614	0.0808	PCI/G	0		13/10/2005	38627.52153	7:31	0.0577	PCI/G	0.0274	PCI/G	1	6.2	110	G	PCI/G	PR				
5502-0000-018-C-2C-02	MSR#05-2443	147673016	472777	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.0102	0.0149	PCI/G	0	U	13/10/2005	38627.52153	7:31	0.0265	PCI/G	0.0126	PCI/G	1	6.2	110	G	PCI/G	PR				
5502-0000-018-C-2C-02	MSR#05-2443	147673016	476640	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.00154	0.00275	PCI/G	0	U	17/10/2005	38659.60208	4:42	0.00628	PCI/G	0.00299	PCI/G	1	6.2	19.2	G	PCI/G	PR				
5502-0000-018-C-2C-02	MSR#05-2443	147673016	472777	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.155	0.0414	PCI/G	0		13/10/2005	38627.52153	7:31	0.0304	PCI/G	0.0144	PCI/G	1	6.2	110	G	PCI/G	PR				
5502-0000-018-C-2C-02	MSR#05-2443	147673016	476953	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	0.688	1.73	PCI/G	0	U		7/11/2005	9:34	2.97	PCI/G	1.42	PCI/G	1	6.2	12.9	G	PCI/G	PR				
5502-0000-018-C-5C-03	MSR#05-2443	147673017	472777	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.498	0.138	PCI/G	0		13/10/2005	38658.50556	3:17	0.123	PCI/G	0.0571	PCI/G	1	5.7	121	G	PCI/G	PR				
5502-0000-018-C-5C-03	MSR#05-2443	147673017	472777	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.00789	0.0195	PCI/G	0	U	13/10/2005	38658.50556	3:17	0.0348	PCI/G	0.0168	PCI/G	1	5.7	121	G	PCI/G	PR				
5502-0000-018-C-5C-03	MSR#05-2443	147673017	472777	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.27	0.192	PCI/G	0	U	13/10/2005	38658.50556	3:17	0.272	PCI/G	0.127	PCI/G	1	5.7	121	G	PCI/G	PR				
5502-0000-018-C-5C-03	MSR#05-2443	147673017	472777	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.504	0.0908	PCI/G	0		13/10/2005	38658.50556	3:17	0.06	PCI/G	0.0282	PCI/G	1	5.7	121	G	PCI/G	PR				
5502-0000-018-C-5C-03	MSR#05-2443	147673017	472777	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0218	0.0217	PCI/G	0	U	13/10/2005	38658.50556	3:17	0.0409	PCI/G	0.0191	PCI/G	1	5.7	121	G	PCI/G	PR				
5502-0000-018-C-5C-03	MSR#05-2443	147673017	472777	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.00217	0.0195	PCI/G	0	U	13/10/2005	38658.50556	3:17	0.0346	PCI/G	0.0162	PCI/G	1	5.7	121	G	PCI/G	PR				
5502-0000-018-C-5C-03	MSR#05-2443	147673017	472777	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.00395	0.0219	PCI/G	0	U	13/10/2005	38658.50556	3:17	0.0381	PCI/G	0.0173	PCI/G	1	5.7	121	G	PCI/G	PR				
5502-0000-018-C-5C-03	MSR#05-2443	147673017	472777	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0133	0.0472	PCI/G	0	U	13/10/2005	38658.50556	3:17	0.0824	PCI/G	0.0392	PCI/G	1	5.7	121	G	PCI/G	PR				
5502-0000-018-C-5C-03	MSR#05-2443	147673017	472777	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0133	0.0551	PCI/G	0	U	13/10/2005	38658.50556	3:17	0.0961	PCI/G	0.0434	PCI/G	1	5.7	121	G	PCI/G	PR				
5502-0000-018-C-5C-03	MSR#05-2443	147673017	472777	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0501	0.0361	PCI/G	0	U	13/10/2005	38658.50556	3:17	0.0648	PCI/G	0.0312	PCI/G	1	5.7	121	G	PCI/G	PR				
5502-0000-018-C-5C-03	MSR#05-2443	147673017	472777	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.439	0.065	PCI/G	0		13/10/2005	38658.50556	3:17	0.0425	PCI/G	0.0204	PCI/G	1	5.7	121	G	PCI/G	PR				
5502-0000-018-C-5C-03	MSR#05-2443	147673017	472777	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.562	0.104	PCI/G	0		13/10/2005	38658.50556	3:17	0.0566	PCI/G	0.0269	PCI/G	1	5.7	121	G	PCI/G	PR				
5502-0000-018-C-5C-03	MSR#05-2443	147673017	472777	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.00805	0.0209	PCI/G	0	U	13/10/2005	38658.50556	3:17	0.0373	PCI/G	0.0174	PCI/G	1	5.7	121	G	PCI/G	PR				
5502-0000-018-C-5C-03	MSR#05-2443	147673017	472777	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0107	0.0181	PCI/G	0	U	13/10/2005	38658.50556	3:17	0.033	PCI/G	0.0155	PCI/G	1	5.7	121	G	PCI/G	PR				
5502-0000-018-C-5C-03	MSR#05-2443	147673017	472777	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	8.4	0.909	PCI/G	0		13/10/2005	38658.50556	3:17	0.31	PCI/G	0.137	PCI/G	1	5.7	121	G	PCI/G	PR				
5502-0000-018-C-5C-03	MSR#05-2443	147673017	472777	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.504	0.0908	PCI/G	0		13/10/2005	38658.50556	3:17	0.06	PCI/G	0.0282	PCI/G	1	5.7	121	G	PCI/G	PR				
5502-0000-018-C-5C-03	MSR#05-2443	147673017	472777	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00686	0.0139	PCI/G	0	U	13/10/2005	38658.50556	3:17	0.0262	PCI/G	0.0123	PCI/G	1	5.7	121	G	PCI/G	PR				
5502-0000-018-C-5C-03	MSR#05-2443	147673017	476640	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.0013	0.00244	PCI/G	0	U	17/10/2005	38659.60208	4:43	0.00513	PCI/G	0.00244	PCI/G	1	5.7	21.5	G	PCI/G	PR				
5502-0000-018-C-5C-03	MSR#05-2443	147673017	472777	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.115	0.0369	PCI/G	0		13/10/2005	38658.50556	3:17	0.0322	PCI/G	0.0151	PCI/G	1	5.7	121	G	PCI/G	PR				
5502-0000-018-C-5C-03	MSR#05-2443	147673017	476953	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	0.669	1.56	PCI/G	0	U		7/11/2005	10:06	2.67	PCI/G	1.28	PCI/G	1	5.7	12.5	G	PCI/G	PR				
5502-0000-018-C-8C-04	MSR#05-2443	147673018	472777	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.454	0.153	PCI/G	0		13/10/2005	38658.50556	3:18	0.107	PCI/G	0.0489	PCI/G	1	5.9	121	G	PCI/G	PR				
5502-0000-018-C-8C-04	MSR#05-2443	147673018	472777	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0708	0.093	PCI/G	0	U	13/10/2005	38658.50556	3:18	0.125	PCI/G	0.0606	PCI/G	1	5.9	121	G	PCI/G	PR				
5502-0000-018-C-8C-04	MSR#05-2443	147673018	472777	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.303	0.214	PCI/G	0		13/10/2005	38658.50556	3:18	0.245	PCI/G	0.113	PCI/G	1	5.9	121	G	PCI/G	PR				
5502-0000-018-C-8C-04	MSR#05-2443	147673018	472777	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.57	0.103	PCI/G	0		13/10/2005	38658.50556	3:18	0.0641	PCI/G	0.0302	PCI/G	1	5.9	121	G	PCI/G	PR				
5502-0000-018-C-8C-04	MSR#05-2443	147673018	472777	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0409	0.0385	PCI/G	0	U	13/10/2005	38658.50556	3:18	0.0417	PCI/G	0.0195	PCI/G	1	5.9	121	G	PCI/G	PR				

5502-0000-018-C-8C-04	MSR#05-2443	147673018	472777	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.000787	0.0176	PCI/G	0	U	13/10/2005	38658.50556	3:18	0.031	PCI/G	0.0144	PCI/G	1	5.9	121	G	PCI/G	PR						
5502-0000-018-C-8C-04	MSR#05-2443	147673018	472777	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.00346	0.021	PCI/G	0	U	13/10/2005	38658.50556	3:18	0.0342	PCI/G	0.0154	PCI/G	1	5.9	121	G	PCI/G	PR						
5502-0000-018-C-8C-04	MSR#05-2443	147673018	472777	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0245	0.0498	PCI/G	0	U	13/10/2005	38658.50556	3:18	0.0864	PCI/G	0.0411	PCI/G	1	5.9	121	G	PCI/G	PR						
5502-0000-018-C-8C-04	MSR#05-2443	147673018	472777	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0366	0.059	PCI/G	0	U	13/10/2005	38658.50556	3:18	0.0987	PCI/G	0.0447	PCI/G	1	5.9	121	G	PCI/G	PR						
5502-0000-018-C-8C-04	MSR#05-2443	147673018	472777	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0212	0.064	PCI/G	0	U	13/10/2005	38658.50556	3:18	0.0954	PCI/G	0.0462	PCI/G	1	5.9	121	G	PCI/G	PR						
5502-0000-018-C-8C-04	MSR#05-2443	147673018	472777	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.481	0.0672	PCI/G	0		13/10/2005	38658.50556	3:18	0.0486	PCI/G	0.0233	PCI/G	1	5.9	121	G	PCI/G	PR						
5502-0000-018-C-8C-04	MSR#05-2443	147673018	472777	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.625	0.103	PCI/G	0		13/10/2005	38658.50556	3:18	0.0623	PCI/G	0.0296	PCI/G	1	5.9	121	G	PCI/G	PR						
5502-0000-018-C-8C-04	MSR#05-2443	147673018	472777	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0186	0.0203	PCI/G	0	U	13/10/2005	38658.50556	3:18	0.0378	PCI/G	0.0177	PCI/G	1	5.9	121	G	PCI/G	PR						
5502-0000-018-C-8C-04	MSR#05-2443	147673018	472777	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00831	0.0182	PCI/G	0	U	13/10/2005	38658.50556	3:18	0.0326	PCI/G	0.0153	PCI/G	1	5.9	121	G	PCI/G	PR						
5502-0000-018-C-8C-04	MSR#05-2443	147673018	472777	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	8.83	0.991	PCI/G	0		13/10/2005	38658.50556	3:18	0.299	PCI/G	0.132	PCI/G	1	5.9	121	G	PCI/G	PR						
5502-0000-018-C-8C-04	MSR#05-2443	147673018	472777	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.57	0.103	PCI/G	0		13/10/2005	38658.50556	3:18	0.0641	PCI/G	0.0302	PCI/G	1	5.9	121	G	PCI/G	PR						
5502-0000-018-C-8C-04	MSR#05-2443	147673018	472777	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00138	0.0162	PCI/G	0	U	13/10/2005	38658.50556	3:18	0.029	PCI/G	0.0137	PCI/G	1	5.9	121	G	PCI/G	PR						
5502-0000-018-C-8C-04	MSR#05-2443	147673018	476640	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.00092	0.00264	PCI/G	0	U	17/10/2005	38659.60208	4:43	0.00594	PCI/G	0.00282	PCI/G	1	5.9	18.9	G	PCI/G	PR						
5502-0000-018-C-8C-04	MSR#05-2443	147673018	472777	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.158	0.0427	PCI/G	0		13/10/2005	38658.50556	3:18	0.0327	PCI/G	0.0153	PCI/G	1	5.9	121	G	PCI/G	PR						
5502-0000-018-C-8C-04	MSR#05-2443	147673018	476953	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	0.207	1.51	PCI/G	0	U		7/11/2005	10:38	2.62	PCI/G	1.26	PCI/G	1	5.9	12	G	PCI/G	PR						
5502-0000-018-C-8C-05	MSR#05-2443	147673019	472777	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.474	0.148	PCI/G	0		13/10/2005	38658.50556	3:32	0.103	PCI/G	0.0468	PCI/G	1	6.5	117	G	PCI/G	PR						
5502-0000-018-C-8C-05	MSR#05-2443	147673019	472777	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0957	0.111	PCI/G	0	U	13/10/2005	38658.50556	3:32	0.178	PCI/G	0.0852	PCI/G	1	6.5	117	G	PCI/G	PR						
5502-0000-018-C-8C-05	MSR#05-2443	147673019	472777	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0	0.245	PCI/G	0	UU	13/10/2005	38658.50556	3:32	0.252	PCI/G	0.116	PCI/G	1	6.5	117	G	PCI/G	PR						
5502-0000-018-C-8C-05	MSR#05-2443	147673019	472777	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.556	0.112	PCI/G	0		13/10/2005	38658.50556	3:32	0.0673	PCI/G	0.0316	PCI/G	1	6.5	117	G	PCI/G	PR						
5502-0000-018-C-8C-05	MSR#05-2443	147673019	472777	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0292	0.0211	PCI/G	0	U	13/10/2005	38658.50556	3:32	0.0416	PCI/G	0.0194	PCI/G	1	6.5	117	G	PCI/G	PR						
5502-0000-018-C-8C-05	MSR#05-2443	147673019	472777	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.00894	0.0206	PCI/G	0	U	13/10/2005	38658.50556	3:32	0.035	PCI/G	0.0163	PCI/G	1	6.5	117	G	PCI/G	PR						
5502-0000-018-C-8C-05	MSR#05-2443	147673019	472777	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.00451	0.0226	PCI/G	0	U	13/10/2005	38658.50556	3:32	0.0399	PCI/G	0.018	PCI/G	1	6.5	117	G	PCI/G	PR						
5502-0000-018-C-8C-05	MSR#05-2443	147673019	472777	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0396	0.0499	PCI/G	0	U	13/10/2005	38658.50556	3:32	0.0897	PCI/G	0.0426	PCI/G	1	6.5	117	G	PCI/G	PR						
5502-0000-018-C-8C-05	MSR#05-2443	147673019	472777	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0323	0.0727	PCI/G	0	U	13/10/2005	38658.50556	3:32	0.122	PCI/G	0.0556	PCI/G	1	6.5	117	G	PCI/G	PR						
5502-0000-018-C-8C-05	MSR#05-2443	147673019	472777	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.00608	0.0539	PCI/G	0	U	13/10/2005	38658.50556	3:32	0.0982	PCI/G	0.0473	PCI/G	1	6.5	117	G	PCI/G	PR						
5502-0000-018-C-8C-05	MSR#05-2443	147673019	472777	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.453	0.0688	PCI/G	0		13/10/2005	38658.50556	3:32	0.0512	PCI/G	0.0245	PCI/G	1	6.5	117	G	PCI/G	PR						
5502-0000-018-C-8C-05	MSR#05-2443	147673019	472777	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.628	0.112	PCI/G	0		13/10/2005	38658.50556	3:32	0.0582	PCI/G	0.0274	PCI/G	1	6.5	117	G	PCI/G	PR						
5502-0000-018-C-8C-05	MSR#05-2443	147673019	472777	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0139	0.0202	PCI/G	0	U	13/10/2005	38658.50556	3:32	0.0376	PCI/G	0.0174	PCI/G	1	6.5	117	G	PCI/G	PR						
5502-0000-018-C-8C-05	MSR#05-2443	147673019	472777	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0139	0.0172	PCI/G	0	U	13/10/2005	38658.50556	3:32	0.0323	PCI/G	0.0151	PCI/G	1	6.5	117	G	PCI/G	PR						
5502-0000-018-C-8C-05	MSR#05-2443	147673019	472777	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	8.58	0.96	PCI/G	0		13/10/2005	38658.50556	3:32	0.341	PCI/G	0.151	PCI/G	1	6.5	117	G	PCI/G	PR						
5502-0000-018-C-8C-05	MSR#05-2443	147673019	472777	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.556	0.112	PCI/G	0		13/10/2005	38658.50556	3:32	0.0673	PCI/G	0.0316	PCI/G	1	6.5	117	G	PCI/G	PR						
5502-0000-018-C-8C-05	MSR#05-2443	147673019	472777	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.0128	0.0157	PCI/G	0	U	13/10/2005	38658.50556	3:32	0.03	PCI/G	0.0141	PCI/G	1	6.5	117	G	PCI/G	PR						
5502-0000-018-C-8C-05	MSR#05-2443	147673019	476640	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.0018	0.00431	PCI/G	0	U	17/10/2005	38659.60208	4:44	0.00913	PCI/G	0.00437	PCI/G	1	6.5	19.3	G	PCI/G	PR						
5502-0000-018-C-8C-05	MSR#05-2443	147673019	472777	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.124	0.0474	PCI/G	0		13/10/2005	38658.50556	3:32	0.0315	PCI/G	0.0146	PCI/G	1	6.5	117	G	PCI/G	PR						
5502-0000-018-C-8C-05	MSR#05-2443	147673019	476953	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-0.0437	1.79	PCI/G	0	U		7/11/2005	11:09	3.14	PCI/G	1.51	PCI/G	1	6.5	12.2	G	PCI/G	PR						
5502-0000-019-C-1C-01	MSR#05-2443	147673020	472777	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.294	0.133	PCI/G	0		13/10/2005	38658.50556	3:33	0.12	PCI/G	0.0554	PCI/G	1	5.8	124	G	PCI/G	PR						
5502-0000-019-C-1C-01	MSR#05-2443	147673020	472777	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.00763	0.0789	PCI/G	0	U	13/10/2005	38658.50556	3:33	0.124	PCI/G	0.0596	PCI/G	1	5.8	124	G	PCI/G	PR						
5502-0000-019-C-1C-01	MSR#05-2443	147673020	472777	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.205	0.188	PCI/G	0	U	13/10/2005	38658.50556	3:33	0.3	PCI/G	0.141	PCI/G	1	5.8	124	G	PCI/G	PR						
5502-0000-019-C-1C-01	MSR#05-2443	147673020	472777	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.756	0.0988	PCI/G	0		13/10/2005	38658.50556	3:33	0.0637	PCI/G	0.03	PCI/G	1	5.8	124	G	PCI/G	PR						
5502-0000-019-C-1C-01	MSR#05-2443	147673020	472777	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0361	0.042	PCI/G	0	U	13/10/2005	38658.50556	3:33	0.0421	PCI/G	0.0197	PCI/G	1	5.8	124	G	PCI/G	PR						
5502-0000-019-C-1C-01	MSR#05-2443	147673020	472777	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.014	0.02	PCI/G	0	U	13/10/2005	38658.50556	3:33	0.0371	PCI/G	0.0174	PCI/G	1	5.8	124	G	PCI/G	PR						
5502-0000-019-C-1C-01	MSR#05-2443	147673020	472777	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.00825	0.0228	PCI/G	0	U	13/10/2005	38658.50556	3:33	0.0424	PCI/G	0.0194	PCI/G	1	5.8	124	G	PCI/G	PR						
5502-0000-019-C-1C-01	MSR#05-2443	147673020	472777	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0246	0.0521	PCI/G	0	U	13/10/2005	38658.50556	3:33	0.0912	PCI/G	0.0434	PCI/G	1	5.8	124	G	PCI/G	PR						
5502-0000-019-C-1C-01	MSR#05-2443	147673020	472777	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0355	0.0664	PCI/G	0	U	13/10/2005	38658.50556	3:33	0.125	PCI/G	0.0575	PCI/G	1	5.8	124	G	PCI/G	PR						
5502-0000-019-C-1C-01	MSR#05-2443	147673020	472777	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0388	0.0575	PCI/G	0	U	13/10/2005	38658.50556	3:33	0.0839	PCI/G	0.0404	PCI/G	1	5.8	124	G	PCI/G	PR						
5502-0000-019-C-1C-01	MSR#05-2443	147673020	472777	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.465	0.0524	PCI/G	0		13/10/2005	38658.50556	3:33	0.0538	PCI/G	0.0259	PCI/G	1	5.8	124	G	PCI/G	PR						
5502-0000-019-C-1C-01	MSR#05-2443	147673020	472777	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.976	0.0924	PCI/G	0		13/10/2005	38658.50556	3:33	0.0643	PCI/G	0.0306	PCI/G	1	5.8	124	G	PCI/G	PR						
5502-0000-019-C-1C-01	MSR#05-2443	147673020	472777	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.00728	0.022	PCI/G	0	U	13/10/2005	38658.50556	3:33	0.0368	PCI/G	0.0171	PCI/G	1	5.8	124	G	PCI/G	PR						
5502-0000-019-C-1C-01	MSR#05-2443	147673020	472777	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00183	0.0175	PCI/G	0	U	13/10/2005	38658.50556	3:33	0.0309	PCI/G	0.0145	PCI/G	1	5.8	124	G	PCI/G	PR						
5502-0000-019-C-1C-01	MSR#05-2443	147673020	472777	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.64	0.837	PCI/G	0		13/10/2005	38658.50556	3:33	0.312	PCI/G	0.138	PCI/G	1	5.8	124	G	PCI/G	PR						
5502-0000-019-C-1C-01	MSR#05-2443	147673020	472777	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.756	0.0988	PCI/G	0		13/10/2005	38658.50556	3:33	0.0637	PCI/G	0.03	PCI/G	1	5.8	124	G	PCI/G	PR						
5502-0000-019-C-1C-01	MSR#05-2443	147673020	472777	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00602	0.0161	PCI/G	0	U	13/10/2005	38658.50556	3:33	0.0299	PCI/G	0.0141	PCI/G	1	5.8	124	G	PCI/G	PR						
5502-0000-019-C-1C-01	MSR#05-2443	147673020	476640	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00156	0.00273	PCI/G	0	U	17/10/2005	38659.60208	4:44	0.00572	PCI/G	0.00271	PCI/G	1	5.8	19.1	G	PCI/G	PR						
5502-0000-019-C-1C-01	MSR#05-2443	147673020	472777	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.142	0.0384	PCI/G	0		13/10/2005	38658.50556	3:33	0.0353	PCI/G	0.0166	PCI/G	1	5.8	124	G	PCI/G	PR						
5502-0000-019-C-1C-01	MSR#05-2443	147673020	476953	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	2.4	1.89	PCI/G	0	U		7/11/2005	11:41	3.1	PCI/G	1.49	PCI/G	1	5.8	12.3	G	PCI/G	PR						
5502-0000-019-C-1C-02	MSR#05-2443	147673021	472779	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.591	0.148	PCI/G	0		13/10/2005	38658.77847	11:42	0.0997	PCI/G	0.047	PCI/G	1	6.6	113	G	PCI/G	PR						
5502-0000-019-C-1C-02	MSR#05-2443	147673021	472779	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0664	0.0539	PCI/G	0	U	13/10/2005	38658.77847	11:42	0.1	PCI/G	0.0488	PCI/G	1	6.6	113	G	PCI/G	PR						
5502-0000-019-C-1C-02	MSR#05-2443	147673021	472779	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.199	0.199	PCI/G	0	U	13/10/2005	38658.77847	11:42	0.203	PCI/G	0.0959	PCI/G	1	6.6	113	G	PCI/G	PR						
5502-0000-019-C-1C-02	MSR#05-2443	147673021	472779	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.708	0.11	PCI/G	0		13/10/2005	38658.77847	11:42	0.0565	PCI/G	0.0271	PCI/G	1	6.6	113	G	PCI/G	PR						
5502-0000-019-C-1C-02	MSR#05-2443	147673021	472779	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0245	0.0193	PCI/G	0	U	13/10/2005	38658.77847	11:42	0.0355	PCI/G	0.0169	PCI/G	1	6.6	113	G	PCI/G	PR						
5502-0000-019-C-1C-02	MSR#05-2443	147673021	472779	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.00353	0.0164	PCI/G	0	U	13/10/2005	38658.77847	11:42	0.0289	PCI/G	0.0138	PCI/G	1	6.6	113	G	PCI/G	PR						
5502-0000-019-C-1C-02	MSR#05-2443	147673021	472779	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0146	0.0186	PCI/G	0	U	13/10/2005	38658.77847	11:42	0.0307	PCI/G	0.0143	PCI/G	1	6.6	113	G	PCI/G	PR						
5502-0000-019-C-1C-02	MSR#05-2443	147673021	472779	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.00089	0.0454	PCI/G	0	U	13/10/2005	38658.77847	11:42	0.0783	PCI/G	0.0377	PCI/G	1	6.6	113	G	PCI/G	PR						
5502-0000-019-C-1C-02	MSR#05-2443	147673021	472779	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0798	0.0526	PCI/G	0	U	13/10/2005	38658.77847	11:42	0.0785	PCI/G	0.0364	PCI/G	1	6.6	113	G	PCI/G	PR						
5502-0000-019-C-1C-02	MSR#05-2443	147673021	472779	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0136	0.0465	PCI/G	0	U	13/10/2005	38658.77847	11:42	0.0818	PCI/G	0.0397	PCI/G	1	6.6	113	G	PCI/G	PR						
5502-0000-019-C-1C-02	MSR#05-2443	147673021	472779	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.512	0.0682	PCI/G	0		13/10/2005	38658.77847	11:42	0.044	PCI/G	0.0213	PCI/G	1	6.6	113	G	PCI/G	PR						
5502-0000-019-C-1C-02	MSR#05-2443	147673021	472779	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.823	0.104	PCI/G	0		13/10/2005	38658.77847	11:42	0.0543	PCI/G	0.0261	PCI/G	1	6.6	113	G	PCI/G	PR						
5502-0000-019-C-1C-02	MSR#05-2443	147673021	472779	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.00447	0.019	PCI/G	0	U	13/10/2005	38658.77847	11:42	0.0328	PCI/G	0.0156	PCI/G	1	6.6	113	G	PCI/G	PR						
5502-0000-019-C-1C-02	MSR#05-2443	147673021	472779	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0119	0.0161	PCI/G	0	U	13/10/2005	38658.77847	11:42	0.0287	PCI/G	0.0137	PCI/G	1	6.6	113	G	PCI/G	PR						
5502-0000-019-C-1C-02	MSR#05-2443	147673021	472779	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	9.99	0.869	PCI/G	0		13/10/2005	38658.77847	11:42	0.233	PCI/G	0.106	PCI/G	1	6.6	113	G	PCI/G	PR						
5502-0000-019-C-1C-02	MSR#05-2443	147673021	472779	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.708	0.11	PCI/G	0		13/10/2005	38658.77847	11:42	0.0565	PCI/G	0.0271	PCI/G	1	6.6	113	G	PCI/G	PR						
5502-0000-019-C-1C-02	MSR#05-2443	147673021	472779	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.0162	0.0145	PCI/G	0	U	13/10/2005	38658.77847	11:42	0.0261	PCI/G	0.0125	PCI/G	1	6.6	113	G	PCI/G	PR						
5502-0000-019-C-1C-02	MSR#05-2443	147673021	476641	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00285	0.00485	PCI/G	0	U	17/10/2005	38660.43611	10:58	0.00946	PCI/G	0.00455	PCI/G	1	6.6	12.9	G	PCI/G	PR						
5502-0000-019-C-1C-02	MSR#05-2443	147673021	472779	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.147	0.0377	PCI/G	0		13/10/2005	38658.77847	11:42	0.0286	PCI/G	0.0136	PCI/G	1	6.6	113	G	PCI/G	PR						
5502-0000-019-C-1C-02	MSR#05-2443	147673021	476953	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	0.83	1.84	PCI/G	0	U		8/11/2005	12:13	3.15	PCI/G	1.51	PCI/G	1	6.6	12.2	G	PCI/G	PR						
5502-0000-019-C-3C-03	MSR#05-2443	147673022	472779	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.472	0.169	PCI/G	0		13/10/2005	38658.78403	11:15	0.135	PCI/G	0.0628	PCI/G	1	5.4	117	G	PCI/G	PR						
5502-0000-019-C-3C-03	MSR#05-2443	147673022	472779	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.02	0.0844	PCI/G	0	U	13/10/2005	38658.78403	11:15	0.133	PCI/G	0.0644	PCI/G	1	5.4	117	G	PCI/G	PR						
5502-0000-019-C-3C-03	MSR#05-2443	147673022	472779	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.26	0.287	PCI/G	0	U	13/10/2005	38658.78403	11:15	0.289	PCI/G	0.136	PCI/G	1	5.4	117	G	PCI/G	PR						
5502-0000-019-C-3C-03	MSR#05-2443	147673022	472779	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.699	0.119	PCI/G	0		13/10/2005	38658.78403	11:15	0.0643	PCI/G	0.0303	PCI/G	1	5.4	117	G	PCI/G	PR						
5502-0000-019-C-3C-03	MSR#05-2443	147673022	472779	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	-0.00275	0.0235	PCI/G	0	U	13/10/2005	38658.78403	11:15	0.0407	PCI/G	0.019	PCI/G	1	5.4	117	G	PCI/G	PR						
5502-0000-019-C-3C-03	MSR#05-2443	147673022	472779	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.000309	0.0206	PCI/G	0	U	13/10/2005	38658.78403	11:15	0.0365	PCI/G	0.0172	PCI/G	1	5.4	117	G	PCI/G	PR						
5502-0000-019-C-3C-03	MSR#05-2443	147673022	472779	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.00086	0.0217	PCI/G	0	U	13/10/2005	38658.78403	11:15	0.0389	PCI/G	0.0177	PCI/G	1	5.4	117	G	PCI/G	PR						
5502-0000-019-C-3C-03	MSR#05-2443	147673022	472779	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.00399	0.0546	PCI/G	0	U	13/10/2005	38658.78403	11:15	0.0944	PCI/G	0.0451	PCI/G	1	5.4	117	G	PCI/G	PR						
5502-0000-019-C-3C-03	MSR#05-2443	147673022	472779	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0358	0.0632	PCI/G	0	U	13/10/2005	38658.78403	11:15	0.12	PCI/G	0.055	PCI/G	1	5.4	117	G	PCI/G	PR						
5502-0000-019-C-3C-03	MSR#05-2443	147673022	472779	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0439	0.0555	PCI/G	0	U	13/10/2005	38658.78403	11:15	0.0988	PCI/G	0.0478	PCI/G	1	5.4	117	G	PCI/G	PR						
5502-0000-019-C-3C-03	MSR#05-2443	147673022	472779	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.494	0.0719	PCI/G	0		13/10/2005	38658.78403	11:15	0.0527	PCI/G	0.0254	PCI/G	1	5.4	117	G	PCI/G	PR						

5502-0000-019-C-3C-03	MSR#05-2443	147673022	472779	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.734	0.11	PCI/G	0		13/10/2005	38658.78403	11:15	0.0663	PCI/G	0.0316	PCI/G	1	5.4	117	G	PCI/G	PR	
5502-0000-019-C-3C-03	MSR#05-2443	147673022	472779	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.00538	0.0237	PCI/G	0	U	13/10/2005	38658.78403	11:15	0.0404	PCI/G	0.0189	PCI/G	1	5.4	117	G	PCI/G	PR	
5502-0000-019-C-3C-03	MSR#05-2443	147673022	472779	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00439	0.0195	PCI/G	0	U	13/10/2005	38658.78403	11:15	0.0347	PCI/G	0.0164	PCI/G	1	5.4	117	G	PCI/G	PR	
5502-0000-019-C-3C-03	MSR#05-2443	147673022	472779	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.49	0.904	PCI/G	0		13/10/2005	38658.78403	11:15	0.316	PCI/G	0.14	PCI/G	1	5.4	117	G	PCI/G	PR	
5502-0000-019-C-3C-03	MSR#05-2443	147673022	472779	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.699	0.119	PCI/G	0		13/10/2005	38658.78403	11:15	0.0643	PCI/G	0.0303	PCI/G	1	5.4	117	G	PCI/G	PR	
5502-0000-019-C-3C-03	MSR#05-2443	147673022	472779	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.0119	0.0174	PCI/G	0	U	13/10/2005	38658.78403	11:15	0.0286	PCI/G	0.0135	PCI/G	1	5.4	117	G	PCI/G	PR	
5502-0000-019-C-3C-03	MSR#05-2443	147673022	476641	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00281	0.00467	PCI/G	0	U	17/10/2005	38660.43333	10:06	0.00794	PCI/G	0.00381	PCI/G	1	5.4	20.1	G	PCI/G	PR	
5502-0000-019-C-3C-03	MSR#05-2443	147673022	472779	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.144	0.0478	PCI/G	0		13/10/2005	38658.78403	11:15	0.034	PCI/G	0.016	PCI/G	1	5.4	117	G	PCI/G	PR	
5502-0000-019-C-3C-03	MSR#05-2443	147673022	476953	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	1.44	1.85	PCI/G	0	U		8/11/2005	12:45	3.11	PCI/G	1.49	PCI/G	1	5.4	12.5	G	PCI/G	PR	
5502-0000-019-C-4C-04	MSR#05-2443	147673023	472779	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.467	0.163	PCI/G	0		13/10/2005	38658.78403	11:15	0.157	PCI/G	0.073	PCI/G	1	6	115	G	PCI/G	PR	
5502-0000-019-C-4C-04	MSR#05-2443	147673023	472779	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0173	0.0367	PCI/G	0	U	13/10/2005	38658.78403	11:15	0.0573	PCI/G	0.0278	PCI/G	1	6	115	G	PCI/G	PR	
5502-0000-019-C-4C-04	MSR#05-2443	147673023	472779	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.113	0.277	PCI/G	0	U	13/10/2005	38658.78403	11:15	0.337	PCI/G	0.157	PCI/G	1	6	115	G	PCI/G	PR	
5502-0000-019-C-4C-04	MSR#05-2443	147673023	472779	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.654	0.119	PCI/G	0		13/10/2005	38658.78403	11:15	0.0838	PCI/G	0.0396	PCI/G	1	6	115	G	PCI/G	PR	
5502-0000-019-C-4C-04	MSR#05-2443	147673023	472779	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	-0.0113	0.0285	PCI/G	0	U	13/10/2005	38658.78403	11:15	0.0475	PCI/G	0.0221	PCI/G	1	6	115	G	PCI/G	PR	
5502-0000-019-C-4C-04	MSR#05-2443	147673023	472779	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.00631	0.0251	PCI/G	0	U	13/10/2005	38658.78403	11:15	0.0427	PCI/G	0.02	PCI/G	1	6	115	G	PCI/G	PR	
5502-0000-019-C-4C-04	MSR#05-2443	147673023	472779	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.00658	0.0259	PCI/G	0	U	13/10/2005	38658.78403	11:15	0.0453	PCI/G	0.0205	PCI/G	1	6	115	G	PCI/G	PR	
5502-0000-019-C-4C-04	MSR#05-2443	147673023	472779	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0245	0.0639	PCI/G	0	U	13/10/2005	38658.78403	11:15	0.11	PCI/G	0.0525	PCI/G	1	6	115	G	PCI/G	PR	
5502-0000-019-C-4C-04	MSR#05-2443	147673023	472779	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0718	0.0715	PCI/G	0	U	13/10/2005	38658.78403	11:15	0.113	PCI/G	0.0507	PCI/G	1	6	115	G	PCI/G	PR	
5502-0000-019-C-4C-04	MSR#05-2443	147673023	472779	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0861	0.0595	PCI/G	0	U	13/10/2005	38658.78403	11:15	0.106	PCI/G	0.0517	PCI/G	1	6	115	G	PCI/G	PR	
5502-0000-019-C-4C-04	MSR#05-2443	147673023	472779	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.537	0.0891	PCI/G	0		13/10/2005	38658.78403	11:15	0.0635	PCI/G	0.0306	PCI/G	1	6	115	G	PCI/G	PR	
5502-0000-019-C-4C-04	MSR#05-2443	147673023	472779	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.669	0.136	PCI/G	0		13/10/2005	38658.78403	11:15	0.0806	PCI/G	0.0385	PCI/G	1	6	115	G	PCI/G	PR	
5502-0000-019-C-4C-04	MSR#05-2443	147673023	472779	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.00202	0.0256	PCI/G	0	U	13/10/2005	38658.78403	11:15	0.0464	PCI/G	0.0216	PCI/G	1	6	115	G	PCI/G	PR	
5502-0000-019-C-4C-04	MSR#05-2443	147673023	472779	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	8.75E-05	0.0252	PCI/G	0	U	13/10/2005	38658.78403	11:15	0.0434	PCI/G	0.0205	PCI/G	1	6	115	G	PCI/G	PR	
5502-0000-019-C-4C-04	MSR#05-2443	147673023	472779	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	8.7	0.978	PCI/G	0		13/10/2005	38658.78403	11:15	0.418	PCI/G	0.188	PCI/G	1	6	115	G	PCI/G	PR	
5502-0000-019-C-4C-04	MSR#05-2443	147673023	472779	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.654	0.119	PCI/G	0		13/10/2005	38658.78403	11:15	0.0838	PCI/G	0.0396	PCI/G	1	6	115	G	PCI/G	PR	
5502-0000-019-C-4C-04	MSR#05-2443	147673023	472779	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.0119	0.0238	PCI/G	0	U	13/10/2005	38658.78403	11:15	0.0345	PCI/G	0.0163	PCI/G	1	6	115	G	PCI/G	PR	
5502-0000-019-C-4C-04	MSR#05-2443	147673023	476641	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.00317	0.00645	PCI/G	0	U	17/10/2005	38660.43333	10:06	0.0114	PCI/G	0.00553	PCI/G	1	6	18.7	G	PCI/G	PR	
5502-0000-019-C-4C-04	MSR#05-2443	147673023	472779	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.191	0.0558	PCI/G	0		13/10/2005	38658.78403	11:15	0.0436	PCI/G	0.0205	PCI/G	1	6	115	G	PCI/G	PR	
5502-0000-019-C-4C-04	MSR#05-2443	147673023	476953	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	0.141	1.75	PCI/G	0	U		8/11/2005	1:17	3.05	PCI/G	1.46	PCI/G	1	6	12.6	G	PCI/G	PR	
5502-0000-020-C-1C-01	MSR#05-2443	147673024	472779	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.588	0.152	PCI/G	0		13/10/2005	38658.78403	11:54	0.122	PCI/G	0.0552	PCI/G	1	6.9	129	G	PCI/G	PR	
5502-0000-020-C-1C-01	MSR#05-2443	147673024	472779	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0181	0.0823	PCI/G	0	U	13/10/2005	38658.78403	11:54	0.149	PCI/G	0.0715	PCI/G	1	6.9	129	G	PCI/G	PR	
5502-0000-020-C-1C-01	MSR#05-2443	147673024	472779	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.358	0.286	PCI/G	0		13/10/2005	38658.78403	11:54	0.288	PCI/G	0.132	PCI/G	1	6.9	129	G	PCI/G	PR	
5502-0000-020-C-1C-01	MSR#05-2443	147673024	472779	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.526	0.0787	PCI/G	0		13/10/2005	38658.78403	11:54	0.065	PCI/G	0.03	PCI/G	1	6.9	129	G	PCI/G	PR	
5502-0000-020-C-1C-01	MSR#05-2443	147673024	472779	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0321	0.033	PCI/G	0	U	13/10/2005	38658.78403	11:54	0.0482	PCI/G	0.0223	PCI/G	1	6.9	129	G	PCI/G	PR	
5502-0000-020-C-1C-01	MSR#05-2443	147673024	472779	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	2.57E-05	0.0185	PCI/G	0	U	13/10/2005	38658.78403	11:54	0.0332	PCI/G	0.0152	PCI/G	1	6.9	129	G	PCI/G	PR	
5502-0000-020-C-1C-01	MSR#05-2443	147673024	472779	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0105	0.022	PCI/G	0	U	13/10/2005	38658.78403	11:54	0.0438	PCI/G	0.0195	PCI/G	1	6.9	129	G	PCI/G	PR	
5502-0000-020-C-1C-01	MSR#05-2443	147673024	472779	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.00212	0.0547	PCI/G	0	U	13/10/2005	38658.78403	11:54	0.099	PCI/G	0.0468	PCI/G	1	6.9	129	G	PCI/G	PR	
5502-0000-020-C-1C-01	MSR#05-2443	147673024	472779	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0279	0.0602	PCI/G	0	U	13/10/2005	38658.78403	11:54	0.105	PCI/G	0.0462	PCI/G	1	6.9	129	G	PCI/G	PR	
5502-0000-020-C-1C-01	MSR#05-2443	147673024	472779	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0237	0.0588	PCI/G	0	U	13/10/2005	38658.78403	11:54	0.105	PCI/G	0.0505	PCI/G	1	6.9	129	G	PCI/G	PR	
5502-0000-020-C-1C-01	MSR#05-2443	147673024	472779	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.463	0.0553	PCI/G	0		13/10/2005	38658.78403	11:54	0.0524	PCI/G	0.0249	PCI/G	1	6.9	129	G	PCI/G	PR	
5502-0000-020-C-1C-01	MSR#05-2443	147673024	472779	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.456	0.088	PCI/G	0		13/10/2005	38658.78403	11:54	0.0717	PCI/G	0.0339	PCI/G	1	6.9	129	G	PCI/G	PR	
5502-0000-020-C-1C-01	MSR#05-2443	147673024	472779	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.00712	0.0278	PCI/G	0	U	13/10/2005	38658.78403	11:54	0.0409	PCI/G	0.0188	PCI/G	1	6.9	129	G	PCI/G	PR	
5502-0000-020-C-1C-01	MSR#05-2443	147673024	472779	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00985	0.0187	PCI/G	0	U	13/10/2005	38658.78403	11:54	0.0349	PCI/G	0.0161	PCI/G	1	6.9	129	G	PCI/G	PR	
5502-0000-020-C-1C-01	MSR#05-2443	147673024	472779	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	8.21	0.879	PCI/G	0		13/10/2005	38658.78403	11:54	0.413	PCI/G	0.183	PCI/G	1	6.9	129	G	PCI/G	PR	
5502-0000-020-C-1C-01	MSR#05-2443	147673024	472779	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.526	0.0787	PCI/G	0		13/10/2005	38658.78403	11:54	0.065	PCI/G	0.03	PCI/G	1	6.9	129	G	PCI/G	PR	
5502-0000-020-C-1C-01	MSR#05-2443	147673024	472779	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.0043	0.0186	PCI/G	0	U	13/10/2005	38658.78403	11:54	0.0328	PCI/G	0.0153	PCI/G	1	6.9	129	G	PCI/G	PR	
5502-0000-020-C-1C-01	MSR#05-2443	147673024	476641	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00174	0.0041	PCI/G	0	U	17/10/2005	38660.43333	10:06	0.00702	PCI/G	0.00337	PCI/G	1	6.9	19.4	G	PCI/G	PR	
5502-0000-020-C-1C-01	MSR#05-2443	147673024	472779	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.145	0.0453	PCI/G	0		13/10/2005	38658.78403	11:54	0.0361	PCI/G	0.0167	PCI/G	1	6.9	129	G	PCI/G	PR	
5502-0000-020-C-1C-01	MSR#05-2443	147673024	476953	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	0.498	1.83	PCI/G	0	U		8/11/2005	1:48	3.16	PCI/G	1.52	PCI/G	1	6.9	12.1	G	PCI/G	PR	
5502-0000-020-C-1C-02	MSR#05-2443	147673025	472779	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.519	0.117	PCI/G	0		13/10/2005	38658.78403	1:25	0.0921	PCI/G	0.0433	PCI/G	1	6.4	147	G	PCI/G	PR	
5502-0000-020-C-1C-02	MSR#05-2443	147673025	472779	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0877	0.0754	PCI/G	0	U	13/10/2005	38658.78403	1:25	0.14	PCI/G	0.0684	PCI/G	1	6.4	147	G	PCI/G	PR	
5502-0000-020-C-1C-02	MSR#05-2443	147673025	472779	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.399	0.199	PCI/G	0		13/10/2005	38658.78403	1:25	0.213	PCI/G	0.101	PCI/G	1	6.4	147	G	PCI/G	PR	
5502-0000-020-C-1C-02	MSR#05-2443	147673025	472779	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.704	0.0841	PCI/G	0		13/10/2005	38658.78403	1:25	0.0501	PCI/G	0.0239	PCI/G	1	6.4	147	G	PCI/G	PR	
5502-0000-020-C-1C-02	MSR#05-2443	147673025	472779	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0119	0.0192	PCI/G	0	U	13/10/2005	38658.78403	1:25	0.035	PCI/G	0.0167	PCI/G	1	6.4	147	G	PCI/G	PR	
5502-0000-020-C-1C-02	MSR#05-2443	147673025	472779	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.00475	0.0162	PCI/G	0	U	13/10/2005	38658.78403	1:25	0.0285	PCI/G	0.0135	PCI/G	1	6.4	147	G	PCI/G	PR	
5502-0000-020-C-1C-02	MSR#05-2443	147673025	472779	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0016	0.0166	PCI/G	0	U	13/10/2005	38658.78403	1:25	0.0301	PCI/G	0.014	PCI/G	1	6.4	147	G	PCI/G	PR	
5502-0000-020-C-1C-02	MSR#05-2443	147673025	472779	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.00323	0.0457	PCI/G	0	U	13/10/2005	38658.78403	1:25	0.0799	PCI/G	0.0385	PCI/G	1	6.4	147	G	PCI/G	PR	
5502-0000-020-C-1C-02	MSR#05-2443	147673025	472779	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0394	0.0544	PCI/G	0	U	13/10/2005	38658.78403	1:25	0.0767	PCI/G	0.0356	PCI/G	1	6.4	147	G	PCI/G	PR	
5502-0000-020-C-1C-02	MSR#05-2443	147673025	472779	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0427	0.0497	PCI/G	0	U	13/10/2005	38658.78403	1:25	0.0891	PCI/G	0.0435	PCI/G	1	6.4	147	G	PCI/G	PR	
5502-0000-020-C-1C-02	MSR#05-2443	147673025	472779	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.504	0.0478	PCI/G	0		13/10/2005	38658.78403	1:25	0.0473	PCI/G	0.023	PCI/G	1	6.4	147	G	PCI/G	PR	
5502-0000-020-C-1C-02	MSR#05-2443	147673025	472779	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.836	0.075	PCI/G	0		13/10/2005	38658.78403	1:25	0.0584	PCI/G	0.0282	PCI/G	1	6.4	147	G	PCI/G	PR	
5502-0000-020-C-1C-02	MSR#05-2443	147673025	472779	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0145	0.0177	PCI/G	0	U	13/10/2005	38658.78403	1:25	0.0284	PCI/G	0.0134	PCI/G	1	6.4	147	G	PCI/G	PR	
5502-0000-020-C-1C-02	MSR#05-2443	147673025	472779	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0074	0.0149	PCI/G	0	U	13/10/2005	38658.78403	1:25	0.0272	PCI/G	0.013	PCI/G	1	6.4	147	G	PCI/G	PR	
5502-0000-020-C-1C-02	MSR#05-2443	147673025	472779	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	8.02	0.589	PCI/G	0		13/10/2005	38658.78403	1:25	0.271	PCI/G	0.125	PCI/G	1	6.4	147	G	PCI/G	PR	
5502-0000-020-C-1C-02	MSR#05-2443	147673025	472779	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.704	0.0841	PCI/G	0		13/10/2005	38658.78403	1:25	0.0501	PCI/G	0.0239	PCI/G	1	6.4	147	G	PCI/G	PR	
5502-0000-020-C-1C-02	MSR#05-2443	147673025	472779	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00344	0.0151	PCI/G	0	U	13/10/2005	38658.78403	1:25	0.0266	PCI/G	0.0127	PCI/G	1	6.4	147	G	PCI/G	PR	
5502-0000-020-C-1C-02	MSR#05-2443	147673025	476641	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.000137	0.00456	PCI/G	0	U	17/10/2005	38660.43333	10:06	0.00793	PCI/G	0.00383	PCI/G	1	6.4	19.5	G	PCI/G	PR	
5502-0000-020-C-1C-02	MSR#05-2443	147673025	472779	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.171	0.0333	PCI/G	0		13/10/2005	38658.78403	1:25	0.0338	PCI/G	0.0161	PCI/G	1	6.4	147	G	PCI/G	PR	
5502-0000-020-C-1C-02	MSR#05-2443	147673025	476953	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	0.388	1.79	PCI/G	0	U		8/11/2005	2:20	3.1	PCI/G	1.49	PCI/G	1	6.4	12.3	G	PCI/G	PR	
5502-0000-020-C-2C-03	MSR#05-2443	147673026	472779	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.579	0.185	PCI/G	0		13/10/2005	38658.78403	1:25	0.119	PCI/G	0.0542	PCI/G	1	6.3	140	G	PCI/G	PR	
5502-0000-020-C-2C-03	MSR#05-2443	147673026	472779	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0041	0.0207	PCI/G	0	U	13/10/2005	38658.78403	1:25	0.0372	PCI/G	0.0178	PCI/G	1	6.3	140	G	PCI/G	PR	
5502-0000-020-C-2C-03	MSR#05-2443	147673026	472779	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.439	0.314	PCI/G	0		13/10/2005	38658.78403	1:25	0.259	PCI/G	0.119	PCI/G	1	6.3	140	G	PCI/G	PR	
5502-0000-020-C-2C-03	MSR#05-2443	147673026	472779	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.571	0.104	PCI/G	0		13/10/2005	38658.78403	1:25	0.0607	PCI/G	0.0282	PCI/G	1	6.3	140	G	PCI/G	PR	
5502-0000-020-C-2C-03	MSR#05-2443	147673026	472779	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0148	0.027	PCI/G	0	U	13/10/2005	38658.78403	1:25	0.0445	PCI/G	0.0207	PCI/G	1	6.3	140	G	PCI/G	PR	
5502-0000-020-C-2C-03	MSR#05-2443	147673026	472779	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.0117	0.0212	PCI/G	0	U	13/10/2005	38658.78403	1:25	0.0396	PCI/G	0.0185	PCI/G	1	6.3	140	G	PCI/G	PR	
5502-0000-020-C-2C-03	MSR#05-2443	147673026	472779	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.00441	0.0209	PCI/G	0	U	13/10/2005	38658.78403	1:25	0.0393	PCI/G	0.0176	PCI/G	1	6.3	140	G	PCI/G	PR	
5502-0000-020-C-2C-03	MSR#05-2443	147673026	472779	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0116	0.0489	PCI/G	0	U	13/10/2005	38658.78403	1:25	0.0872	PCI/G	0.0413	PCI/G	1	6.3	140	G	PCI/G	PR	
5502-0000-020-C-2C-03	MSR#05-2443	147673026	472779	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0316	0.0585	PCI/G	0	U	13/10/2005	38658.78403	1:25	0.114	PCI/G	0.0515	PCI/G	1	6.3	140	G	PCI/G	PR	
5502-0000-020-C-2C-03	MSR#05-2443	147673026	472779	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0197	0.0387	PCI/G	0	U	13/10/2005	38658.78403	1:25	0.0691	PCI/G	0.0332	PCI/G	1	6.3	140	G	PCI/G	PR	
5502-0000-020-C-2C-03	MSR#05-2443	147673026	472779	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.443	0.0667	PCI/G	0		13/10/2005	38658.78403	1:25	0.0466	PCI/G	0.0222	PCI/G	1	6.3	140	G	PCI/G	PR	
5502-0000-020-C-2C-03	MSR#05-2443	147673026	472779	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.554	0.0944	PCI/G	0		13/10/2005	38658.78403	1:25	0.0598	PCI/G	0.0282	PCI/G	1	6.3	140	G	PCI/G	PR	
5502-0000-020-C-2C-03	MSR#05-2443	147673026	472779	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0031	0.0208	PCI/G	0	U	13/10/2005	38658.78403	1:25	0.0372	PCI/G	0.0172	PCI/G	1	6.3	140	G	PCI/G	PR	
5502-0000-020-C-2C-03	MSR#05-2443	147673026	472779	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.00241	0.0191	PCI/G	0	U	13/10/2005	38658.78403	1:25	0.0335	PCI/G	0.0156	PCI/G	1	6.3	140	G	PCI/G	PR	
5502-0000-020-C-2C-03	MSR#05-2443	147673026	472779	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	8.74	0.925	PCI/G	0		13/10/2005	38658.78403	1:25	0.324	PCI/G	0.142	PCI/G	1	6.3	140	G	PCI/G	PR	
5502-0000-020-C-2C-03	MSR#05-2443	147673026	472779	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.571	0.104	PCI/G	0		13/10/2005	38658.78403	1:25	0.0607	PCI/G	0.0282	PCI/G	1	6.3	140	G	PCI/G	PR	
5502-0000-020-C-2C-03	MSR#05-2443	147673026	472779	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.0048	0.0162	PCI/G	0	U	13/10/2005	38658.78403	1:25	0.0306	PCI/G	0.0144	PCI/G	1	6.3	140	G	PCI/G	PR	

5502-0000-020-C-2C-03	MSR#05-2443	147673026	476641	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.00111	0.00249	PCI/G	0	U	17/10/2005	38660.43611	12:35	0.00513	PCI/G	0.00247	PCI/G	1	6.3	18.7	G	PCI/G	PR				
5502-0000-020-C-2C-03	MSR#05-2443	147673026	472779	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.163	0.0368	PCI/G	0		13/10/2005	38658.78403	1:25	0.0305	PCI/G	0.0141	PCI/G	1	6.3	140	G	PCI/G	PR				
5502-0000-020-C-2C-03	MSR#05-2443	147673026	476953	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	1.64	1.86	PCI/G	0	U		8/11/2005	2:52	3.11	PCI/G	1.49	PCI/G	1	6.3	12.2	G	PCI/G	PR				
5502-0000-020-C-3C-04	MSR#05-2443	147673027	472779	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.475	0.171	PCI/G	0		13/10/2005	38658.78403	1:26	0.154	PCI/G	0.0701	PCI/G	1	4.7	146	G	PCI/G	PR				
5502-0000-020-C-3C-04	MSR#05-2443	147673027	472779	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.00202	0.0267	PCI/G	0	U	13/10/2005	38658.78403	1:26	0.0488	PCI/G	0.0234	PCI/G	1	4.7	146	G	PCI/G	PR				
5502-0000-020-C-3C-04	MSR#05-2443	147673027	472779	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.218	0.195	PCI/G	0	U	13/10/2005	38658.78403	1:26	0.392	PCI/G	0.183	PCI/G	1	4.7	146	G	PCI/G	PR				
5502-0000-020-C-3C-04	MSR#05-2443	147673027	472779	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.463	0.0939	PCI/G	0		13/10/2005	38658.78403	1:26	0.0696	PCI/G	0.0321	PCI/G	1	4.7	146	G	PCI/G	PR				
5502-0000-020-C-3C-04	MSR#05-2443	147673027	472779	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.00242	0.025	PCI/G	0	U	13/10/2005	38658.78403	1:26	0.0469	PCI/G	0.0215	PCI/G	1	4.7	146	G	PCI/G	PR				
5502-0000-020-C-3C-04	MSR#05-2443	147673027	472779	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.00675	0.0231	PCI/G	0	U	13/10/2005	38658.78403	1:26	0.042	PCI/G	0.0194	PCI/G	1	4.7	146	G	PCI/G	PR				
5502-0000-020-C-3C-04	MSR#05-2443	147673027	472779	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.011	0.0204	PCI/G	0		13/10/2005	38658.78403	1:26	0.0365	PCI/G	0.0156	PCI/G	1	4.7	146	G	PCI/G	PR				
5502-0000-020-C-3C-04	MSR#05-2443	147673027	472779	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0635	0.0523	PCI/G	0	U	13/10/2005	38658.78403	1:26	0.0859	PCI/G	0.0401	PCI/G	1	4.7	146	G	PCI/G	PR				
5502-0000-020-C-3C-04	MSR#05-2443	147673027	472779	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.038	0.0785	PCI/G	0	U	13/10/2005	38658.78403	1:26	0.131	PCI/G	0.0587	PCI/G	1	4.7	146	G	PCI/G	PR				
5502-0000-020-C-3C-04	MSR#05-2443	147673027	472779	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0398	0.0468	PCI/G	0	U	13/10/2005	38658.78403	1:26	0.0868	PCI/G	0.0416	PCI/G	1	4.7	146	G	PCI/G	PR				
5502-0000-020-C-3C-04	MSR#05-2443	147673027	472779	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.414	0.0623	PCI/G	0		13/10/2005	38658.78403	1:26	0.0495	PCI/G	0.0234	PCI/G	1	4.7	146	G	PCI/G	PR				
5502-0000-020-C-3C-04	MSR#05-2443	147673027	472779	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.487	0.0937	PCI/G	0		13/10/2005	38658.78403	1:26	0.0648	PCI/G	0.0304	PCI/G	1	4.7	146	G	PCI/G	PR				
5502-0000-020-C-3C-04	MSR#05-2443	147673027	472779	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0205	0.0317	PCI/G	0	U	13/10/2005	38658.78403	1:26	0.0438	PCI/G	0.0201	PCI/G	1	4.7	146	G	PCI/G	PR				
5502-0000-020-C-3C-04	MSR#05-2443	147673027	472779	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.00477	0.0241	PCI/G	0	U	13/10/2005	38658.78403	1:26	0.0385	PCI/G	0.0178	PCI/G	1	4.7	146	G	PCI/G	PR				
5502-0000-020-C-3C-04	MSR#05-2443	147673027	472779	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.4	1	PCI/G	0		13/10/2005	38658.78403	1:26	0.434	PCI/G	0.191	PCI/G	1	4.7	146	G	PCI/G	PR				
5502-0000-020-C-3C-04	MSR#05-2443	147673027	472779	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.463	0.0939	PCI/G	0		13/10/2005	38658.78403	1:26	0.0696	PCI/G	0.0321	PCI/G	1	4.7	146	G	PCI/G	PR				
5502-0000-020-C-3C-04	MSR#05-2443	147673027	472779	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.0026	0.0183	PCI/G	0	U	13/10/2005	38658.78403	1:26	0.0334	PCI/G	0.0156	PCI/G	1	4.7	146	G	PCI/G	PR				
5502-0000-020-C-3C-04	MSR#05-2443	147673027	476641	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.000747	0.00392	PCI/G	0	U	17/10/2005	38660.43333	10:06	0.00678	PCI/G	0.00326	PCI/G	1	4.7	19.7	G	PCI/G	PR				
5502-0000-020-C-3C-04	MSR#05-2443	147673027	472779	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.133	0.0503	PCI/G	0		13/10/2005	38658.78403	1:26	0.0447	PCI/G	0.0209	PCI/G	1	4.7	146	G	PCI/G	PR				
5502-0000-020-C-3C-04	MSR#05-2443	147673027	476953	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	0.841	1.59	PCI/G	0	U		8/11/2005	3:24	2.71	PCI/G	1.3	PCI/G	1	4.7	12.1	G	PCI/G	PR				
5502-0000-020-C-3C-05	MSR#05-2443	147673028	472779	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.508	0.161	PCI/G	0		13/10/2005	38658.78403	3:56	0.116	PCI/G	0.0517	PCI/G	1	5.8	128	G	PCI/G	PR				
5502-0000-020-C-3C-05	MSR#05-2443	147673028	472779	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0192	0.111	PCI/G	0	U	13/10/2005	38658.78403	3:56	0.143	PCI/G	0.0686	PCI/G	1	5.8	128	G	PCI/G	PR				
5502-0000-020-C-3C-05	MSR#05-2443	147673028	472779	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.444	0.353	PCI/G	0		13/10/2005	38658.78403	3:56	0.295	PCI/G	0.135	PCI/G	1	5.8	128	G	PCI/G	PR				
5502-0000-020-C-3C-05	MSR#05-2443	147673028	472779	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.442	0.089	PCI/G	0		13/10/2005	38658.78403	3:56	0.0717	PCI/G	0.0334	PCI/G	1	5.8	128	G	PCI/G	PR				
5502-0000-020-C-3C-05	MSR#05-2443	147673028	472779	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.013	0.0237	PCI/G	0	U	13/10/2005	38658.78403	3:56	0.0445	PCI/G	0.0205	PCI/G	1	5.8	128	G	PCI/G	PR				
5502-0000-020-C-3C-05	MSR#05-2443	147673028	472779	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.0105	0.0215	PCI/G	0	U	13/10/2005	38658.78403	3:56	0.0362	PCI/G	0.0166	PCI/G	1	5.8	128	G	PCI/G	PR				
5502-0000-020-C-3C-05	MSR#05-2443	147673028	472779	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.00683	0.0239	PCI/G	0	U	13/10/2005	38658.78403	3:56	0.0426	PCI/G	0.0189	PCI/G	1	5.8	128	G	PCI/G	PR				
5502-0000-020-C-3C-05	MSR#05-2443	147673028	472779	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.00962	0.055	PCI/G	0	U	13/10/2005	38658.78403	3:56	0.098	PCI/G	0.0463	PCI/G	1	5.8	128	G	PCI/G	PR				
5502-0000-020-C-3C-05	MSR#05-2443	147673028	472779	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0164	0.0687	PCI/G	0	U	13/10/2005	38658.78403	3:56	0.13	PCI/G	0.0588	PCI/G	1	5.8	128	G	PCI/G	PR				
5502-0000-020-C-3C-05	MSR#05-2443	147673028	472779	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	-0.000577	0.0603	PCI/G	0	U	13/10/2005	38658.78403	3:56	0.105	PCI/G	0.0506	PCI/G	1	5.8	128	G	PCI/G	PR				
5502-0000-020-C-3C-05	MSR#05-2443	147673028	472779	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.501	0.0604	PCI/G	0		13/10/2005	38658.78403	3:56	0.0524	PCI/G	0.0249	PCI/G	1	5.8	128	G	PCI/G	PR				
5502-0000-020-C-3C-05	MSR#05-2443	147673028	472779	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.546	0.0891	PCI/G	0		13/10/2005	38658.78403	3:56	0.0598	PCI/G	0.028	PCI/G	1	5.8	128	G	PCI/G	PR				
5502-0000-020-C-3C-05	MSR#05-2443	147673028	472779	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.00195	0.0252	PCI/G	0	U	13/10/2005	38658.78403	3:56	0.0444	PCI/G	0.0205	PCI/G	1	5.8	128	G	PCI/G	PR				
5502-0000-020-C-3C-05	MSR#05-2443	147673028	472779	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00609	0.0202	PCI/G	0	U	13/10/2005	38658.78403	3:56	0.0366	PCI/G	0.017	PCI/G	1	5.8	128	G	PCI/G	PR				
5502-0000-020-C-3C-05	MSR#05-2443	147673028	472779	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.34	0.892	PCI/G	0		13/10/2005	38658.78403	3:56	0.346	PCI/G	0.149	PCI/G	1	5.8	128	G	PCI/G	PR				
5502-0000-020-C-3C-05	MSR#05-2443	147673028	472779	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.442	0.089	PCI/G	0		13/10/2005	38658.78403	3:56	0.0717	PCI/G	0.0334	PCI/G	1	5.8	128	G	PCI/G	PR				
5502-0000-020-C-3C-05	MSR#05-2443	147673028	472779	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.0152	0.0167	PCI/G	0	U	13/10/2005	38658.78403	3:56	0.0324	PCI/G	0.0151	PCI/G	1	5.8	128	G	PCI/G	PR				
5502-0000-020-C-3C-05	MSR#05-2443	147673028	476641	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00139	0.00376	PCI/G	0	U	17/10/2005	38660.43333	10:07	0.00649	PCI/G	0.00309	PCI/G	1	5.8	19.7	G	PCI/G	PR				
5502-0000-020-C-3C-05	MSR#05-2443	147673028	472779	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.157	0.0414	PCI/G	0		13/10/2005	38658.78403	3:56	0.0436	PCI/G	0.0205	PCI/G	1	5.8	128	G	PCI/G	PR				
5502-0000-020-C-3C-05	MSR#05-2443	147673028	476953	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	1.86	1.89	PCI/G	0	U		8/11/2005	3:56	3.15	PCI/G	1.51	PCI/G	1	5.8	12.3	G	PCI/G	PR				
5502-0000-016-C-4C-05	MSR#05-2443	147673029	472779	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.403	0.171	PCI/G	0		13/10/2005	38658.78403	3:57	0.127	PCI/G	0.0586	PCI/G	1	5.9	144	G	PCI/G	PR				
5502-0000-016-C-4C-05	MSR#05-2443	147673029	472779	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0318	0.0791	PCI/G	0	U	13/10/2005	38658.78403	3:57	0.145	PCI/G	0.0698	PCI/G	1	5.9	144	G	PCI/G	PR				
5502-0000-016-C-4C-05	MSR#05-2443	147673029	475273	14596-10-2	Americium-241	TRG 1	UAM05RCM	AM05RCM	REG	0.0145	0.023	PCI/G	0	U	17/10/2005	38660.43264	12:15	0.0258	PCI/G	0	PCI/G	1	5.9	1.01	G	PCI/G	PR				
5502-0000-016-C-4C-05	MSR#05-2443	147673029	472779	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.575	0.278	PCI/G	0		13/10/2005	38658.78403	3:57	0.277	PCI/G	0.129	PCI/G	1	5.9	144	G	PCI/G	PR				
5502-0000-016-C-4C-05	MSR#05-2443	147673029	472779	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.556	0.109	PCI/G	0		13/10/2005	38658.78403	3:57	0.0695	PCI/G	0.0327	PCI/G	1	5.9	144	G	PCI/G	PR				
5502-0000-016-C-4C-05	MSR#05-2443	147673029	475769	14762-75-5	Carbon-14	TRG 5	ULSC	LSC	REG	0.0934	0.241	PCI/G	0	U		31/10/2005	11:14	0.409	PCI/G	0.201	PCI/G	1	5.9	3.05	G	PCI/G	PR				
5502-0000-016-C-4C-05	MSR#05-2443	147673029	472779	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.017	0.0285	PCI/G	0	U	13/10/2005	38658.78403	3:57	0.0444	PCI/G	0.0207	PCI/G	1	5.9	144	G	PCI/G	PR				
5502-0000-016-C-4C-05	MSR#05-2443	147673029	472779	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.0131	0.0195	PCI/G	0	U	13/10/2005	38658.78403	3:57	0.0374	PCI/G	0.0175	PCI/G	1	5.9	144	G	PCI/G	PR				
5502-0000-016-C-4C-05	MSR#05-2443	147673029	472779	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.00874	0.0227	PCI/G	0	U	13/10/2005	38658.78403	3:57	0.0394	PCI/G	0.0178	PCI/G	1	5.9	144	G	PCI/G	PR				
5502-0000-016-C-4C-05	MSR#05-2443	147673029	475273	OER-100-93	Curium-242	TRG 1	UAM05RCM	AM05RCM	REG	-0.00266	0.00521	PCI/G	0	U	17/10/2005	38660.43264	12:15	0.0552	PCI/G	0.0126	PCI/G	1	5.9	1.01	G	PCI/G	PR				
5502-0000-016-C-4C-05	MSR#05-2443	147673029	475273	OER-101-57	Curium-243/244	TRG 1	UAM05RCM	AM05RCM	REG	0.00955	0.0187	PCI/G	0	U	17/10/2005	38660.43264	12:15	0.0259	PCI/G	0	PCI/G	1	5.9	1.01	G	PCI/G	PR				
5502-0000-016-C-4C-05	MSR#05-2443	147673029	472779	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.00367	0.0545	PCI/G	0	U	13/10/2005	38658.78403	3:57	0.097	PCI/G	0.0462	PCI/G	1	5.9	144	G	PCI/G	PR				
5502-0000-016-C-4C-05	MSR#05-2443	147673029	472779	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0597	0.0629	PCI/G	0	U	13/10/2005	38658.78403	3:57	0.101	PCI/G	0.0454	PCI/G	1	5.9	144	G	PCI/G	PR				
5502-0000-016-C-4C-05	MSR#05-2443	147673029	472779	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.00671	0.0554	PCI/G	0	U	13/10/2005	38658.78403	3:57	0.1	PCI/G	0.0483	PCI/G	1	5.9	144	G	PCI/G	PR				
5502-0000-016-C-4C-05	MSR#05-2443	147673029	473497	14681-59-5	Iron-55	TRG 26	ULSC	LSC	REG	-1.8	1.68	PCI/G	0	U	17/10/2005	38629.44583	5:57	2.52	PCI/G	1.24	PCI/G	1	5.9	3.37	G	PCI/G	PR				
5502-0000-016-C-4C-05	MSR#05-2443	147673029	472779	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.428	0.062	PCI/G	0		13/10/2005	38658.78403	3:57	0.0542	PCI/G	0.026	PCI/G	1	5.9	144	G	PCI/G	PR				
5502-0000-016-C-4C-05	MSR#05-2443	147673029	472779	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.549	0.0865	PCI/G	0		13/10/2005	38658.78403	3:57	0.0679	PCI/G	0.0323	PCI/G	1	5.9	144	G	PCI/G	PR				
5502-0000-016-C-4C-05	MSR#05-2443	147673029	472779	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0181	0.0213	PCI/G	0	U	13/10/2005	38658.78403	3:57	0.0372	PCI/G	0.0172	PCI/G	1	5.9	144	G	PCI/G	PR				
5502-0000-016-C-4C-05	MSR#05-2443	147673029	473499	13781-37-8	Nickel-63	TRG 30	ULSC	LSC	REG	-0.351	1.62	PCI/G	0	U	17/10/2005	38629.44861	3:14	2.81	PCI/G	1.37	PCI/G	1	5.9	0.906	G	PCI/G	PR				
5502-0000-016-C-4C-05	MSR#05-2443	147673029	472779	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.01	0.019	PCI/G	0	U	13/10/2005	38658.78403	3:57	0.0356	PCI/G	0.0167	PCI/G	1	5.9	144	G	PCI/G	PR				
5502-0000-016-C-4C-05	MSR#05-2443	147673029	475274	13981-16-3	Plutonium-238	TRG 32	UPU11RCM	PU11RCM	REG	-0.00153	0.0128	PCI/G	0	U	17/10/2005	38660.43264	9:07	0.0318	PCI/G	0.00726	PCI/G	1	5.9	1.01	G	PCI/G	PR				
5502-0000-016-C-4C-05	MSR#05-2443	147673029	475274	OER-100-70	Plutonium-239/24	TRG 32	UPU11RCM	PU11RCM	REG	-0.00433	0.0148	PCI/G	0	U	17/10/2005	38660.43264	9:07	0.0556	PCI/G	0.0192	PCI/G	1	5.9	1.01	G	PCI/G	PR				
5502-0000-016-C-4C-05	MSR#05-2443	147673029	475275	14119-32-5	Plutonium-241	TRG 36	UPU11RCM	PU11RCM	REG	-0.346	1.95	PCI/G	0	U	17/10/2005	38660.43333	10:47	3.38	PCI/G	1.65	PCI/G	1	5.9	1.62	G	PCI/G	PR				
5502-0000-016-C-4C-05	MSR#05-2443	147673029	472779	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.5	0.898	PCI/G	0		13/10/2005	38658.78403	3:57	0.278	PCI/G	0.119	PCI/G	1	5.9	144	G	PCI/G	PR				
5502-0000-016-C-4C-05	MSR#05-2443	147673029	472779	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.556	0.109	PCI/G	0		13/10/2005	38658.78403	3:57	0.0695	PCI/G	0.0327	PCI/G	1	5.9	144	G	PCI/G	PR				
5502-0000-016-C-4C-05	MSR#05-2443	147673029	472779	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00505	0.0173	PCI/G	0	U	13/10/2005	38658.78403	3:57	0.0312	PCI/G	0.0147	PCI/G	1	5.9	144	G	PCI/G	PR				
5502-0000-016-C-4C-05	MSR#05-2443	147673029	476641	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.00155	0.00306	PCI/G	0	U	17/10/2005	38660.43333	10:07	0.00554	PCI/G	0.00264	PCI/G	1	5.9	20.2	G	PCI/G	PR				
5502-0000-016-C-4C-05	MSR#05-2443	147673029	473504	14133-76-7	Technetium-99	TRG 46	UTC02RCM	TC02RCM	REG	0.136	0.265	PCI/G	0	U		29/10/2005	2:52	0.448	PCI/G	0.219	PCI/G	1	5.9	5.13	G	PCI/G	PR				
5502-0000-016-C-4C-05	MSR#05-2443	147673029	472779	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.146	0.0471	PCI/G	0		13/10/2005	38658.78403	3:57	0.0337	PCI/G	0.0157	PCI/G	1	5.9	144	G	PCI/G	PR				
5502-0000-016-C-4C-05	MSR#05-2443	147673029	476953	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	0.471	1.9	PCI/G	0	U		8/11/2005	3:45	3.24	PCI/G	1.58	PCI/G	1	5.9	6.7	G	PCI/G	PR				
5502-0000-019-C-4C-05	MSR#05-2443	147673030	472779	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.37	0.181	PCI/G	0		13/10/2005	38658.78403	3:57	0.158	PCI/G	0.0731	PCI/G	1	6.6	126	G	PCI/G	PR				
5502-0000-019-C-4C-05	MSR#05-2443	147673030	472779	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0728	0.15	PCI/G	0	U	13/10/2005	38658.78403	3:57	0.199	PCI/G	0.0948	PCI/G	1	6.6	126	G	PCI/G	PR				
5502-0000-019-C-4C-05	MSR#05-2443	147673030	475273	14596-10-2	Americium-241	TRG 1	UAM05RCM	AM05RCM	REG	0.00468	0.0127	PCI/G	0	U	17/10/2005	38660.43264	12:15	0.0245	PCI/G	0	PCI/G	1	6.6	1.05	G	PCI/G	PR				
5502-0000-019-C-4C-05	MSR#05-2443	147673030	472779	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.52	0.244	PCI/G	0		13/10/2005	38658.78403	3:57	0.255	PCI/G	0.116	PCI/G	1	6.6	126	G	PCI/G	PR				
5502-0000-019-C-4C-05	MSR#05-2443	147673030	472779	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.597	0.0975	PCI/G	0		13/10/2005	38658.78403	3:57	0.0653	PCI/G	0.0301	PCI/G	1	6.6	126	G	PCI/G	PR				
5502-0000-019-C-4C-05	MSR#05-2443	147673030	475769	14762-75-5	Carbon-14	TRG 5	ULSC	LSC	REG	-0.173	0.229	PCI/G	0	U		1/11/2005	12:47	0.398	PCI/G	0.196	PCI/G	1	6.6	3.16	G	PCI/G	PR				
5502-0000-019-C-4C-05	MSR#05-2443	147673030	472779	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0378	0.0288	PCI/G	0	U	13/10/2005	38658.78403	3:57	0.0529	PCI/G	0.0247	PCI/G	1	6.6	126	G	PCI/G	PR				
5502-0000-019-C-4C-05	MSR#05-2443	147673030	472779	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.00214	0.0197	PCI/G	0	U	13/10/2005	38658.78403	3:57	0.0352	PCI/G	0.0161	PCI/G	1	6.6	126	G	PCI/G	PR				
5502-0000-019-C-4C-05	MSR#05-2443	147673030	472779	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.00332	0.0231	PCI/G	0	U	13/10/2005	38658.78403	3:57	0.0436	PCI/G	0.0194	PCI/G	1	6.6	126	G	PCI/G	PR				
5502-0000-019-C-4C-05	MSR#05-2443	147673030	475273	OER-100-93	Curium-242	TRG 1	UAM05RCM	AM05RCM	REG	0	0.0208	PCI/G	0	U	17/10/2005	38660.43264	12:15	0.0287	PCI/G	0	PCI/G	1	6.6	1.05	G	PCI/G	PR				
5502-0000-019-C-4C-05	MSR#05-2443	147673030	475273	OER-101-57	Curium-243/244	TRG 1	UAM05RCM	AM05RCM	REG	0	0.0178	PCI/G	0	U	17/10/2005	38660.43264	12:15	0.0246	PCI/G	0	PCI/G	1	6.6	1.05	G	PCI/G	PR				
5502-0000-019-C-4C-05	MSR#05-2443	147673030	472779	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0415	0.0582	PCI/G	0	U	13/10/2005	38658.78403	3:57	0.106	PCI/G	0.05	PCI/G	1	6.6	126	G	PCI/G	PR				
5502-0000-019-C-4C-05	MSR#05-2443	147673030	472779	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0533	0.0816	PCI/G	0	U	13/10/2005	38658.78403	3:57	0.113	PCI/G	0.0502	PCI/G	1	6.6	126	G	PCI/G	PR				

5502-0000-019-C-4C-05	MSR#05-2443	147673030	472779	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0165	0.0609	PCI/G	0	U	13/10/2005	38658.78403	3:57	0.114	PCI/G	0.0546	PCI/G	1	6.6	126	G	PCI/G	PR		
5502-0000-019-C-4C-05	MSR#05-2443	147673030	473497	14681-59-5	Iron-55	TRG 26	ULSC	LSC	REG	1.45	1.93	PCI/G	0	U	17/10/2005	38629.44583	7:30	2.79	PCI/G	1.37	PCI/G	1	6.6	3.13	G	PCI/G	PR		
5502-0000-019-C-4C-05	MSR#05-2443	147673030	472779	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.474	0.0752	PCI/G	0		13/10/2005	38658.78403	3:57	0.0567	PCI/G	0.027	PCI/G	1	6.6	126	G	PCI/G	PR		
5502-0000-019-C-4C-05	MSR#05-2443	147673030	472779	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.661	0.114	PCI/G	0		13/10/2005	38658.78403	3:57	0.0727	PCI/G	0.0343	PCI/G	1	6.6	126	G	PCI/G	PR		
5502-0000-019-C-4C-05	MSR#05-2443	147673030	472779	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0128	0.0242	PCI/G	0	U	13/10/2005	38658.78403	3:57	0.0449	PCI/G	0.0207	PCI/G	1	6.6	126	G	PCI/G	PR		
5502-0000-019-C-4C-05	MSR#05-2443	147673030	473499	13781-37-8	Nickel-63	TRG 30	ULSC	LSC	REG	-1.36	1.87	PCI/G	0	U	17/10/2005	38629.44861	4:02	3.3	PCI/G	1.61	PCI/G	1	6.6	0.838	G	PCI/G	PR		
5502-0000-019-C-4C-05	MSR#05-2443	147673030	472779	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0109	0.0182	PCI/G	0	U	13/10/2005	38658.78403	3:57	0.0345	PCI/G	0.0159	PCI/G	1	6.6	126	G	PCI/G	PR		
5502-0000-019-C-4C-05	MSR#05-2443	147673030	475274	13981-16-3	Plutonium-238	TRG 32	UPU11RCM	PU11RCM	REG	0.000281	0.0153	PCI/G	0	U	17/10/2005	38660.43264	9:07	0.051	PCI/G	0.016	PCI/G	1	6.6	1.05	G	PCI/G	PR		
5502-0000-019-C-4C-05	MSR#05-2443	147673030	475274	OER-100-70	Plutonium-239/24	TRG 32	UPU11RCM	PU11RCM	REG	-0.00449	0.0223	PCI/G	0	U	17/10/2005	38660.43264	9:07	0.0721	PCI/G	0.0265	PCI/G	1	6.6	1.05	G	PCI/G	PR		
5502-0000-019-C-4C-05	MSR#05-2443	147673030	475275	14119-32-5	Plutonium-241	TRG 36	UPU11RCM	PU11RCM	REG	0.912	1.85	PCI/G	0	U	17/10/2005	38660.43333	11:35	3.13	PCI/G	1.53	PCI/G	1	6.6	1.51	G	PCI/G	PR		
5502-0000-019-C-4C-05	MSR#05-2443	147673030	472779	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	9.1	1.12	PCI/G	0		13/10/2005	38658.78403	3:57	0.371	PCI/G	0.162	PCI/G	1	6.6	126	G	PCI/G	PR		
5502-0000-019-C-4C-05	MSR#05-2443	147673030	472779	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.597	0.0975	PCI/G	0		13/10/2005	38658.78403	3:57	0.0653	PCI/G	0.0301	PCI/G	1	6.6	126	G	PCI/G	PR		
5502-0000-019-C-4C-05	MSR#05-2443	147673030	472779	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00547	0.0163	PCI/G	0	U	13/10/2005	38658.78403	3:57	0.0294	PCI/G	0.0136	PCI/G	1	6.6	126	G	PCI/G	PR		
5502-0000-019-C-4C-05	MSR#05-2443	147673030	476641	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.000393	0.00455	PCI/G	0	U	17/10/2005	38660.43333	10:07	0.00795	PCI/G	0.0038	PCI/G	1	6.6	17.5	G	PCI/G	PR		
5502-0000-019-C-4C-05	MSR#05-2443	147673030	473504	14133-76-7	Technetium-99	TRG 46	UTC02RCM	TC02RCM	REG	0.00768	0.246	PCI/G	0	U		29/10/2005	3:24	0.423	PCI/G	0.207	PCI/G	1	6.6	5.13	G	PCI/G	PR		
5502-0000-019-C-4C-05	MSR#05-2443	147673030	472779	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.194	0.0506	PCI/G	0		13/10/2005	38658.78403	3:57	0.0331	PCI/G	0.0152	PCI/G	1	6.6	126	G	PCI/G	PR		
5502-0000-019-C-4C-05	MSR#05-2443	147673030	476953	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	1.36	1.86	PCI/G	0	U		8/11/2005	4:59	3.13	PCI/G	1.5	PCI/G	1	6.6	12.3	G	PCI/G	PR		
	MSR#05-2443	1200960048	472777	14331-83-0	Actinium-228	TRG	U	HASL300	LB1	0.0325	0.0624	PCI/G	0	U		9/11/2005	6:49	0.121	PCI/G	0.0555	PCI/G	1	0	136	G	PCI/G	PR		
	MSR#05-2443	1200960048	472777	14596-10-2	Americium-241	TRG	U	HASL300	LB1	-0.0392	0.0204	PCI/G	0	U		9/11/2005	6:49	0.0331	PCI/G	0.0158	PCI/G	1	0	136	G	PCI/G	PR		
	MSR#05-2443	1200960048	472777	14913-49-6	Bismuth-212	TRG	U	HASL300	LB1	0.0594	0.128	PCI/G	0	U		9/11/2005	6:49	0.24	PCI/G	0.111	PCI/G	1	0	136	G	PCI/G	PR		
	MSR#05-2443	1200960048	472777	14733-03-0	Bismuth-214	TRG	U	HASL300	LB1	0.032	0.0398	PCI/G	0	U		9/11/2005	6:49	0.0665	PCI/G	0.0313	PCI/G	1	0	136	G	PCI/G	PR		
	MSR#05-2443	1200960048	472777	13967-70-9	Cesium-134	TRG	U	HASL300	LB1	0.00238	0.0153	PCI/G	0	U		9/11/2005	6:49	0.0283	PCI/G	0.0127	PCI/G	1	0	136	G	PCI/G	PR		
	MSR#05-2443	1200960048	472777	10045-97-3	Cesium-137	TRG	U	HASL300	LB1	-0.000576	0.0158	PCI/G	0	U		9/11/2005	6:49	0.0283	PCI/G	0.013	PCI/G	1	0	136	G	PCI/G	PR		
	MSR#05-2443	1200960048	472777	10198-40-0	Cobalt-60	TRG	U	HASL300	LB1	0.00502	0.0176	PCI/G	0	U		9/11/2005	6:49	0.0339	PCI/G	0.0151	PCI/G	1	0	136	G	PCI/G	PR		
	MSR#05-2443	1200960048	472777	14683-23-9	Europium-152	TRG	U	HASL300	LB1	0.0289	0.0471	PCI/G	0	U		9/11/2005	6:49	0.0708	PCI/G	0.0332	PCI/G	1	0	136	G	PCI/G	PR		
	MSR#05-2443	1200960048	472777	15585-10-1	Europium-154	TRG	U	HASL300	LB1	-0.0256	0.0457	PCI/G	0	U		9/11/2005	6:49	0.0783	PCI/G	0.0342	PCI/G	1	0	136	G	PCI/G	PR		
	MSR#05-2443	1200960048	472777	14391-16-3	Europium-155	TRG	U	HASL300	LB1	-0.037	0.0351	PCI/G	0	U		9/11/2005	6:49	0.0587	PCI/G	0.028	PCI/G	1	0	136	G	PCI/G	PR		
	MSR#05-2443	1200960048	472777	15092-94-1	Lead-212	TRG	U	HASL300	LB1	0.0178	0.0248	PCI/G	0	U		9/11/2005	6:49	0.0467	PCI/G	0.0224	PCI/G	1	0	136	G	PCI/G	PR		
	MSR#05-2443	1200960048	472777	15067-28-4	Lead-214	TRG	U	HASL300	LB1	0	0.0727	PCI/G	0	UUI		9/11/2005	6:49	0.0665	PCI/G	0.0317	PCI/G	1	0	136	G	PCI/G	PR		
	MSR#05-2443	1200960048	472777	13966-31-9	Manganese-54	TRG	U	HASL300	LB1	-0.00523	0.0161	PCI/G	0	U		9/11/2005	6:49	0.029	PCI/G	0.0132	PCI/G	1	0	136	G	PCI/G	PR		
	MSR#05-2443	1200960048	472777	14681-63-1	Niobium-94	TRG	U	HASL300	LB1	-0.00417	0.0165	PCI/G	0	U		9/11/2005	6:49	0.0285	PCI/G	0.0132	PCI/G	1	0	136	G	PCI/G	PR		
	MSR#05-2443	1200960048	472777	13966-00-2	Potassium-40	TRG	U	HASL300	LB1	0	0.298	PCI/G	0	UUI		9/11/2005	6:49	0.182	PCI/G	0.0727	PCI/G	1	0	136	G	PCI/G	PR		
	MSR#05-2443	1200960048	472777	13982-63-3	Radium-226	TRG	U	HASL300	LB1	0.032	0.0398	PCI/G	0	U		9/11/2005	6:49	0.0665	PCI/G	0.0313	PCI/G	1	0	136	G	PCI/G	PR		
	MSR#05-2443	1200960048	472777	14391-65-2	Silver-108m	TRG	U	HASL300	LB1	0.0153	0.0148	PCI/G	0	U		9/11/2005	6:49	0.0262	PCI/G	0.0123	PCI/G	1	0	136	G	PCI/G	PR		
	MSR#05-2443	1200960048	472777	14913-50-9	Thallium-208	TRG	U	HASL300	LB1	0.00484	0.0268	PCI/G	0	U		9/11/2005	6:49	0.0319	PCI/G	0.0148	PCI/G	1	0	136	G	PCI/G	PR		
5502-0000-015-C-1C-01	MSR#05-2443	1200960049	472777	14331-83-0	Actinium-228	TRG	U	HASL300	LR1	0.383	0.131	PCI/G	0			8/11/2005	3:19	0.105	PCI/G	0.0495	PCI/G	1	5.5	125	G	PCI/G	4	PR	
5502-0000-015-C-1C-01	MSR#05-2443	1200960049	472777	14596-10-2	Americium-241	TRG	U	HASL300	LR1	0.00861	0.0956	PCI/G	0	U		8/11/2005	3:19	0.151	PCI/G	0.0728	PCI/G	1	5.5	125	G	PCI/G	4	PR	
5502-0000-015-C-1C-01	MSR#05-2443	1200960049	472777	14913-49-6	Bismuth-212	TRG	U	HASL300	LR1	0.352	0.243	PCI/G	0			8/11/2005	3:19	0.208	PCI/G	0.0981	PCI/G	1	5.5	125	G	PCI/G	7	PR	
5502-0000-015-C-1C-01	MSR#05-2443	1200960049	472777	14733-03-0	Bismuth-214	TRG	U	HASL300	LR1	0.62	0.0805	PCI/G	0			8/11/2005	3:19	0.0568	PCI/G	0.0271	PCI/G	1	5.5	125	G	PCI/G	0	PR	
5502-0000-015-C-1C-01	MSR#05-2443	1200960049	472777	13967-70-9	Cesium-134	TRG	U	HASL300	LR1	0.0078	0.0177	PCI/G	0	U		8/11/2005	3:19	0.0325	PCI/G	0.0154	PCI/G	1	5.5	125	G	PCI/G	64	PR	
5502-0000-015-C-1C-01	MSR#05-2443	1200960049	472777	10045-97-3	Cesium-137	TRG	U	HASL300	LR1	0.0454	0.0238	PCI/G	0			8/11/2005	3:19	0.031	PCI/G	0.0148	PCI/G	1	5.5	125	G	PCI/G	01	PR	
5502-0000-015-C-1C-01	MSR#05-2443	1200960049	472777	10198-40-0	Cobalt-60	TRG	U	HASL300	LR1	-0.0113	0.0164	PCI/G	0	U		8/11/2005	3:19	0.0266	PCI/G	0.0122	PCI/G	1	5.5	125	G	PCI/G	0788	PR	
5502-0000-015-C-1C-01	MSR#05-2443	1200960049	472777	14683-23-9	Europium-152	TRG	U	HASL300	LR1	0.00144	0.042	PCI/G	0	U		8/11/2005	3:19	0.0759	PCI/G	0.0364	PCI/G	1	5.5	125	G	PCI/G	0562	PR	
5502-0000-015-C-1C-01	MSR#05-2443	1200960049	472777	15585-10-1	Europium-154	TRG	U	HASL300	LR1	-0.0248	0.0492	PCI/G	0	U		8/11/2005	3:19	0.0815	PCI/G	0.0377	PCI/G	1	5.5	125	G	PCI/G	3	PR	
5502-0000-015-C-1C-01	MSR#05-2443	1200960049	472777	14391-16-3	Europium-155	TRG	U	HASL300	LR1	0.0302	0.0492	PCI/G	0	U		8/11/2005	3:19	0.0915	PCI/G	0.0443	PCI/G	1	5.5	125	G	PCI/G	66	PR	
5502-0000-015-C-1C-01	MSR#05-2443	1200960049	472777	15092-94-1	Lead-212	TRG	U	HASL300	LR1	0.513	0.0507	PCI/G	0			8/11/2005	3:19	0.052	PCI/G	0.0252	PCI/G	1	5.5	125	G	PCI/G	6	PR	
5502-0000-015-C-1C-01	MSR#05-2443	1200960049	472777	15067-28-4	Lead-214	TRG	U	HASL300	LR1	0.79	0.0743	PCI/G	0			8/11/2005	3:19	0.0584	PCI/G	0.0281	PCI/G	1	5.5	125	G	PCI/G	6	PR	
5502-0000-015-C-1C-01	MSR#05-2443	1200960049	472777	13966-31-9	Manganese-54	TRG	U	HASL300	LR1	-0.00695	0.0177	PCI/G	0	U		8/11/2005	3:19	0.0308	PCI/G	0.0146	PCI/G	1	5.5	125	G	PCI/G	00982	PR	
5502-0000-015-C-1C-01	MSR#05-2443	1200960049	472777	14681-63-1	Niobium-94	TRG	U	HASL300	LR1	0.00682	0.0146	PCI/G	0	U		8/11/2005	3:19	0.0257	PCI/G	0.0122	PCI/G	1	5.5	125	G	PCI/G	753	PR	
5502-0000-015-C-1C-01	MSR#05-2443	1200960049	472777	13966-00-2	Potassium-40	TRG	U	HASL300	LR1	8.46	0.63	PCI/G	0			8/11/2005	3:19	0.226	PCI/G	0.102	PCI/G	1	5.5	125	G	PCI/G	PR		
5502-0000-015-C-1C-01	MSR#05-2443	1200960049	472777	13982-63-3	Radium-226	TRG	U	HASL300	LR1	0.62	0.0805	PCI/G	0			8/11/2005	3:19	0.0568	PCI/G	0.0271	PCI/G	1	5.5	125	G	PCI/G	0	PR	
5502-0000-015-C-1C-01	MSR#05-2443	1200960049	472777	14391-65-2	Silver-108m	TRG	U	HASL300	LR1	-0.00717	0.0136	PCI/G	0	U		8/11/2005	3:19	0.0234	PCI/G	0.0111	PCI/G	1	5.5	125	G	PCI/G	0357	PR	
5502-0000-015-C-1C-01	MSR#05-2443	1200960049	472777	14913-50-9	Thallium-208	TRG	U	HASL300	LR1	0.144	0.0347	PCI/G	0			8/11/2005	3:19	0.0273	PCI/G	0.013	PCI/G	1	5.5	125	G	PCI/G	5	PR	
	MSR#05-2443	1200960050	472777	14331-83-0	Actinium-228	TRG	U	HASL300	BS1	0.196	0.816	PCI/G	0	U		26/10/2005	9:40	1.44	PCI/G	0.685	PCI/G	1	0	100	G	PCI/G	PR		
	MSR#05-2443	1200960050	472777	14596-10-2	Americium-241	TRG	U	HASL300	BS1	25.8	1.27	PCI/G	0			26/10/2005	9:40	0.769	PCI/G	0.377	PCI/G	1	0	100	G	4	PR		
	MSR#05-2443	1200960050	472777	14913-49-6	Bismuth-212	TRG	U	HASL300	BS1	1.12	1.65	PCI/G	0	U		26/10/2005	9:40	2.87	PCI/G	1.37	PCI/G	1	0	100	G	PCI/G	PR		
	MSR#05-2443	1200960050	472777	14733-03-0	Bismuth-214	TRG	U	HASL300	BS1	-0.214	0.367	PCI/G	0	U		26/10/2005	9:40	0.595	PCI/G	0.283	PCI/G	1	0	100	G	PCI/G	PR		
	MSR#05-2443	1200960050	472777	13967-70-9	Cesium-134	TRG	U	HASL300	BS1	0.0446	0.227	PCI/G	0	U		26/10/2005	9:40	0.405	PCI/G	0.192	PCI/G	1	0	100	G	PCI/G	PR		
	MSR#05-2443	1200960050	472777	10045-97-3	Cesium-137	TRG	U	HASL300	BS1	9.73	0.683	PCI/G	0			26/10/2005	9:40	0.347	PCI/G	0.165	PCI/G	1	0	100	G	38	PR		
	MSR#05-2443	1200960050	472777	10198-40-0	Cobalt-60	TRG	U	HASL300	BS1	14.8	0.845	PCI/G	0			26/10/2005	9:40	0.335	PCI/G	0.154	PCI/G	1	0	100	G	1	PR		
	MSR#05-2443	1200960050	472777	14683-23-9	Europium-152	TRG	U	HASL300	BS1	0.211	0.42	PCI/G	0	U		26/10/2005	9:40	0.738	PCI/G	0.355	PCI/G	1	0	100	G	PCI/G	PR		
	MSR#05-2443	1200960050	472777	15585-10-1	Europium-154	TRG	U	HASL300	BS1	-0.435	0.422	PCI/G	0	U		26/10/2005	9:40	0.654	PCI/G	0.289	PCI/G	1	0	100	G	PCI/G	PR		
	MSR#05-2443	1200960050	472777	14391-16-3	Europium-155	TRG	U	HASL300	BS1	0.00093	0.436	PCI/G	0	U		26/10/2005	9:40	0.719	PCI/G	0.35	PCI/G	1	0	100	G	PCI/G	PR		
	MSR#05-2443	1200960050	472777	15092-94-1	Lead-212	TRG	U	HASL300	BS1	0.0431	0.282	PCI/G	0	U		26/10/2005	9:40	0.377	PCI/G	0.182	PCI/G	1	0	100	G	PCI/G	PR		
	MSR#05-2443	1200960050	472777	15067-28-4	Lead-214	TRG	U	HASL300	BS1	0.145	0.307	PCI/G	0	U		26/10/2005	9:40	0.538	PCI/G	0.259	PCI/G	1	0	100	G	PCI/G	PR		
	MSR#05-2443	1200960050	472777	13966-31-9	Manganese-54	TRG	U	HASL300	BS1	-0.0336	0.198	PCI/G	0	U		26/10/2005	9:40	0.345	PCI/G	0.163	PCI/G	1	0	100	G	PCI/G	PR		
	MSR#05-2443	1200960050	472777	14681-63-1	Niobium-94	TRG	U	HASL300	BS1	-0.0612	0.204	PCI/G	0	U		26/10/2005	9:40	0.332	PCI/G	0.159	PCI/G	1	0	100	G	PCI/G	PR		
	MSR#05-2443	1200960050	472777	13966-00-2	Potassium-40	TRG	U	HASL300	BS1	-1.35	1.72	PCI/G	0	U		26/10/2005	9:40	2.75	PCI/G	1.23	PCI/G	1	0	100	G	PCI/G	PR		
	MSR#05-2443	1200960050	472777	13982-63-3	Radium-226	TRG	U	HASL300	BS1	-0.214	0.367	PCI/G	0	U		26/10/2005	9:40	0.595	PCI/G	0.283	PCI/G	1	0	100	G	PCI/G	PR		
	MSR#05-2443	1200960050	472777	14391-65-2	Silver-108m	TRG	U	HASL300	BS1	-0.139	0.148	PCI/G	0	U		26/10/2005	9:40	0.238	PCI/G	0.113	PCI/G	1	0	100	G	PCI/G	PR		
	MSR#05-2443	1200960050	472777	14913-50-9	Thallium-208	TRG	U	HASL300	BS1	-0.0531	0.192	PCI/G	0	U		26/10/2005	9:40	0.319	PCI/G	0.152	PCI/G	1	0	100	G	PCI/G	PR		
	MSR#05-2443	1200960053	472779	14331-83-0	Actinium-228	TRG	U	HASL300	LB1	0.0641	0.0533	PCI/G	0	U		9/11/2005	3:58	0.117	PCI/G	0.0526	PCI/G	1	0	150	G	PCI/G	PR		
	MSR#05-2443	1200960053	472779	14596-10-2	Americium-241	TRG	U	HASL300	LB1	0.0154	0.0216	PCI/G	0	U		9/11/2005	3:58	0.0377	PCI/G	0.018	PCI/G	1	0	150	G	PCI/G	PR		
	MSR#05-2443	1200960053	472779	14913-49-6	Bismuth-212	TRG	U	HASL300	LB1	0.0218	0.134	PCI/G	0	U		9/11/2005	3:58	0.25	PCI/G	0.113	PCI/G	1	0	150	G	PCI/G	PR		
	MSR#05-2443	1200960053	472779	14733-03-0	Bismuth-214	TRG	U	HASL300	LB1	0.0319	0.0382	PCI/G	0	U		9/11/2005	3:58	0.0737	PCI/G	0.0344	PCI/G	1	0	150	G	PCI/G	PR		
	MSR#05-2443	1200960053	472779	13967-70-9	Cesium-134	TRG	U	HASL300	LB1	-0.00159	0.0186	PCI/G	0	U		9/11/2005	3:58	0.0336	PCI/G	0.0151	PCI/G	1	0	150	G	PCI/G	PR		
	MSR#05-2443	1200960053	472779	10045-97-3	Cesium-137	TRG	U	HASL300	LB1	0.03	0.0272	PCI/G	0	U		9/11/2005	3:58	0.03	PCI/G	0.0136	PCI/G	1	0	150	G	PCI/G	PR		
	MSR#05-2443	1200960053	472779	10198-40-0	Cobalt-60	TRG	U	HASL300	LB1	-0.00194	0.0164	PCI/G	0	U		9/11/2005	3:58	0.0309	PCI/G	0.0132	PCI/G	1	0	150	G	PCI/G	PR		
	MSR#05-2443	1200960053	472779	14683-23-9	Europium-152	TRG	U	HASL300	LB1	0.0152	0.0447	PCI/G	0	U		9/11/2005	3:58	0.085	PCI/G	0.0399	PCI/G	1	0	150	G	PCI/G	PR		
	MSR#05-2443	1200960053	472779	15585-10-1	Europium-154	TRG	U	HASL300	LB1	-0.0221	0.0459	PCI/G	0	U		9/11/2005	3:58	0.0808	PCI/G	0.0344	PCI/G	1	0	150	G	PCI/G	PR		
	MSR#05-2443	1200960053	472779	14391-16-3	Europium-155	TRG	U	HASL300	LB1	-0.00388	0.0359	PCI/G	0	U		9/11/2005	3:58	0.0654	PCI/G	0.0311	PCI/G	1	0	150	G	PCI/G	PR		
	MSR#05-2443	1200960053	472779	15092-94-1	Lead-212	TRG	U	HASL300	LB1	0.00987	0.0412	PCI/G	0	U		9/11/2005	3:58	0.0523	PCI/G	0.0249	PCI/G	1	0	150	G	PCI/G	PR		
	MSR#05-2443	1200960053	472779	15067-28-4	Lead-214	TRG	U	HASL300	LB1	0.0231	0.0337	PCI/G	0	U		9/11/2005	3:58	0.0651	PCI/G	0.0307	PCI/G	1	0	150	G	PCI/G	PR		
	MSR#05-2443	1200960053	472779	13966-31-9	Manganese-54	TRG	U	HASL300	LB1	-0.00517	0.02	PCI/G	0	U		9/11/2005	3:58	0.0314	PCI/G	0.0141	PCI/G	1	0	150	G	PCI/G	PR		
	MSR#05-2443	1200960053	472779	14681-63-1	Niobium-94	TRG	U	HASL300	LB1	-0.0074	0.0171	PCI/G	0	U		9/11/2005	3:58	0.0295	PCI/G	0.0135	PCI/G	1	0	150	G	PCI/G	PR		
	MSR#05-2443	1200960053	472779	13966-00-2	Potassium-40	TRG	U	HASL300	LB1	0.0989	0.17	PCI/G	0	U		9/11/2005	3:58	0.354	PCI/G	0.155	PCI/G	1	0	150	G	PCI/G	PR		

	MSR#05-2443	1200960053	472779	13982-63-3	Radium-226	TRG	U	HASL300	LB1	0.0319	0.0382	PCI/G	0	U			9/11/2005	3:58	0.0737	PCI/G	0.0344	PCI/G	1	0	150	G	PCI/G	PR	
	MSR#05-2443	1200960053	472779	14391-65-2	Silver-108m	TRG	U	HASL300	LB1	0.00625	0.0157	PCI/G	0	U			9/11/2005	3:58	0.0299	PCI/G	0.0139	PCI/G	1	0	150	G	PCI/G	PR	
	MSR#05-2443	1200960053	472779	14913-50-9	Thallium-208	TRG	U	HASL300	LB1	0.0164	0.024	PCI/G	0	U			9/11/2005	3:58	0.0235	PCI/G	0.0104	PCI/G	1	0	150	G	PCI/G	PR	
5502-0000-019-C-1C-02	MSR#05-2443	1200960054	472779	14331-83-0	Actinium-228	TRG	U	HASL300	LR1	0.564	0.188	PCI/G	0				9/11/2005	3:58	0.183	PCI/G	0.0839	PCI/G	1	6.6	113	G	PCI/G	1	PR
5502-0000-019-C-1C-02	MSR#05-2443	1200960054	472779	14596-10-2	Americium-241	TRG	U	HASL300	LR1	-0.0372	0.122	PCI/G	0	U			9/11/2005	3:58	0.202	PCI/G	0.0969	PCI/G	1	6.6	113	G	PCI/G	64	PR
5502-0000-019-C-1C-02	MSR#05-2443	1200960054	472779	14913-49-6	Bismuth-212	TRG	U	HASL300	LR1	0.408	0.406	PCI/G	0				9/11/2005	3:58	0.384	PCI/G	0.177	PCI/G	1	6.6	113	G	PCI/G	9	PR
5502-0000-019-C-1C-02	MSR#05-2443	1200960054	472779	14733-03-0	Bismuth-214	TRG	U	HASL300	LR1	0.705	0.138	PCI/G	0				9/11/2005	3:58	0.0946	PCI/G	0.0442	PCI/G	1	6.6	113	G	PCI/G	8	PR
5502-0000-019-C-1C-02	MSR#05-2443	1200960054	472779	13967-70-9	Cesium-134	TRG	U	HASL300	LR1	0	0.0382	PCI/G	0	UUI			9/11/2005	3:58	0.0487	PCI/G	0.0221	PCI/G	1	6.6	113	G	PCI/G	45	PR
5502-0000-019-C-1C-02	MSR#05-2443	1200960054	472779	10045-97-3	Cesium-137	TRG	U	HASL300	LR1	0.00802	0.0266	PCI/G	0	U			9/11/2005	3:58	0.0492	PCI/G	0.0228	PCI/G	1	6.6	113	G	PCI/G	353	PR
5502-0000-019-C-1C-02	MSR#05-2443	1200960054	472779	10198-40-0	Cobalt-60	TRG	U	HASL300	LR1	-0.0144	0.0273	PCI/G	0	U			9/11/2005	3:58	0.0471	PCI/G	0.0206	PCI/G	1	6.6	113	G	PCI/G	46	PR
5502-0000-019-C-1C-02	MSR#05-2443	1200960054	472779	14683-23-9	Europium-152	TRG	U	HASL300	LR1	0.0506	0.0728	PCI/G	0	U			9/11/2005	3:58	0.131	PCI/G	0.0621	PCI/G	1	6.6	113	G	PCI/G	089	PR
5502-0000-019-C-1C-02	MSR#05-2443	1200960054	472779	15585-10-1	Europium-154	TRG	U	HASL300	LR1	-0.0194	0.0773	PCI/G	0	U			9/11/2005	3:58	0.14	PCI/G	0.0619	PCI/G	1	6.6	113	G	PCI/G	798	PR
5502-0000-019-C-1C-02	MSR#05-2443	1200960054	472779	14391-16-3	Europium-155	TRG	U	HASL300	LR1	0.00138	0.0691	PCI/G	0	U			9/11/2005	3:58	0.126	PCI/G	0.0602	PCI/G	1	6.6	113	G	PCI/G	36	PR
5502-0000-019-C-1C-02	MSR#05-2443	1200960054	472779	15092-94-1	Lead-212	TRG	U	HASL300	LR1	0.551	0.068	PCI/G	0				9/11/2005	3:58	0.0781	PCI/G	0.0375	PCI/G	1	6.6	113	G	PCI/G	2	PR
5502-0000-019-C-1C-02	MSR#05-2443	1200960054	472779	15067-28-4	Lead-214	TRG	U	HASL300	LR1	0.75	0.117	PCI/G	0				9/11/2005	3:58	0.0963	PCI/G	0.0457	PCI/G	1	6.6	113	G	PCI/G	3	PR
5502-0000-019-C-1C-02	MSR#05-2443	1200960054	472779	13966-31-9	Manganese-54	TRG	U	HASL300	LR1	-0.00318	0.0296	PCI/G	0	U			9/11/2005	3:58	0.0518	PCI/G	0.0238	PCI/G	1	6.6	113	G	PCI/G	447	PR
5502-0000-019-C-1C-02	MSR#05-2443	1200960054	472779	14681-63-1	Niobium-94	TRG	U	HASL300	LR1	0.00516	0.0232	PCI/G	0	U			9/11/2005	3:58	0.0425	PCI/G	0.0196	PCI/G	1	6.6	113	G	PCI/G	19	PR
5502-0000-019-C-1C-02	MSR#05-2443	1200960054	472779	13966-00-2	Potassium-40	TRG	U	HASL300	LR1	9.01	1.02	PCI/G	0				9/11/2005	3:58	0.484	PCI/G	0.213	PCI/G	1	6.6	113	G	PCI/G	PR	
5502-0000-019-C-1C-02	MSR#05-2443	1200960054	472779	13982-63-3	Radium-226	TRG	U	HASL300	LR1	0.705	0.138	PCI/G	0				9/11/2005	3:58	0.0946	PCI/G	0.0442	PCI/G	1	6.6	113	G	PCI/G	8	PR
5502-0000-019-C-1C-02	MSR#05-2443	1200960054	472779	14391-65-2	Silver-108m	TRG	U	HASL300	LR1	0.00211	0.0259	PCI/G	0	U			9/11/2005	3:58	0.0443	PCI/G	0.0208	PCI/G	1	6.6	113	G	PCI/G	62	PR
5502-0000-019-C-1C-02	MSR#05-2443	1200960054	472779	14913-50-9	Thallium-208	TRG	U	HASL300	LR1	0.164	0.0522	PCI/G	0				9/11/2005	3:58	0.0491	PCI/G	0.0228	PCI/G	1	6.6	113	G	PCI/G	7	PR
	MSR#05-2443	1200960055	472779	14331-83-0	Actinium-228	TRG	U	HASL300	BS1	-0.0939	0.82	PCI/G	0	U			9/11/2005	1:26	1.42	PCI/G	0.674	PCI/G	1	0	100	G	PCI/G	PR	
	MSR#05-2443	1200960055	472779	14596-10-2	Americium-241	TRG	U	HASL300	BS1	24.9	1.27	PCI/G	0				9/11/2005	1:26	0.782	PCI/G	0.384	PCI/G	1	0	100	G	.4	PR	
	MSR#05-2443	1200960055	472779	14913-49-6	Bismuth-212	TRG	U	HASL300	BS1	-1.24	1.57	PCI/G	0	U			9/11/2005	1:26	2.47	PCI/G	1.17	PCI/G	1	0	100	G	PCI/G	PR	
	MSR#05-2443	1200960055	472779	14733-03-0	Bismuth-214	TRG	U	HASL300	BS1	-0.042	0.339	PCI/G	0	U			9/11/2005	1:26	0.567	PCI/G	0.269	PCI/G	1	0	100	G	PCI/G	PR	
	MSR#05-2443	1200960055	472779	13967-70-9	Cesium-134	TRG	U	HASL300	BS1	0.0853	0.22	PCI/G	0	U			9/11/2005	1:26	0.397	PCI/G	0.188	PCI/G	1	0	100	G	PCI/G	PR	
	MSR#05-2443	1200960055	472779	10045-97-3	Cesium-137	TRG	U	HASL300	BS1	10	0.624	PCI/G	0				9/11/2005	1:26	0.37	PCI/G	0.177	PCI/G	1	0	100	G	38	PR	
	MSR#05-2443	1200960055	472779	10198-40-0	Cobalt-60	TRG	U	HASL300	BS1	14.8	0.851	PCI/G	0				9/11/2005	1:26	0.299	PCI/G	0.136	PCI/G	1	0	100	G	.1	PR	
	MSR#05-2443	1200960055	472779	14683-23-9	Europium-152	TRG	U	HASL300	BS1	-0.0476	0.41	PCI/G	0	U			9/11/2005	1:26	0.701	PCI/G	0.336	PCI/G	1	0	100	G	PCI/G	PR	
	MSR#05-2443	1200960055	472779	15585-10-1	Europium-154	TRG	U	HASL300	BS1	-0.0795	0.373	PCI/G	0	U			9/11/2005	1:26	0.659	PCI/G	0.292	PCI/G	1	0	100	G	PCI/G	PR	
	MSR#05-2443	1200960055	472779	14391-16-3	Europium-155	TRG	U	HASL300	BS1	0.102	0.444	PCI/G	0	U			9/11/2005	1:26	0.737	PCI/G	0.359	PCI/G	1	0	100	G	PCI/G	PR	
	MSR#05-2443	1200960055	472779	15092-94-1	Lead-212	TRG	U	HASL300	BS1	-0.0503	0.211	PCI/G	0	U			9/11/2005	1:26	0.362	PCI/G	0.175	PCI/G	1	0	100	G	PCI/G	PR	
	MSR#05-2443	1200960055	472779	15067-28-4	Lead-214	TRG	U	HASL300	BS1	-0.0765	0.304	PCI/G	0	U			9/11/2005	1:26	0.515	PCI/G	0.247	PCI/G	1	0	100	G	PCI/G	PR	
	MSR#05-2443	1200960055	472779	13966-31-9	Manganese-54	TRG	U	HASL300	BS1	-0.0169	0.204	PCI/G	0	U			9/11/2005	1:26	0.357	PCI/G	0.169	PCI/G	1	0	100	G	PCI/G	PR	
	MSR#05-2443	1200960055	472779	14681-63-1	Niobium-94	TRG	U	HASL300	BS1	-0.0239	0.181	PCI/G	0	U			9/11/2005	1:26	0.3	PCI/G	0.142	PCI/G	1	0	100	G	PCI/G	PR	
	MSR#05-2443	1200960055	472779	13966-00-2	Potassium-40	TRG	U	HASL300	BS1	-0.722	1.79	PCI/G	0	U			9/11/2005	1:26	3.02	PCI/G	1.37	PCI/G	1	0	100	G	PCI/G	PR	
	MSR#05-2443	1200960055	472779	13982-63-3	Radium-226	TRG	U	HASL300	BS1	-0.042	0.339	PCI/G	0	U			9/11/2005	1:26	0.567	PCI/G	0.269	PCI/G	1	0	100	G	PCI/G	PR	
	MSR#05-2443	1200960055	472779	14391-65-2	Silver-108m	TRG	U	HASL300	BS1	0.124	0.166	PCI/G	0	U			9/11/2005	1:26	0.293	PCI/G	0.141	PCI/G	1	0	100	G	PCI/G	PR	
	MSR#05-2443	1200960055	472779	14913-50-9	Thallium-208	TRG	U	HASL300	BS1	-0.0196	0.187	PCI/G	0	U			9/11/2005	1:26	0.313	PCI/G	0.149	PCI/G	1	0	100	G	PCI/G	PR	
	MSR#05-2443	1200961819	473497	14681-59-5	Iron-55	TRG	U	LSC	LB1	-1.17	1.68	PCI/G	0	U			22/10/2005	9:04	2.39	PCI/G	1.18	PCI/G	1	0	3.37	G	PCI/G	PR	
	MSR#05-2443	1200961822	473497	14681-59-5	Iron-55	TRG	U	LSC	BS1	54	2.59	PCI/G	0				23/10/2005	1:45	2.76	PCI/G	1.36	PCI/G	1	0	3.37	G	.5	PR	
	MSR#05-2443	1200961827	473499	13781-37-8	Nickel-63	TRG	U	LSC	LB1	-2.12	1.45	PCI/G	0	U			26/10/2005	4:49	2.61	PCI/G	1.27	PCI/G	1	0	0.9	G	PCI/G	PR	
	MSR#05-2443	1200961830	473499	13781-37-8	Nickel-63	TRG	U	LSC	BS1	153	4.04	PCI/G	0				26/10/2005	7:04	2.52	PCI/G	1.23	PCI/G	1	0	0.9	G	6	PR	
	MSR#05-2443	1200961847	473504	14133-76-7	Technetium-99	TRG	U	TC02RCM	LB1	0.0515	0.247	PCI/G	0	U			29/10/2005	3:57	0.422	PCI/G	0.206	PCI/G	1	0	5.14	G	PCI/G	PR	
	MSR#05-2443	1200961850	473504	14133-76-7	Technetium-99	TRG	U	TC02RCM	BS1	19.9	0.562	PCI/G	0				29/10/2005	5:34	0.396	PCI/G	0.194	PCI/G	1	0	5.14	G	.0	PR	
	MSR#05-2443	1200966093	475273	14596-10-2	Americium-241	TRG	U	AM05RCM	LB1	0.0164	0.0209	PCI/G	0	U			3/11/2005	12:15	0.0188	PCI/G	0	PCI/G	1	0	1.05	G	PCI/G	PR	
	MSR#05-2443	1200966093	475273	OER-100-93	Curium-242	TRG	U	AM05RCM	LB1	-0.00169	0.00331	PCI/G	0	U			3/11/2005	12:15	0.0351	PCI/G	0.00802	PCI/G	1	0	1.05	G	PCI/G	PR	
	MSR#05-2443	1200966093	475273	OER-101-57	Curium-243/244	TRG	U	AM05RCM	LB1	-0.00333	0.00461	PCI/G	0	U			3/11/2005	12:15	0.0411	PCI/G	0.0112	PCI/G	1	0	1.05	G	PCI/G	PR	
	MSR#05-2443	1200966096	475273	14596-10-2	Americium-241	TRG	U	AM05RCM	BS1	2.31	0.227	PCI/G	0				3/11/2005	12:15	0.0345	PCI/G	0.00937	PCI/G	1	0	1.05	G	58	PR	
	MSR#05-2443	1200966096	475273	OER-100-93	Curium-242	TRG	U	AM05RCM	BS1	-0.00142	0.00277	PCI/G	0	U			3/11/2005	12:15	0.0294	PCI/G	0.00672	PCI/G	1	0	1.05	G	PCI/G	PR	
	MSR#05-2443	1200966096	475273	OER-101-57	Curium-243/244	TRG	U	AM05RCM	BS1	2.68	0.245	PCI/G	0				3/11/2005	12:15	0.0554	PCI/G	0.0199	PCI/G	1	0	1.05	G	15	PR	
	MSR#05-2443	1200966097	475274	13981-16-3	Plutonium-238	TRG	U	PU11RCM	LB1	0.0128	0.0283	PCI/G	0	U			3/11/2005	9:07	0.0641	PCI/G	0.0239	PCI/G	1	0	1.05	G	PCI/G	PR	
	MSR#05-2443	1200966097	475274	OER-100-70	Plutonium-239/24	TRG	U	PU11RCM	LB1	-0.0058	0.0131	PCI/G	0	U			3/11/2005	9:07	0.0439	PCI/G	0.0138	PCI/G	1	0	1.05	G	PCI/G	PR	
	MSR#05-2443	1200966100	475274	13981-16-3	Plutonium-238	TRG	U	PU11RCM	BS1	0.0133	0.0257	PCI/G	0	U			3/11/2005	9:07	0.0564	PCI/G	0.0214	PCI/G	1	0	1.05	G	PCI/G	PR	
	MSR#05-2443	1200966100	475274	OER-100-70	Plutonium-239/24	TRG	U	PU11RCM	BS1	2.1	0.202	PCI/G	0				3/11/2005	9:07	0.0498	PCI/G	0.0181	PCI/G	1	0	1.05	G	39	PR	
	MSR#05-2443	1200966101	475275	14119-32-5	Plutonium-241	TRG	U	PU11RCM	LB1	0.66	1.48	PCI/G	0	U			5/11/2005	1:11	2.51	PCI/G	1.23	PCI/G	1	0	1.62	G	PCI/G	PR	
	MSR#05-2443	1200966104	475275	14119-32-5	Plutonium-241	TRG	U	PU11RCM	BS1	38.1	2.38	PCI/G	0				5/11/2005	3:34	2.57	PCI/G	1.25	PCI/G	1	0	1.62	G	.9	PR	
	MSR#05-2443	1200967206	475769	14762-75-5	Carbon-14	TRG	U	LSC	LB1	-0.0629	0.0794	PCI/G	0	U			1/11/2005	3:57	0.138	PCI/G	0.0677	PCI/G	1	0	9.13	G	PCI/G	PR	
5502-0000-016-C-4C-05	MSR#05-2443	1200967207	475769	14762-75-5	Carbon-14	TRG	U	LSC	LR2	-0.159	0.229	PCI/G	0	U			1/11/2005	5:31	0.396	PCI/G	0.195	PCI/G	1	5.9	3.14	G	PCI/G	34	PR
5502-0000-016-C-4C-05	MSR#05-2443	1200967208	475769	14762-75-5	Carbon-14	TRG	U	LSC	MS2	17.3	0.424	PCI/G	0				1/11/2005	7:05	0.34	PCI/G	0.167	PCI/G	1	5.9	3.68	G	.7	PR	
	MSR#05-2443	1200967209	475769	14762-75-5	Carbon-14	TRG	U	LSC	BS1	6.91	0.169	PCI/G	0				1/11/2005	8:39	0.136	PCI/G	0.067	PCI/G	1	0	9.13	G	12	PR	
	MSR#05-2443	1200969214	476640	10098-97-2	Strontium-90	TRG	U	E905M	LB1	0.000715	0.00209	PCI/G	0	U			7/11/2005	4:44	0.00448	PCI/G	0.00212	PCI/G	1	0	22.2	G	PCI/G	PR	
5502-0000-015-C-1C-01	MSR#05-2443	1200969215	476640	10098-97-2	Strontium-90	TRG	U	E905M	LR1	0.000582	0.00214	PCI/G	0	U			7/11/2005	4:44	0.00462	PCI/G	0.00216	PCI/G	1	5.5	18.6	G	PCI/G	0205	PR
5502-0000-015-C-1C-01	MSR#05-2443	1200969216	476640	10098-97-2	Strontium-90	TRG	U	E905M	MS1	10.9	0.876	PCI/G	0				8/11/2005	11:37	0.382	PCI/G	0.167	PCI/G	1	5.5	1.08	G	.5	PR	
	MSR#05-2443	1200969217	476640	10098-97-2	Strontium-90	TRG	U	E905M	BS1	0.644	0.0338	PCI/G	0				7/11/2005	4:45	0.0106	PCI/G	0.0047	PCI/G	1	0	22.2	G	700	PR	
	MSR#05-2443	1200969218	476641	10098-97-2	Strontium-90	TRG	U	E905M	LB1	-0.000402	0.00492	PCI/G	0	U			4/11/2005	10:07	0.00868	PCI/G	0.00415	PCI/G	1	0	20.2	G	PCI/G	PR	
5502-0000-019-C-1C-02	MSR#05-2443	1200969219	476641	10098-97-2	Strontium-90	TRG	U	E905M	LR1	-0.00137	0.0051	PCI/G	0	U			4/11/2005	10:07	0.00913	PCI/G	0.00435	PCI/G	1	6.6	12.9	G	PCI/G	285	PR
5502-0000-019-C-1C-02	MSR#05-2443	1200969220	476641	10098-97-2	Strontium-90	TRG	U	E905M	MS1	9.35	0.633	PCI/G	0				8/11/2005	9:20	0.272	PCI/G	0.121	PCI/G	1	6.6	1.26	G	.4	PR	
	MSR#05-2443	1200969221	476641	10098-97-2	Strontium-90	TRG	U	E905M	BS1	0.632	0.0362	PCI/G	0				7/11/2005	3:18	0.014	PCI/G	0.00628	PCI/G	1	0	20.2	G	772	PR	
	MSR#05-2443	1200970069	476952	10028-17-8	Tritium	TRG	U	E906.0	LB1	-0.251	1.44	PCI/G	0	U			8/11/2005	9:56	2.54	PCI/G	1.22	PCI/G	1	0	9.42	G	PCI/G	PR	
5502-0000-015-C-3C-04	MSR#05-2443	1200970070	476952	10028-17-8	Tritium	TRG	U	E906.0	LR1	0.0675	1.64	PCI/G	0	U			10/11/2005	3:46	2.82	PCI/G	1.37	PCI/G	1	5.4	9.06	G	PCI/G	61	PR
5502-0000-015-C-3C-04	MSR#05-2443	1200970071	476952	10028-17-8	Tritium	TRG	U	E906.0	MS1	15.1	3.65	PCI/G	0				8/11/2005	11:01	5.23	PCI/G	2.51	PCI/G	1	5.4	9.1	G	.6	PR	
	MSR#05-2443	1200970072	476952	10028-17-8	Tritium	TRG	U	E906.0	BS1	16.5	2.09	PCI/G	0				8/11/2005	11:33	2.52	PCI/G	1.21	PCI/G	1	0	9.42	G	.0	PR	
	MSR#05-2443	1200970073	476953	10028-17-8	Tritium	TRG	U	E906.0	LB1	0.822	0.886	PCI/G	0	U			8/11/2005	5:31	1.48	PCI/G	0.709	PCI/G	1	0	12.9	G	PCI/G	PR	
5502-0000-018-C-2C-02	MSR#05-2443	1200970074	476953	10028-17-8	Tritium	TRG	U	E906.0	LR1	0.756	1.76	PCI/G	0	U			8/11/2005	6:03	3.02	PCI/G	1.45	PCI/G	1	6.2	12.6	G	PCI/G	8	PR
5502-0000-018-C-2C-02	MSR#05-2443	1200970075	476953	10028-17-8	Tritium	TRG	U	E906.0	MS1	13.6	2.4	PCI/G	0				8/11/2005	6:35	3.14	PCI/G	1.5	PCI/G	1	6.2	12.1	G	.5	PR	
	MSR#05-2443	1200970076	476953	10028-17-8	Tritium	TRG	U	E906.0	BS1	12.6	1.32	PCI/G	0				8/11/2005	7:06	1.43	PCI/G	0.684	PCI/G	1	0	12.9	G	.7	PR	

GENERAL ENGINEERING LABORATORIES, LLC
a Member of THE GEL GROUP, INC.
Meeting Today's Needs with a Vision for Tomorrow

August 22, 2005

Mr. Pete Hollenbeck
Connecticut Yankee Atomic Power
Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424

Re: Concrete PO# 002332
Work Order: 143526
SDG: MSR#05-2074

Dear Mr. Hollenbeck:

General Engineering Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on August 19, 2005. This data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4243.

Sincerely,

Cheryl Jones
Project Manager

Purchase Order: 002332
Chain of Custody: 2005-00366
Enclosures

P.O. Box 30712 • Charleston, SC 29417 • 2040 Savage Road (29407)
Phone (843) 556-8171 • Fax (843) 766-1178 • www.gel.com

CONNECTICUT YANKEE
RE: Sediment
PO# 002332
Work Order: 143526
SDG: MSR#05-2074

143526001	5502-0002-006-1S
143526002	5502-0002-006-2S
143526003	5502-0002-008-1S
143526004	5502-0002-008-2S
143526005	5502-0001-009-S1S
143526006	5502-0000-001-C2S
143526007	5502-0000-002-C2S
143526008	5502-0000-003-C2S
143526009	5502-0000-002-C2S

Table of Contents

General Narrative **1**

Chain of Custody **4**

Cooler Receipt Checklist **6**

Radiological Analysis **9**

Sample Data Summary 25

Quality Control Data 45

GENERAL NARRATIVE

CASE NARRATIVE
For
CONNECTICUT YANKEE
RE: Sediment
PO# 002332
Work Order: 143526

August 22, 2005

Laboratory Identification:
General Engineering Laboratories, LLC

Mailing Address:
P.O. Box 30712
Charleston, South Carolina 29417

Express Mail Delivery and Shipping Address:
2040 Savage Road
Charleston, South Carolina 29407

Telephone Number:
(843) 556-8171

Summary:

Sample receipt
The samples arrived at General Engineering Laboratories, LLC, (GEL) in Charleston, South Carolina August 19, 2005. All sample containers arrived without any visible signs of tampering or breakage. The chain of custody contained the proper documentation and signatures except in items of note located below.

The laboratory prepared the following sample(s):

Sample ID	Client Sample ID
143526001	5502-0002-006-1S
143526002	5502-0002-006-2S
143526003	5502-0002-008-1S
143526004	5502-0002-008-2S
143526005	5502-0001-009-S1S
143526006	5502-0000-001-C2S
143526007	5502-0000-002-C2S
143526008	5502-0000-003-C2S
143526009	5502-0000-002-C2S

Items of Note:
Samples ID's 5502-0000-002-C2S, 5502-0000-003-C2S and 5502-0000-002-C2S had dates and times on the labels, which conflicted, with those on the COC. Pete Hollenbeck was contacted and indicated that the dates and times on the container labels were correct. This is illustrated on the SRR and COC for reference.

Case Narrative:

Sample analyses were conducted using methodology as outlined in General Engineering Laboratories (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are listed below by analytical parameter.

Analytical Request:

Seven sediment samples were analyzed for FSSGAM, Sr-90, and H_3.
One sediment sample was analyzed for FSSALL.

Internal Chain of Custody:

Custody was maintained for all of these samples.

Data Package:

The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist and Radiochemistry.

I certify that this data package is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or a designee, as verified by the following signature.

Cheryl Jones
Project Manager

CHAIN OF CUSTODY

Chain of Custody Form

Connecticut Yankee Atomic Power Company
362 Injun Hollow Road, East Hampton, CT 06424
860-267-2556

No. 2005-00366

143526 1/

Project Name: Haddam Neck Decommissioning

Contact Name & Phone:
Pete Hollenbeck 860-267-3923

Analytical Lab (Name, City, State):
General Engineering Laboratories
2040 Savage Road
Charleston, SC 29407
ATT: Cheryl Jones (843-556-8171)

Priority: ☐ 30 D. ☐ 14 D. ☐ 7 D.
Other: 3 DAYS

Lab Use Only
Comments:

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	FSSGAM	FSSALL	H-3	Sr-90			Comment, Preservation	Lab Sample ID
5502-0002-006-1S	7/6/05	0830	SE	G	P	X		X	X				
5502-0002-006-2S	7/6/05	1045	SE	G	P	X		X	X				
5502-0002-008-1S	7/5/05	1600	SE	G	P	X		X	X				
5502-0002-008-2S	7/6/05	0815	SE	G	P	X		X	X				
5502-0001-009-S1S	6/22/05	1145	SE	G	P	X		X	X				
5502-0000-001-C2S	* 6/22/05	1145	SE	G	P	X		X	X				
5502-0000-002-C2S	* 6/22/05	1400	SE	G	P		X						
5502-0000-003-C2S	* 6/21/05	1620	SE	G	P	X		X	X				

NOTES: PO #: 002332 MSR #: 05-2074 ☒ LTP QA ☐ Radwaste QA ☐ Non QA

* Date/Time incorrect. See comments on SRR - C. Jones 8/19/05

Sr-90 RDL = 0.025 pCi/g

Samples Shipped Via:
☒ Fed Ex
☐ UPS
☐ Hand
☐ Other

~~7925 0453 4485~~ 8/18
Bill of Lading #
7917 0662 9978

Internal Container Temp.: 25 Deg. C

Custody Sealed? Y ☑ N ☐
Custody Seal Intact? Y ☑ N ☐

1) Relinquished By	Date/Time	2) Received By	Date/Time
[signature]	8/18/05 1400	[signature]	8-19-05 0900
3) Relinquished By	Date/Time	4) Received By	Date/Time
5) Relinquished By	Date/Time	6) Received By	Date/Time

COOLER RECEIPT CHECKLIST

Figure 1. Sample Check-in List

Date/Time Received: 8-19-05 0900

SDG#: MSR#05-2074

Work Order Number: 1435261.

Shipping Container ID: FED EX 7917 0662 9978 Chain of Custody # 2005 - 00366

1. Custody Seals on shipping container intact? Yes [ ] No [ ] NA ✓
2. Custody Seals dated and signed? Yes [ ] No [ ] NA ✓
3. Chain-of-Custody record present? Yes [✓] No [ ]
4. Cooler temperature 25°C NO ICE
5. Vermiculite/packing materials is: Wet [ ] Dry [ ] NA ✓
6. Number of samples in shipping container: 8
7. Sample holding times exceeded? Yes [ ] No [✓]

8. Samples have:

✓ tape ____ hazard labels

✓ custody seals ____ appropriate sample labels

9. Samples are:

✓ in good condition ____ leaking

____ broken ____ have air bubbles

10. Were any anomalies identified in sample receipt? Yes [✓] No [ ]

11. Description of anomalies (include sample numbers): DATE + TIME DISCREPANCY FOR SAMPLES 001-CS2 (6-21 1620), 002-CS2 (6-22 1145) + 003-CS2 (6-22 1400) - ON CONTAINER DOES NOT MATCH WHAT'S ON CHAIN - Container has correct date/time per Pete Hollenbeck 8/19/05

Sample Custodian/Laboratory: Mike Taylor Date: 8-19-05

Telephoned to: ____ On ____ By ____ CdJones

SAMPLE RECEIPT & REVIEW FORM

GENERAL ENGINEERING LABORATORIES, LLC

PM use only

Client: Conn Yankee / RAD DATA	SDG/ARCOC/Work Order: 143526
Date Received: 8-19-05	PM(A) Review (ensure non-conforming items are resolved prior to signing):
Received By: MK	

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?				Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within (4 +/- 2 C)? Record preservation method.				Circle Coolant # ice bags blue ice dry ice none other describe)
3	Chain of custody documents included with shipment?				
4	Sample containers intact and sealed?				Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?				Sample ID's, containers affected and observed pH:
6	VOA vials free of headspace (defined as < 6mm bubble)?				Sample ID's and containers affected:
7	Are Encore containers present? (If yes, immediately deliver to VOA laboratory)				
8	Samples received within holding time?				Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?				Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?				Sample ID's affected:
11	Number of containers received match number indicated on COC?				Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?				
14	Air Bill ,Tracking #'s, & Additional Comments				

	Suspected Hazard Information	Non-Regulated	Regulated	High Level	RSO RAD Receipt # _____ *If > x2 area background is observed on samples identified as "non-regulated/non-radioactive", contact the Radiation Safety group for further investigation.
A	Radiological Classification?		✓		Maximum Counts Observed*:
B	PCB Regulated?	✓			Comments:
C	Shipped as DOT Hazardous Material? If yes, contact Waste Manager or ESH Manager.	✓			Hazard Class Shipped: UN#:

PM (or PMA) review of Hazard classification: CAJ Initials 8/19/05 Date:

RADIOLOGICAL ANALYSIS

Radiochemistry Case Narrative
Connecticut Yankee Atomic Power Co. (YANK)
SDG MSR#05-2074

Method/Analysis Information

Product:	**Alphaspec Am241, Cm, Solid ALL FSS**
Analytical Method:	DOE EML HASL-300, Am-05-RC Modified
Prep Method:	Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method:	Dry Soil Prep
Analytical Batch Number:	454737
Prep Batch Number:	454650
Dry Soil Prep GL-RAD-A-021 Batch Number:	454646

Sample ID	Client ID
143526009	5502-0000-002-C2S
1200916699	Method Blank (MB)
1200916700	143526009(5502-0000-002-C2S) Sample Duplicate (DUP)
1200916701	143526009(5502-0000-002-C2S) Matrix Spike (MS)
1200916702	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 14.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 143526009 (5502-0000-002-C2S).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Manual Integration
No manual integrations were performed on data in this batch.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Alphaspec Pu, Solid-ALL FSS**
Analytical Method:	DOE EML HASL-300, Pu-11-RC Modified
Prep Method:	Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method:	Dry Soil Prep
Analytical Batch Number:	454739
Prep Batch Number:	454650
Dry Soil Prep GL-RAD-A-021 Batch Number:	454646

Sample ID	Client ID
143526009	5502-0000-002-C2S
1200916714	Method Blank (MB)
1200916715	143526009(5502-0000-002-C2S) Sample Duplicate (DUP)
1200916716	143526009(5502-0000-002-C2S) Matrix Spike (MS)
1200916717	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 14.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 143526009 (5502-0000-002-C2S).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Manual Integration
No manual integrations were performed on data in this batch.

Additional Comments
The duplicate 1200916715 (5502-0000-002-C2S) fails to meet the RPD requirements for Pu-9/0. The RER is 1.99.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Liquid Scint Pu241, Solid-ALL FSS**
Analytical Method:	DOE EML HASL-300, Pu-11-RC Modified
Prep Method:	Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method:	Dry Soil Prep
Analytical Batch Number:	454741
Prep Batch Number:	454650
Dry Soil Prep GL-RAD-A-021 Batch Number:	454646

Sample ID	Client ID
143526009	5502-0000-002-C2S
1200916718	Method Blank (MB)
1200916719	143526009(5502-0000-002-C2S) Sample Duplicate (DUP)
1200916720	143526009(5502-0000-002-C2S) Matrix Spike (MS)
1200916721	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-035 REV# 7.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 143526009 (5502-0000-002-C2S).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
The background was recounted due to electronic interference in the background.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Manual Integration
No manual integrations were performed on data in this batch.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived**
Analytical Method:	EML HASL 300, 4.5.2.3
Prep Method:	Dry Soil Prep
Analytical Batch Number:	455664
Prep Batch Number:	454646

Sample ID	Client ID
143526001	5502-0002-006-1S
143526002	5502-0002-006-2S
143526003	5502-0002-008-1S
143526004	5502-0002-008-2S
143526005	5502-0001-009-S1S
143526006	5502-0000-001-C2S
143526007	5502-0000-002-C2S

143526008	5502-0000-003-C2S
1200919030	Method Blank (MB)
1200919031	143526001(5502-0002-006-1S) Sample Duplicate (DUP)
1200919032	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-013 REV# 10.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 143526001 (5502-0002-006-1S).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information

Qualifier	Reason	Analyte	Sample
UI	Data rejected due to low abundance.	Actinium-228	143526008
		Cesium-134	143526002
UI	Data rejected due to no valid peak.	Americium-241	143526007
		Radium-226	1200919030

Method/Analysis Information

Product:	**GFPC, Sr90, solid - 0.025 pCi/g**
Analytical Method:	EPA 905.0 Modified
Prep Method:	Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method:	Dry Soil Prep
Analytical Batch Number:	454777
Prep Batch Number:	454650
Dry Soil Prep GL-RAD-A-021 Batch Number:	454646

Sample ID	Client ID
143526001	5502-0002-006-1S
143526002	5502-0002-006-2S
143526003	5502-0002-008-1S
143526004	5502-0002-008-2S
143526005	5502-0001-009-S1S
143526006	5502-0000-001-C2S
143526007	5502-0000-002-C2S
143526008	5502-0000-003-C2S
1200916817	Method Blank (MB)
1200916818	143526001(5502-0002-006-1S) Sample Duplicate (DUP)
1200916819	143526001(5502-0002-006-1S) Matrix Spike (MS)
1200916820	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-004 REV# 9.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 143526001 (5502-0002-006-1S).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Chemical Recoveries
All chemical recoveries meet the required acceptance limits for this sample set.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following NCR was generated for this SDG:
NCR 236604 was generated due to RDL less than MDA. 1. Samples 143526001, 143526002, 143526003, 143526008, and 1200916818 did not meet the detection limit. The analyst used as much sample possible and the samples were counted for 500 minutes to achieve the lowest detection limit possible. 1. Reporting results.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Liquid Scint Tc99, Solid-ALL FSS**
Analytical Method:	DOE EML HASL-300, Tc-02-RC Modified
Analytical Batch Number:	455604

Sample ID	Client ID
143526009	5502-0000-002-C2S
1200918896	Method Blank (MB)
1200918897	143735017(3000-0000-205-C-1C-03) Sample Duplicate (DUP)
1200918898	143735017(3000-0000-205-C-1C-03) Matrix Spike (MS)
1200918899	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-005 REV# 12.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 143735017 (3000-0000-205-C-1C-03).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Liquid Scint Fe55, Solid-ALL FSS**
Analytical Method:	DOE RESL Fe-1, Modified
Prep Method:	Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method:	Dry Soil Prep
Analytical Batch Number:	458659
Prep Batch Number:	454650
Dry Soil Prep GL-RAD-A-021 Batch Number:	454646

Sample ID	Client ID
143526009	5502-0000-002-C2S
1200926169	Method Blank (MB)
1200926170	143318020(9802-0000-Z7-01-05) Sample Duplicate (DUP)
1200926171	143318020(9802-0000-Z7-01-05) Matrix Spike (MS)
1200926172	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-040 REV# 3.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 143318020 (9802-0000-Z7-01-05).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
The background was reprepped and recounted due to spectral interference causing high negative results.
The batch was reprepped due to high MDAs and low MS recovery.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Liquid Scint Ni63, Solid-ALL FSS**
Analytical Method:	DOE RESL Ni-1, Modified
Prep Method:	Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method:	Dry Soil Prep
Analytical Batch Number:	455806
Prep Batch Number:	454650
Dry Soil Prep GL-RAD-A-021 Batch Number:	454646

Sample ID	Client ID
143526009	5502-0000-002-C2S
1200919345	Method Blank (MB)
1200919346	143526009(5502-0000-002-C2S) Sample Duplicate (DUP)
1200919347	143526009(5502-0000-002-C2S) Matrix Spike (MS)
1200919348	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-022 REV# 7.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 143526009 (5502-0000-002-C2S).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**LSC, Tritium Dist, Solid-HTD2,ALL FSS**
Analytical Method:	EPA 906.0 Modified
Analytical Batch Number:	455445

Sample ID	Client ID
143526001	5502-0002-006-1S
143526002	5502-0002-006-2S
143526003	5502-0002-008-1S
143526004	5502-0002-008-2S
143526005	5502-0001-009-S1S
143526006	5502-0000-001-C2S

143526007	5502-0000-002-C2S
143526008	5502-0000-003-C2S
1200918485	Method Blank (MB)
1200918486	143526006(5502-0000-001-C2S) Sample Duplicate (DUP)
1200918487	143526006(5502-0000-001-C2S) Matrix Spike (MS)
1200918488	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-002 REV# 10.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 143526006 (5502-0000-001-C2S).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
Samples were reprepped due to low/high recovery.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following NCR was generated for this SDG:
NCR 236289 was generated due to Container scanning event for custody missed. 1. The analyst did not scan the samples 143526001, 002,003,004,005,006,007,008 into the batch prior to analysis, however the samples did remain in their custody at all times. The error has been corrected and the analyst has been instructed on proper scanning procedures. 1. Reporting results.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

Product:	**Liquid Scint C14, Solid All,FSS**
Analytical Method:	EPA EERF C-01 Modified
Analytical Batch Number:	455809

Sample ID	Client ID
143526009	5502-0000-002-C2S
1200919353	Method Blank (MB)
1200919354	143526009(5502-0000-002-C2S) Sample Duplicate (DUP)
1200919355	143526009(5502-0000-002-C2S) Matrix Spike (MS)
1200919356	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-003 REV# 8.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 143526009 (5502-0000-002-C2S).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation

Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information
Manual qualifiers were not required.

Certification Statement
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:
GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.
The following data validator verified the information presented in this case narrative:

Reviewer: Kathy B Gellatt 9/9/05

General Engineering Laboratories
Form GEL-NCR
Rev. 06/05

NCR Report No.: 236289
Revision No.:

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
23-AUG-05	Radiochemistry	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
LSC	EPA 906.0 Modified	Solid	YANK
Batch ID:	**Sample Numbers:**		
455445	See Below		

Potentially affected work order(s)(SDG): 143526(MSR#05-2074)

Application Issues:

Container scanning event for custody missed

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. The analyst did not scan the samples 143526001, 002,003,004,005,006,007,008 into the batch prior to analysis, however the samples did remain in their custody at all times. The error has been corrected and the analyst has been instructed on proper scanning procedures.	1. Reporting results.

Originator's Name:
Wendy Hicks 24-AUG-05

Data Validator/Group Leader:
Melanie Aycock 24-AUG-05

Quality Review:

Director:

General Engineering Laboratories
Form GEL-NCR
Rev. 06/05

NCR Report No.: 236604
Revision No.:

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
24-AUG-05	Radiochemistry	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
GFPC	EPA 905.0 Modified	Solid	YANK
Batch ID:	**Sample Numbers:**		
454777	See Below		

Potentially affected work order(s)(SDG): 143526(MSR#05-2074)

Application Issues:

RDL less than MDA

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Samples 143526001, 143526002, 143526003, 143526008, and 1200916818 did not meet the detection limit. The analyst used as much sample possible and the samples were counted for 500 minutes to achieve the lowest detection limit possible.	1. Reporting results.

Originator's Name:
Melanie Aycock 24-AUG-05

Data Validator/Group Leader:
Scott Moreland 24-AUG-05

Quality Review:

Director:

SAMPLE DATA SUMMARY

GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

YANK001 Connecticut Yankee Atomic Power Co.

Client SDG: MSR#05-2074 GEL Work Order: 143526

The Qualifiers in this report are defined as follows:

** Indicates the analyte is a surrogate compound.
< Result is less than amount reported.
> Result is greater than amount reported.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
P The response between the confirmation and the primary columns is >40% Different.
R Sample results are rejected.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
Y QC Samples were not spiked with this compound.
Z Paint Filter qualifier: Particulates passed through the filter. No free liquids were observed.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.
** Indicates the analyte is a surrogate compound.
This data report has been prepared and reviewed in accordance with General Engineering Laboratories, LLC standard operating procedures. Please direct any questions to your Project Manager, Cheryl Jones.

Reviewed by

GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 – (843) 556-8171 – www.gel.com

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: September 9, 2005

Client Sample ID:	5502-0002-006-1S	Project:	YANK01204
Sample ID:	143526001	Client ID:	YANK001
Matrix:	SE	Vol. Recv.:	
Collect Date:	06-JUL-05		
Receive Date:	19-AUG-05		
Collector:	Client		
Moisture:	17.7%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived												
Actinium-228		0.226	+/-0.181	0.075	+/-0.177	0.161	pCi/g		MJH1 08/23/05	2131	455664	1
Americium-241	U	-0.0451	+/-0.0669	0.0413	+/-0.0655	0.0848	pCi/g					
Bismuth-212	U	0.140	+/-0.312	0.155	+/-0.305	0.331	pCi/g					
Bismuth-214		0.369	+/-0.0884	0.0354	+/-0.0866	0.0752	pCi/g					
Cesium-134	U	-0.0107	+/-0.027	0.0228	+/-0.0265	0.0488	pCi/g					
Cesium-137	U	0.0399	+/-0.0537	0.020	+/-0.0526	0.0426	pCi/g					
Cobalt-60	U	0.0155	+/-0.0256	0.0228	+/-0.0251	0.0497	pCi/g					
Europium-152	U	-0.0199	+/-0.056	0.0485	+/-0.0548	0.102	pCi/g					
Europium-154	U	0.00564	+/-0.073	0.0614	+/-0.0716	0.134	pCi/g					
Europium-155	U	0.0427	+/-0.0565	0.0519	+/-0.0554	0.107	pCi/g					
Lead-212		0.351	+/-0.0579	0.0265	+/-0.0567	0.0551	pCi/g					
Lead-214		0.364	+/-0.0935	0.0347	+/-0.0917	0.0726	pCi/g					
Manganese-54	U	0.0354	+/-0.0365	0.0219	+/-0.0358	0.0467	pCi/g					
Niobium-94	U	0.0181	+/-0.0223	0.0198	+/-0.0219	0.0419	pCi/g					
Potassium-40		13.8	+/-1.03	0.201	+/-1.01	0.443	pCi/g					
Radium-226		0.369	+/-0.0884	0.0354	+/-0.0866	0.0752	pCi/g					
Silver-108m	U	-0.000997	+/-0.0196	0.017	+/-0.0192	0.0357	pCi/g					
Thallium-208		0.132	+/-0.054	0.0194	+/-0.0529	0.0412	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid - 0.025 pCi/g												
Strontium-90	U	0.0196	+/-0.0176	0.0142	+/-0.0176	0.0293	pCi/g		EXW1 08/23/05	1903	454777	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL FSS												
Tritium	U	-0.806	+/-5.08	4.33	+/-5.08	9.39	pCi/g		MXP1 08/23/05	0817	455445	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	08/22/05	0853	454650
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	08/19/05	1543	454646

The following Analytical Methods were performed

Method	Description

GENERAL ENGINEERING LABORATORIES, LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: September 9, 2005

Client Sample ID: 5502-0002-006-1S
Sample ID: 143526001

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 906.0 Modified
4	EPA 906.0 Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid - 0.025 pCi/g	59	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 – (843) 556-8171 – www.gel.com

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: September 9, 2005

Client Sample ID:	5502-0002-006-2S	Project:	YANK01204
Sample ID:	143526002	Client ID:	YANK001
Matrix:	SE	Vol. Recv.:	
Collect Date:	06-JUL-05		
Receive Date:	19-AUG-05		
Collector:	Client		
Moisture:	47.7%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived												
Actinium-228		1.41	+/-0.248	0.0766	+/-0.243	0.162	pCi/g		MJH1 08/23/05	2143	455664	1
Americium-241	U	0.0138	+/-0.046	0.0331	+/-0.0451	0.0674	pCi/g					
Bismuth-212		1.13	+/-0.452	0.183	+/-0.443	0.384	pCi/g					
Bismuth-214		0.804	+/-0.142	0.0455	+/-0.139	0.0947	pCi/g					
Cesium-134	UUI	0.00	+/-0.0591	0.0331	+/-0.0579	0.0689	pCi/g					
Cesium-137		0.918	+/-0.102	0.0238	+/-0.0995	0.0498	pCi/g					
Cobalt-60		0.116	+/-0.0454	0.026	+/-0.0445	0.0555	pCi/g					
Europium-152	U	-0.0311	+/-0.0849	0.0593	+/-0.0832	0.123	pCi/g					
Europium-154	U	0.108	+/-0.0898	0.0793	+/-0.088	0.168	pCi/g					
Europium-155	U	0.0831	+/-0.0793	0.0522	+/-0.0778	0.107	pCi/g					
Lead-212		1.30	+/-0.161	0.0328	+/-0.157	0.0675	pCi/g					
Lead-214		1.08	+/-0.163	0.0458	+/-0.160	0.0944	pCi/g					
Manganese-54	U	0.015	+/-0.0299	0.0255	+/-0.0293	0.0537	pCi/g					
Niobium-94	U	-0.0135	+/-0.0273	0.0211	+/-0.0267	0.0443	pCi/g					
Potassium-40		20.7	+/-1.68	0.219	+/-1.64	0.474	pCi/g					
Radium-226		0.804	+/-0.142	0.0455	+/-0.139	0.0947	pCi/g					
Silver-108m	U	-0.00391	+/-0.0261	0.0212	+/-0.0256	0.0439	pCi/g					
Thallium-208		0.458	+/-0.0807	0.0246	+/-0.0791	0.0512	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid - 0.025 pCi/g												
Strontium-90	U	0.00679	+/-0.0161	0.0133	+/-0.0161	0.0274	pCi/g		EXW1 08/23/05	1903	454777	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL FSS												
Tritium	U	0.00	+/-5.15	4.32	+/-5.15	9.37	pCi/g		MXP1 08/23/05	0848	455445	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	08/22/05	0853	454650
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	08/19/05	1543	454646

The following Analytical Methods were performed

Method	Description

GENERAL ENGINEERING LABORATORIES, LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: September 9, 2005

Client Sample ID: 5502-0002-006-2S
Sample ID: 143526002

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
1	EML HASL 300, 4.5.2.3										
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										
4	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid - 0.025 pCi/g	57	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

GENERAL ENGINEERING LABORATORIES, LLC

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: September 9, 2005

Client Sample ID:	5502-0002-008-1S	Project:	YANK01204
Sample ID:	143526003	Client ID:	YANK001
Matrix:	SE	Vol. Recv.:	
Collect Date:	05-JUL-05		
Receive Date:	19-AUG-05		
Collector:	Client		
Moisture:	24.7%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived												
Actinium-228		0.604	+/-0.157	0.0504	+/-0.154	0.110	pCi/g		MJH1 08/24/05	0355	455664	1
Americium-241	U	-0.0884	+/-0.127	0.0966	+/-0.125	0.202	pCi/g					
Bismuth-212		0.402	+/-0.293	0.126	+/-0.287	0.270	pCi/g					
Bismuth-214		0.625	+/-0.109	0.0287	+/-0.107	0.0615	pCi/g					
Cesium-134	U	0.0402	+/-0.0312	0.0237	+/-0.0305	0.0502	pCi/g					
Cesium-137	U	0.0135	+/-0.0203	0.018	+/-0.0199	0.0382	pCi/g					
Cobalt-60	U	0.00127	+/-0.0199	0.0164	+/-0.0195	0.0362	pCi/g					
Europium-152	U	-0.0123	+/-0.0471	0.0413	+/-0.0461	0.0877	pCi/g					
Europium-154	U	0.0279	+/-0.0668	0.0571	+/-0.0655	0.124	pCi/g					
Europium-155	U	0.114	+/-0.0943	0.0585	+/-0.0924	0.122	pCi/g					
Lead-212		0.621	+/-0.0915	0.0381	+/-0.0897	0.0788	pCi/g					
Lead-214		0.664	+/-0.111	0.0289	+/-0.108	0.0614	pCi/g					
Manganese-54	U	0.010	+/-0.024	0.0182	+/-0.0235	0.0391	pCi/g					
Niobium-94	U	-0.00319	+/-0.0177	0.0145	+/-0.0174	0.031	pCi/g					
Potassium-40		14.6	+/-1.52	0.157	+/-1.49	0.349	pCi/g					
Radium-226		0.625	+/-0.109	0.0287	+/-0.107	0.0615	pCi/g					
Silver-108m	U	0.00262	+/-0.0161	0.0142	+/-0.0157	0.0303	pCi/g					
Thallium-208		0.171	+/-0.0429	0.0155	+/-0.042	0.0333	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid - 0.025 pCi/g												
Strontium-90	U	0.0184	+/-0.0188	0.0152	+/-0.0188	0.0313	pCi/g		EXW1 08/23/05	1903	454777	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL FSS												
Tritium	U	0.00	+/-5.18	4.35	+/-5.18	9.42	pCi/g		MXP1 08/23/05	0919	455445	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	08/22/05	0853	454650
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	08/19/05	1543	454646

The following Analytical Methods were performed

Method	Description

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: September 9, 2005

Client Sample ID: 5502–0002–008–1S
Sample ID: 143526003

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
1	EML HASL 300, 4.5.2.3										
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										
4	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid – 0.025 pCi/g	56	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

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Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: September 9, 2005

Client Sample ID:	5502-0002-008-2S	Project:	YANK01204
Sample ID:	143526004	Client ID:	YANK001
Matrix:	SE	Vol. Recv.:	
Collect Date:	06-JUL-05		
Receive Date:	19-AUG-05		
Collector:	Client		
Moisture:	51.2%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived												
Actinium-228		0.772	+/-0.539	0.176	+/-0.528	0.378	pCi/g		MJH1 08/24/05	0356	455664	1
Americium-241	U	0.073	+/-0.0847	0.0603	+/-0.0831	0.125	pCi/g					
Bismuth-212	U	0.522	+/-0.506	0.445	+/-0.496	0.942	pCi/g					
Bismuth-214		1.07	+/-0.266	0.0886	+/-0.261	0.188	pCi/g					
Cesium-134	U	0.0449	+/-0.0639	0.0553	+/-0.0626	0.118	pCi/g					
Cesium-137		0.791	+/-0.161	0.0425	+/-0.158	0.0913	pCi/g					
Cobalt-60	U	0.0558	+/-0.0615	0.0555	+/-0.0602	0.121	pCi/g					
Europium-152	U	-0.0374	+/-0.156	0.110	+/-0.153	0.231	pCi/g					
Europium-154	U	0.0274	+/-0.193	0.161	+/-0.189	0.348	pCi/g					
Europium-155	U	0.0925	+/-0.125	0.104	+/-0.122	0.217	pCi/g					
Lead-212		1.31	+/-0.193	0.0599	+/-0.189	0.126	pCi/g					
Lead-214		0.954	+/-0.230	0.0861	+/-0.226	0.181	pCi/g					
Manganese-54	U	-0.00614	+/-0.0666	0.0538	+/-0.0652	0.115	pCi/g					
Niobium-94	U	-0.0187	+/-0.0531	0.0425	+/-0.052	0.0908	pCi/g					
Potassium-40		16.2	+/-2.27	0.247	+/-2.23	0.592	pCi/g					
Radium-226		1.07	+/-0.266	0.0886	+/-0.261	0.188	pCi/g					
Silver-108m	U	0.0161	+/-0.0505	0.0417	+/-0.0495	0.088	pCi/g					
Thallium-208		0.481	+/-0.131	0.0441	+/-0.129	0.0943	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid - 0.025 pCi/g												
Strontium-90	U	0.0167	+/-0.0148	0.012	+/-0.0149	0.0246	pCi/g		EXW1 08/23/05	1903	454777	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL FSS												
Tritium	U	1.71	+/-5.65	4.60	+/-5.65	9.97	pCi/g		MXP1 08/23/05	0950	455445	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	08/22/05	0853	454650
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	08/19/05	1543	454646

The following Analytical Methods were performed

Method	Description

GENERAL ENGINEERING LABORATORIES, LLC
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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: September 9, 2005

Client Sample ID: 5502–0002–008–2S
Sample ID: 143526004

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
1	EML HASL 300, 4.5.2.3										
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										
4	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid – 0.025 pCi/g	61	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: September 9, 2005

Client Sample ID:	5502–0001–009–S1S	Project:	YANK01204
Sample ID:	143526005	Client ID:	YANK001
Matrix:	SE	Vol. Recv.:	
Collect Date:	06–JUL–05		
Receive Date:	19–AUG–05		
Collector:	Client		
Moisture:	18.9%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth Waived												
Actinium–228		0.446	+/–0.192	0.0709	+/–0.188	0.159	pCi/g		MJH1 08/24/05	0412	455664	1
Americium–241	U	–0.0252	+/–0.032	0.0279	+/–0.0313	0.0585	pCi/g					
Bismuth–212		0.646	+/–0.364	0.164	+/–0.357	0.363	pCi/g					
Bismuth–214		0.338	+/–0.0889	0.0423	+/–0.0872	0.0917	pCi/g					
Cesium–134	U	0.00529	+/–0.0304	0.0267	+/–0.0298	0.0585	pCi/g					
Cesium–137	U	–0.0136	+/–0.0256	0.0213	+/–0.0251	0.0466	pCi/g					
Cobalt–60	U	0.014	+/–0.0231	0.0219	+/–0.0226	0.0505	pCi/g					
Europium–152	U	0.0312	+/–0.0589	0.054	+/–0.0577	0.115	pCi/g					
Europium–154	U	–0.0134	+/–0.0845	0.067	+/–0.0828	0.152	pCi/g					
Europium–155	U	0.0311	+/–0.0498	0.0456	+/–0.0488	0.0959	pCi/g					
Lead–212		0.388	+/–0.0653	0.0258	+/–0.064	0.0549	pCi/g					
Lead–214		0.307	+/–0.078	0.0453	+/–0.0764	0.096	pCi/g					
Manganese–54	U	0.0361	+/–0.0289	0.0254	+/–0.0283	0.0556	pCi/g					
Niobium–94	U	–0.00297	+/–0.0246	0.0213	+/–0.0241	0.0462	pCi/g					
Potassium–40		13.8	+/–1.43	0.157	+/–1.40	0.380	pCi/g					
Radium–226		0.338	+/–0.0889	0.0423	+/–0.0872	0.0917	pCi/g					
Silver–108m	U	0.00774	+/–0.0172	0.0156	+/–0.0169	0.0341	pCi/g					
Thallium–208		0.122	+/–0.0525	0.019	+/–0.0514	0.042	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid – 0.025 pCi/g												
Strontium–90	U	0.00569	+/–0.0133	0.0109	+/–0.0133	0.0226	pCi/g		EXW1 08/23/05	1903	454777	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL FSS												
Tritium	U	–1.61	+/–5.00	4.33	+/–5.00	9.39	pCi/g		MXP1 08/23/05	1021	455445	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	B J1	08/22/05	0853	454650
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	TC1	08/19/05	1543	454646

The following Analytical Methods were performed

Method	Description

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: September 9, 2005

Client Sample ID: 5502-0001-009-S1S
Sample ID: 143526005

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
1	EML HASL 300, 4.5.2.3										
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										
4	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid - 0.025 pCi/g	63	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

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Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: September 9, 2005

Client Sample ID:	5502-0000-001-C2S	Project:	YANK01204
Sample ID:	143526006	Client ID:	YANK001
Matrix:	SE	Vol. Recv.:	
Collect Date:	21-JUN-05		
Receive Date:	19-AUG-05		
Collector:	Client		
Moisture:	1.95%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived												
Actinium-228		0.351	+/-0.114	0.0594	+/-0.112	0.132	pCi/g		MJH1 08/24/05	0412	455664	1
Americium-241	U	-0.00446	+/-0.133	0.0872	+/-0.131	0.182	pCi/g					
Bismuth-212	U	0.198	+/-0.151	0.150	+/-0.148	0.327	pCi/g					
Bismuth-214		0.347	+/-0.0826	0.0271	+/-0.0809	0.0599	pCi/g					
Cesium-134	U	0.041	+/-0.0202	0.0217	+/-0.0198	0.0473	pCi/g					
Cesium-137	U	0.0179	+/-0.0259	0.0177	+/-0.0254	0.0387	pCi/g					
Cobalt-60	U	0.00872	+/-0.0229	0.0205	+/-0.0224	0.0457	pCi/g					
Europium-152	U	-0.032	+/-0.0594	0.0499	+/-0.0582	0.107	pCi/g					
Europium-154	U	-0.000578	+/-0.0588	0.050	+/-0.0576	0.113	pCi/g					
Europium-155	U	0.0369	+/-0.0622	0.0581	+/-0.0609	0.122	pCi/g					
Lead-212		0.283	+/-0.068	0.0273	+/-0.0667	0.0579	pCi/g					
Lead-214		0.312	+/-0.0944	0.034	+/-0.0925	0.0728	pCi/g					
Manganese-54	U	-0.000578	+/-0.0223	0.019	+/-0.0219	0.0418	pCi/g					
Niobium-94	U	-0.00529	+/-0.0191	0.0161	+/-0.0187	0.0351	pCi/g					
Potassium-40		5.81	+/-0.803	0.166	+/-0.786	0.379	pCi/g					
Radium-226		0.347	+/-0.0826	0.0271	+/-0.0809	0.0599	pCi/g					
Silver-108m	U	-0.00568	+/-0.0186	0.0155	+/-0.0182	0.0336	pCi/g					
Thallium-208		0.114	+/-0.0441	0.0164	+/-0.0432	0.036	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid - 0.025 pCi/g												
Strontium-90	U	-0.00595	+/-0.0145	0.0123	+/-0.0145	0.0253	pCi/g		EXW1 08/23/05	1903	454777	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL FSS												
Tritium	U	2.48	+/-5.53	4.44	+/-5.53	9.62	pCi/g		MXP1 08/23/05	1052	455445	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	08/22/05	0853	454650
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	08/19/05	1543	454646

The following Analytical Methods were performed

Method	Description

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2040 Savage Road Charleston SC 29407 – (843) 556–8171 – www.gel.com

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: September 9, 2005

Client Sample ID: 5502–0000–001–C2S
Sample ID: 143526006

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
1	EML HASL 300, 4.5.2.3										
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										
4	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid – 0.025 pCi/g	65	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: September 9, 2005

Client Sample ID:	5502–0000–002–C2S	Project:	YANK01204
Sample ID:	143526007	Client ID:	YANK001
Matrix:	SE	Vol. Recv.:	
Collect Date:	22–JUN–05		
Receive Date:	19–AUG–05		
Collector:	Client		
Moisture:	6.55%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth Waived												
Actinium–228		0.319	+/–0.121	0.0389	+/–0.119	0.0896	pCi/g		MJH1 08/24/05	0413	455664	1
Americium–241	UUI	0.00	+/–0.185	0.0757	+/–0.181	0.161	pCi/g					
Bismuth–212	U	0.234	+/–0.151	0.151	+/–0.148	0.325	pCi/g					
Bismuth–214		0.281	+/–0.0678	0.0245	+/–0.0665	0.0539	pCi/g					
Cesium–134	U	0.0268	+/–0.0214	0.0176	+/–0.021	0.0386	pCi/g					
Cesium–137	U	0.00894	+/–0.0174	0.0161	+/–0.0171	0.035	pCi/g					
Cobalt–60	U	–0.00525	+/–0.0166	0.0131	+/–0.0163	0.0308	pCi/g					
Europium–152	U	–0.00518	+/–0.0378	0.0325	+/–0.037	0.0706	pCi/g					
Europium–154	U	0.0112	+/–0.052	0.0457	+/–0.051	0.104	pCi/g					
Europium–155	U	–0.00898	+/–0.0417	0.0403	+/–0.0408	0.0853	pCi/g					
Lead–212		0.220	+/–0.058	0.0324	+/–0.0568	0.0675	pCi/g					
Lead–214		0.308	+/–0.0718	0.0263	+/–0.0704	0.0566	pCi/g					
Manganese–54	U	0.0117	+/–0.0203	0.0184	+/–0.0199	0.0402	pCi/g					
Niobium–94	U	0.00136	+/–0.012	0.0106	+/–0.0118	0.0237	pCi/g					
Potassium–40		5.62	+/–0.761	0.112	+/–0.746	0.269	pCi/g					
Radium–226		0.281	+/–0.0678	0.0245	+/–0.0665	0.0539	pCi/g					
Silver–108m	U	–0.00333	+/–0.0137	0.0106	+/–0.0134	0.0234	pCi/g					
Thallium–208		0.102	+/–0.0364	0.014	+/–0.0357	0.0307	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid ~ 0.025 pCi/g												
Strontium–90	U	0.0117	+/–0.0147	0.012	+/–0.0147	0.0247	pCi/g		EXW1 08/23/05	1906	454777	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL FSS												
Tritium	U	2.54	+/–5.67	4.55	+/–5.67	9.86	pCi/g		MXP1 08/23/05	1122	455445	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	B J1	08/22/05	0853	454650
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	TC1	08/19/05	1543	454646

The following Analytical Methods were performed

Method	Description

GENERAL ENGINEERING LABORATORIES, LLC
2040 Savage Road Charleston SC 29407 – (843) 556–8171 – www.gel.com

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: September 9, 2005

Client Sample ID: 5502–0000–002–C2S
Sample ID: 143526007

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
1	EML HASL 300, 4.5.2.3										
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										
4	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid – 0.025 pCi/g	66	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

GENERAL ENGINEERING LABORATORIES, LLC

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
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362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: September 9, 2005

Client Sample ID:	5502-0000-003-C2S	Project:	YANK01204
Sample ID:	143526008	Client ID:	YANK001
Matrix:	SE	Vol. Recv.:	
Collect Date:	22-JUN-05		
Receive Date:	19-AUG-05		
Collector:	Client		
Moisture:	4.16%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived												
Actinium-228	UUI	0.00	+/-0.0963	0.0857	+/-0.0943	0.182	pCi/g		MJH1 08/24/05	0413	455664	1
Americium-241	U	0.0185	+/-0.0617	0.0557	+/-0.0604	0.117	pCi/g					
Bismuth-212	U	0.107	+/-0.138	0.128	+/-0.135	0.277	pCi/g					
Bismuth-214		0.252	+/-0.0716	0.026	+/-0.0701	0.0566	pCi/g					
Cesium-134	U	0.0023	+/-0.0179	0.0154	+/-0.0175	0.034	pCi/g					
Cesium-137	U	0.0244	+/-0.0239	0.0114	+/-0.0235	0.0255	pCi/g					
Cobalt-60	U	0.0094	+/-0.0147	0.014	+/-0.0144	0.032	pCi/g					
Europium-152	U	-0.00935	+/-0.0406	0.032	+/-0.0398	0.0692	pCi/g					
Europium-154	U	-0.0229	+/-0.0439	0.0335	+/-0.043	0.0781	pCi/g					
Europium-155	U	0.0117	+/-0.0451	0.0433	+/-0.0442	0.0907	pCi/g					
Lead-212		0.255	+/-0.0483	0.0246	+/-0.0473	0.0517	pCi/g					
Lead-214		0.284	+/-0.0622	0.0235	+/-0.0609	0.0507	pCi/g					
Manganese-54	U	0.0127	+/-0.0179	0.0164	+/-0.0175	0.0359	pCi/g					
Niobium-94	U	0.00939	+/-0.0145	0.0134	+/-0.0142	0.029	pCi/g					
Potassium-40		5.31	+/-0.700	0.107	+/-0.686	0.254	pCi/g					
Radium-226		0.252	+/-0.0716	0.026	+/-0.0701	0.0566	pCi/g					
Silver-108m	U	-0.00329	+/-0.0143	0.0127	+/-0.0141	0.0273	pCi/g					
Thallium-208		0.0694	+/-0.0287	0.0123	+/-0.0281	0.0272	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid - 0.025 pCi/g												
Strontium-90	U	-0.0546	+/-0.0163	0.0149	+/-0.0165	0.0305	pCi/g		EXW1 08/23/05	1906	454777	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL FSS												
Tritium	U	-0.837	+/-5.27	4.49	+/-5.27	9.74	pCi/g		MXP1 08/23/05	1153	455445	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	08/22/05	0853	454650
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	08/19/05	1543	454646

The following Analytical Methods were performed

Method	Description

GENERAL ENGINEERING LABORATORIES, LLC
2040 Savage Road Charleston SC 29407 – (843) 556–8171 – www.gel.com

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: September 9, 2005

Client Sample ID: 5502–0000–003–C2S
Sample ID: 143526008

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
1	EML HASL 300, 4.5.2.3										
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										
4	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid – 0.025 pCi/g	70	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

GENERAL ENGINEERING LABORATORIES, LLC

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: September 9, 2005

Client Sample ID:	5502-0000-002-C2S	Project:	YANK01204
Sample ID:	143526009	Client ID:	YANK001
Matrix:	SE	Vol. Recv.:	
Collect Date:	22-JUN-05		
Receive Date:	19-AUG-05		
Collector:	Client		
Moisture:	6.55%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Alpha Spec Analysis													
Alphaspec Am241, Cm, Solid ALL FSS													
Americium-241	U	-0.0967	+/-0.101	0.181	+/-0.102	0.499	pCi/g		JXG1	08/26/05	1705	454737	1
Curium-242	U	-0.0319	+/-0.138	0.107	+/-0.138	0.395	pCi/g						
Curium-243/244	U	-0.146	+/-0.129	0.200	+/-0.130	0.536	pCi/g						
Alphaspec Pu, Solid-ALL FSS													
Plutonium-238	U	0.0161	+/-0.064	0.0499	+/-0.0641	0.183	pCi/g		JXG1	08/26/05	1705	454739	2
Plutonium-239/240		0.301	+/-0.192	0.0352	+/-0.195	0.154	pCi/g						
Liquid Scint Pu241, Solid-ALL FSS													
Plutonium-241	U	4.50	+/-6.22	5.09	+/-6.24	10.5	pCi/g		JXG1	08/30/05	1547	454741	3
Rad Liquid Scintillation Analysis													
Liquid Scint C14, Solid All,FSS													
Carbon-14	U	0.0654	+/-0.102	0.085	+/-0.102	0.172	pCi/g		BXF1	08/30/05	0433	455809	4
Liquid Scint Fe55, Solid-ALL FSS													
Iron-55	U	-8.19	+/-43.6	30.0	+/-43.6	62.0	pCi/g		AF1	09/05/05	1113	458659	5
Liquid Scint Ni63, Solid-ALL FSS													
Nickel-63	U	-2.91	+/-8.50	7.28	+/-8.50	15.3	pCi/g		AF1	08/30/05	2353	455806	7
Liquid Scint Tc99, Solid-ALL FSS													
Technetium-99	U	0.00	+/-0.126	0.106	+/-0.126	0.217	pCi/g		BXF1	08/31/05	0306	455604	8

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	08/22/05	0853	454650
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	08/19/05	1543	454646

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, Pu-11-RC Modified
4	EPA EERF C-01 Modified
5	DOE RESL Fe-1, Modified
6	DOE RESL Fe-1, Modified

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
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362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: September 9, 2005

Client Sample ID: 5502–0000–002–C2S
Sample ID: 143526009

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
7	DOE RESL Ni–1, Modified										
8	DOE EML HASL–300, Tc–02–RC Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium–243	Alphaspec Am241, Cm, Solid ALL	71	(15%–125%)
Plutonium–242	Alphaspec Pu, Solid–ALL FSS	91	(15%–125%)
Carrier/Tracer Recovery	Liquid Scint Pu241, Solid–ALL FS	95	(25%–125%)
Carrier/Tracer Recovery	Liquid Scint Fe55, Solid–ALL FS	78	(15%–125%)
Carrier/Tracer Recovery	Liquid Scint Ni63, Solid–ALL FS	82	(25%–125%)
Carrier/Tracer Recovery	Liquid Scint Tc99, Solid–ALL FS	88	(15%–125%)

Notes:
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E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

QUALITY CONTROL DATA

GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: September 9, 2005

Client : **Connecticut Yankee Atomic Power**
Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut
Contact: **Mr. Pete Hollenbeck**

Workorder: **143526**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Alpha Spec										
Batch 454737										
QC1200916700 143526009 DUP										
Americium-241	U	-0.0967	U	-0.00413	pCi/g	N/A		(0% - 100%)	JXG1	08/26/05 17:05
	Uncert:	+/-0.101		+/-0.100						
	TPU:	+/-0.102		+/-0.100						
Curium-242	U	-0.0319	U	-0.0376	pCi/g	N/A		(0% - 100%)		
	Uncert:	+/-0.138		+/-0.111						
	TPU:	+/-0.138		+/-0.111						
Curium-243/244	U	-0.146	U	-0.054	pCi/g	N/A		(0% - 100%)		
	Uncert:	+/-0.129		+/-0.130						
	TPU:	+/-0.130		+/-0.131						
QC1200916702 LCS										
Americium-241	13.4			14.4	pCi/g		107	(75%-125%)		08/26/05 17:05
	Uncert:			+/-1.36						
	TPU:			+/-2.43						
Curium-242			U	-0.00804	pCi/g					
	Uncert:			+/-0.0675						
	TPU:			+/-0.0676						
Curium-243/244	16.4			17.1	pCi/g		104	(75%-125%)		
	Uncert:			+/-1.48						
	TPU:			+/-2.81						
QC1200916699 MB										
Americium-241			U	-0.0421	pCi/g					08/26/05 17:05
	Uncert:			+/-0.0694						
	TPU:			+/-0.0694						
Curium-242			U	-0.0325	pCi/g					
	Uncert:			+/-0.0737						
	TPU:			+/-0.0737						
Curium-243/244			U	0.0282	pCi/g					
	Uncert:			+/-0.123						
	TPU:			+/-0.123						
QC1200916701 143526009 MS										
Americium-241	13.4 U	-0.0967		11.5	pCi/g		86	(75%-125%)		08/26/05 17:05
	Uncert:	+/-0.101		+/-1.23						
	TPU:	+/-0.102		+/-2.04						
Curium-242	U	-0.0319	U	-0.0217	pCi/g					
	Uncert:	+/-0.138		+/-0.0936						
	TPU:	+/-0.138		+/-0.0936						
Curium-243/244	16.5 U	-0.146		15.9	pCi/g		96	(75%-125%)		
	Uncert:	+/-0.129		+/-1.45						
	TPU:	+/-0.130		+/-2.67						
Batch 454739										
QC1200916715 143526009 DUP										
Plutonium-238	U	0.0161	U	-0.0686	pCi/g	N/A		(0% - 100%)	JXG1	08/26/05 17:05

QC Summary

Workorder: 143526

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Alpha Spec										
Batch 454739										
	Uncert:	+/-0.064		+/-0.0425						
	TPU:	+/-0.0641		+/-0.0433						
Plutonium-239/240		0.301	U	0.0788	pCi/g	117		(0% - 100%)		
	Uncert:	+/-0.192		+/-0.0979						
	TPU:	+/-0.195		+/-0.0983						
QC1200916717 LCS										
Plutonium-238			U	0.0455	pCi/g			(75%-125%)		
	Uncert:			+/-0.105						
	TPU:			+/-0.105						
Plutonium-239/240	12.3			13.2	pCi/g		107	(75%-125%)		
	Uncert:			+/-1.21						
	TPU:			+/-1.97						
QC1200916714 MB										
Plutonium-238			U	-0.00736	pCi/g					08/26/05 17:05
	Uncert:			+/-0.0618						
	TPU:			+/-0.0618						
Plutonium-239/240			U	0.124	pCi/g					
	Uncert:			+/-0.137						
	TPU:			+/-0.138						
QC1200916716 143526009 MS										
Plutonium-238	U	0.0161	U	0.0139	pCi/g			(75%-125%)		08/26/05 17:05
	Uncert:	+/-0.064		+/-0.0551						
	TPU:	+/-0.0641		+/-0.0552						
Plutonium-239/240	12.3	0.301		12.2	pCi/g		97	(75%-125%)		
	Uncert:	+/-0.192		+/-1.12						
	TPU:	+/-0.195		+/-1.80						
Batch 454741										
QC1200916719 143526009 DUP										
Plutonium-241	U	4.50	U	4.88	pCi/g	0		(0% - 100%)	JXG1	08/30/05 16:52
	Uncert:	+/-6.22		+/-6.90						
	TPU:	+/-6.24		+/-6.92						
QC1200916721 LCS										
Plutonium-241	133			108	pCi/g		81	(75%-125%)		08/30/05 17:57
	Uncert:			+/-9.37						
	TPU:			+/-14.3						
QC1200916718 MB										
Plutonium-241			U	4.27	pCi/g					08/30/05 16:20
	Uncert:			+/-6.50						
	TPU:			+/-6.52						
QC1200916720 143526009 MS										
Plutonium-241	136 U	4.50		122	pCi/g		90	(75%-125%)		08/30/05 17:25
	Uncert:	+/-6.22		+/-10.3						
	TPU:	+/-6.24		+/-16.7						
Rad Gamma Spec										
Batch 455664										
QC1200919031 143526001 DUP										
Actinium-228		0.226		0.331	pCi/g	38		(0% - 100%)	MJH1	08/24/05 03:50
	Uncert:	+/-0.181		+/-0.131						
				+/-						

QC Summary

Workorder: 143526

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch 455664											
	TPU:	+/-0.177									
Americium-241	U	-0.0451	U	0.0268	pCi/g	N/A		(0% - 100%)			
	Uncert:	+/-0.0669		+/-0.0833							
	TPU:	+/-0.0655		+/-							
Bismuth-212	U	0.140	U	0.248	pCi/g	56		(0% - 100%)			
	Uncert:	+/-0.312		+/-0.260							
	TPU:	+/-0.305		+/-							
Bismuth-214		0.369		0.327	pCi/g	12		(0% - 100%)			
	Uncert:	+/-0.0884		+/-0.0831							
	TPU:	+/-0.0866		+/-							
Cesium-134	U	-0.0107	U	0.0186	pCi/g	N/A		(0% - 100%)			
	Uncert:	+/-0.027		+/-0.0254							
	TPU:	+/-0.0265		+/-							
Cesium-137	U	0.0399	U	-0.000195	pCi/g	N/A		(0% - 100%)			
	Uncert:	+/-0.0537		+/-0.0192							
	TPU:	+/-0.0526		+/-							
Cobalt-60	U	0.0155	U	0.0164	pCi/g	6		(0% - 100%)			
	Uncert:	+/-0.0256		+/-0.0226							
	TPU:	+/-0.0251		+/-							
Europium-152	U	-0.0199	U	-0.000584	pCi/g	N/A		(0% - 100%)			
	Uncert:	+/-0.056		+/-0.0495							
	TPU:	+/-0.0548		+/-							
Europium-154	U	0.00564	U	-0.0301	pCi/g	N/A		(0% - 100%)			
	Uncert:	+/-0.073		+/-0.0696							
	TPU:	+/-0.0716		+/-							
Europium-155	U	0.0427	U	-0.00537	pCi/g	N/A		(0% - 100%)			
	Uncert:	+/-0.0565		+/-0.0575							
	TPU:	+/-0.0554		+/-							
Lead-212		0.351		0.307	pCi/g	13		(0% - 100%)			
	Uncert:	+/-0.0579		+/-0.0582							
	TPU:	+/-0.0567		+/-							
Lead-214		0.364		0.393	pCi/g	7		(0% - 100%)			
	Uncert:	+/-0.0935		+/-0.0876							
	TPU:	+/-0.0917		+/-							
Manganese-54	U	0.0354	U	0.00846	pCi/g	123		(0% - 100%)			
	Uncert:	+/-0.0365		+/-0.0217							
	TPU:	+/-0.0358		+/-							
Niobium-94	U	0.0181	U	0.000898	pCi/g	181		(0% - 100%)			
	Uncert:	+/-0.0223		+/-0.0191							
	TPU:	+/-0.0219		+/-							
Potassium-40		13.8		14.0	pCi/g	2		(0% - 20%)			
	Uncert:	+/-1.03		+/-1.43							
	TPU:	+/-1.01		+/-							
Radium-226		0.369		0.327	pCi/g	12		(0% - 100%)			
	Uncert:	+/-0.0884		+/-0.0831							
	TPU:	+/-0.0866		+/-							
Silver-108m	U	-0.000997	U	-0.000999	pCi/g	N/A		(0% - 100%)			
	Uncert:	+/-0.0196		+/-0.0171							

QC Summary

Workorder: **143526**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch 455664											
	TPU:	+/-0.0192		+/-							
Thallium-208		0.132		0.144	pCi/g	9		(0% - 100%)			
	Uncert:	+/-0.054		+/-0.0408							
	TPU:	+/-0.0529		+/-							
QC1200919032 LCS											
Actinium-228			U	0.0161	pCi/g					08/23/05	20:17
	Uncert:			+/-0.837							
	TPU:			+/-0.821							
Americium-241	24.4			24.6	pCi/g		101	(75%-125%)			
	Uncert:			+/-1.28							
	TPU:			+/-1.25							
Bismuth-212			U	0.614	pCi/g						
	Uncert:			+/-1.68							
	TPU:			+/-1.65							
Bismuth-214			U	0.213	pCi/g						
	Uncert:			+/-0.378							
	TPU:			+/-0.371							
Cesium-134			U	-0.198	pCi/g						
	Uncert:			+/-0.231							
	TPU:			+/-0.227							
Cesium-137	9.41			9.50	pCi/g		101	(75%-125%)			
	Uncert:			+/-0.639							
	TPU:			+/-0.626							
Cobalt-60	14.4			15.1	pCi/g		105	(75%-125%)			
	Uncert:			+/-0.926							
	TPU:			+/-0.907							
Europium-152			U	-0.423	pCi/g						
	Uncert:			+/-0.425							
	TPU:			+/-0.417							
Europium-154				0.958	pCi/g						
	Uncert:			+/-0.458							
	TPU:			+/-0.449							
Europium-155			U	-0.0701	pCi/g						
	Uncert:			+/-0.480							
	TPU:			+/-0.470							
Lead-212			U	0.187	pCi/g						
	Uncert:			+/-0.238							
	TPU:			+/-0.233							
Lead-214			U	0.169	pCi/g						
	Uncert:			+/-0.330							
	TPU:			+/-0.323							
Manganese-54			U	0.082	pCi/g						
	Uncert:			+/-0.208							
	TPU:			+/-0.204							
Niobium-94			U	-0.0113	pCi/g						
	Uncert:			+/-0.199							
	TPU:			+/-0.195							
Potassium-40			U	1.15	pCi/g						

QC Summary

Workorder: 143526

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 455664										
	Uncert:			+/-2.03						
	TPU:			+/-1.99						
Radium-226			U	0.213	pCi/g			(75%-125%)		
	Uncert:			+/-0.378						
	TPU:			+/-0.371						
Silver-108m			U	0.0132	pCi/g					
	Uncert:			+/-0.164						
	TPU:			+/-0.161						
Thallium-208			U	0.0271	pCi/g					
	Uncert:			+/-0.195						
	TPU:			+/-0.192						
QC1200919030 MB										
Actinium-228			U	0.055	pCi/g					08/24/05 04:14
	Uncert:			+/-0.0768						
	TPU:			+/-0.0752						
Americium-241			U	-0.00288	pCi/g					
	Uncert:			+/-0.0478						
	TPU:			+/-0.0468						
Bismuth-212			U	0.106	pCi/g					
	Uncert:			+/-0.134						
	TPU:			+/-0.131						
Bismuth-214			U	0.054	pCi/g					
	Uncert:			+/-0.036						
	TPU:			+/-0.0353						
Cesium-134			U	0.00513	pCi/g					
	Uncert:			+/-0.00944						
	TPU:			+/-0.00925						
Cesium-137			U	0.00519	pCi/g					
	Uncert:			+/-0.0116						
	TPU:			+/-0.0113						
Cobalt-60			U	0.00894	pCi/g					
	Uncert:			+/-0.0157						
	TPU:			+/-0.0154						
Europium-152			U	-0.00726	pCi/g					
	Uncert:			+/-0.0321						
	TPU:			+/-0.0314						
Europium-154			U	-0.0224	pCi/g					
	Uncert:			+/-0.034						
	TPU:			+/-0.0333						
Europium-155			U	-0.019	pCi/g					
	Uncert:			+/-0.0308						
	TPU:			+/-0.0302						
Lead-212			U	0.0102	pCi/g					
	Uncert:			+/-0.0301						
	TPU:			+/-0.0295						
Lead-214			U	0.0307	pCi/g					
	Uncert:			+/-0.0291						
	TPU:			+/-0.0285						

QC Summary

Workorder: **143526**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 455664										
Manganese-54			U	-0.000301	pCi/g					
Uncert:				+/-0.0112						
TPU:				+/-0.011						
Niobium-94			U	0.00218	pCi/g					
Uncert:				+/-0.0113						
TPU:				+/-0.0111						
Potassium-40			U	0.193	pCi/g					
Uncert:				+/-0.145						
TPU:				+/-0.142						
Radium-226			UUI	0.00	pCi/g					
Uncert:				+/-0.036						
TPU:				+/-0.0353						
Silver-108m			U	0.00147	pCi/g					
Uncert:				+/-0.00998						
TPU:				+/-0.00978						
Thallium-208			U	0.00518	pCi/g					
Uncert:				+/-0.0123						
TPU:				+/-0.0121						
Rad Gas Flow										
Batch 454777										
QC1200916818 143526001 DUP										
Strontium-90	U	0.0196	U	0.0139	pCi/g	0		(0% - 100%)	EXW1	08/23/05 19:06
Uncert:		+/-0.0176		+/-0.0152						
TPU:		+/-0.0176		+/-0.0152						
QC1200916820 LCS										
Strontium-90	1.49			1.44	pCi/g		97	(75%-125%)		08/23/05 16:48
Uncert:				+/-0.0676						
TPU:				+/-0.235						
QC1200916817 MB										
Strontium-90			U	-0.00598	pCi/g					08/23/05 19:06
Uncert:				+/-0.0108						
TPU:				+/-0.0108						
QC1200916819 143526001 MS										
Strontium-90	2.85 U	0.0196		2.24	pCi/g		79	(75%-125%)		08/23/05 16:48
Uncert:		+/-0.0176		+/-0.138						
TPU:		+/-0.0176		+/-0.472						
Rad Liquid Scintillation										
Batch 455445										
QC1200918486 143526006 DUP										
Tritium	U	2.48	U	1.62	pCi/g	0		(0% - 100%)	MXP1	08/23/05 12:55
Uncert:		+/-5.53		+/-5.34						
TPU:		+/-5.53		+/-5.34						
QC1200918488 LCS										
Tritium	73.6			58.3	pCi/g		79	(75%-125%)		08/23/05 13:58
Uncert:				+/-9.35						
TPU:				+/-9.41						
QC1200918485 MB										
Tritium			U	1.61	pCi/g					08/23/05 12:24

QC Summary

Workorder: 143526

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Liquid Scintillation											
Batch 455445											
	Uncert:				+/-5.31						
	TPU:				+/-5.32						
QC1200918487 143526006 MS											
Tritium	74.3	U	2.48		74.0	pCi/g		100	(75%-125%)		08/23/05 13:26
	Uncert:		+/-5.53		+/-10.1						
	TPU:		+/-5.53		+/-10.2						
Batch 455604											
QC1200918897 143735017 DUP											
Technetium-99		U	0.190	U	0.108	pCi/g	0		(0% - 100%)	BXF1	08/31/05 06:26
	Uncert:		+/-0.277		+/-0.264						
	TPU:		+/-0.277		+/-0.264						
QC1200918899 LCS											
Technetium-99	12.3				11.2	pCi/g		91	(75%-125%)		08/31/05 07:33
	Uncert:				+/-0.318						
	TPU:				+/-0.417						
QC1200918896 MB											
Technetium-99				U	0.0309	pCi/g					08/31/05 05:53
	Uncert:				+/-0.123						
	TPU:				+/-0.123						
QC1200918898 143735017 MS											
Technetium-99	23.3	U	0.190		21.4	pCi/g		92	(75%-125%)		08/31/05 06:59
	Uncert:		+/-0.277		+/-0.619						
	TPU:		+/-0.277		+/-0.810						
Batch 455806											
QC1200919346 143526009 DUP											
Nickel-63		U	-2.91	U	-0.993	pCi/g	N/A		(0% - 100%)	AF1	08/31/05 00:27
	Uncert:		+/-8.50		+/-6.38						
	TPU:		+/-8.50		+/-6.38						
QC1200919348 LCS											
Nickel-63	378				365	pCi/g		97	(75%-125%)		08/31/05 01:02
	Uncert:				+/-17.8						
	TPU:				+/-27.8						
QC1200919345 MB											
Nickel-63				U	-3.1	pCi/g					08/31/05 00:10
	Uncert:				+/-6.19						
	TPU:				+/-6.20						
QC1200919347 143526009 MS											
Nickel-63	483	U	-2.91		434	pCi/g		90	(75%-125%)		08/31/05 00:44
	Uncert:		+/-8.50		+/-22.5						
	TPU:		+/-8.50		+/-34.4						
Batch 455809											
QC1200919354 143526009 DUP											
Carbon-14		U	0.0654	U	0.00903	pCi/g	0		(0% - 100%)	BXF1	08/30/05 07:37
	Uncert:		+/-0.102		+/-0.104						
	TPU:		+/-0.102		+/-0.104						
QC1200919356 LCS											
Carbon-14	7.03				6.49	pCi/g		92	(75%-125%)		08/30/05 03:05
	Uncert:				+/-0.246						
	TPU:				+/-0.266						

QC Summary

Workorder: 143526

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Liquid Scintillation											
Batch 455809											
QC1200919353 MB											
Carbon-14				U	0.00238	pCi/g					08/30/05 06:05
	Uncert:				+/-0.101						
	TPU:				+/-0.101						
QC1200919355 143526009 MS											
Carbon-14	7.03	U	0.0654		6.26	pCi/g		89	(75%-125%)		08/30/05 02:18
	Uncert:		+/-0.102		+/-0.241						
	TPU:		+/-0.102		+/-0.260						
Batch 458659											
QC1200926170 143318020 DUP											
Iron-55		U	-27.3	U	-17.3	pCi/g	N/A		(0% - 100%)	AF1	09/05/05 11:30
	Uncert:		+/-43.5		+/-67.0						
	TPU:		+/-43.5		+/-67.0						
QC1200926172 LCS											
Iron-55	56.6				48.1	pCi/g		85	(75%-125%)		09/05/05 12:04
	Uncert:				+/-4.65						
	TPU:				+/-5.32						
QC1200926169 MB											
Iron-55				U	-0.239	pCi/g					09/06/05 22:44
	Uncert:				+/-1.20						
	TPU:				+/-1.20						
QC1200926171 143318020 MS											
Iron-55	891	U	-27.3		793	pCi/g		89	(75%-125%)		09/05/05 11:47
	Uncert:		+/-43.5		+/-103						
	TPU:		+/-43.5		+/-113						

Notes:
The Qualifiers in this report are defined as follows:

- ** Indicates the analyte is a surrogate compound.
- B Target analyte was detected in the sample as well as the associated blank.
- BD Results below the MDC or low tracer recovery.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J Indicates an estimated value.
- U Target analyte was analyzed for but not detected above the MDL or LOD.
- UI Uncertain identification for gamma spectroscopy.
- X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
- d The 2:1 depletion requirement was not met for this sample
- h Sample preparation or preservation holding time exceeded.

QC Summary

Workorder: **143526**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
** Indicates analyte is a surrogate compound.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptence criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

5502-0002-006-1S	MSR#05-2074	143526001	455664	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.226	0.181	PCI/G	0		19/08/2005	38568.12708	9:31	0.161	PCI/G	0.075	PCI/G	1	18	175	G	PCI/G	PR	
5502-0002-006-1S	MSR#05-2074	143526001	455664	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0451	0.0669	PCI/G	0	U	19/08/2005	38568.12708	9:31	0.0848	PCI/G	0.0413	PCI/G	1	18	175	G	PCI/G	PR	
5502-0002-006-1S	MSR#05-2074	143526001	455664	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.14	0.312	PCI/G	0	U	19/08/2005	38568.12708	9:31	0.331	PCI/G	0.155	PCI/G	1	18	175	G	PCI/G	PR	
5502-0002-006-1S	MSR#05-2074	143526001	455664	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.369	0.0884	PCI/G	0		19/08/2005	38568.12708	9:31	0.0752	PCI/G	0.0354	PCI/G	1	18	175	G	PCI/G	PR	
5502-0002-006-1S	MSR#05-2074	143526001	455664	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	-0.0107	0.027	PCI/G	0	U	19/08/2005	38568.12708	9:31	0.0488	PCI/G	0.0228	PCI/G	1	18	175	G	PCI/G	PR	
5502-0002-006-1S	MSR#05-2074	143526001	455664	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.0399	0.0537	PCI/G	0	U	19/08/2005	38568.12708	9:31	0.0426	PCI/G	0.02	PCI/G	1	18	175	G	PCI/G	PR	
5502-0002-006-1S	MSR#05-2074	143526001	455664	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0155	0.0256	PCI/G	0	U	19/08/2005	38568.12708	9:31	0.0497	PCI/G	0.0228	PCI/G	1	18	175	G	PCI/G	PR	
5502-0002-006-1S	MSR#05-2074	143526001	455664	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0199	0.056	PCI/G	0	U	19/08/2005	38568.12708	9:31	0.102	PCI/G	0.0485	PCI/G	1	18	175	G	PCI/G	PR	
5502-0002-006-1S	MSR#05-2074	143526001	455664	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.00564	0.073	PCI/G	0	U	19/08/2005	38568.12708	9:31	0.134	PCI/G	0.0614	PCI/G	1	18	175	G	PCI/G	PR	
5502-0002-006-1S	MSR#05-2074	143526001	455664	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0427	0.0565	PCI/G	0	U	19/08/2005	38568.12708	9:31	0.107	PCI/G	0.0519	PCI/G	1	18	175	G	PCI/G	PR	
5502-0002-006-1S	MSR#05-2074	143526001	455664	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.351	0.0579	PCI/G	0		19/08/2005	38568.12708	9:31	0.0551	PCI/G	0.0265	PCI/G	1	18	175	G	PCI/G	PR	
5502-0002-006-1S	MSR#05-2074	143526001	455664	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.364	0.0935	PCI/G	0		19/08/2005	38568.12708	9:31	0.0726	PCI/G	0.0347	PCI/G	1	18	175	G	PCI/G	PR	
5502-0002-006-1S	MSR#05-2074	143526001	455664	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0354	0.0365	PCI/G	0	U	19/08/2005	38568.12708	9:31	0.0467	PCI/G	0.0219	PCI/G	1	18	175	G	PCI/G	PR	
5502-0002-006-1S	MSR#05-2074	143526001	455664	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0181	0.0223	PCI/G	0	U	19/08/2005	38568.12708	9:31	0.0419	PCI/G	0.0198	PCI/G	1	18	175	G	PCI/G	PR	
5502-0002-006-1S	MSR#05-2074	143526001	455664	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	13.8	1.03	PCI/G	0		19/08/2005	38568.12708	9:31	0.443	PCI/G	0.201	PCI/G	1	18	175	G	PCI/G	PR	
5502-0002-006-1S	MSR#05-2074	143526001	455664	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.369	0.0884	PCI/G	0		19/08/2005	38568.12708	9:31	0.0752	PCI/G	0.0354	PCI/G	1	18	175	G	PCI/G	PR	
5502-0002-006-1S	MSR#05-2074	143526001	455664	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.000997	0.0196	PCI/G	0	U	19/08/2005	38568.12708	9:31	0.0357	PCI/G	0.017	PCI/G	1	18	175	G	PCI/G	PR	
5502-0002-006-1S	MSR#05-2074	143526001	454777	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.0196	0.0176	PCI/G	0	U	22/08/2005	38569.02986	7:03	0.0293	PCI/G	0.0142	PCI/G	1	18	12.2	G	PCI/G	PR	
5502-0002-006-1S	MSR#05-2074	143526001	455664	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.132	0.054	PCI/G	0		19/08/2005	38568.12708	9:31	0.0412	PCI/G	0.0194	PCI/G	1	18	175	G	PCI/G	PR	
5502-0002-006-1S	MSR#05-2074	143526001	455445	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-0.806	5.08	PCI/G	0	U		23/08/2005	8:17	9.39	PCI/G	4.33	PCI/G	1	18	2.06	G	PCI/G	PR	
5502-0002-006-2S	MSR#05-2074	143526002	455664	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	1.41	0.248	PCI/G	0		19/08/2005	38568.12708	9:43	0.162	PCI/G	0.0766	PCI/G	1	48	93.1	G	PCI/G	PR	
5502-0002-006-2S	MSR#05-2074	143526002	455664	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0138	0.046	PCI/G	0	U	19/08/2005	38568.12708	9:43	0.0674	PCI/G	0.0331	PCI/G	1	48	93.1	G	PCI/G	PR	
5502-0002-006-2S	MSR#05-2074	143526002	455664	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	1.13	0.452	PCI/G	0		19/08/2005	38568.12708	9:43	0.384	PCI/G	0.183	PCI/G	1	48	93.1	G	PCI/G	PR	
5502-0002-006-2S	MSR#05-2074	143526002	455664	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.804	0.142	PCI/G	0		19/08/2005	38568.12708	9:43	0.0947	PCI/G	0.0455	PCI/G	1	48	93.1	G	PCI/G	PR	
5502-0002-006-2S	MSR#05-2074	143526002	455664	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0	0.0591	PCI/G	0	UUI	19/08/2005	38568.12708	9:43	0.0689	PCI/G	0.0331	PCI/G	1	48	93.1	G	PCI/G	PR	
5502-0002-006-2S	MSR#05-2074	143526002	455664	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.918	0.102	PCI/G	0		19/08/2005	38568.12708	9:43	0.0498	PCI/G	0.0238	PCI/G	1	48	93.1	G	PCI/G	PR	
5502-0002-006-2S	MSR#05-2074	143526002	455664	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.116	0.0454	PCI/G	0		19/08/2005	38568.12708	9:43	0.0555	PCI/G	0.026	PCI/G	1	48	93.1	G	PCI/G	PR	
5502-0002-006-2S	MSR#05-2074	143526002	455664	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0311	0.0849	PCI/G	0	U	19/08/2005	38568.12708	9:43	0.123	PCI/G	0.0593	PCI/G	1	48	93.1	G	PCI/G	PR	
5502-0002-006-2S	MSR#05-2074	143526002	455664	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.108	0.0898	PCI/G	0	U	19/08/2005	38568.12708	9:43	0.168	PCI/G	0.0793	PCI/G	1	48	93.1	G	PCI/G	PR	
5502-0002-006-2S	MSR#05-2074	143526002	455664	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0831	0.0793	PCI/G	0	U	19/08/2005	38568.12708	9:43	0.107	PCI/G	0.0522	PCI/G	1	48	93.1	G	PCI/G	PR	
5502-0002-006-2S	MSR#05-2074	143526002	455664	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	1.3	0.161	PCI/G	0		19/08/2005	38568.12708	9:43	0.0675	PCI/G	0.0328	PCI/G	1	48	93.1	G	PCI/G	PR	
5502-0002-006-2S	MSR#05-2074	143526002	455664	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	1.08	0.163	PCI/G	0		19/08/2005	38568.12708	9:43	0.0944	PCI/G	0.0458	PCI/G	1	48	93.1	G	PCI/G	PR	
5502-0002-006-2S	MSR#05-2074	143526002	455664	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.015	0.0299	PCI/G	0	U	19/08/2005	38568.12708	9:43	0.0537	PCI/G	0.0255	PCI/G	1	48	93.1	G	PCI/G	PR	
5502-0002-006-2S	MSR#05-2074	143526002	455664	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.0135	0.0273	PCI/G	0	U	19/08/2005	38568.12708	9:43	0.0443	PCI/G	0.0211	PCI/G	1	48	93.1	G	PCI/G	PR	
5502-0002-006-2S	MSR#05-2074	143526002	455664	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	20.7	1.68	PCI/G	0		19/08/2005	38568.12708	9:43	0.474	PCI/G	0.219	PCI/G	1	48	93.1	G	PCI/G	PR	
5502-0002-006-2S	MSR#05-2074	143526002	455664	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.804	0.142	PCI/G	0		19/08/2005	38568.12708	9:43	0.0947	PCI/G	0.0455	PCI/G	1	48	93.1	G	PCI/G	PR	
5502-0002-006-2S	MSR#05-2074	143526002	455664	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00391	0.0261	PCI/G	0	U	19/08/2005	38568.12708	9:43	0.0439	PCI/G	0.0212	PCI/G	1	48	93.1	G	PCI/G	PR	
5502-0002-006-2S	MSR#05-2074	143526002	454777	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00679	0.0161	PCI/G	0	U	22/08/2005	38569.02986	7:03	0.0274	PCI/G	0.0133	PCI/G	1	48	12.9	G	PCI/G	PR	
5502-0002-006-2S	MSR#05-2074	143526002	455664	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.458	0.0807	PCI/G	0		19/08/2005	38568.12708	9:43	0.0512	PCI/G	0.0246	PCI/G	1	48	93.1	G	PCI/G	PR	
5502-0002-006-2S	MSR#05-2074	143526002	455445	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	0	5.15	PCI/G	0	U		23/08/2005	8:48	9.37	PCI/G	4.32	PCI/G	1	48	2.07	G	PCI/G	PR	
5502-0002-008-1S	MSR#05-2074	143526003	455664	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.604	0.157	PCI/G	0		19/08/2005	38568.12778	3:55	0.11	PCI/G	0.0504	PCI/G	1	25	162	G	PCI/G	PR	
5502-0002-008-1S	MSR#05-2074	143526003	455664	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0884	0.127	PCI/G	0	U	19/08/2005	38568.12778	3:55	0.202	PCI/G	0.0966	PCI/G	1	25	162	G	PCI/G	PR	
5502-0002-008-1S	MSR#05-2074	143526003	455664	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.402	0.293	PCI/G	0		19/08/2005	38568.12778	3:55	0.27	PCI/G	0.126	PCI/G	1	25	162	G	PCI/G	PR	
5502-0002-008-1S	MSR#05-2074	143526003	455664	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.625	0.109	PCI/G	0		19/08/2005	38568.12778	3:55	0.0615	PCI/G	0.0287	PCI/G	1	25	162	G	PCI/G	PR	
5502-0002-008-1S	MSR#05-2074	143526003	455664	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0402	0.0312	PCI/G	0	U	19/08/2005	38568.12778	3:55	0.0502	PCI/G	0.0237	PCI/G	1	25	162	G	PCI/G	PR	
5502-0002-008-1S	MSR#05-2074	143526003	455664	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.0135	0.0203	PCI/G	0	U	19/08/2005	38568.12778	3:55	0.0382	PCI/G	0.018	PCI/G	1	25	162	G	PCI/G	PR	
5502-0002-008-1S	MSR#05-2074	143526003	455664	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.00127	0.0199	PCI/G	0	U	19/08/2005	38568.12778	3:55	0.0362	PCI/G	0.0164	PCI/G	1	25	162	G	PCI/G	PR	
5502-0002-008-1S	MSR#05-2074	143526003	455664	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0123	0.0471	PCI/G	0	U	19/08/2005	38568.12778	3:55	0.0877	PCI/G	0.0413	PCI/G	1	25	162	G	PCI/G	PR	
5502-0002-008-1S	MSR#05-2074	143526003	455664	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0279	0.0668	PCI/G	0	U	19/08/2005	38568.12778	3:55	0.124	PCI/G	0.0571	PCI/G	1	25	162	G	PCI/G	PR	
5502-0002-008-1S	MSR#05-2074	143526003	455664	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.114	0.0943	PCI/G	0	U	19/08/2005	38568.12778	3:55	0.122	PCI/G	0.0585	PCI/G	1	25	162	G	PCI/G	PR	
5502-0002-008-1S	MSR#05-2074	143526003	455664	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.621	0.0915	PCI/G	0		19/08/2005	38568.12778	3:55	0.0788	PCI/G	0.0381	PCI/G	1	25	162	G	PCI/G	PR	
5502-0002-008-1S	MSR#05-2074	143526003	455664	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.664	0.111	PCI/G	0		19/08/2005	38568.12778	3:55	0.0614	PCI/G	0.0289	PCI/G	1	25	162	G	PCI/G	PR	
5502-0002-008-1S	MSR#05-2074	143526003	455664	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.01	0.024	PCI/G	0	U	19/08/2005	38568.12778	3:55	0.0391	PCI/G	0.0182	PCI/G	1	25	162	G	PCI/G	PR	
5502-0002-008-1S	MSR#05-2074	143526003	455664	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.00319	0.0177	PCI/G	0	U	19/08/2005	38568.12778	3:55	0.031	PCI/G	0.0145	PCI/G	1	25	162	G	PCI/G	PR	
5502-0002-008-1S	MSR#05-2074	143526003	455664	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	14.6	1.52	PCI/G	0		19/08/2005	38568.12778	3:55	0.349	PCI/G	0.157	PCI/G	1	25	162	G	PCI/G	PR	
5502-0002-008-1S	MSR#05-2074	143526003	455664	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.625	0.109	PCI/G	0		19/08/2005	38568.12778	3:55	0.0615	PCI/G	0.0287	PCI/G	1	25	162	G	PCI/G	PR	
5502-0002-008-1S	MSR#05-2074	143526003	455664	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00262	0.0161	PCI/G	0	U	19/08/2005	38568.12778	3:55	0.0303	PCI/G	0.0142	PCI/G	1	25	162	G	PCI/G	PR	
5502-0002-008-1S	MSR#05-2074	143526003	454777	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.0184	0.0186	PCI/G	0	U	22/08/2005	38569.02986	7:03	0.0313	PCI/G	0.0152	PCI/G	1	25	12.2	G	PCI/G	PR	
5502-0002-008-1S	MSR#05-2074	143526003	455664	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.171	0.0429	PCI/G	0		19/08/2005	38568.12778	3:55	0.0333	PCI/G	0.0155	PCI/G	1	25	162	G	PCI/G	PR	
5502-0002-008-1S	MSR#05-2074	143526003	455445	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	0	5.18	PCI/G	0	U		23/08/2005	3:19	9.42	PCI/G	4.35	PCI/G	1	25	2.07	G	PCI/G	PR	
5502-0002-008-2S	MSR#05-2074	143526004	455664	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.772	0.539	PCI/G	0		19/08/2005	38568.12778	3:56	0.378	PCI/G	0.176	PCI/G	1	51	95.8	G	PCI/G	PR	
5502-0002-008-2S	MSR#05-2074	143526004	455664	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.073	0.0847	PCI/G	0	U	19/08/2005	38568.12778	3:56	0.125	PCI/G	0.0603	PCI/G	1	51	95.8	G	PCI/G	PR	
5502-0002-008-2S	MSR#05-2074	143526004	455664	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.522	0.506	PCI/G	0	U	19/08/2005	38568.12778	3:56	0.942	PCI/G	0.445	PCI/G	1	51	95.8	G	PCI/G	PR	
5502-0002-008-2S	MSR#05-2074	143526004	455664	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	1.07	0.266	PCI/G	0		19/08/2005	38568.12778	3:56	0.188	PCI/G	0.0886	PCI/G	1	51	95.8	G	PCI/G	PR	
5502-0002-008-2S	MSR#05-2074	143526004	455664	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0449	0.0639	PCI/G	0	U	19/08/2005	38568.12778	3:56	0.118	PCI/G	0.0553	PCI/G	1	51	95.8	G	PCI/G	PR	
5502-0002-008-2S	MSR#05-2074	143526004	455664	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.791	0.161	PCI/G	0		19/08/2005	38568.12778	3:56	0.0913	PCI/G	0.0425	PCI/G	1	51	95.8	G	PCI/G	PR	
5502-0002-008-2S	MSR#05-2074	143526004	455664	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0558	0.0615	PCI/G	0	U	19/08/2005	38568.12778	3:56	0.121	PCI/G	0.0555	PCI/G	1	51	95.8	G	PCI/G	PR	
5502-0002-008-2S	MSR#05-2074	143526004	455664	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0374	0.156	PCI/G	0	U	19/08/2005	38568.12778	3:56	0.231	PCI/G	0.11	PCI/G	1	51	95.8	G	PCI/G	PR	
5502-0002-008-2S	MSR#05-2074	143526004	455664	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0274	0.193	PCI/G	0	U	19/08/2005	38568.12778	3:56	0.348	PCI/G	0.161	PCI/G	1	51	95.8	G	PCI/G	PR	
5502-0002-008-2S	MSR#05-2074	143526004	455664	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0925	0.125	PCI/G	0	U	19/08/2005	38568.12778	3:56	0.217	PCI/G	0.104	PCI/G	1	51	95.8	G	PCI/G	PR	
5502-0002-008-2S	MSR#05-2074	143526004	455664	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	1.31	0.193	PCI/G	0		19/08/2005	38568.12778	3:56	0.126	PCI/G	0.0599	PCI/G	1	51	95.8	G	PCI/G	PR	
5502-0002-008-2S	MSR#05-2074	143526004	455664	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.954	0.23	PCI/G	0		19/08/2005	38568.12778	3:56	0.181	PCI/G	0.0861	PCI/G	1	51	95.8	G	PCI/G	PR	
5502-0002-008-2S	MSR#05-2074	143526004	455664	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.00614	0.0666	PCI/G	0	U	19/08/2005	38568.12778	3:56	0.115	PCI/G	0.0538	PCI/G	1	51	95.8	G	PCI/G	PR	
5502-0002-008-2S	MSR#05-2074	143526004	455664	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.0187	0.0531	PCI/G	0	U	19/08/2005	38568.12778	3:56	0.0908	PCI/G	0.0425	PCI/G	1	51	95.8	G	PCI/G	PR	
5502-0002-008-2S	MSR#05-2074	143526004	455664	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	16.2	2.27	PCI/G	0		19/08/2005	38568.12778	3:56	0.592	PCI/G	0.247	PCI/G	1	51	95.8	G	PCI/G	PR	
5502-0002-008-2S	MSR#05-2074	143526004	455664	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	1.07	0.266	PCI/G	0		19/08/2005	38568.12778	3:56	0.188	PCI/G	0.0886	PCI/G	1	51	95.8	G	PCI/G	PR	
5502-0002-008-2S	MSR#05-2074	143526004	455664	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.0161	0.0505	PCI/G	0	U	19/08/2005	38568.12778	3:56	0.088	PCI/G	0.0417	PCI/G	1	51	95.8	G	PCI/G	PR	
5502-0002-008-2S	MSR#05-2074	143526004	454777	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.0167	0.0148	PCI/G	0	U	22/08/2005	38569.02986	7:03	0.0246	PCI/G	0.012	PCI/G	1	51	12.9	G	PCI/G	PR	
5502-0002-008-2S	MSR#05-2074	143526004	455664	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.481	0.131	PCI/G	0		19/08/2005	38568.12778	3:56	0.0943	PCI/G	0.0441	PCI/G	1	51	95.8	G	PCI/G	PR	
5502-0002-008-2S	MSR#05-2074	143526004	455445	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	1.71	5.65	PCI/G	0	U		23/08/2005	9:50	9.97	PCI/G	4.6	PCI/G	1	51	2.02	G	PCI/G	PR	
5502-0001-009-S1S	MSR#05-2074	143526005	455664	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.446	0.192	PCI/G	0		19/08/2005	38568.12778	4:12	0.159	PCI/G	0.0709	PCI/G	1	19	173	G	PCI/G	PR	
5502-0001-009-S1S	MSR#05-2074	143526005	455664	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0252	0.032	PCI/G	0	U	19/08/2005	38568.12778	4:12	0.0585	PCI/G	0.0279	PCI/G	1	19	173	G	PCI/G	PR	
5502-0001-009-S1S	MSR#05-2074	143526005	455664	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.646	0.364	PCI/G	0		19/08/2005	38568.12778	4:12	0.363	PCI/G	0.164	PCI/G	1	19	173	G	PCI/G	PR	
5502-0001-009-S1S	MSR#05-2074	143526005	455664	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.338	0.0889	PCI/G	0		19/08/2005	38568.12778	4:12	0.0917	PCI/G	0.0423	PCI/G	1	19	173	G	PCI/G	PR	
5502-0001-009-S1S	MSR#05-2074	143526005	455664	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.00529	0.0304	PCI/G	0	U	19/08/2005	38568.12778	4:12	0.0585	PCI/G	0.0267	PCI/G	1	19	173	G	PCI/G	PR	
5502-0001-009-S1S	MSR#05-2074	143526005	455664	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.0136	0.0256	PCI/G	0	U	19/08/2005	38568.12778	4:12	0.0456	PCI/G	0.0213	PCI/G	1	19	173	G	PCI/G	PR	
5502-0001-009-S1S	MSR#05-2074	143526005	455664	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.014	0.0231	PCI/G	0	U	19/08/2005	38568.12778	4:12	0.0505	PCI/G	0.0219	PCI/G	1	19	173	G	PCI/G	PR	
5502-0001-009-S1S	MSR#05-2074	143526005	455664	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0312	0.0589	PCI/G	0	U	19/08/2005	38568.12778	4:12	0.115	PCI/G	0.054	PCI/G	1	19	173	G	PCI/G	PR	

5502-0001-009-S1S	MSR#05-2074	143526005	455664	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0134	0.0845	PCI/G	0	U	19/08/2005	38568.12778	4:12	0.152	PCI/G	0.067	PCI/G	1	19	173	G	PCI/G		PR	
5502-0001-009-S1S	MSR#05-2074	143526005	455664	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0311	0.0498	PCI/G	0	U	19/08/2005	38568.12778	4:12	0.0959	PCI/G	0.0456	PCI/G	1	19	173	G	PCI/G		PR	
5502-0001-009-S1S	MSR#05-2074	143526005	455664	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.388	0.0653	PCI/G	0		19/08/2005	38568.12778	4:12	0.0549	PCI/G	0.0258	PCI/G	1	19	173	G	PCI/G		PR	
5502-0001-009-S1S	MSR#05-2074	143526005	455664	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.307	0.078	PCI/G	0		19/08/2005	38568.12778	4:12	0.096	PCI/G	0.0453	PCI/G	1	19	173	G	PCI/G		PR	
5502-0001-009-S1S	MSR#05-2074	143526005	455664	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0361	0.0289	PCI/G	0	U	19/08/2005	38568.12778	4:12	0.0556	PCI/G	0.0254	PCI/G	1	19	173	G	PCI/G		PR	
5502-0001-009-S1S	MSR#05-2074	143526005	455664	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.00297	0.0246	PCI/G	0	U	19/08/2005	38568.12778	4:12	0.0462	PCI/G	0.0213	PCI/G	1	19	173	G	PCI/G		PR	
5502-0001-009-S1S	MSR#05-2074	143526005	455664	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	13.8	1.43	PCI/G	0		19/08/2005	38568.12778	4:12	0.38	PCI/G	0.157	PCI/G	1	19	173	G	PCI/G		PR	
5502-0001-009-S1S	MSR#05-2074	143526005	455664	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.338	0.0889	PCI/G	0		19/08/2005	38568.12778	4:12	0.0917	PCI/G	0.0423	PCI/G	1	19	173	G	PCI/G		PR	
5502-0001-009-S1S	MSR#05-2074	143526005	455664	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00774	0.0172	PCI/G	0	U	19/08/2005	38568.12778	4:12	0.0341	PCI/G	0.0156	PCI/G	1	19	173	G	PCI/G		PR	
5502-0001-009-S1S	MSR#05-2074	143526005	454777	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00569	0.0133	PCI/G	0	U	22/08/2005	38569.02986	7:03	0.0226	PCI/G	0.0109	PCI/G	1	19	12.1	G	PCI/G		PR	
5502-0001-009-S1S	MSR#05-2074	143526005	455664	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.122	0.0525	PCI/G	0		19/08/2005	38568.12778	4:12	0.042	PCI/G	0.019	PCI/G	1	19	173	G	PCI/G		PR	
5502-0001-009-S1S	MSR#05-2074	143526005	455445	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-1.61	5	PCI/G	0	U		23/08/2005	10:21	9.39	PCI/G	4.33	PCI/G	1	19	2.07	G	PCI/G		PR	
5502-0000-001-C2S	MSR#05-2074	143526006	455664	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.351	0.114	PCI/G	0		19/08/2005	38568.12778	4:12	0.132	PCI/G	0.0594	PCI/G	1	2	194	G	PCI/G		PR	
5502-0000-001-C2S	MSR#05-2074	143526006	455664	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.00446	0.133	PCI/G	0	U	19/08/2005	38568.12778	4:12	0.182	PCI/G	0.0872	PCI/G	1	2	194	G	PCI/G		PR	
5502-0000-001-C2S	MSR#05-2074	143526006	455664	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.198	0.151	PCI/G	0	U	19/08/2005	38568.12778	4:12	0.327	PCI/G	0.15	PCI/G	1	2	194	G	PCI/G		PR	
5502-0000-001-C2S	MSR#05-2074	143526006	455664	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.347	0.0826	PCI/G	0		19/08/2005	38568.12778	4:12	0.0599	PCI/G	0.0271	PCI/G	1	2	194	G	PCI/G		PR	
5502-0000-001-C2S	MSR#05-2074	143526006	455664	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.041	0.0202	PCI/G	0	U	19/08/2005	38568.12778	4:12	0.0473	PCI/G	0.0217	PCI/G	1	2	194	G	PCI/G		PR	
5502-0000-001-C2S	MSR#05-2074	143526006	455664	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.0179	0.0259	PCI/G	0	U	19/08/2005	38568.12778	4:12	0.0387	PCI/G	0.0177	PCI/G	1	2	194	G	PCI/G		PR	
5502-0000-001-C2S	MSR#05-2074	143526006	455664	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.00872	0.0229	PCI/G	0	U	19/08/2005	38568.12778	4:12	0.0457	PCI/G	0.0205	PCI/G	1	2	194	G	PCI/G		PR	
5502-0000-001-C2S	MSR#05-2074	143526006	455664	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.032	0.0594	PCI/G	0	U	19/08/2005	38568.12778	4:12	0.107	PCI/G	0.0499	PCI/G	1	2	194	G	PCI/G		PR	
5502-0000-001-C2S	MSR#05-2074	143526006	455664	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.000578	0.0588	PCI/G	0	U	19/08/2005	38568.12778	4:12	0.113	PCI/G	0.05	PCI/G	1	2	194	G	PCI/G		PR	
5502-0000-001-C2S	MSR#05-2074	143526006	455664	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0369	0.0622	PCI/G	0	U	19/08/2005	38568.12778	4:12	0.122	PCI/G	0.0581	PCI/G	1	2	194	G	PCI/G		PR	
5502-0000-001-C2S	MSR#05-2074	143526006	455664	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.283	0.068	PCI/G	0		19/08/2005	38568.12778	4:12	0.0579	PCI/G	0.0273	PCI/G	1	2	194	G	PCI/G		PR	
5502-0000-001-C2S	MSR#05-2074	143526006	455664	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.312	0.0944	PCI/G	0		19/08/2005	38568.12778	4:12	0.0728	PCI/G	0.034	PCI/G	1	2	194	G	PCI/G		PR	
5502-0000-001-C2S	MSR#05-2074	143526006	455664	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.000578	0.0223	PCI/G	0	U	19/08/2005	38568.12778	4:12	0.0418	PCI/G	0.019	PCI/G	1	2	194	G	PCI/G		PR	
5502-0000-001-C2S	MSR#05-2074	143526006	455664	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.00529	0.0191	PCI/G	0	U	19/08/2005	38568.12778	4:12	0.0351	PCI/G	0.0161	PCI/G	1	2	194	G	PCI/G		PR	
5502-0000-001-C2S	MSR#05-2074	143526006	455664	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	5.81	0.803	PCI/G	0		19/08/2005	38568.12778	4:12	0.379	PCI/G	0.166	PCI/G	1	2	194	G	PCI/G		PR	
5502-0000-001-C2S	MSR#05-2074	143526006	455664	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.347	0.0826	PCI/G	0		19/08/2005	38568.12778	4:12	0.0599	PCI/G	0.0271	PCI/G	1	2	194	G	PCI/G		PR	
5502-0000-001-C2S	MSR#05-2074	143526006	455664	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00568	0.0186	PCI/G	0	U	19/08/2005	38568.12778	4:12	0.0336	PCI/G	0.0155	PCI/G	1	2	194	G	PCI/G		PR	
5502-0000-001-C2S	MSR#05-2074	143526006	454777	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.00595	0.0145	PCI/G	0	U	22/08/2005	38569.02986	7:03	0.0253	PCI/G	0.0123	PCI/G	1	2	12.2	G	PCI/G		PR	
5502-0000-001-C2S	MSR#05-2074	143526006	455664	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.114	0.0441	PCI/G	0		19/08/2005	38568.12778	4:12	0.036	PCI/G	0.0164	PCI/G	1	2	194	G	PCI/G		PR	
5502-0000-001-C2S	MSR#05-2074	143526006	455445	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	2.48	5.53	PCI/G	0	U		23/08/2005	10:52	9.62	PCI/G	4.44	PCI/G	1	2	2.05	G	PCI/G		PR	
5502-0000-002-C2S	MSR#05-2074	143526007	455664	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.319	0.121	PCI/G	0		19/08/2005	38568.12778	4:13	0.0896	PCI/G	0.0389	PCI/G	1	6.6	205	G	PCI/G		PR	
5502-0000-002-C2S	MSR#05-2074	143526007	455664	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0	0.185	PCI/G	0	UUI	19/08/2005	38568.12778	4:13	0.161	PCI/G	0.0757	PCI/G	1	6.6	205	G	PCI/G		PR	
5502-0000-002-C2S	MSR#05-2074	143526007	455664	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.234	0.151	PCI/G	0	U	19/08/2005	38568.12778	4:13	0.325	PCI/G	0.151	PCI/G	1	6.6	205	G	PCI/G		PR	
5502-0000-002-C2S	MSR#05-2074	143526007	455664	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.281	0.0678	PCI/G	0		19/08/2005	38568.12778	4:13	0.0539	PCI/G	0.0245	PCI/G	1	6.6	205	G	PCI/G		PR	
5502-0000-002-C2S	MSR#05-2074	143526007	455664	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0268	0.0214	PCI/G	0	U	19/08/2005	38568.12778	4:13	0.0386	PCI/G	0.0176	PCI/G	1	6.6	205	G	PCI/G		PR	
5502-0000-002-C2S	MSR#05-2074	143526007	455664	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.00894	0.0174	PCI/G	0	U	19/08/2005	38568.12778	4:13	0.035	PCI/G	0.0161	PCI/G	1	6.6	205	G	PCI/G		PR	
5502-0000-002-C2S	MSR#05-2074	143526007	455664	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.00525	0.0166	PCI/G	0	U	19/08/2005	38568.12778	4:13	0.0308	PCI/G	0.0131	PCI/G	1	6.6	205	G	PCI/G		PR	
5502-0000-002-C2S	MSR#05-2074	143526007	455664	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.00518	0.0378	PCI/G	0	U	19/08/2005	38568.12778	4:13	0.0706	PCI/G	0.0325	PCI/G	1	6.6	205	G	PCI/G		PR	
5502-0000-002-C2S	MSR#05-2074	143526007	455664	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0112	0.052	PCI/G	0	U	19/08/2005	38568.12778	4:13	0.104	PCI/G	0.0457	PCI/G	1	6.6	205	G	PCI/G		PR	
5502-0000-002-C2S	MSR#05-2074	143526007	455664	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	-0.00898	0.0417	PCI/G	0	U	19/08/2005	38568.12778	4:13	0.0853	PCI/G	0.0403	PCI/G	1	6.6	205	G	PCI/G		PR	
5502-0000-002-C2S	MSR#05-2074	143526007	455664	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.22	0.058	PCI/G	0		19/08/2005	38568.12778	4:13	0.0675	PCI/G	0.0324	PCI/G	1	6.6	205	G	PCI/G		PR	
5502-0000-002-C2S	MSR#05-2074	143526007	455664	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.308	0.0718	PCI/G	0		19/08/2005	38568.12778	4:13	0.0566	PCI/G	0.0263	PCI/G	1	6.6	205	G	PCI/G		PR	
5502-0000-002-C2S	MSR#05-2074	143526007	455664	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0117	0.0203	PCI/G	0	U	19/08/2005	38568.12778	4:13	0.0402	PCI/G	0.0184	PCI/G	1	6.6	205	G	PCI/G		PR	
5502-0000-002-C2S	MSR#05-2074	143526007	455664	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00136	0.012	PCI/G	0	U	19/08/2005	38568.12778	4:13	0.0237	PCI/G	0.0106	PCI/G	1	6.6	205	G	PCI/G		PR	
5502-0000-002-C2S	MSR#05-2074	143526007	455664	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	5.62	0.761	PCI/G	0		19/08/2005	38568.12778	4:13	0.269	PCI/G	0.112	PCI/G	1	6.6	205	G	PCI/G		PR	
5502-0000-002-C2S	MSR#05-2074	143526007	455664	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.281	0.0678	PCI/G	0		19/08/2005	38568.12778	4:13	0.0539	PCI/G	0.0245	PCI/G	1	6.6	205	G	PCI/G		PR	
5502-0000-002-C2S	MSR#05-2074	143526007	455664	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00333	0.0137	PCI/G	0	U	19/08/2005	38568.12778	4:13	0.0234	PCI/G	0.0106	PCI/G	1	6.6	205	G	PCI/G		PR	
5502-0000-002-C2S	MSR#05-2074	143526007	454777	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.0117	0.0147	PCI/G	0	U	22/08/2005	38569.02986	7:06	0.0247	PCI/G	0.012	PCI/G	1	6.6	12.2	G	PCI/G		PR	
5502-0000-002-C2S	MSR#05-2074	143526007	455664	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.102	0.0364	PCI/G	0		19/08/2005	38568.12778	4:13	0.0307	PCI/G	0.014	PCI/G	1	6.6	205	G	PCI/G		PR	
5502-0000-002-C2S	MSR#05-2074	143526007	455445	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	2.54	5.67	PCI/G	0	U		23/08/2005	11:22	9.86	PCI/G	4.55	PCI/G	1	6.6	2.02	G	PCI/G		PR	
5502-0000-003-C2S	MSR#05-2074	143526008	455664	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0	0.0963	PCI/G	0	UUI	19/08/2005	38568.12778	4:13	0.162	PCI/G	0.0857	PCI/G	1	4.2	212	G	PCI/G		PR	
5502-0000-003-C2S	MSR#05-2074	143526008	455664	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0185	0.0617	PCI/G	0	U	19/08/2005	38568.12778	4:13	0.117	PCI/G	0.0557	PCI/G	1	4.2	212	G	PCI/G		PR	
5502-0000-003-C2S	MSR#05-2074	143526008	455664	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.107	0.138	PCI/G	0	U	19/08/2005	38568.12778	4:13	0.277	PCI/G	0.128	PCI/G	1	4.2	212	G	PCI/G		PR	
5502-0000-003-C2S	MSR#05-2074	143526008	455664	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.252	0.0716	PCI/G	0		19/08/2005	38568.12778	4:13	0.0566	PCI/G	0.026	PCI/G	1	4.2	212	G	PCI/G		PR	
5502-0000-003-C2S	MSR#05-2074	143526008	455664	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0023	0.0179	PCI/G	0	U	19/08/2005	38568.12778	4:13	0.034	PCI/G	0.0154	PCI/G	1	4.2	212	G	PCI/G		PR	
5502-0000-003-C2S	MSR#05-2074	143526008	455664	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.0244	0.0239	PCI/G	0	U	19/08/2005	38568.12778	4:13	0.0255	PCI/G	0.0114	PCI/G	1	4.2	212	G	PCI/G		PR	
5502-0000-003-C2S	MSR#05-2074	143526008	455664	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0094	0.0147	PCI/G	0	U	19/08/2005	38568.12778	4:13	0.032	PCI/G	0.014	PCI/G	1	4.2	212	G	PCI/G		PR	
5502-0000-003-C2S	MSR#05-2074	143526008	455664	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.00935	0.0406	PCI/G	0	U	19/08/2005	38568.12778	4:13	0.0692	PCI/G	0.032	PCI/G	1	4.2	212	G	PCI/G		PR	
5502-0000-003-C2S	MSR#05-2074	143526008	455664	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0229	0.0439	PCI/G	0	U	19/08/2005	38568.12778	4:13	0.0781	PCI/G	0.0335	PCI/G	1	4.2	212	G	PCI/G		PR	
5502-0000-003-C2S	MSR#05-2074	143526008	455664	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0117	0.0451	PCI/G	0	U	19/08/2005	38568.12778	4:13	0.0907	PCI/G	0.0433	PCI/G	1	4.2	212	G	PCI/G		PR	
5502-0000-003-C2S	MSR#05-2074	143526008	455664	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.255	0.0483	PCI/G	0		19/08/2005	38568.12778	4:13	0.0517	PCI/G	0.0246	PCI/G	1	4.2	212	G	PCI/G		PR	
5502-0000-003-C2S	MSR#05-2074	143526008	455664	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.284	0.0622	PCI/G	0		19/08/2005	38568.12778	4:13	0.0507	PCI/G	0.0235	PCI/G	1	4.2	212	G	PCI/G		PR	
5502-0000-003-C2S	MSR#05-2074	143526008	455664	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0127	0.0179	PCI/G	0	U	19/08/2005	38568.12778	4:13	0.0359	PCI/G	0.0164	PCI/G	1	4.2	212	G	PCI/G		PR	
5502-0000-003-C2S	MSR#05-2074	143526008	455664	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00939	0.0145	PCI/G	0	U	19/08/2005	38568.12778	4:13	0.029	PCI/G	0.0134	PCI/G	1	4.2	212	G	PCI/G		PR	
5502-0000-003-C2S	MSR#05-2074	143526008	455664	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	5.31	0.7	PCI/G	0		19/08/2005	38568.12778	4:13	0.254	PCI/G	0.107	PCI/G	1	4.2	212	G	PCI/G		PR	
5502-0000-003-C2S	MSR#05-2074	143526008	455664	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.252	0.0716	PCI/G	0		19/08/2005	38568.12778	4:13	0.0566	PCI/G	0.026	PCI/G	1	4.2	212	G	PCI/G		PR	
5502-0000-003-C2S	MSR#05-2074	143526008	455664	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00329	0.0143	PCI/G	0	U	19/08/2005	38568.12778	4:13	0.0273	PCI/G	0.0127	PCI/G	1	4.2	212	G	PCI/G		PR	
5502-0000-003-C2S	MSR#05-2074	143526008	454777	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.0546	0.0163	PCI/G	0	U	22/08/2005	38569.02986	7:06	0.0305	PCI/G	0.0149	PCI/G	1	4.2	12.3	G	PCI/G		PR	
5502-0000-003-C2S	MSR#05-2074	143526008	455664	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.0694	0.0287	PCI/G	0		19/08/2005	38568.12778	4:13	0.0272	PCI/G	0.0123	PCI/G	1	4.2	212	G	PCI/G		PR	
5502-0000-003-C2S	MSR#05-2074	143526008	455445	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-0.837	5.27	PCI/G	0	U		23/08/2005	11:53	9.74	PCI/G	4.49	PCI/G	1	4.2	2.01	G	PCI/G		PR	
5502-0000-002-C2S	MSR#05-2074	143526009	454737	14596-10-2	Americium-241	TRG 1	UAM05RCM	AM05RCM	REG	-0.0967	0.101	PCI/G	0	U	22/08/2005	38569.03194	5:05	0.499	PCI/G	0.181	PCI/G	1	6.6	0.202	G	PCI/G		PR	
5502-0000-002-C2S	MSR#05-2074	143526009	455809	14762-75-5	Carbon-14	TRG 5	ULSC	LSC	REG	0.0654	0.102	PCI/G	0	U		30/08/2005	4:33	0.172	PCI/G	0.085	PCI/G	1	6.6	9.19	G	PCI/G		PR	
5502-0000-002-C2S	MSR#05-2074	143526009	454737	OER-100-93	Curium-242	TRG 1	UAM05RCM	AM05RCM	REG	-0.0319	0.138	PCI/G	0	U	22/08/2005	38569.03194	5:05	0.395	PCI/G	0.107	PCI/G	1	6.6	0.202	G	PCI/G		PR	
5502-0000-002-C2S	MSR#05-2074	143526009	454737	OER-101-57	Curium-243/244	TRG 1	UAM05RCM	AM05RCM	REG	-0.146	0.129	PCI/G	0	U	22/08/2005	38569.03194	5:05	0.536	PCI/G	0.2	PCI/G	1	6.6	0.202	G	PCI/G		PR	
5502-0000-002-C2S	MSR#05-2074	143526009	458659	14681-59-5	Iron-55	TRG 26	ULSC	LSC	REG	-8.19	43.6	PCI/G	0	U	22/08/2005	38600.01736	11:13	62	PCI/G	30	PCI/G	1	6.6	0.266	G	PCI/G		PR	
5502-0000-002-C2S	MSR#05-2074	143526009	455806	13781-37-8	Nickel-63	TRG 30	ULSC	LSC	REG	-2.91	8.5	PCI/G	0	U	22/08/2005	38569.03472	11:53	15.3	PCI/G	7.28	PCI/G	1	6.6	0.29	G	PCI/G		PR	
5502-0000-002-C2S	MSR#05-2074	143526009	454739	13981-16-3	Plutonium-238	TRG 32	UPU11RCM	PU11RCM	REG	0.0161	0.064	PCI/G	0	U	22/08/2005	38569.03194	5:05	0.183	PCI/G	0.0499	PCI/G	1	6.6	0.202	G	PCI/G		PR	
5502-0000-002-C2S	MSR#05-2074	143526009	454739	OER-100-70	Plutonium-239/240	TRG 32	UPU11RCM	PU11RCM	REG	0.301	0.192	PCI/G	0		22/08/2005	38569.03194	5:05	0.154	PCI/G	0.0352	PCI/G	1	6.6	0.202	G	PCI/G		PR	
5502-0000-002-C2S	MSR#05-2074	143526009	454741	14119-32-5	Plutonium-241	TRG 36	UPU11RCM	PU11RCM	REG	4.5	6.22	PCI/G	0	U	22/08/2005	38569.03472	3:47	10.5	PCI/G	5.09	PCI/G	1	6.6	0.502	G	PCI/G		PR	
5502-0000-002-C2S	MSR#05-2074	143526009	455604	14133-76-7	Technetium-99	TRG 46	UTC02RCM	TC02RCM	REG	0	0.126	PCI/G	0	U		31/08/2005	3:06	0.217	PCI/G	0.106	PCI/G	1	6.6	9.59	G	PCI/G		PR	
	MSR#05-2074	1200916699	454737	14596-10-2	Americium-241	TRG	U	AM05RCM	LB1	-0.0421	0.0694	PCI/G	0	U		26/08/2005	5:05	0.199	PCI/G	0.054	PCI/G	1	0	0.204	G	PCI/G		PR	
	MSR#05-2074	1200916699	454737	OER-100-93	Curium-242	TRG	U	AM05RCM	LB1	-0.0325	0.0737	PCI/G	0	U		26/08/2005	5:05	0.246	PCI/G	0.0773	PCI/G	1	0	0.204	G	PCI/G		PR	
	MSR#05-2074	1200916699	454737	OER-101-57	Curium-243/244	TRG	U	AM05RCM	LB1	0.0282	0.123	PCI/G	0	U		26/08/2005	5:05	0.32	PCI/G	0.115	PCI/G	1	0	0.204	G	PCI/G		PR	
5502-0000-002-C2S	MSR#05-2074	1200916700	454737	14596-10-2	Americium-241	TRG	U	AM05RCM	LR1	-0.00413	0.1	PCI/G	0	U		26/08/2005	5:05	0.327	PCI/G	0.11	PCI/G	1	6.6	0.202	G	PCI/G	-0.0	967	PR
5502-0000-002-C2S	MSR#05-2074	1200916700	454737	OER-100-93	Curium-242	TRG	U	AM05RCM	LR1	-0.0376	0.111	PCI/G	0	U		26/08/2005	5:05	0.348	PCI/G	0.103	PCI/G	1	6.6	0.202	G	PCI/G	-0.0	319	PR
5502-0000-002-C2S	MSR#05-2074	1200916700	454737	OER-101-57	Curium-243/244	TRG	U	AM05RCM	LR1	-0.064	0.13	PCI/G	0	U		26/08/2005	5:05	0.446	PCI/G	0.169	PCI/G	1	6.6	0.202	G	PCI/G	-0.1	46	PR

5502-0000-002-C2S	MSR#05-2074	1200916701	454737	14596-10-2	Americium-241	TRG	U	AM05RCM	MS1	11.5	1.23	PCI/G	0		26/08/2005	5:05	0.203	PCI/G	0.0551	PCI/G	1	6.6	0.204	G	13	.4	PCI/G	13.3	PR	
5502-0000-002-C2S	MSR#05-2074	1200916701	454737	OER-100-93	Curium-242	TRG	U	AM05RCM	MS1	-0.0217	0.0936	PCI/G	0	U	26/08/2005	5:05	0.268	PCI/G	0.0729	PCI/G	1	6.6	0.204	G			PCI/G		PR	
5502-0000-002-C2S	MSR#05-2074	1200916701	454737	OER-101-57	Curium-243/244	TRG	U	AM05RCM	MS1	15.9	1.45	PCI/G	0		26/08/2005	5:05	0.204	PCI/G	0.0554	PCI/G	1	6.6	0.204	G	16	.5	PCI/G	16.4	PR	
	MSR#05-2074	1200916702	454737	14596-10-2	Americium-241	TRG	U	AM05RCM	BS1	14.4	1.36	PCI/G	0		26/08/2005	5:05	0.197	PCI/G	0.0534	PCI/G	1	0	0.204	G	13	.4	PCI/G		PR	
	MSR#05-2074	1200916702	454737	OER-100-93	Curium-242	TRG	U	AM05RCM	BS1	-0.00804	0.0675	PCI/G	0	U	26/08/2005	5:05	0.167	PCI/G	0.0382	PCI/G	1	0	0.204	G			PCI/G		PR	
	MSR#05-2074	1200916702	454737	OER-101-57	Curium-243/244	TRG	U	AM05RCM	BS1	17.1	1.48	PCI/G	0		26/08/2005	5:05	0.241	PCI/G	0.0755	PCI/G	1	0	0.204	G	16	.4	PCI/G		PR	
	MSR#05-2074	1200916714	454739	13981-16-3	Plutonium-238	TRG	U	PU11RCM	LB1	-0.00736	0.0618	PCI/G	0	U	26/08/2005	5:05	0.153	PCI/G	0.0349	PCI/G	1	0	0.204	G			PCI/G		PR	
	MSR#05-2074	1200916714	454739	OER-100-70	Plutonium-239/240	TRG	U	PU11RCM	LB1	0.124	0.137	PCI/G	0	U	26/08/2005	5:05	0.223	PCI/G	0.0699	PCI/G	1	0	0.204	G			PCI/G		PR	
5502-0000-002-C2S	MSR#05-2074	1200916715	454739	13981-16-3	Plutonium-238	TRG	U	PU11RCM	LR1	-0.0686	0.0425	PCI/G	0	U	26/08/2005	5:05	0.284	PCI/G	0.103	PCI/G	1	6.6	0.202	G			PCI/G	0.01	61	PR
5502-0000-002-C2S	MSR#05-2074	1200916715	454739	OER-100-70	Plutonium-239/240	TRG	U	PU11RCM	LR1	0.0788	0.0979	PCI/G	0	U	26/08/2005	5:05	0.142	PCI/G	0.0325	PCI/G	1	6.6	0.202	G			PCI/G	0.30	1	PR
5502-0000-002-C2S	MSR#05-2074	1200916716	454739	13981-16-3	Plutonium-238	TRG	U	PU11RCM	MS1	0.0139	0.0551	PCI/G	0	U	26/08/2005	5:05	0.158	PCI/G	0.0429	PCI/G	1	6.6	0.204	G			PCI/G		PR	
5502-0000-002-C2S	MSR#05-2074	1200916716	454739	OER-100-70	Plutonium-239/240	TRG	U	PU11RCM	MS1	12.2	1.12	PCI/G	0		26/08/2005	5:05	0.133	PCI/G	0.0303	PCI/G	1	6.6	0.204	G	12	.3	PCI/G	12.6	PR	
	MSR#05-2074	1200916717	454739	13981-16-3	Plutonium-238	TRG	U	PU11RCM	BS1	0.0455	0.105	PCI/G	0	U	26/08/2005	5:05	0.242	PCI/G	0.0814	PCI/G	1	0	0.204	G			PCI/G		PR	
	MSR#05-2074	1200916717	454739	OER-100-70	Plutonium-239/240	TRG	U	PU11RCM	BS1	13.2	1.21	PCI/G	0		26/08/2005	5:05	0.145	PCI/G	0.0332	PCI/G	1	0	0.204	G	12	.3	PCI/G		PR	
	MSR#05-2074	1200916718	454741	14119-32-5	Plutonium-241	TRG	U	PU11RCM	LB1	4.27	6.5	PCI/G	0	U	30/08/2005	4:20	11	PCI/G	5.34	PCI/G	1	0	0.505	G			PCI/G		PR	
5502-0000-002-C2S	MSR#05-2074	1200916719	454741	14119-32-5	Plutonium-241	TRG	U	PU11RCM	LR1	4.88	6.9	PCI/G	0	U	30/08/2005	4:52	11.6	PCI/G	5.65	PCI/G	1	6.6	0.505	G			PCI/G	4.50	PR	
5502-0000-002-C2S	MSR#05-2074	1200916720	454741	14119-32-5	Plutonium-241	TRG	U	PU11RCM	MS1	122	10.3	PCI/G	0		30/08/2005	5:25	12	PCI/G	5.83	PCI/G	1	6.6	0.498	G	13	6	PCI/G	141	PR	
	MSR#05-2074	1200916721	454741	14119-32-5	Plutonium-241	TRG	U	PU11RCM	BS1	108	9.37	PCI/G	0		30/08/2005	5:57	11	PCI/G	5.34	PCI/G	1	0	0.505	G	13	3	PCI/G		PR	
	MSR#05-2074	1200916817	454777	10098-97-2	Strontium-90	TRG	U	E905M	LB1	-0.00598	0.0108	PCI/G	0	U	23/08/2005	7:06	0.0189	PCI/G	0.00923	PCI/G	1	0	12	G			PCI/G		PR	
5502-0002-006-1S	MSR#05-2074	1200916818	454777	10098-97-2	Strontium-90	TRG	U	E905M	LR1	0.0139	0.0152	PCI/G	0	U	23/08/2005	7:06	0.0255	PCI/G	0.0124	PCI/G	1	18	12.2	G			PCI/G	0.01	96	PR
5502-0002-006-1S	MSR#05-2074	1200916819	454777	10098-97-2	Strontium-90	TRG	U	E905M	MS1	2.24	0.138	PCI/G	0		23/08/2005	4:48	0.0925	PCI/G	0.0436	PCI/G	1	18	6.28	G	2.	85	PCI/G	2.87	PR	
	MSR#05-2074	1200916820	454777	10098-97-2	Strontium-90	TRG	U	E905M	BS1	1.44	0.0676	PCI/G	0		23/08/2005	4:48	0.042	PCI/G	0.02	PCI/G	1	0	12	G	1.	49	PCI/G		PR	
	MSR#05-2074	1200918485	455445	10028-17-8	Tritium	TRG	U	E906.0	LB1	1.61	5.31	PCI/G	0	U	23/08/2005	12:24	9.38	PCI/G	4.33	PCI/G	1	0	2.07	G			PCI/G		PR	
5502-0000-001-C2S	MSR#05-2074	1200918486	455445	10028-17-8	Tritium	TRG	U	E906.0	LR2	1.62	5.34	PCI/G	0	U	23/08/2005	12:55	9.42	PCI/G	4.35	PCI/G	1	2	2.02	G			PCI/G	2.48	PR	
5502-0000-001-C2S	MSR#05-2074	1200918487	455445	10028-17-8	Tritium	TRG	U	E906.0	MS2	74	10.1	PCI/G	0		23/08/2005	1:26	9.37	PCI/G	4.32	PCI/G	1	2	2.07	G	74	.3	PCI/G	76.8	PR	
	MSR#05-2074	1200918488	455445	10028-17-8	Tritium	TRG	U	E906.0	BS1	58.3	9.35	PCI/G	0		23/08/2005	1:58	9.44	PCI/G	4.35	PCI/G	1	0	2.07	G	73	.6	PCI/G		PR	
	MSR#05-2074	1200918896	455604	14133-76-7	Technetium-99	TRG	U	TC02RCM	LB1	0.0309	0.123	PCI/G	0	U	31/08/2005	5:53	0.21	PCI/G	0.102	PCI/G	1	0	9.59	G			PCI/G		PR	
	MSR#05-2074	1200918899	455604	14133-76-7	Technetium-99	TRG	U	TC02RCM	BS1	11.2	0.318	PCI/G	0		31/08/2005	7:33	0.215	PCI/G	0.105	PCI/G	1	0	9.59	G	12	.3	PCI/G		PR	
	MSR#05-2074	1200919030	455664	14331-83-0	Actinium-228	TRG	U	HASL300	LB1	0.055	0.0768	PCI/G	0	U	24/08/2005	4:14	0.0957	PCI/G	0.0425	PCI/G	1	0	210	G			PCI/G		PR	
	MSR#05-2074	1200919030	455664	14596-10-2	Americium-241	TRG	U	HASL300	LB1	-0.00288	0.0478	PCI/G	0	U	24/08/2005	4:14	0.0899	PCI/G	0.0421	PCI/G	1	0	210	G			PCI/G		PR	
	MSR#05-2074	1200919030	455664	14913-49-6	Bismuth-212	TRG	U	HASL300	LB1	0.106	0.134	PCI/G	0	U	24/08/2005	4:14	0.182	PCI/G	0.0809	PCI/G	1	0	210	G			PCI/G		PR	
	MSR#05-2074	1200919030	455664	14733-03-0	Bismuth-214	TRG	U	HASL300	LB1	0.054	0.036	PCI/G	0	U	24/08/2005	4:14	0.0573	PCI/G	0.0264	PCI/G	1	0	210	G			PCI/G		PR	
	MSR#05-2074	1200919030	455664	13967-70-9	Cesium-134	TRG	U	HASL300	LB1	0.00513	0.00944	PCI/G	0	U	24/08/2005	4:14	0.0252	PCI/G	0.0111	PCI/G	1	0	210	G			PCI/G		PR	
	MSR#05-2074	1200919030	455664	10045-97-3	Cesium-137	TRG	U	HASL300	LB1	0.00519	0.0116	PCI/G	0	U	24/08/2005	4:14	0.0244	PCI/G	0.0109	PCI/G	1	0	210	G			PCI/G		PR	
	MSR#05-2074	1200919030	455664	10198-40-0	Cobalt-60	TRG	U	HASL300	LB1	0.00894	0.0157	PCI/G	0	U	24/08/2005	4:14	0.0332	PCI/G	0.0146	PCI/G	1	0	210	G			PCI/G		PR	
	MSR#05-2074	1200919030	455664	14683-23-9	Europium-152	TRG	U	HASL300	LB1	-0.00726	0.0321	PCI/G	0	U	24/08/2005	4:14	0.0615	PCI/G	0.0282	PCI/G	1	0	210	G			PCI/G		PR	
	MSR#05-2074	1200919030	455664	15585-10-1	Europium-154	TRG	U	HASL300	LB1	-0.0224	0.034	PCI/G	0	U	24/08/2005	4:14	0.059	PCI/G	0.024	PCI/G	1	0	210	G			PCI/G		PR	
	MSR#05-2074	1200919030	455664	14391-16-3	Europium-155	TRG	U	HASL300	LB1	-0.019	0.0308	PCI/G	0	U	24/08/2005	4:14	0.0588	PCI/G	0.0274	PCI/G	1	0	210	G			PCI/G		PR	
	MSR#05-2074	1200919030	455664	15092-94-1	Lead-212	TRG	U	HASL300	LB1	0.0102	0.0301	PCI/G	0	U	24/08/2005	4:14	0.045	PCI/G	0.0213	PCI/G	1	0	210	G			PCI/G		PR	
	MSR#05-2074	1200919030	455664	15067-28-4	Lead-214	TRG	U	HASL300	LB1	0.0307	0.0291	PCI/G	0	U	24/08/2005	4:14	0.0522	PCI/G	0.0243	PCI/G	1	0	210	G			PCI/G		PR	
	MSR#05-2074	1200919030	455664	13966-31-9	Manganese-54	TRG	U	HASL300	LB1	-0.000301	0.0112	PCI/G	0	U	24/08/2005	4:14	0.0218	PCI/G	0.00954	PCI/G	1	0	210	G			PCI/G		PR	
	MSR#05-2074	1200919030	455664	14681-63-1	Niobium-94	TRG	U	HASL300	LB1	0.00218	0.0113	PCI/G	0	U	24/08/2005	4:14	0.0227	PCI/G	0.0102	PCI/G	1	0	210	G			PCI/G		PR	
	MSR#05-2074	1200919030	455664	13966-00-2	Potassium-40	TRG	U	HASL300	LB1	0.193	0.145	PCI/G	0	U	24/08/2005	4:14	0.342	PCI/G	0.151	PCI/G	1	0	210	G			PCI/G		PR	
	MSR#05-2074	1200919030	455664	13982-63-3	Radium-226	TRG	U	HASL300	LB1	0	0.036	PCI/G	0	UUI	24/08/2005	4:14	0.0445	PCI/G	0.02	PCI/G	1	0	210	G			PCI/G		PR	
	MSR#05-2074	1200919030	455664	14391-65-2	Silver-108m	TRG	U	HASL300	LB1	0.00147	0.00998	PCI/G	0	U	24/08/2005	4:14	0.0199	PCI/G	0.00895	PCI/G	1	0	210	G			PCI/G		PR	
	MSR#05-2074	1200919030	455664	14913-50-9	Thallium-208	TRG	U	HASL300	LB1	0.00518	0.0123	PCI/G	0	U	24/08/2005	4:14	0.0256	PCI/G	0.0116	PCI/G	1	0	210	G			PCI/G		PR	
5502-0002-006-1S	MSR#05-2074	1200919031	455664	14331-83-0	Actinium-228	TRG	U	HASL300	LR1	0.331	0.131	PCI/G	0		24/08/2005	3:50	0.146	PCI/G		PCI/G	1	18	175	G			PCI/G	0.22	6	PR
5502-0002-006-1S	MSR#05-2074	1200919031	455664	14596-10-2	Americium-241	TRG	U	HASL300	LR1	0.0268	0.0833	PCI/G	0	U	24/08/2005	3:50	0.164	PCI/G		PCI/G	1	18	175	G			PCI/G	-0.0	451	PR
5502-0002-006-1S	MSR#05-2074	1200919031	455664	14913-49-6	Bismuth-212	TRG	U	HASL300	LR1	0.248	0.26	PCI/G	0	U	24/08/2005	3:50	0.32	PCI/G		PCI/G	1	18	175	G			PCI/G	0.14	0	PR
5502-0002-006-1S	MSR#05-2074	1200919031	455664	14733-03-0	Bismuth-214	TRG	U	HASL300	LR1	0.327	0.0831	PCI/G	0		24/08/2005	3:50	0.0628	PCI/G		PCI/G	1	18	175	G			PCI/G	0.36	9	PR
5502-0002-006-1S	MSR#05-2074	1200919031	455664	13967-70-9	Cesium-134	TRG	U	HASL300	LR1	0.0186	0.0254	PCI/G	0	U	24/08/2005	3:50	0.0499	PCI/G		PCI/G	1	18	175	G			PCI/G	-0.0	107	PR
5502-0002-006-1S	MSR#05-2074	1200919031	455664	10045-97-3	Cesium-137	TRG	U	HASL300	LR1	-0.000195	0.0192	PCI/G	0	U	24/08/2005	3:50	0.0357	PCI/G		PCI/G	1	18	175	G			PCI/G	0.03	99	PR
5502-0002-006-1S	MSR#05-2074	1200919031	455664	10198-40-0	Cobalt-60	TRG	U	HASL300	LR1	0.0164	0.0226	PCI/G	0	U	24/08/2005	3:50	0.0477	PCI/G		PCI/G	1	18	175	G			PCI/G	0.01	55	PR
5502-0002-006-1S	MSR#05-2074	1200919031	455664	14683-23-9	Europium-152	TRG	U	HASL300	LR1	-0.000584	0.0495	PCI/G	0	U	24/08/2005	3:50	0.0943	PCI/G		PCI/G	1	18	175	G			PCI/G	-0.0	199	PR
5502-0002-006-1S	MSR#05-2074	1200919031	455664	15585-10-1	Europium-154	TRG	U	HASL300	LR1	-0.0301	0.0696	PCI/G	0	U	24/08/2005	3:50	0.124	PCI/G		PCI/G	1	18	175	G			PCI/G	0.00	564	PR
5502-0002-006-1S	MSR#05-2074	1200919031	455664	14391-16-3	Europium-155	TRG	U	HASL300	LR1	-0.00537	0.0575	PCI/G	0	U	24/08/2005	3:50	0.107	PCI/G		PCI/G	1	18	175	G			PCI/G	0.04	27	PR
5502-0002-006-1S	MSR#05-2074	1200919031	455664	15092-94-1	Lead-212	TRG	U	HASL300	LR1	0.307	0.0582	PCI/G	0		24/08/2005	3:50	0.0572	PCI/G		PCI/G	1	18	175	G			PCI/G	0.35	1	PR
5502-0002-006-1S	MSR#05-2074	1200919031	455664	15067-28-4	Lead-214	TRG	U	HASL300	LR1	0.393	0.0878	PCI/G	0		24/08/2005	3:50	0.0694	PCI/G		PCI/G	1	18	175	G			PCI/G	0.36	4	PR
5502-0002-006-1S	MSR#05-2074	1200919031	455664	13966-31-9	Manganese-54	TRG	U	HASL300	LR1	0.00848	0.0217	PCI/G	0	U	24/08/2005	3:50	0.0417	PCI/G		PCI/G	1	18	175	G			PCI/G	0.03	54	PR
5502-0002-006-1S	MSR#05-2074	1200919031	455664	14681-63-1	Niobium-94	TRG	U	HASL300	LR1	0.000898	0.0191	PCI/G	0	U	24/08/2005	3:50	0.0352	PCI/G		PCI/G	1	18	175	G			PCI/G	0.01	81	PR
5502-0002-006-1S	MSR#05-2074	1200919031	455664	13966-00-2	Potassium-40	TRG	U	HASL300	LR1	14	1.43	PCI/G	0		24/08/2005	3:50	0.342	PCI/G		PCI/G	1	18	175	G			PCI/G	13.8	PR	
5502-0002-006-1S	MSR#05-2074	1200919031	455664	13982-63-3	Radium-226	TRG	U	HASL300	LR1	0.327	0.0831	PCI/G	0		24/08/2005	3:50	0.0628	PCI/G		PCI/G	1	18	175	G			PCI/G	0.36	9	PR
5502-0002-006-1S	MSR#05-2074	1200919031	455664	14391-65-2	Silver-108m	TRG	U	HASL300	LR1	-0.000999	0.0171	PCI/G	0	U	24/08/2005	3:50	0.0322	PCI/G		PCI/G	1	18	175	G			PCI/G	-0.0	00997	PR
5502-0002-006-1S	MSR#05-2074	1200919031	455664	14913-50-9	Thallium-208	TRG	U	HASL300	LR1	0.144	0.0408	PCI/G	0		24/08/2005	3:50	0.0362	PCI/G		PCI/G	1	18	175	G			PCI/G	0.13	2	PR
	MSR#05-2074	1200919032	455664	14331-83-0	Actinium-228	TRG	U	HASL300	BS1	0.0161	0.837	PCI/G	0	U	23/08/2005	8:17	1.46	PCI/G	0.694	PCI/G	1	0	100	G			PCI/G		PR	
	MSR#05-2074	1200919032	455664	14596-10-2	Americium-241	TRG	U	HASL300	BS1	24.6	1.28	PCI/G	0		23/08/2005	8:17	0.836	PCI/G	0.411	PCI/G	1	0	100	G	24	.4	PCI/G		PR	
	MSR#05-2074	1200919032	455664	14913-49-6	Bismuth-212	TRG	U	HASL300	BS1	0.614	1.68	PCI/G	0	U	23/08/2005	8:17	2.86	PCI/G	1.36	PCI/G	1	0	100	G			PCI/G		PR	
	MSR#05-2074	1200919032	455664	14733-03-0	Bismuth-214	TRG	U	HASL300	BS1	0.213	0.378	PCI/G	0	U	23/08/2005	8:17	0.656	PCI/G	0.313	PCI/G	1	0	100	G			PCI/G		PR	
	MSR#05-2074	1200919032	455664	13967-70-9	Cesium-134	TRG	U	HASL300	BS1	-0.198	0.231	PCI/G	0	U	23/08/2005	8:17	0.388	PCI/G	0.183	PCI/G	1	0	100	G			PCI/G		PR	
	MSR#05-2074	1200919032	455664	10045-97-3	Cesium-137	TRG	U	HASL300	BS1	9.5	0.639	PCI/G	0		23/08/2005	8:17	0.422	PCI/G	0.203	PCI/G	1	0	100	G	9.	41	PCI/G		PR	
	MSR#05-2074	1200919032	455664	10198-40-0	Cobalt-60	TRG	U	HASL300	BS1	15.1	0.926	PCI/G	0		23/08/2005	8:17	0.382	PCI/G	0.177	PCI/G	1	0	100	G	14	.4	PCI/G		PR	
	MSR#05-2074	1200919032	455664	14683-23-9	Europium-152	TRG	U	HASL300	BS1	-0.423	0.425	PCI/G	0	U	23/08/2005	8:17	0.695	PCI/G	0.333	PCI/G	1	0	100	G			PCI/G		PR	
	MSR#05-2074	1200919032	455664	15585-10-1	Europium-154	TRG	U	HASL300	BS1	0.958	0.458	PCI/G	0		23/08/2005	8:17	0.918	PCI/G	0.421	PCI/G	1	0	100	G			PCI/G		PR	
	MSR#05-2074	1200919032	455664	14391-16-3	Europium-155	TRG	U	HASL300	BS1	-0.0701	0.48	PCI/G	0	U	23/08/2005	8:17	0.784	PCI/G	0.383	PCI/G	1	0	100	G			PCI/G		PR	
	MSR#05-2074	1200919032	455664	15092-94-1	Lead-212	TRG	U	HASL300	BS1	0.187	0.238	PCI/G	0	U	23/08/2005	8:17	0.421	PCI/G	0.204	PCI/G	1	0	100	G			PCI/G		PR	
	MSR#05-2074	1200919032	455664	15067-28-4	Lead-214	TRG	U	HASL300	BS1	0.169	0.33	PCI/G	0	U	23/08/2005	8:17	0.577	PCI/G	0.278	PCI/G	1	0	100	G			PCI/G		PR	
	MSR#05-2074	1200919032	455664	13966-31-9	Manganese-54	TRG	U	HASL300	BS1	0.082	0.208	PCI/G	0	U	23/08/2005	8:17	0.372	PCI/G	0.177	PCI/G	1	0	100	G			PCI/G		PR	
	MSR#05-2074	1200919032	455664	14681-63-1	Niobium-94	TRG	U	HASL300	BS1	-0.0113	0.199	PCI/G	0	U	23/08/2005	8:17	0.331	PCI/G	0.158	PCI/G	1	0	100	G			PCI/G		PR	
	MSR#05-2074	1200919032	455664	13966-00-2	Potassium-40	TRG	U	HASL300	BS1	1.15	2.03	PCI/G	0	U	23/08/2005	8:17	3.74	PCI/G	1.73	PCI/G	1	0	100	G			PCI/G		PR	
	MSR#05-2074	1200919032	455664	13982-63-3	Radium-226	TRG	U	HASL300	BS1	0.213	0.378	PCI/G	0	U	23/08/2005	8:17	0.656	PCI/G	0.313	PCI/G	1	0	100	G			PCI/G		PR	
	MSR#05-2074	1200919032	455664	14391-65-2	Silver-108m	TRG	U	HASL300	BS1	0.0132	0.164	PCI/G	0	U	23/08/2005	8:17	0.281	PCI/G	0.135	PCI/G	1	0	100	G			PCI/G		PR	
	MSR#05-2074	1200919032	455664	14913-50-9	Thallium-208	TRG	U	HASL300	BS1	0.0271	0.195	PCI/G	0	U	23/08/2005	8:17	0.332	PCI/G	0.158	PCI/G	1	0	100	G			PCI/G		PR	
	MSR#05-2074	1200919345	455806	13781-37-8	Nickel-63	TRG	U	LSC	LB1	-3.1	6.19	PCI/G	0	U	31/08/2005	12:10	11.2	PCI/G	5.35	PCI/G	1	0	0.396	G			PCI/G		PR	
5502-0000-002-C2S	MSR#05-2074	1200919346	455806	13781-37-8	Nickel-63	TRG	U	LSC	LR1	-0.993	6.38	PCI/G	0	U	31/08/2005	12:27	11.3	PCI/G	5.4	PCI/G	1	6.6	0.396	G			PCI/G	-2.9	1	PR
5502-0000-002-C2S	MSR#05-2074	1200919347	455806	13781-37-8	Nickel-63	TRG	U	LSC	MS1	434	22.5	PCI/G	0		31/08/2005	12:44	15.1	PCI/G	7.22	PCI/G	1	6.6	0.31	G	48	3	PCI/G	480	PR	
	MSR#05-2074	1200919348	455806	13781-37-8	Nickel-63	TRG	U	LSC	BS1	365	17.8	PCI/G	0		31/08/2005	1:02	11.4	PCI/G	5.45	PCI/G	1	0	0.396	G	37	8	PCI/G		PR	
	MSR#05-2074	1200919353	455809	14762-75-5	Carbon-14	TRG	U	LSC	LB1	0.00238	0.101	PCI/G	0	U	30/08/2005	6:05	0.171	PCI/G	0.0845	PCI/G	1	0	9.25	G			PCI/G		PR	
5502-0000-002-C2S	MSR#05-2074	1200919354	455809	14762-75-5	Carbon-14	TRG	U	LSC	LR1	0.00903	0.104	PCI/G	0	U	30/08/2005	7:37	0.177	PCI/G	0.0875	PCI/G	1	6.6	9.23	G			PCI/G	0.06	54	PR

5502-0000-002-C2S	MSR#05-2074	1200919355	455809	14762-75-5	Carbon-14	TRG	U	LSC	MS1	6.26	0.241	PCI/G	0			30/08/2005	2:18	0.245	PCI/G	0.12	PCI/G	1	6.6	9.25	G	7.	03	PCI/G	7.10	PR	
	MSR#05-2074	1200919356	455809	14762-75-5	Carbon-14	TRG	U	LSC	BS1	6.49	0.246	PCI/G	0			30/08/2005	3:05	0.248	PCI/G	0.122	PCI/G	1	0	9.25	G	7.	03	PCI/G		PR	
	MSR#05-2074	1200926169	458659	14681-59-5	Iron-55	TRG	U	LSC	LB1	-0.239	1.2	PCI/G	0	U		6/9/2005	10:44	1.64	PCI/G	0.813	PCI/G	1	0	3.86	G		PCI/G			PR	
	MSR#05-2074	1200926172	458659	14681-59-5	Iron-55	TRG	U	LSC	BS1	48.1	4.65	PCI/G	0			5/9/2005	12:04	4.8	PCI/G	2.33	PCI/G	1	0	3.86	G	56	.6	PCI/G		PR	

GENERAL ENGINEERING LABORATORIES, LLC
a Member of THE GEL GROUP, INC.
Meeting Today's Needs with a Vision for Tomorrow

August 9, 2004

Mr. Pete Hollenbeck
Connecticut Yankee Atomic Power
Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424

Re: Concrete PO# 002337
Work Order: 141673
SDG: MSR#05-1930

Dear Mr. Hollenbeck:

General Engineering Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on July 28, 2005. This data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4243.

Sincerely,

Cheryl Jones
Project Manager

Purchase Order: 002337
Chain of Custody: 2005-00332, 2005-00333, 2005-00334, 2005-00335
Enclosures

P.O. Box 30712 • Charleston, SC 29417 • 2040 Savage Road (29407)
Phone (843) 556-8171 • Fax (843) 766-1178 • www.gel.com

CONNECTICUT YANKEE
RE: CONCRETE
PO# 002337
Work Order: 141673
SDG: MSR#05-1930

141673001	5502-0000-002-C1C-01	141673017	5502-0002-008-C1C-01
141673002	5502-0000-002-C1C-02	141673018	5502-0002-008-C1C-02
141673003	5502-0000-003-C1C-01	141673019	5502-0002-008-C2C-03
141673004	5502-0000-003-C1C-02	141673020	5502-0002-008-C2C-04
141673005	5502-0001-005-C1C-01	141673021	5502-0001-009-C1C-01
141673006	5502-0001-005-C1C-02	141673022	5502-0001-009-C1C-02
141673007	5502-0001-005-C2C-03	141673023	5502-0001-009-C2C-03
141673008	5502-0001-005-C2C-04	141673024	5502-0001-009-C2C-04
141673009	5502-0002-006-C1C-01	141673025	5502-0001-010-C1C-01
141673010	5502-0002-006-C1C-02	141673026	5502-0001-010-C1C-02
141673011	5502-0002-006-C2C-03	141673027	5502-0001-010-C2C-03
141673012	5502-0002-006-C2C-04	141673028	5502-0001-010-C2C-04
141673013	5502-0002-007-C1C-01	141673029	5502-0000-001-C1C-01
141673014	5502-0002-007-C1C-02	141673030	5502-0000-001-C1C-02
141673015	5502-0002-007-C2C-03	141673031	5502-0000-001-C1C-03
141673016	5502-0002-007-C2C-04	141673032	5502-0000-001-C1C-04

Table of Contents

General Narrative **1**

Chain of Custody **5**

Cooler Receipt Checklist **10**

Radiological Analysis **13**
Sample Data Summary 34
Quality Control Data 103

GENERAL NARRATIVE

CASE NARRATIVE
For
CONNECTICUT YANKEE
RE: Concrete
PO# 002337
Work Order: 141673

August 9, 2005

Laboratory Identification:
General Engineering Laboratories, LLC

Mailing Address:
P.O. Box 30712
Charleston, South Carolina 29417

Express Mail Delivery and Shipping Address:
2040 Savage Road
Charleston, South Carolina 29407

Telephone Number:
(843) 556-8171

Summary:

Sample receipt
The samples arrived at General Engineering Laboratories, LLC, (GEL) in Charleston, South Carolina July 28, 2005. All sample containers arrived without any visible signs of tampering or breakage. The chain of custody contained the proper documentation and signatures except in items of note located below.

The laboratory prepared the following sample(s):

Sample ID	Client Sample ID
141673001	5502-0000-002-C1C-01
141673002	5502-0000-002-C1C-02
141673003	5502-0000-003-C1C-01
141673004	5502-0000-003-C1C-02
141673005	5502-0001-005-C1C-01
141673006	5502-0001-005-C1C-02
141673007	5502-0001-005-C2C-03
141673008	5502-0001-005-C2C-04
141673009	5502-0002-006-C1C-01
141673010	5502-0002-006-C1C-02

Sample ID	Client Sample ID
141673011	5502-0002-006-C2C-03
141673012	5502-0002-006-C2C-04
141673013	5502-0002-007-C1C-01
141673014	5502-0002-007-C1C-02
141673015	5502-0002-007-C2C-03
141673016	5502-0002-007-C2C-04
141673017	5502-0002-008-C1C-01
141673018	5502-0002-008-C1C-02
141673019	5502-0002-008-C2C-03
141673020	5502-0002-008-C2C-04
141673021	5502-0001-009-C1C-01
141673022	5502-0001-009-C1C-02
141673023	5502-0001-009-C2C-03
141673024	5502-0001-009-C2C-04
141673025	5502-0001-010-C1C-01
141673026	5502-0001-010-C1C-02
141673027	5502-0001-010-C2C-03
141673028	5502-0001-010-C2C-04
141673029	5502-0000-001-C1C-01
141673030	5502-0000-001-C1C-02
141673031	5502-0000-001-C1C-03
141673032	5502-0000-001-C1C-04

Items of Note:

There are no items of note.

Case Narrative:

Sample analyses were conducted using methodology as outlined in General Engineering Laboratories (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are listed below by analytical parameter.

Analytical Request:

Twenty-nine concrete samples were analyzed for CHGAM, Sr-90, and H_3.
Three concrete samples were analyzed for CHALL.

Internal Chain of Custody:

Custody was maintained for all of these samples.

Data Package:

The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist and Radiochemistry.

I certify that this data package is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or a designee, as verified by the following signature.

Cheryl Jones
Project Manager

CHAIN OF CUSTODY

Chain of Custody Form

Connecticut Yankee Atomic Power Company
362 Injun Hollow Road, East Hampton, CT 06424
860-267-2556

No. 2005-00332
141673'1

Project Name: Haddam Neck Decommissioning

Contact Name & Phone:
Pete Hollenbeck 860-267-3923

Analytical Lab (Name, City, State):
General Engineering Laboratories
2040 Savage Road
Charleston, SC 29407 ATT: Cheryl Jones

Priority: ☐ 30 D. ☒ 14 D. ☐ 7 D.
Other:

Lab Use Only
Comments:

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	CHGAM	H-3	Sr-90	CHALL			Comment, Preservation	Lab Sample ID
5502-0000-002-C1C-01	6/22/05	1045	CT	CR	BP				X			2"	
5502-0000-002-C1C-02	6/22/05	1045	CT	CR	BP	X	X	X				2"	
5502-0000-003-C1C-01	6/22/05	1350	CT	CR	BP	X	X	X				2"	
5502-0000-003-C1C-02	6/22/05	1350	CT	CR	BP	X	X	X				2"	
5502-0001-005-C1C-01	6/28/05	0950	CT	CR	BP	X	X	X				2"	
5502-0001-005-C1C-02	6/28/05	0950	CT	CR	BP	X	X	X				2"	
5502-0001-005-C2C-03	6/28/05	0950	CT	CR	BP	X	X	X				2"	
5502-0001-005-C2C-04	6/28/05	0950	CT	CR	BP	X	X	X				2"	

NOTES: PO #: 002337 MSR #: 05-1930 ☒ LTP QA ☐ Radwaste QA ☐ Non QA

Samples Shipped Via:
☒ Fed Ex
☐ UPS
☐ Hand
☐ Other ____

Bill of Lading #
7900 9925 2602

Internal Container Temp.: ____ Deg. C

Custody Sealed?
Y ☐ N ☐

Custody Seal Intact?
Y ☐ N ☐

1) Relinquished By	Date/Time	2) Received By	Date/Time
[signature]	7/27/05 1330	[signature]	7/28/05 930
3) Relinquished By	Date/Time	4) Received By	Date/Time
5) Relinquished By	Date/Time	6) Received By	Date/Time

Connecticut Yankee Atomic Power Company
362 Injun Hollow Road, East Hampton, CT 06424
860-267-2556

Chain of Custody Form

No. 2005-00333

141673

Project Name: Haddam Neck Decommissioning

Contact Name & Phone:
Pete Hollenbeck 860-267-3923

Analytical Lab (Name, City, State):
General Engineering Laboratories
2040 Savage Road
Charleston, SC 29407 ATT: Cheryl Jones

Priority: ☐ 30 D. ☒ 14 D. ☐ 7 D.
Other:

Lab Use Only
Comments:

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	CHGAM	H-3	Sr-90	CHALL			Comment, Preservation	Lab Sample ID
5502-0002-006-C1C-01	7/6/05	1045	CT	CR	BP				X			2"	
5502-0002-006-C1C-02	7/6/05	1045	CT	CR	BP	X	X	X				2"	
5502-0002-006-C2C-03	7/6/05	1045	CT	CR	BP	X	X	X				2"	
5502-0002-006-C2C-04	7/6/05	1045	CT	CR	BP	X	X	X				2"	
5502-0002-007-C1C-01	7/6/05	1600	CT	CR	BP	X	X	X				2"	
5502-0002-007-C1C-02	7/6/05	1600	CT	CR	BP	X	X	X				2"	
5502-0002-007-C2C-03	7/6/05	0855	CT	CR	BP	X	X	X				2"	
5502-0002-007-C2C-04	7/6/05	0855	CT	CR	BP	X	X	X				2"	

NOTES: PO #: 002337 MSR #: 05-1930 ☒ LTP QA ☐ Radwaste QA ☐ Non QA

Samples Shipped Via:
☒ Fed Ex
☐ UPS
☐ Hand
☐ Other ____

Bill of Lading #
7900 9925 2602

Internal Container Temp.: ____ Deg. C

Custody Sealed? Y ☐ N ☐

Custody Seal Intact? Y ☐ N ☐

1) Relinquished By	Date/Time	2) Received By	Date/Time
John O. Foster	7/27/05 1330	Marian Gathers	7/28/05 930
3) Relinquished By	Date/Time	4) Received By	Date/Time
5) Relinquished By	Date/Time	6) Received By	Date/Time

Chain of Custody Form

Connecticut Yankee Atomic Power Company
362 Injun Hollow Road, East Hampton, CT 06424
860-267-2556

No. 2005-00334
141673%

Project Name: Haddam Neck Decommissioning

Contact Name & Phone:
Pete Hollenbeck 860-267-3923

Analytical Lab (Name, City, State):
General Engineering Laboratories
2040 Savage Road
Charleston, SC 29407 ATT: Cheryl Jones

Priority: ☐ 30 D. ☒ 14 D. ☐ 7 D.
Other:

Lab Use Only
Comments:

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	CHGAM	H-3	Sr-90	CHALL			Comment, Preservation	Lab Sample ID
5502-0002-008-C1C-01	7/5/05	1530	CT	CR	BP	X	X	X				2"	
5502-0002-008-C1C-02	7/5/05	1530	CT	CR	BP	X	X	X				2"	
5502-0002-008-C2C-03	7/5/05	1530	CT	CR	BP	X	X	X				2"	
5502-0002-008-C2C-04	7/5/05	1530	CT	CR	BP	X	X	X				2"	
5502-0001-009-C1C-01	6/27/05	1130	CT	CR	BP	X	X	X				2"	
5502-0001-009-C1C-02	6/27/05	1130	CT	CR	BP	X	X	X				2"	
5502-0001-009-C2C-03	6/27/05	1150	CT	CR	BP	X	X	X				2"	
5502-0001-009-C2C-04	6/27/05	1150	CT	CR	BP	X	X	X				2"	

NOTES: PO #: 002337 MSR #: 05- 1930 ☒ LTP QA ☐ Radwaste QA ☐ Non QA

Samples Shipped Via:
☒ Fed Ex
☐ UPS
☐ Hand
☐ Other _____

Bill of Lading #
7900 9925 2602

Internal Container Temp.: ____ Deg. C

Custody Sealed? Y ☐ N ☐

Custody Seal Intact? Y ☐ N ☐

1) Relinquished By: John O'Toole Date/Time 7/27/05 1330	2) Received By: Marian Gatherum Date/Time 7/28/05 0930
3) Relinquished By Date/Time	4) Received By Date/Time
5) Relinquished By Date/Time	6) Received By Date/Time

Chain of Custody Form

Connecticut Yankee Atomic Power Company
362 Injun Hollow Road, East Hampton, CT 06424
860-267-2556

No. 2005-00335
141673

Project Name: Haddam Neck Decommissioning

Contact Name & Phone:
Pete Hollenbeck 860-267-3923

Analytical Lab (Name, City, State):
General Engineering Laboratories
2040 Savage Road
Charleston, SC 29407 ATT: Cheryl Jones

Priority: ☐ 30 D. ☒ 14 D. ☐ 7 D.
Other:

Lab Use Only
Comments:

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	CHGAM	H-3	Sr-90	CHALL			Comment, Preservation	Lab Sample ID
5502-0001-010-C1C-01	6/23/05	1540	CT	CR	BP				X			2"	
5502-0001-010-C1C-02	6/23/05	1540	CT	CR	BP	X	X	X				2"	
5502-0001-010-C2C-03	6/23/05	1540	CT	CR	BP	X	X	X				2"	
5502-0001-010-C2C-04	6/23/05	1540	CT	CR	BP	X	X	X				2"	
5502-0000-001-C1C-01	6/21/05	1620	CT	CR	BP	X	X	X				2"	
5502-0000-001-C1C-02	6/21/05	1620	CT	CR	BP	X	X	X				2"	
5502-0000-001-C1C-03	6/21/05	1620	CT	CR	BP	X	X	X				2"	
5502-0000-001-C1C-04	6/21/05	1620	CT	CR	BP	X	X	X				2"	

NOTES: PO #: 002337 MSR #: 05- 1930 ☒ LTP QA ☐ Radwaste QA ☐ Non QA

Samples Shipped Via:
☒ Fed Ex
☐ UPS
☐ Hand
☐ Other _____

Bill of Lading #
7900 9925 2602

Internal Container Temp.: ____ Deg. C

Custody Sealed? Y ☐ N ☐

Custody Seal Intact? Y ☐ N ☐

1) Relinquished By	Date/Time	2) Received By	Date/Time
[signature]	7/27/05 1330	[signature]	7/28/05 930
3) Relinquished By	Date/Time	4) Received By	Date/Time
5) Relinquished By	Date/Time	6) Received By	Date/Time

COOLER RECEIPT CHECKLIST

Figure 1. Sample Check-in List

Date/Time Received: 7/28/05 9:30

SDG#: MSR#05-1930

Work Order Number: 141673.1

Shipping Container ID: FX 79009925 2602 Chain of Custody # 2005-00332 – 00335

1. Custody Seals on shipping container intact? Yes [✓] No [ ]
2. Custody Seals dated and signed? Yes [✓] No [ ]
3. Chain-of-Custody record present? Yes [✓] No [ ]
4. Cooler temperature 26°C
5. Vermiculite/packing materials is: Wet [ ] Dry [ ] N/A [✓]
6. Number of samples in shipping container: 32
7. Sample holding times exceeded? Yes [ ] No [✓]

8. Samples have:

_____tape _____hazard labels

_____custody seals ✓ appropriate sample labels

9. Samples are:

✓ in good condition _____leaking

_____broken _____have air bubbles

10. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
11. Description of anomalies (include sample numbers): NA

Sample Custodian/Laboratory: Marian Gathers Date: 7/28/05

Telephoned to:_____ On_____ By_____

SAMPLE RECEIPT & REVIEW FORM

GENERAL ENGINEERING LABORATORIES, LLC

PM use only

Client: Connecticut Yankee	SDG/ARCOC/Work Order: 141673
Date Received: 7/28/05	PM(A) Review (ensure non-conforming items are resolved prior to signing):
Received By: MB	

	Sample Receipt Criteria	Conforming	NA	Non-Conforming	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?				Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within (4 +/-2 C)? Record preservation method.				Circle Temp device serial # ice bags blue ice dry ice none other(describe) 26°C
3	Chain of custody documents included with shipment?				
4	Sample containers intact and sealed?				Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?				Sample ID's, containers affected and observed pH:
6	VOA vials free of headspace (defined as < 6mm bubble)?				Sample ID's and containers affected:
7	Samples received within holding time?				Id's and tests affected:
8	Sample ID's on COC match ID's on bottles?				Sample ID's and containers affected:
9	Date & time on COC match date & time on bottles?				Sample ID's affected:
10	Number of containers received match number indicated on COC?				Sample ID's affected:
11	COC form is properly signed in relinquished/received sections?				
12	Air Bill ,Tracking #'s, & Additional Comments	FX 7900 9925 2602			

Radiological Information	Non-RAD	RAD	RADII	RSO RAD Receipt #
What is the radiological classification of the samples?		✓		Comments:
Radioactivity Screening Results (maximum observed @PM)	0/M 40			*If > x2 area background is observed on a non-radioactive sample, contact the RSO to investigate.

PM (or PMA) review of Receiving Rad classification: _____ Initials 7/28/05 Date

RADIOLOGICAL ANALYSIS

Radiochemistry Case Narrative
Connecticut Yankee Atomic Power Co. (YANK)
SDG MSR#05-1930

Method/Analysis Information

Product:	**Alphaspec Am241, Cm, Solid-TRU2,ALL2 (CT)**
Analytical Method:	DOE EML HASL-300, Am-05-RC Modified
Prep Method:	Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method:	Dry Soil Prep
Analytical Batch Number:	447483
Prep Batch Number:	447437
Dry Soil Prep GL-RAD-A-021 Batch Number:	447436

Sample ID	Client ID
141673001	5502-0000-002-C1C-01
141673009	5502-0002-006-C1C-01
141673025	5502-0001-010-C1C-01
1200899637	Method Blank (MB)
1200899638	141673001(5502-0000-002-C1C-01) Sample Duplicate (DUP)
1200899639	141673001(5502-0000-002-C1C-01) Matrix Spike (MS)
1200899640	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 14.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 141673001 (5502-0000-002-C1C-01).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information

All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Manual Integration
No manual integrations were performed on data in this batch.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Alphaspec Pu, Solid-TRU2,ALL2 (CT)**
Analytical Method:	DOE EML HASL-300, Pu-11-RC Modified
Prep Method:	Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method:	Dry Soil Prep
Analytical Batch Number:	447487
Prep Batch Number:	447437
Dry Soil Prep GL-RAD-A-021 Batch Number:	447436

Sample ID	Client ID
141673001	5502-0000-002-C1C-01
141673009	5502-0002-006-C1C-01
141673025	5502-0001-010-C1C-01
1200899650	Method Blank (MB)
1200899651	141673001(5502-0000-002-C1C-01) Sample Duplicate (DUP)
1200899652	141673001(5502-0000-002-C1C-01) Matrix Spike (MS)
1200899653	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 14.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 141673001 (5502-0000-002-C1C-01).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Manual Integration
No manual integrations were performed on data in this batch.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Liquid Scint Pu241, Solid-TRU2,ALL2 (CT)**
Analytical Method:	DOE EML HASL-300, Pu-11-RC Modified
Prep Method:	Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method:	Dry Soil Prep
Analytical Batch Number:	447490
Prep Batch Number:	447437
Dry Soil Prep GL-RAD-A-021 Batch Number:	447436

Sample ID	Client ID
141673001	5502-0000-002-C1C-01
141673009	5502-0002-006-C1C-01
141673025	5502-0001-010-C1C-01
1200899654	Method Blank (MB)
1200899655	141673001(5502-0000-002-C1C-01) Sample Duplicate (DUP)
1200899656	141673001(5502-0000-002-C1C-01) Matrix Spike (MS)
1200899657	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-035 REV# 7.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 141673001 (5502-0000-002-C1C-01).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
Samples 1200899656 (5502-0000-002-C1C-01) and 1200899657 (LCS) were recounted due to low/high recovery.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following NCR was generated for this SDG:
NCR 230592 was generated due to Failed Recovery for MS/PS 1. The tracer yields may be biased high due to interference from an undetermined isotope. This is causing the results and the matrix spike 1200899656 and the laboratory control sample 1200899657 recoveries to be slightly low. There is no activity in any of the samples. 1. Reporting results.

Manual Integration
No manual integrations were performed on data in this batch.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)**
Analytical Method:	EML HASL 300, 4.5.2.3
Prep Method:	Dry Soil Prep
Analytical Batch Number:	447538
Prep Batch Number:	447436

Sample ID	Client ID

141673013	5502-0002-007-C1C-01
141673014	5502-0002-007-C1C-02
141673015	5502-0002-007-C2C-03
141673016	5502-0002-007-C2C-04
141673017	5502-0002-008-C1C-01
141673018	5502-0002-008-C1C-02
141673019	5502-0002-008-C2C-03
141673020	5502-0002-008-C2C-04
141673021	5502-0001-009-C1C-01
141673022	5502-0001-009-C1C-02
141673023	5502-0001-009-C2C-03
141673024	5502-0001-009-C2C-04
141673025	5502-0001-010-C1C-01
141673026	5502-0001-010-C1C-02
141673027	5502-0001-010-C2C-03
141673028	5502-0001-010-C2C-04
141673029	5502-0000-001-C1C-01
141673030	5502-0000-001-C1C-02
141673031	5502-0000-001-C1C-03
141673032	5502-0000-001-C1C-04
1200899783	Method Blank (MB)
1200899784	141673013(5502-0002-007-C1C-01) Sample Duplicate (DUP)
1200899785	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-013 REV# 10.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 141673013 (5502-0002-007-C1C-01).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Additional Comments
The relative percent difference for Ac-228 did not meet with the duplication criteria. However, when a relative error ratio is calculated, precision is shown at 1.30586.

Qualifier information

Qualifier	Reason	Analyte	Sample
UI	Data rejected due to low abundance.	Cesium-134	1200899784
			141673015
			141673016
			141673025
			141673031
		Cobalt-60	141673013
UI	Data rejected due to no valid peak.	Bismuth-212	141673013
			141673031

Method/Analysis Information

Product:	**Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)**
Analytical Method:	EML HASL 300, 4.5.2.3
Prep Method:	Dry Soil Prep
Analytical Batch Number:	447540
Prep Batch Number:	447436

Sample ID	Client ID
141673001	5502-0000-002-C1C-01
141673002	5502-0000-002-C1C-02
141673003	5502-0000-003-C1C-01
141673004	5502-0000-003-C1C-02
141673005	5502-0001-005-C1C-01
141673006	5502-0001-005-C1C-02
141673007	5502-0001-005-C2C-03
141673008	5502-0001-005-C2C-04
141673009	5502-0002-006-C1C-01
141673010	5502-0002-006-C1C-02
141673011	5502-0002-006-C2C-03
141673012	5502-0002-006-C2C-04
1200899792	Method Blank (MB)
1200899793	141589041(3000-0000-212C-3C-06) Sample Duplicate (DUP)
1200899794	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering

Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-013 REV# 10.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 141589041 (3000-0000-212C-3C-06).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Additional Comments
The relative percent difference for Tl-208 did not meet the duplication criteria. However, when a relative error ratio is calculated, precision is shown at 1.19737.

Qualifier information

Qualifier	Reason	Analyte	Sample
UI	Data rejected due to low abundance.	Cesium-134	141673009
UI	Data rejected due to no valid peak.	Bismuth-212	141673001
			141673002
			141673009

Method/Analysis Information

Product:	**GFPC, Sr90, solid-HTD2,ALL2 (CT)**
Analytical Method:	EPA 905.0 Modified
Prep Method:	Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method:	Dry Soil Prep
Analytical Batch Number:	447617
Prep Batch Number:	447437
Dry Soil Prep GL-RAD-A-021 Batch Number:	447436

Sample ID	Client ID
141673001	5502-0000-002-C1C-01
141673002	5502-0000-002-C1C-02
141673003	5502-0000-003-C1C-01
141673004	5502-0000-003-C1C-02
141673005	5502-0001-005-C1C-01
141673006	5502-0001-005-C1C-02
141673007	5502-0001-005-C2C-03
141673008	5502-0001-005-C2C-04
141673009	5502-0002-006-C1C-01
141673010	5502-0002-006-C1C-02
141673011	5502-0002-006-C2C-03
141673012	5502-0002-006-C2C-04
141673013	5502-0002-007-C1C-01
141673014	5502-0002-007-C1C-02
141673015	5502-0002-007-C2C-03
141673016	5502-0002-007-C2C-04
1200899967	Method Blank (MB)
1200899968	141673001(5502-0000-002-C1C-01) Sample Duplicate (DUP)
1200899969	141673001(5502-0000-002-C1C-01) Matrix Spike (MS)
1200899970	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-004 REV# 9.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 141673001 (5502-0000-002-C1C-01).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Chemical Recoveries
All chemical recoveries meet the required acceptance limits for this sample set.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**GFPC, Sr90, solid-HTD2,ALL2 (CT)**
Analytical Method:	EPA 905.0 Modified
Prep Method:	Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method:	Dry Soil Prep
Analytical Batch Number:	447618
Prep Batch Number:	447439
Dry Soil Prep GL-RAD-A-021 Batch Number:	447438

Sample ID	Client ID
141673017	5502-0002-008-C1C-01
141673018	5502-0002-008-C1C-02
141673019	5502-0002-008-C2C-03
141673020	5502-0002-008-C2C-04
141673021	5502-0001-009-C1C-01
141673022	5502-0001-009-C1C-02
141673023	5502-0001-009-C2C-03
141673024	5502-0001-009-C2C-04
141673025	5502-0001-010-C1C-01
141673026	5502-0001-010-C1C-02
141673027	5502-0001-010-C2C-03
141673028	5502-0001-010-C2C-04
141673029	5502-0000-001-C1C-01
141673030	5502-0000-001-C1C-02
141673031	5502-0000-001-C1C-03
141673032	5502-0000-001-C1C-04
1200899971	Method Blank (MB)
1200899972	141673019(5502-0002-008-C2C-03) Sample Duplicate (DUP)
1200899973	141673019(5502-0002-008-C2C-03) Matrix Spike (MS)
1200899974	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-004 REV# 9.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 141673019 (5502-0002-008-C2C-03).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
Samples 1200899972 (5502-0002-008-C2C-03) and 141673019 (5502-0002-008-C2C-03) were recounted due to high relative percent difference/relative error ratio.
Samples 141673017 (5502-0002-008-C1C-01), 141673018 (5502-0002-008-C1C-02), 141673019 (5502-0002-008-C2C-03), 141673020 (5502-0002-008-C2C-04), 141673021 (5502-0001-009-C1C-01), 141673022 (5502-0001-009-C1C-02), 141673023 (5502-0001-009-C2C-03), 141673024 (5502-0001-009-C2C-04), 141673025 (5502-0001-010-C1C-01), 141673029 (5502-0000-001-C1C-01), 141673030 (5502-0000-001-C1C-02), 141673031 (5502-0000-001-C1C-03), and 141673032 (5502-0000-001-C1C-04) were recounted to verify results due to the quality control sample result not verifying when recounted due to a high relative error ratio value. Second counts being reported.

Chemical Recoveries
All chemical recoveries meet the required acceptance limits for this sample set.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

Product:	**Liquid Scint Tc99, Solid-HTD2,ALL2 (CT)**
Analytical Method:	DOE EML HASL-300, Tc-02-RC Modified
Analytical Batch Number:	447276

Sample ID	Client ID
141673001	5502-0000-002-C1C-01
141673009	5502-0002-006-C1C-01
141673025	5502-0001-010-C1C-01
1200899065	Method Blank (MB)
1200899066	141673001(5502-0000-002-C1C-01) Sample Duplicate (DUP)
1200899067	141673001(5502-0000-002-C1C-01) Matrix Spike (MS)
1200899068	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-005 REV# 12.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 141673001 (5502-0000-002-C1C-01).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Liquid Scint Fe55, Solid-HTD2,ALL2 (CT)**
Analytical Method:	DOE RESL Fe-1, Modified
Prep Method:	Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method:	Dry Soil Prep
Analytical Batch Number:	447648
Prep Batch Number:	447437
Dry Soil Prep GL-RAD-A-021 Batch Number:	447436

Sample ID	Client ID
141673001	5502-0000-002-C1C-01
141673009	5502-0002-006-C1C-01
141673025	5502-0001-010-C1C-01
1200900069	Method Blank (MB)
1200900070	141673001(5502-0000-002-C1C-01) Sample Duplicate (DUP)
1200900071	141673001(5502-0000-002-C1C-01) Matrix Spike (MS)
1200900072	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-040 REV# 2.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 141673001 (5502-0000-002-C1C-01).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
Samples 141673001 (5502-0000-002-C1C-01), 141673009 (5502-0002-006-C1C-01), and 141673025 (5502-0001-010-C1C-01) were recounted due to high MDAs.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Additional Comments
The sample MDA was used to calculate the relative percent difference for sample 1200900070 (5502-0000-002-C1C-01).

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Liquid Scint Ni63, Solid-HTD2,ALL2 (CT)**
Analytical Method:	DOE RESL Ni-1, Modified
Prep Method:	Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method:	Dry Soil Prep
Analytical Batch Number:	451367
Prep Batch Number:	447437
Dry Soil Prep GL-RAD-A-021 Batch Number:	447436

Sample ID	Client ID
141673001	5502-0000-002-C1C-01
141673009	5502-0002-006-C1C-01
141673025	5502-0001-010-C1C-01
1200908779	Method Blank (MB)
1200908780	141673001(5502-0000-002-C1C-01) Sample Duplicate (DUP)
1200908781	141673001(5502-0000-002-C1C-01) Matrix Spike (MS)
1200908782	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-022 REV# 7.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry

All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 141673001 (5502-0000-002-C1C-01).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
Samples were reprepped due to low/high recovery.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)**
Analytical Method:	EPA 906.0 Modified
Analytical Batch Number:	447277

Sample ID	Client ID
141673001	5502-0000-002-C1C-01
141673002	5502-0000-002-C1C-02
141673003	5502-0000-003-C1C-01
141673004	5502-0000-003-C1C-02
141673005	5502-0001-005-C1C-01
141673006	5502-0001-005-C1C-02
141673007	5502-0001-005-C2C-03
141673008	5502-0001-005-C2C-04
141673009	5502-0002-006-C1C-01
141673010	5502-0002-006-C1C-02
141673011	5502-0002-006-C2C-03
141673012	5502-0002-006-C2C-04
141673013	5502-0002-007-C1C-01
141673014	5502-0002-007-C1C-02
141673015	5502-0002-007-C2C-03
141673016	5502-0002-007-C2C-04

1200899069	Method Blank (MB)
1200899070	141673001(5502-0000-002-C1C-01) Sample Duplicate (DUP)
1200899071	141673001(5502-0000-002-C1C-01) Matrix Spike (MS)
1200899072	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-002 REV# 10.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 141673001 (5502-0000-002-C1C-01).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
Samples were recounted due to high MDAs.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following NCR was generated for this SDG:
NCR 229983 was generated due to Container scanning event for custody missed. 1. The analyst did not scan the samples 141673001, 002,003,004,005,006,007,008,009,010,011,012,013,014,015 016,1200899069,1200899070,1200899071 and 1200899072 into the batch prior to analysis, however the samples did remain in their custody at all times. The error has been corrected and the analyst has been instructed on proper scanning procedures. 1. Reporting results.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)**
Analytical Method:	EPA 906.0 Modified
Analytical Batch Number:	447279

Sample ID	Client ID
141673017	5502-0002-008-C1C-01
141673018	5502-0002-008-C1C-02
141673019	5502-0002-008-C2C-03
141673020	5502-0002-008-C2C-04
141673021	5502-0001-009-C1C-01
141673022	5502-0001-009-C1C-02
141673023	5502-0001-009-C2C-03
141673024	5502-0001-009-C2C-04
141673025	5502-0001-010-C1C-01
141673026	5502-0001-010-C1C-02
141673027	5502-0001-010-C2C-03
141673028	5502-0001-010-C2C-04
141673029	5502-0000-001-C1C-01
141673030	5502-0000-001-C1C-02
141673031	5502-0000-001-C1C-03
141673032	5502-0000-001-C1C-04
1200899075	Method Blank (MB)
1200899076	141673017(5502-0002-008-C1C-01) Sample Duplicate (DUP)
1200899077	141673017(5502-0002-008-C1C-01) Matrix Spike (MS)
1200899078	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-002 REV# 10.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 141673017 (5502-0002-008-C1C-01).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Liquid Scint C14, Solid-HTD2,ALL2 (CT)**
Analytical Method:	EPA EERF C-01 Modified
Analytical Batch Number:	447285

Sample ID	Client ID
141673001	5502-0000-002-C1C-01
141673009	5502-0002-006-C1C-01
141673025	5502-0001-010-C1C-01
1200899087	Method Blank (MB)
1200899088	141714003(TDS-202-GR) Sample Duplicate (DUP)
1200899089	141714003(TDS-202-GR) Matrix Spike (MS)
1200899090	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-003 REV# 8.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 141714003 (TDS-202-GR).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
Sample 1200899088 (TDS-202-GR) was recounted due to high relative percent difference/relative error ratio. Samples 1200899088 (TDS-202-GR) and 1200899089 (TDS-202-GR) were recounted due to high lumex.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information
Manual qualifiers were not required.

Certification Statement
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:
GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.
The following data validator verified the information presented in this case narrative:

Reviewer: Kathy B Gellatt 8/15/05

General Engineering Laboratories
Form GEL-NCR
Rev. 06/05

NCR Report No.: 229983
Revision No.: 1

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
09-AUG-05	Radiochemistry	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
LSC	EPA 906.0 Modified	Solid	YANK
Batch ID:	**Sample Numbers:**		
447277	See Below		

Potentially affected work order(s)(SDG): 141673(MSR#05-1930)

Application Issues:

Container scanning event for custody missed

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. The analyst did not scan the samples 141673001, 002,003,004,005,006,007,008,009,010,011,012,013,014,015 016,1200899069,1200899070,1200899071 and 1200899072 into the batch prior to analysis, however the samples did remain in their custody at all times. The error has been corrected and the analyst has been instructed on proper scanning procedures.	1. Reporting results.

Originator's Name:

Wendy Hicks 09-AUG-05

Data Validator/Group Leader:

Melanie Aycock 10-AUG-05

Quality Review:

Director:

General Engineering Laboratories
Form GEL-NCR
Rev. 06/05

NCR Report No.: 230592
Revision No.: 2

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
10-AUG-05	Radiochemistry	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
LSC	DOE EML HASL-300, Pu-11-RC Modified	Solid	YANK001
Batch ID:	**Sample Numbers:**		
447490	SEE BELOW		

Potentially affected work order(s)(SDG): 141673(MSR#05-1930)

Application Issues:

Failed Recovery for MS/PS

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. The tracer yields maybe biased high due to interference from an undetermined isotope. This is causing the results and matrix spike 1200899656 and the laboratory control sample 1200899657 recoveries to be slighty low. There is no activity in any of the samples.	1. Reporting results.

Originator's Name:

Wendy Hicks 10-AUG-05

Data Validator/Group Leader:

Melanie Aycock 10-AUG-05

Quality Review:

Director:

SAMPLE DATA SUMMARY

GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

YANK001 Connecticut Yankee Atomic Power Co.

Client SDG: MSR#05-1930 GEL Work Order: 141673

The Qualifiers in this report are defined as follows:

** Indicates the analyte is a surrogate compound.
< Result is less than amount reported.
> Result is greater than amount reported.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
P The response between the confirmation and the primary columns is >40% Different.
R Sample results are rejected.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
Y QC Samples were not spiked with this compound.
Z Paint Filter qualifier: Particulates passed through the filter. No free liquids were observed.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.
** Indicates the analyte is a surrogate compound.
This data report has been prepared and reviewed in accordance with General Engineering Laboratories, LLC standard operating procedures. Please direct any questions to your Project Manager, Cheryl Jones.

Reviewed by

GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 – (843) 556–8171 – www.gel.com

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID:	5502–0000–002–C1C–01	Project:	YANK01304
Sample ID:	141673001	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	22–JUN–05		
Receive Date:	28–JUL–05		
Collector:	Client		
Moisture:	8.49%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Alpha Spec Analysis												
Alphaspec Am241, Cm, Solid–TRU2,ALL2 (CT)												
Americium–241	U	0.00791	+/–0.034	0.0285	+/–0.034	0.0961	pCi/g		JXG1 08/04/05	1357	447483	1
Curium–242	U	–0.0125	+/–0.0142	0.0343	+/–0.0143	0.116	pCi/g					
Curium–243/244	U	0.0255	+/–0.0408	0.0165	+/–0.0409	0.0723	pCi/g					
Alphaspec Pu, Solid–TRU2,ALL2 (CT)												
Plutonium–238	U	0.0138	+/–0.0271	0.00	+/–0.0272	0.0375	pCi/g		JXG1 08/04/05	1357	447487	2
Plutonium–239/240	U	0.00719	+/–0.0286	0.0223	+/–0.0286	0.0821	pCi/g					
Liquid Scint Pu241, Solid–TRU2,ALL2 (CT)												
Plutonium–241	U	1.62	+/–2.77	2.28	+/–2.78	4.69	pCi/g		JXG1 08/07/05	0406	447490	3
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)												
Actinium–228		0.395	+/–0.108	0.0418	+/–0.106	0.0924	pCi/g		MJH1 08/02/05	1539	447540	4
Americium–241	U	–0.0073	+/–0.074	0.0616	+/–0.0725	0.128	pCi/g					
Bismuth–212	UUI	0.00	+/–0.316	0.116	+/–0.310	0.250	pCi/g					
Bismuth–214		0.396	+/–0.0777	0.0254	+/–0.0761	0.0545	pCi/g					
Cesium–134	U	0.0164	+/–0.0184	0.0168	+/–0.018	0.0362	pCi/g					
Cesium–137		0.152	+/–0.0368	0.016	+/–0.036	0.0341	pCi/g					
Cobalt–60	U	0.028	+/–0.0266	0.0164	+/–0.026	0.0362	pCi/g					
Europium–152	U	–0.0334	+/–0.0461	0.0381	+/–0.0451	0.0803	pCi/g					
Europium–154	U	–0.0054	+/–0.0593	0.049	+/–0.0581	0.107	pCi/g					
Europium–155	U	0.0494	+/–0.0486	0.0453	+/–0.0476	0.0937	pCi/g					
Lead–212		0.441	+/–0.062	0.0217	+/–0.0608	0.0454	pCi/g					
Lead–214		0.441	+/–0.0847	0.0272	+/–0.083	0.0574	pCi/g					
Manganese–54	U	–0.0156	+/–0.0228	0.0149	+/–0.0223	0.0322	pCi/g					
Niobium–94	U	0.00923	+/–0.0167	0.0149	+/–0.0164	0.0317	pCi/g					
Potassium–40		7.82	+/–0.837	0.123	+/–0.820	0.280	pCi/g					
Radium–226		0.396	+/–0.0777	0.0254	+/–0.0761	0.0545	pCi/g					
Silver–108m	U	–0.00686	+/–0.0158	0.013	+/–0.0155	0.0276	pCi/g					
Thallium–208		0.133	+/–0.0349	0.0165	+/–0.0342	0.0349	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid–HTD2,ALL2 (CT)												
Strontium–90	U	0.00556	+/–0.00434	0.00388	+/–0.00434	0.0081	pCi/g		EXW1 08/05/05	2016	447617	5
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)												
Tritium	U	–0.357	+/–1.55	1.31	+/–1.55	2.70	pCi/g		LAG1 08/06/05	1015	447277	6

GENERAL ENGINEERING LABORATORIES, LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID: 5502-0000-002-C1C-01
Sample ID: 141673001

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Liquid Scintillation Analysis												
Liquid Scint C14, Solid-HTD2,ALL2 (CT)												
Carbon-14	U	0.039	+/-0.369	0.309	+/-0.369	0.629	pCi/g		BXF1 08/02/05	0417	447285	8
Liquid Scint Fe55, Solid-HTD2,ALL2 (CT)												
Iron-55	U	-1.09	+/-3.41	2.55	+/-3.41	5.15	pCi/g		BXD1 08/13/05	0447	447648	9
Liquid Scint Ni63, Solid-HTD2,ALL2 (CT)												
Nickel-63	U	-0.895	+/-1.29	1.11	+/-1.29	2.27	pCi/g		BXD1 08/11/05	0301	451367	10
Liquid Scint Tc99, Solid-HTD2,ALL2 (CT)												
Technetium-99	U	-0.128	+/-0.527	0.445	+/-0.527	0.913	pCi/g		BXD1 08/04/05	0119	447276	12

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	08/01/05	0610	447437
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	B J1	07/29/05	0057	447436

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, Pu-11-RC Modified
4	EML HASL 300, 4.5.2.3
5	EPA 905.0 Modified
6	EPA 906.0 Modified
7	EPA 906.0 Modified
8	EPA EERF C-01 Modified
9	DOE RESL Fe-1, Modified
10	DOE RESL Ni-1, Modified
11	DOE RESL Ni-1, Modified
12	DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243	Alphaspec Am241, Cm, Solid-TRI	76	(15%-125%)
Plutonium-242	Alphaspec Pu, Solid-TRU2,ALL2	92	(15%-125%)
Carrier/Tracer Recovery	Liquid Scint Pu241, Solid-TRU2,/	72	(25%-125%)
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	79	(25%-125%)

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID: 5502-0000-002-C1C-01
Sample ID: 141673001

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
Carrier/Tracer Recovery		Liquid Scint Fe55, Solid-HTD2,Al			36		(15%-125%)				
Carrier/Tracer Recovery		Liquid Scint Ni63, Solid-HTD2,Al			72		(25%-125%)				
Carrier/Tracer Recovery		Liquid Scint Tc99, Solid-HTD2,A			69		(15%-125%)				

Notes:
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B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID:	5502-0000-002-C1C-02	Project:	YANK01304
Sample ID:	141673002	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	22-JUN-05		
Receive Date:	28-JUL-05		
Collector:	Client		
Moisture:	8.53%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.413	+/-0.117	0.0422	+/-0.114	0.0936	pCi/g		MJH1 08/02/05	1540	447540	1
Americium-241	U	-0.0137	+/-0.106	0.0859	+/-0.104	0.179	pCi/g					
Bismuth-212	UUI	0.00	+/-0.173	0.0724	+/-0.170	0.163	pCi/g					
Bismuth-214		0.346	+/-0.0773	0.0261	+/-0.0758	0.0559	pCi/g					
Cesium-134	U	0.0291	+/-0.0194	0.0185	+/-0.019	0.0396	pCi/g					
Cesium-137	U	-0.00641	+/-0.0169	0.0139	+/-0.0165	0.030	pCi/g					
Cobalt-60	U	0.0143	+/-0.0158	0.0141	+/-0.0155	0.0317	pCi/g					
Europium-152	U	0.000863	+/-0.0415	0.0354	+/-0.0407	0.0751	pCi/g					
Europium-154	U	0.0035	+/-0.0545	0.0461	+/-0.0534	0.102	pCi/g					
Europium-155	U	0.035	+/-0.0445	0.0434	+/-0.0436	0.0903	pCi/g					
Lead-212		0.435	+/-0.0615	0.0211	+/-0.0603	0.0443	pCi/g					
Lead-214		0.382	+/-0.0681	0.0227	+/-0.0668	0.0486	pCi/g					
Manganese-54	U	0.00323	+/-0.0179	0.0152	+/-0.0175	0.0329	pCi/g					
Niobium-94	U	-0.00115	+/-0.0164	0.012	+/-0.016	0.0261	pCi/g					
Potassium-40		7.97	+/-0.888	0.116	+/-0.871	0.268	pCi/g					
Radium-226		0.346	+/-0.0773	0.0261	+/-0.0758	0.0559	pCi/g					
Silver-108m	U	0.00369	+/-0.0129	0.0117	+/-0.0126	0.0251	pCi/g					
Thallium-208		0.120	+/-0.0359	0.0143	+/-0.0352	0.0307	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	-0.00171	+/-0.00335	0.00336	+/-0.00335	0.00705	pCi/g		EXW1 08/05/05	2016	447617	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	1.19	+/-1.03	0.977	+/-1.03	2.05	pCi/g		LAG1 08/06/05	1220	447277	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	08/01/05	0610	447437
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	B J1	07/29/05	0057	447436

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID: 5502-0000-002-C1C-02
Sample ID: 141673002

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										
4	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	86	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID:	5502-0000-003-C1C-01	Project:	YANK01304
Sample ID:	141673003	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	22-JUN-05		
Receive Date:	28-JUL-05		
Collector:	Client		
Moisture:	9.12%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.379	+/-0.152	0.0592	+/-0.148	0.129	pCi/g		MJH1 08/02/05	1540	447540	1
Americium-241	U	0.0239	+/-0.0878	0.0723	+/-0.086	0.150	pCi/g					
Bismuth-212	U	0.213	+/-0.273	0.128	+/-0.267	0.276	pCi/g					
Bismuth-214		0.391	+/-0.0859	0.0302	+/-0.0841	0.065	pCi/g					
Cesium-134	U	0.0384	+/-0.0255	0.0242	+/-0.025	0.0515	pCi/g					
Cesium-137		0.139	+/-0.0355	0.0162	+/-0.0348	0.0351	pCi/g					
Cobalt-60	U	0.0308	+/-0.0433	0.0244	+/-0.0424	0.053	pCi/g					
Europium-152	U	-0.0067	+/-0.0518	0.0437	+/-0.0508	0.0923	pCi/g					
Europium-154	U	0.00645	+/-0.0636	0.0545	+/-0.0623	0.120	pCi/g					
Europium-155	U	0.00817	+/-0.0502	0.0472	+/-0.0492	0.0982	pCi/g					
Lead-212		0.392	+/-0.0625	0.0259	+/-0.0613	0.0541	pCi/g					
Lead-214		0.410	+/-0.0908	0.031	+/-0.089	0.0655	pCi/g					
Manganese-54	U	0.00701	+/-0.0299	0.0179	+/-0.0293	0.0387	pCi/g					
Niobium-94	U	0.0195	+/-0.0172	0.0162	+/-0.0169	0.0347	pCi/g					
Potassium-40		7.60	+/-0.883	0.129	+/-0.866	0.298	pCi/g					
Radium-226		0.391	+/-0.0859	0.0302	+/-0.0841	0.065	pCi/g					
Silver-108m	U	-0.0055	+/-0.018	0.0146	+/-0.0177	0.0311	pCi/g					
Thallium-208		0.137	+/-0.0449	0.0152	+/-0.044	0.033	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	-0.00067	+/-0.00538	0.00525	+/-0.00538	0.0109	pCi/g		EXW1 08/05/05	2016	447617	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	-0.205	+/-1.14	1.19	+/-1.14	2.50	pCi/g		LAG1 08/06/05	1241	447277	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	08/01/05	0610	447437
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	B J1	07/29/05	0057	447436

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID: 5502–0000–003–C1C–01
Sample ID: 141673003

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										
4	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	64	(25%–125%)

Notes:
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B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID:	5502–0000–003–C1C–02	Project:	YANK01304
Sample ID:	141673004	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	22–JUN–05		
Receive Date:	28–JUL–05		
Collector:	Client		
Moisture:	7.38%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)												
Actinium–228		0.416	+/–0.168	0.0501	+/–0.164	0.111	pCi/g		MJH1 08/02/05	1541	447540	1
Americium–241	U	0.0859	+/–0.0887	0.0647	+/–0.0869	0.135	pCi/g					
Bismuth–212		0.434	+/–0.348	0.129	+/–0.341	0.278	pCi/g					
Bismuth–214		0.328	+/–0.0882	0.032	+/–0.0864	0.0684	pCi/g					
Cesium–134	U	0.009	+/–0.0227	0.0198	+/–0.0223	0.0428	pCi/g					
Cesium–137	U	0.000562	+/–0.0185	0.0159	+/–0.0182	0.0344	pCi/g					
Cobalt–60	U	–0.00404	+/–0.0224	0.0181	+/–0.0219	0.0404	pCi/g					
Europium–152	U	0.0638	+/–0.0528	0.0447	+/–0.0517	0.0942	pCi/g					
Europium–154	U	0.0126	+/–0.0616	0.0528	+/–0.0604	0.117	pCi/g					
Europium–155	U	0.0635	+/–0.057	0.0448	+/–0.0559	0.0933	pCi/g					
Lead–212		0.480	+/–0.0725	0.0281	+/–0.0711	0.0585	pCi/g					
Lead–214		0.415	+/–0.102	0.0284	+/–0.0995	0.0602	pCi/g					
Manganese–54	U	0.032	+/–0.0224	0.0211	+/–0.0219	0.045	pCi/g					
Niobium–94	U	–0.00447	+/–0.0177	0.0147	+/–0.0173	0.0317	pCi/g					
Potassium–40		8.61	+/–1.01	0.178	+/–0.992	0.397	pCi/g					
Radium–226		0.328	+/–0.0882	0.032	+/–0.0864	0.0684	pCi/g					
Silver–108m	U	0.0037	+/–0.017	0.0129	+/–0.0166	0.0277	pCi/g					
Thallium–208		0.146	+/–0.0443	0.0154	+/–0.0434	0.0332	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid–HTD2,ALL2 (CT)												
Strontium–90	U	–0.000898	+/–0.00475	0.00466	+/–0.00475	0.00974	pCi/g		EXW1 08/05/05	2016	447617	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)												
Tritium	U	1.20	+/–1.27	1.21	+/–1.27	2.55	pCi/g		LAG1 08/06/05	1303	447277	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	B J1	08/01/05	0610	447437
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	B J1	07/29/05	0057	447436

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID: 5502–0000–003–C1C–02
Sample ID: 141673004

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										
4	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	64	(25%–125%)

Notes:
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B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID:	5502-0001-005-C1C-01	Project:	YANK01304
Sample ID:	141673005	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	28-JUN-05		
Receive Date:	28-JUL-05		
Collector:	Client		
Moisture:	7.51%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.546	+/-0.175	0.0647	+/-0.172	0.140	pCi/g		MJH1 08/02/05	1541	447540	1
Americium-241	U	-0.00993	+/-0.107	0.0939	+/-0.105	0.194	pCi/g					
Bismuth-212	U	0.238	+/-0.256	0.144	+/-0.251	0.309	pCi/g					
Bismuth-214		0.708	+/-0.111	0.0388	+/-0.109	0.0824	pCi/g					
Cesium-134	U	0.0492	+/-0.026	0.0251	+/-0.0255	0.0535	pCi/g					
Cesium-137		0.322	+/-0.0559	0.0179	+/-0.0548	0.0385	pCi/g					
Cobalt-60	U	0.0192	+/-0.0251	0.0227	+/-0.0246	0.0494	pCi/g					
Europium-152	U	-0.0369	+/-0.0785	0.0559	+/-0.0769	0.117	pCi/g					
Europium-154	U	-0.0576	+/-0.066	0.0493	+/-0.0647	0.110	pCi/g					
Europium-155	U	0.0475	+/-0.0696	0.0613	+/-0.0682	0.127	pCi/g					
Lead-212		0.643	+/-0.0883	0.0323	+/-0.0866	0.0673	pCi/g					
Lead-214		0.902	+/-0.140	0.0417	+/-0.137	0.0873	pCi/g					
Manganese-54	U	-0.0124	+/-0.0231	0.0183	+/-0.0227	0.0396	pCi/g					
Niobium-94	U	0.0084	+/-0.0208	0.0182	+/-0.0204	0.0388	pCi/g					
Potassium-40		7.75	+/-0.903	0.163	+/-0.884	0.366	pCi/g					
Radium-226		0.708	+/-0.111	0.0388	+/-0.109	0.0824	pCi/g					
Silver-108m	U	0.0116	+/-0.0232	0.020	+/-0.0227	0.0422	pCi/g					
Thallium-208		0.213	+/-0.044	0.0206	+/-0.0432	0.0437	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.00613	+/-0.00477	0.0043	+/-0.00477	0.00895	pCi/g		EXW1 08/05/05	2016	447617	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	0.626	+/-1.10	1.09	+/-1.10	2.28	pCi/g		LAG1 08/06/05	1324	447277	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	08/01/05	0610	447437
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	B J1	07/29/05	0057	447436

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID: 5502-0001-005-C1C-01
Sample ID: 141673005

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										
4	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	76	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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362 Injun Hollow Road
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Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID:	5502-0001-005-C1C-02	Project:	YANK01304
Sample ID:	141673006	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	28-JUN-05		
Receive Date:	28-JUL-05		
Collector:	Client		
Moisture:	8%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.615	+/-0.199	0.0792	+/-0.195	0.170	pCi/g		MJH1 08/02/05	1542	447540	1
Americium-241	U	0.0371	+/-0.040	0.0372	+/-0.0392	0.0764	pCi/g					
Bismuth-212		0.439	+/-0.391	0.183	+/-0.383	0.389	pCi/g					
Bismuth-214		0.673	+/-0.147	0.0419	+/-0.144	0.0888	pCi/g					
Cesium-134	U	0.0269	+/-0.0362	0.0319	+/-0.0355	0.0673	pCi/g					
Cesium-137	U	0.00519	+/-0.037	0.0279	+/-0.0363	0.0587	pCi/g					
Cobalt-60	U	0.0344	+/-0.0338	0.0279	+/-0.0332	0.0602	pCi/g					
Europium-152	U	-0.00432	+/-0.0742	0.0636	+/-0.0727	0.133	pCi/g					
Europium-154	U	0.032	+/-0.092	0.0699	+/-0.0901	0.152	pCi/g					
Europium-155	U	-0.0101	+/-0.0641	0.0557	+/-0.0628	0.115	pCi/g					
Lead-212		0.510	+/-0.0798	0.0356	+/-0.0782	0.0738	pCi/g					
Lead-214		0.721	+/-0.125	0.0427	+/-0.123	0.0893	pCi/g					
Manganese-54	U	0.0381	+/-0.0706	0.0257	+/-0.0692	0.0546	pCi/g					
Niobium-94	U	-0.0102	+/-0.0274	0.0228	+/-0.0269	0.0481	pCi/g					
Potassium-40		7.63	+/-0.984	0.230	+/-0.965	0.503	pCi/g					
Radium-226		0.673	+/-0.147	0.0419	+/-0.144	0.0888	pCi/g					
Silver-108m	U	-0.00348	+/-0.0241	0.0201	+/-0.0236	0.0423	pCi/g					
Thallium-208		0.183	+/-0.0615	0.0234	+/-0.0602	0.0496	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.000668	+/-0.00476	0.00457	+/-0.00476	0.00958	pCi/g		EXW1 08/05/05	2016	447617	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	0.399	+/-1.03	1.02	+/-1.03	2.15	pCi/g		LAG1 08/06/05	1346	447277	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	08/01/05	0610	447437
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	B J1	07/29/05	0057	447436

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID: 5502–0001–005–C1C–02
Sample ID: 141673006

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										
4	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	63	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID:	5502–0001–005–C2C–03	Project:	YANK01304
Sample ID:	141673007	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	28–JUN–05		
Receive Date:	28–JUL–05		
Collector:	Client		
Moisture:	7%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)												
Actinium–228		0.463	+/–0.133	0.0514	+/–0.130	0.113	pCi/g		MJH1 08/02/05	1542	447540	1
Americium–241	U	0.0128	+/–0.0218	0.0197	+/–0.0213	0.0409	pCi/g					
Bismuth–212		0.463	+/–0.241	0.129	+/–0.236	0.278	pCi/g					
Bismuth–214		0.514	+/–0.087	0.0249	+/–0.0852	0.0539	pCi/g					
Cesium–134	U	0.00823	+/–0.025	0.0188	+/–0.0245	0.0404	pCi/g					
Cesium–137	U	–0.0141	+/–0.0175	0.0134	+/–0.0172	0.0292	pCi/g					
Cobalt–60	U	0.0183	+/–0.0219	0.0198	+/–0.0214	0.0434	pCi/g					
Europium–152	U	–0.0491	+/–0.0456	0.0349	+/–0.0447	0.0741	pCi/g					
Europium–154	U	–0.0185	+/–0.0588	0.0463	+/–0.0577	0.103	pCi/g					
Europium–155	U	0.00835	+/–0.0385	0.0328	+/–0.0377	0.0682	pCi/g					
Lead–212		0.522	+/–0.0731	0.0204	+/–0.0716	0.0428	pCi/g					
Lead–214		0.495	+/–0.0959	0.0263	+/–0.094	0.0558	pCi/g					
Manganese–54	U	0.0121	+/–0.0204	0.0177	+/–0.020	0.0381	pCi/g					
Niobium–94	U	0.0134	+/–0.0257	0.0151	+/–0.0252	0.0324	pCi/g					
Potassium–40		7.54	+/–0.868	0.140	+/–0.850	0.318	pCi/g					
Radium–226		0.514	+/–0.087	0.0249	+/–0.0852	0.0539	pCi/g					
Silver–108m	U	–0.00197	+/–0.014	0.0122	+/–0.0137	0.026	pCi/g					
Thallium–208		0.163	+/–0.0444	0.0153	+/–0.0436	0.0328	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid–HTD2,ALL2 (CT)												
Strontium–90	U	0.000696	+/–0.00372	0.00357	+/–0.00372	0.00743	pCi/g		EXW1 08/05/05	2016	447617	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)												
Tritium	U	1.09	+/–1.19	1.15	+/–1.19	2.41	pCi/g		LAG1 08/06/05	1407	447277	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	B J1	08/01/05	0610	447437
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	B J1	07/29/05	0057	447436

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID: 5502-0001-005-C2C-03
Sample ID: 141673007

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										
4	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	92	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

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B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID:	5502-0001-005-C2C-04	Project:	YANK01304
Sample ID:	141673008	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	28-JUN-05		
Receive Date:	28-JUL-05		
Collector:	Client		
Moisture:	6.65%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.573	+/-0.191	0.0632	+/-0.187	0.138	pCi/g		MJH1 08/02/05	1543	447540	1
Americium-241	U	-0.0165	+/-0.227	0.145	+/-0.222	0.303	pCi/g					
Bismuth-212		0.481	+/-0.288	0.150	+/-0.282	0.323	pCi/g					
Bismuth-214		0.596	+/-0.112	0.0382	+/-0.109	0.0815	pCi/g					
Cesium-134	U	0.031	+/-0.0402	0.0236	+/-0.0394	0.0506	pCi/g					
Cesium-137	U	0.0282	+/-0.0252	0.0227	+/-0.0247	0.0484	pCi/g					
Cobalt-60	U	0.0296	+/-0.0257	0.0239	+/-0.0252	0.0522	pCi/g					
Europium-152	U	0.0102	+/-0.0714	0.0625	+/-0.0699	0.131	pCi/g					
Europium-154	U	-0.00551	+/-0.0676	0.0547	+/-0.0662	0.121	pCi/g					
Europium-155	U	0.0577	+/-0.0766	0.0695	+/-0.0751	0.144	pCi/g					
Lead-212		0.547	+/-0.0862	0.0369	+/-0.0845	0.0769	pCi/g					
Lead-214		0.675	+/-0.120	0.0403	+/-0.118	0.085	pCi/g					
Manganese-54	U	0.0211	+/-0.0243	0.0206	+/-0.0238	0.0445	pCi/g					
Niobium-94	U	0.00518	+/-0.0223	0.0187	+/-0.0219	0.040	pCi/g					
Potassium-40		8.45	+/-0.956	0.168	+/-0.937	0.380	pCi/g					
Radium-226		0.596	+/-0.112	0.0382	+/-0.109	0.0815	pCi/g					
Silver-108m	U	-0.0135	+/-0.0221	0.018	+/-0.0217	0.0383	pCi/g					
Thallium-208		0.215	+/-0.0435	0.0197	+/-0.0426	0.0423	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	-0.00973	+/-0.00373	0.00415	+/-0.00374	0.00863	pCi/g		EXW1 08/05/05	2016	447617	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	0.682	+/-1.20	1.18	+/-1.20	2.48	pCi/g		LAG1 08/06/05	1429	447277	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	08/01/05	0610	447437
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	B J1	07/29/05	0057	447436

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID: 5502-0001-005-C2C-04
Sample ID: 141673008

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										
4	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	86	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID:	5502–0002–006–C1C–01	Project:	YANK01304
Sample ID:	141673009	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	06–JUL–05		
Receive Date:	28–JUL–05		
Collector:	Client		
Moisture:	7.75%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Alpha Spec Analysis												
Alphaspec Am241, Cm, Solid–TRU2,ALL2 (CT)												
Americium–241	U	–0.0141	+/–0.0287	0.0162	+/–0.0287	0.071	pCi/g		JXG1 08/04/05	1357	447483	1
Curium–242	U	0.00	+/–0.0316	0.00	+/–0.0316	0.0437	pCi/g					
Curium–243/244	U	0.0251	+/–0.0401	0.0163	+/–0.0402	0.0712	pCi/g					
Alphaspec Pu, Solid–TRU2,ALL2 (CT)												
Plutonium–238	U	0.0366	+/–0.0503	0.0234	+/–0.0504	0.0862	pCi/g		JXG1 08/04/05	1357	447487	2
Plutonium–239/240	U	0.0145	+/–0.0285	0.00	+/–0.0285	0.0393	pCi/g					
Liquid Scint Pu241, Solid–TRU2,ALL2 (CT)												
Plutonium–241	U	0.0425	+/–2.61	2.19	+/–2.61	4.51	pCi/g		JXG1 08/07/05	0438	447490	3
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)												
Actinium–228		0.525	+/–0.115	0.0442	+/–0.113	0.0935	pCi/g		MJH1 08/02/05	1543	447540	4
Americium–241	U	0.0147	+/–0.0443	0.043	+/–0.0434	0.0887	pCi/g					
Bismuth–212	UUI	0.00	+/–0.250	0.0846	+/–0.245	0.179	pCi/g					
Bismuth–214		0.579	+/–0.0819	0.0221	+/–0.0803	0.0464	pCi/g					
Cesium–134	UUI	0.00	+/–0.0294	0.0154	+/–0.0288	0.0323	pCi/g					
Cesium–137		0.132	+/–0.0291	0.0119	+/–0.0285	0.0251	pCi/g					
Cobalt–60	U	0.00437	+/–0.0145	0.0123	+/–0.0142	0.0264	pCi/g					
Europium–152	U	0.0104	+/–0.0396	0.031	+/–0.0388	0.0647	pCi/g					
Europium–154	U	–0.0233	+/–0.0442	0.0349	+/–0.0433	0.0749	pCi/g					
Europium–155	U	0.0471	+/–0.0421	0.0399	+/–0.0412	0.0822	pCi/g					
Lead–212		0.499	+/–0.059	0.0186	+/–0.0578	0.0385	pCi/g					
Lead–214		0.720	+/–0.0941	0.0214	+/–0.0922	0.0447	pCi/g					
Manganese–54	U	0.015	+/–0.017	0.0127	+/–0.0167	0.0268	pCi/g					
Niobium–94	U	–0.00879	+/–0.0138	0.0113	+/–0.0135	0.0237	pCi/g					
Potassium–40		9.28	+/–0.774	0.0979	+/–0.758	0.214	pCi/g					
Radium–226		0.579	+/–0.0819	0.0221	+/–0.0803	0.0464	pCi/g					
Silver–108m	U	–0.00522	+/–0.0119	0.00988	+/–0.0117	0.0208	pCi/g					
Thallium–208		0.162	+/–0.0338	0.0123	+/–0.0331	0.0258	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid–HTD2,ALL2 (CT)												
Strontium–90		0.00631	+/–0.00283	0.00239	+/–0.00284	0.00499	pCi/g		EXW1 08/06/05	1118	447617	5
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)												
Tritium	U	1.53	+/–1.26	1.19	+/–1.26	2.50	pCi/g		LAG1 08/06/05	1451	447277	6
Liquid Scint C14, Solid–HTD2,ALL2 (CT)												

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Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID: 5502–0002–006–C1C–01
Sample ID: 141673009

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Liquid Scintillation Analysis												
Liquid Scint C14, Solid–HTD2,ALL2 (CT)												
Carbon–14	U	–0.0178	+/–0.374	0.314	+/–0.374	0.640	pCi/g		BXF1 08/02/05	0504	447285	8
Liquid Scint Fe55, Solid–HTD2,ALL2 (CT)												
Iron–55		6.26	+/–3.72	2.77	+/–3.73	5.58	pCi/g		BXD1 08/12/05	2241	447648	9
Liquid Scint Ni63, Solid–HTD2,ALL2 (CT)												
Nickel–63	U	–0.505	+/–1.83	1.55	+/–1.83	3.17	pCi/g		BXD1 08/11/05	0348	451367	10
Liquid Scint Tc99, Solid–HTD2,ALL2 (CT)												
Technetium–99	U	–0.485	+/–0.530	0.457	+/–0.531	0.937	pCi/g		BXD1 08/04/05	0151	447276	12

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	B J1	08/01/05	0610	447437
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	B J1	07/29/05	0057	447436

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL–300, Am–05–RC Modified
2	DOE EML HASL–300, Pu–11–RC Modified
3	DOE EML HASL–300, Pu–11–RC Modified
4	EML HASL 300, 4.5.2.3
5	EPA 905.0 Modified
6	EPA 906.0 Modified
7	EPA 906.0 Modified
8	EPA EERF C–01 Modified
9	DOE RESL Fe–1, Modified
10	DOE RESL Ni–1, Modified
11	DOE RESL Ni–1, Modified
12	DOE EML HASL–300, Tc–02–RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium–243	Alphaspec Am241, Cm, Solid–TRI	75	(15%–125%)
Plutonium–242	Alphaspec Pu, Solid–TRU2,ALL2	79	(15%–125%)
Carrier/Tracer Recovery	Liquid Scint Pu241, Solid–TRU2,A	76	(25%–125%)
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	112	(25%–125%)

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Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID: 5502-0002-006-C1C-01
Sample ID: 141673009

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
Carrier/Tracer Recovery		Liquid Scint Fe55, Solid-HTD2,Al			33		(15%-125%)				
Carrier/Tracer Recovery		Liquid Scint Ni63, Solid-HTD2,Al			62		(25%-125%)				
Carrier/Tracer Recovery		Liquid Scint Tc99, Solid-HTD2,A			68		(15%-125%)				

Notes:
The Qualifiers in this report are defined as follows :

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B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID:	5502-0002-006-C1C-02	Project:	YANK01304
Sample ID:	141673010	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	06-JUL-05		
Receive Date:	28-JUL-05		
Collector:	Client		
Moisture:	8.57%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.715	+/-0.180	0.0701	+/-0.177	0.151	pCi/g		MJH1 08/02/05	1627	447540	1
Americium-241	U	0.0465	+/-0.0436	0.0363	+/-0.0428	0.0742	pCi/g					
Bismuth-212		0.537	+/-0.288	0.142	+/-0.282	0.305	pCi/g					
Bismuth-214		1.45	+/-0.183	0.0415	+/-0.179	0.0875	pCi/g					
Cesium-134	U	0.0352	+/-0.0343	0.0266	+/-0.0337	0.0564	pCi/g					
Cesium-137	U	0.0451	+/-0.0331	0.0216	+/-0.0325	0.0458	pCi/g					
Cobalt-60	U	0.00812	+/-0.0252	0.0218	+/-0.0247	0.0476	pCi/g					
Europium-152	U	0.0221	+/-0.0673	0.060	+/-0.0659	0.125	pCi/g					
Europium-154	U	0.0215	+/-0.0715	0.0617	+/-0.0701	0.135	pCi/g					
Europium-155	U	0.0506	+/-0.0645	0.0586	+/-0.0632	0.120	pCi/g					
Lead-212		0.614	+/-0.0961	0.0376	+/-0.0942	0.0774	pCi/g					
Lead-214		1.59	+/-0.190	0.0404	+/-0.186	0.0844	pCi/g					
Manganese-54	U	-0.0303	+/-0.0303	0.0199	+/-0.0297	0.0426	pCi/g					
Niobium-94	U	-0.00822	+/-0.0231	0.0188	+/-0.0227	0.040	pCi/g					
Potassium-40		8.26	+/-1.00	0.205	+/-0.983	0.450	pCi/g					
Radium-226		1.45	+/-0.183	0.0415	+/-0.179	0.0875	pCi/g					
Silver-108m	U	-0.0226	+/-0.0215	0.0172	+/-0.021	0.0364	pCi/g					
Thallium-208		0.251	+/-0.0621	0.0193	+/-0.0608	0.0412	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.000721	+/-0.00347	0.00332	+/-0.00347	0.00696	pCi/g		EXW1 08/06/05	1118	447617	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	0.693	+/-1.15	1.13	+/-1.15	2.37	pCi/g		LAG1 08/06/05	1512	447277	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	08/01/05	0610	447437
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	B J1	07/29/05	0057	447436

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID: 5502-0002-006-C1C-02
Sample ID: 141673010

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										
4	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	110	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Company : Connecticut Yankee Atomic Power
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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID:	5502–0002–006–C2C–03	Project:	YANK01304
Sample ID:	141673011	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	06–JUL–05		
Receive Date:	28–JUL–05		
Collector:	Client		
Moisture:	8.13%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)												
Actinium–228		0.460	+/–0.189	0.0566	+/–0.185	0.123	pCi/g		MJH1 08/02/05	1628	447540	1
Americium–241	U	–0.0262	+/–0.115	0.093	+/–0.113	0.193	pCi/g					
Bismuth–212		0.693	+/–0.337	0.116	+/–0.330	0.251	pCi/g					
Bismuth–214		0.624	+/–0.105	0.0276	+/–0.103	0.0592	pCi/g					
Cesium–134	U	0.003	+/–0.0218	0.0181	+/–0.0213	0.0391	pCi/g					
Cesium–137	U	–0.00427	+/–0.0187	0.0153	+/–0.0183	0.0329	pCi/g					
Cobalt–60	U	–0.00615	+/–0.0191	0.0126	+/–0.0188	0.029	pCi/g					
Europium–152	U	0.0133	+/–0.0451	0.0403	+/–0.0442	0.0851	pCi/g					
Europium–154	U	–0.0192	+/–0.068	0.0546	+/–0.0666	0.120	pCi/g					
Europium–155	U	0.00804	+/–0.0523	0.0466	+/–0.0512	0.0968	pCi/g					
Lead–212		0.461	+/–0.0767	0.0252	+/–0.0752	0.0526	pCi/g					
Lead–214		0.751	+/–0.124	0.0303	+/–0.122	0.0638	pCi/g					
Manganese–54	U	0.000611	+/–0.021	0.0172	+/–0.0206	0.0371	pCi/g					
Niobium–94	U	0.00856	+/–0.0172	0.015	+/–0.0169	0.032	pCi/g					
Potassium–40		8.82	+/–0.995	0.148	+/–0.976	0.335	pCi/g					
Radium–226		0.624	+/–0.105	0.0276	+/–0.103	0.0592	pCi/g					
Silver–108m	U	–0.00871	+/–0.0162	0.0115	+/–0.0159	0.0248	pCi/g					
Thallium–208		0.154	+/–0.0409	0.0151	+/–0.0401	0.0323	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid–HTD2,ALL2 (CT)												
Strontium–90	U	–0.00635	+/–0.00542	0.00561	+/–0.00542	0.0117	pCi/g		EXW1 08/06/05	1119	447617	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)												
Tritium	U	0.651	+/–1.15	1.13	+/–1.15	2.37	pCi/g		LAG1 08/06/05	1534	447277	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	B J1	08/01/05	0610	447437
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	B J1	07/29/05	0057	447436

The following Analytical Methods were performed

Method	Description

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362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID: 5502–0002–006–C2C–03
Sample ID: 141673011

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
1	EML HASL 300, 4.5.2.3										
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										
4	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	52	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID:	5502-0002-006-C2C-04	Project:	YANK01304
Sample ID:	141673012	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	06-JUL-05		
Receive Date:	28-JUL-05		
Collector:	Client		
Moisture:	7.84%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.611	+/-0.142	0.0619	+/-0.139	0.135	pCi/g		MJH1 08/02/05	1817	447540	1
Americium-241	U	0.0646	+/-0.0892	0.0717	+/-0.0874	0.149	pCi/g					
Bismuth-212		0.487	+/-0.237	0.112	+/-0.232	0.245	pCi/g					
Bismuth-214		0.577	+/-0.113	0.0281	+/-0.111	0.0606	pCi/g					
Cesium-134	U	0.0241	+/-0.0342	0.0209	+/-0.0335	0.0449	pCi/g					
Cesium-137	U	-0.0104	+/-0.0206	0.0164	+/-0.0202	0.0355	pCi/g					
Cobalt-60	U	0.0118	+/-0.0208	0.0187	+/-0.0204	0.0415	pCi/g					
Europium-152	U	-0.0093	+/-0.0522	0.0424	+/-0.0511	0.0899	pCi/g					
Europium-154	U	-0.0116	+/-0.0622	0.0506	+/-0.061	0.113	pCi/g					
Europium-155	U	0.0441	+/-0.074	0.0458	+/-0.0726	0.0952	pCi/g					
Lead-212		0.526	+/-0.0739	0.0259	+/-0.0724	0.0541	pCi/g					
Lead-214		0.668	+/-0.111	0.0309	+/-0.109	0.0655	pCi/g					
Manganese-54	U	0.0122	+/-0.0213	0.0167	+/-0.0209	0.0363	pCi/g					
Niobium-94	U	-0.00807	+/-0.0194	0.0156	+/-0.0191	0.0335	pCi/g					
Potassium-40		8.64	+/-1.02	0.146	+/-1.00	0.335	pCi/g					
Radium-226		0.577	+/-0.113	0.0281	+/-0.111	0.0606	pCi/g					
Silver-108m	U	-0.00883	+/-0.0175	0.0146	+/-0.0172	0.0312	pCi/g					
Thallium-208		0.182	+/-0.0471	0.0172	+/-0.0462	0.0369	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.00308	+/-0.00337	0.00308	+/-0.00337	0.00645	pCi/g		EXW1 08/06/05	1119	447617	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	1.42	+/-1.17	1.10	+/-1.17	2.31	pCi/g		LAG1 08/06/05	1556	447277	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	08/01/05	0610	447437
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	B J1	07/29/05	0057	447436

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID: 5502–0002–006–C2C–04
Sample ID: 141673012

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										
4	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	83	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

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B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID:	5502-0002-007-C1C-01	Project:	YANK01304
Sample ID:	141673013	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	06-JUL-05		
Receive Date:	28-JUL-05		
Collector:	Client		
Moisture:	5.85%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.544	+/-0.132	0.0394	+/-0.129	0.0858	pCi/g		JPH1 08/08/05	1100	447538	1
Americium-241	U	-0.0431	+/-0.0603	0.0532	+/-0.0591	0.110	pCi/g					
Bismuth-212	UUI	0.00	+/-0.272	0.0957	+/-0.266	0.205	pCi/g					
Bismuth-214		0.510	+/-0.0911	0.0231	+/-0.0892	0.0492	pCi/g					
Cesium-134	U	0.0145	+/-0.0298	0.0166	+/-0.0292	0.0352	pCi/g					
Cesium-137		0.194	+/-0.0337	0.0116	+/-0.0331	0.0248	pCi/g					
Cobalt-60	UUI	0.00	+/-0.0217	0.0155	+/-0.0212	0.0337	pCi/g					
Europium-152	U	0.0212	+/-0.0431	0.0388	+/-0.0422	0.0809	pCi/g					
Europium-154	U	0.00173	+/-0.0439	0.0368	+/-0.0431	0.0808	pCi/g					
Europium-155	U	0.0111	+/-0.0521	0.0369	+/-0.0511	0.0763	pCi/g					
Lead-212		0.466	+/-0.0603	0.0204	+/-0.0591	0.0424	pCi/g					
Lead-214		0.586	+/-0.0834	0.0237	+/-0.0817	0.0499	pCi/g					
Manganese-54	U	0.0181	+/-0.0238	0.0128	+/-0.0234	0.0274	pCi/g					
Niobium-94	U	-0.000795	+/-0.0135	0.0112	+/-0.0132	0.0238	pCi/g					
Potassium-40		7.02	+/-0.781	0.119	+/-0.765	0.265	pCi/g					
Radium-226		0.510	+/-0.0911	0.0231	+/-0.0892	0.0492	pCi/g					
Silver-108m	U	-0.00709	+/-0.0135	0.0112	+/-0.0132	0.0238	pCi/g					
Thallium-208		0.143	+/-0.0341	0.0128	+/-0.0335	0.0272	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.00275	+/-0.00358	0.00331	+/-0.00358	0.00691	pCi/g		EXW1 08/06/05	1119	447617	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	0.545	+/-1.18	1.17	+/-1.18	2.47	pCi/g		LAG1 08/06/05	1617	447277	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	08/01/05	0610	447437
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	B J1	07/29/05	0057	447436

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID: 5502-0002-007-C1C-01
Sample ID: 141673013

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										
4	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	85	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID:	5502-0002-007-C1C-02	Project:	YANK01304
Sample ID:	141673014	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	06-JUL-05		
Receive Date:	28-JUL-05		
Collector:	Client		
Moisture:	6.5%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.423	+/-0.181	0.0679	+/-0.177	0.152	pCi/g		JPH1 08/08/05	1001	447538	1
Americium-241	U	0.0232	+/-0.0414	0.0341	+/-0.0406	0.0707	pCi/g					
Bismuth-212		0.473	+/-0.294	0.167	+/-0.288	0.366	pCi/g					
Bismuth-214		0.654	+/-0.128	0.0421	+/-0.126	0.0911	pCi/g					
Cesium-134	U	0.053	+/-0.0421	0.0297	+/-0.0412	0.0643	pCi/g					
Cesium-137	U	0.0134	+/-0.0284	0.025	+/-0.0278	0.054	pCi/g					
Cobalt-60	U	-0.0136	+/-0.0272	0.0206	+/-0.0267	0.0474	pCi/g					
Europium-152	U	0.0377	+/-0.0746	0.0598	+/-0.0731	0.127	pCi/g					
Europium-154	U	0.0222	+/-0.0861	0.0744	+/-0.0843	0.166	pCi/g					
Europium-155	U	0.0336	+/-0.065	0.0588	+/-0.0637	0.122	pCi/g					
Lead-212		0.564	+/-0.101	0.0363	+/-0.0994	0.0761	pCi/g					
Lead-214		0.628	+/-0.132	0.0433	+/-0.129	0.092	pCi/g					
Manganese-54	U	0.00334	+/-0.0255	0.0224	+/-0.025	0.0493	pCi/g					
Niobium-94	U	0.00137	+/-0.0263	0.0221	+/-0.0258	0.0478	pCi/g					
Potassium-40		7.93	+/-1.05	0.216	+/-1.03	0.494	pCi/g					
Radium-226		0.654	+/-0.128	0.0421	+/-0.126	0.0911	pCi/g					
Silver-108m	U	0.00795	+/-0.0224	0.0199	+/-0.022	0.0428	pCi/g					
Thallium-208		0.157	+/-0.0553	0.0192	+/-0.0542	0.0423	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	-0.00217	+/-0.00329	0.00333	+/-0.00329	0.00698	pCi/g		EXW1 08/06/05	1119	447617	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	0.505	+/-1.19	1.18	+/-1.19	2.48	pCi/g		LAG1 08/06/05	1639	447277	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	08/01/05	0610	447437
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	B J1	07/29/05	0057	447436

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID: 5502–0002–007–C1C–02
Sample ID: 141673014

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										
4	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	79	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID:	5502–0002–007–C2C–03	Project:	YANK01304
Sample ID:	141673015	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	06–JUL–05		
Receive Date:	28–JUL–05		
Collector:	Client		
Moisture:	6.63%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)												
Actinium–228		0.363	+/–0.275	0.104	+/–0.270	0.226	pCi/g		JPH1 08/08/05	1002	447538	1
Americium–241	U	–0.0115	+/–0.0468	0.0422	+/–0.0458	0.0874	pCi/g					
Bismuth–212	U	0.367	+/–0.290	0.213	+/–0.285	0.460	pCi/g					
Bismuth–214		0.796	+/–0.158	0.0492	+/–0.154	0.106	pCi/g					
Cesium–134	UUI	0.00	+/–0.0669	0.0361	+/–0.0656	0.0773	pCi/g					
Cesium–137	U	0.014	+/–0.0341	0.0303	+/–0.0334	0.0647	pCi/g					
Cobalt–60	U	0.019	+/–0.0416	0.0324	+/–0.0408	0.0712	pCi/g					
Europium–152	U	0.0126	+/–0.089	0.0775	+/–0.0872	0.163	pCi/g					
Europium–154	U	0.00247	+/–0.115	0.0971	+/–0.113	0.211	pCi/g					
Europium–155	U	0.0882	+/–0.0968	0.066	+/–0.0949	0.137	pCi/g					
Lead–212		0.514	+/–0.090	0.0399	+/–0.0882	0.0835	pCi/g					
Lead–214		0.669	+/–0.152	0.0505	+/–0.149	0.107	pCi/g					
Manganese–54	U	0.0306	+/–0.0294	0.0245	+/–0.0289	0.0536	pCi/g					
Niobium–94	U	0.0276	+/–0.0331	0.030	+/–0.0324	0.0637	pCi/g					
Potassium–40		8.70	+/–1.21	0.238	+/–1.19	0.539	pCi/g					
Radium–226		0.796	+/–0.158	0.0492	+/–0.154	0.106	pCi/g					
Silver–108m	U	–0.0103	+/–0.0285	0.0234	+/–0.0279	0.0498	pCi/g					
Thallium–208		0.196	+/–0.0715	0.0276	+/–0.0701	0.0591	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid–HTD2,ALL2 (CT)												
Strontium–90	U	–0.00533	+/–0.00378	0.00397	+/–0.00378	0.00826	pCi/g		EXW1 08/06/05	1120	447617	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)												
Tritium	U	0.828	+/–1.23	1.20	+/–1.23	2.52	pCi/g		LAG1 08/06/05	1700	447277	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	B J1	08/01/05	0610	447437
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	B J1	07/29/05	0057	447436

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID: 5502–0002–007–C2C–03
Sample ID: 141673015

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										
4	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 (C	73	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID:	5502-0002-007-C2C-04	Project:	YANK01304
Sample ID:	141673016	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	06-JUL-05		
Receive Date:	28-JUL-05		
Collector:	Client		
Moisture:	8.32%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.507	+/-0.133	0.0535	+/-0.130	0.116	pCi/g		JPH1 08/08/05	1121	447538	1
Americium-241	U	0.0148	+/-0.068	0.0573	+/-0.0666	0.119	pCi/g					
Bismuth-212		0.477	+/-0.257	0.109	+/-0.252	0.235	pCi/g					
Bismuth-214		0.515	+/-0.104	0.0303	+/-0.102	0.0645	pCi/g					
Cesium-134	UUI	0.00	+/-0.0234	0.0222	+/-0.023	0.0471	pCi/g					
Cesium-137		0.372	+/-0.0634	0.0147	+/-0.0622	0.0316	pCi/g					
Cobalt-60	U	-0.00459	+/-0.0246	0.0166	+/-0.0241	0.0365	pCi/g					
Europium-152	U	0.0445	+/-0.0394	0.0429	+/-0.0387	0.0904	pCi/g					
Europium-154	U	0.00783	+/-0.0708	0.0507	+/-0.0694	0.110	pCi/g					
Europium-155	U	-0.011	+/-0.0522	0.0457	+/-0.0511	0.0954	pCi/g					
Lead-212		0.479	+/-0.0663	0.0247	+/-0.065	0.0517	pCi/g					
Lead-214		0.640	+/-0.100	0.0287	+/-0.0984	0.0607	pCi/g					
Manganese-54	U	0.00339	+/-0.0194	0.0162	+/-0.019	0.0349	pCi/g					
Niobium-94	U	-0.0022	+/-0.0171	0.0142	+/-0.0168	0.0305	pCi/g					
Potassium-40		7.49	+/-0.860	0.127	+/-0.842	0.285	pCi/g					
Radium-226		0.515	+/-0.104	0.0303	+/-0.102	0.0645	pCi/g					
Silver-108m	U	-0.0175	+/-0.0178	0.0137	+/-0.0174	0.0291	pCi/g					
Thallium-208		0.126	+/-0.0451	0.0179	+/-0.0442	0.0379	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90		0.0107	+/-0.0032	0.00246	+/-0.00321	0.00517	pCi/g		EXW1 08/07/05	2341	447617	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	-0.0698	+/-1.13	1.16	+/-1.13	2.45	pCi/g		LAG1 08/06/05	1722	447277	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	08/01/05	0610	447437
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	B J1	07/29/05	0057	447436

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID: 5502-0002-007-C2C-04
Sample ID: 141673016

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										
4	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 (C	77	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID:	5502–0002–008–C1C–01	Project:	YANK01304
Sample ID:	141673017	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	05–JUL–05		
Receive Date:	28–JUL–05		
Collector:	Client		
Moisture:	7.5%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)												
Actinium–228		0.465	+/–0.125	0.0498	+/–0.122	0.108	pCi/g		JPH1 08/08/05	1348	447538	1
Americium–241	U	–0.0429	+/–0.0644	0.0513	+/–0.0631	0.107	pCi/g					
Bismuth–212		0.299	+/–0.216	0.129	+/–0.212	0.275	pCi/g					
Bismuth–214		0.477	+/–0.0956	0.0305	+/–0.0937	0.0649	pCi/g					
Cesium–134	U	0.0242	+/–0.0196	0.0181	+/–0.0192	0.0388	pCi/g					
Cesium–137	U	0.00268	+/–0.0174	0.0149	+/–0.0171	0.0321	pCi/g					
Cobalt–60	U	0.00687	+/–0.0202	0.0172	+/–0.0198	0.0376	pCi/g					
Europium–152	U	0.00132	+/–0.0454	0.039	+/–0.0445	0.0826	pCi/g					
Europium–154	U	–0.0343	+/–0.0536	0.0403	+/–0.0525	0.0894	pCi/g					
Europium–155	U	0.039	+/–0.0701	0.0494	+/–0.0687	0.103	pCi/g					
Lead–212		0.429	+/–0.0805	0.032	+/–0.0789	0.0662	pCi/g					
Lead–214		0.442	+/–0.0875	0.0292	+/–0.0858	0.0616	pCi/g					
Manganese–54	U	0.00132	+/–0.0209	0.015	+/–0.0205	0.0324	pCi/g					
Niobium–94	U	0.022	+/–0.0267	0.0143	+/–0.0262	0.0306	pCi/g					
Potassium–40		7.37	+/–0.833	0.122	+/–0.816	0.277	pCi/g					
Radium–226		0.477	+/–0.0956	0.0305	+/–0.0937	0.0649	pCi/g					
Silver–108m	U	0.00781	+/–0.0159	0.0139	+/–0.0156	0.0294	pCi/g					
Thallium–208		0.141	+/–0.0359	0.0167	+/–0.0352	0.0355	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid–HTD2,ALL2 (CT)												
Strontium–90	U	0.00434	+/–0.00428	0.0039	+/–0.00429	0.00815	pCi/g		EXW1 08/12/05	2306	447618	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)												
Tritium	U	–0.693	+/–1.65	1.41	+/–1.65	2.94	pCi/g		LAG1 08/07/05	0313	447279	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	B J1	08/01/05	0612	447439
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	B J1	07/29/05	0057	447438

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID: 5502–0002–008–C1C–01
Sample ID: 141673017

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	47	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID:	5502–0002–008–C1C–02	Project:	YANK01304
Sample ID:	141673018	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	05–JUL–05		
Receive Date:	28–JUL–05		
Collector:	Client		
Moisture:	7.39%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)													
Actinium–228		0.475	+/–0.139	0.0516	+/–0.137	0.112	pCi/g		JPH1	08/08/05	1544	447538	1
Americium–241	U	0.0146	+/–0.173	0.103	+/–0.169	0.212	pCi/g						
Bismuth–212		0.583	+/–0.250	0.119	+/–0.245	0.257	pCi/g						
Bismuth–214		0.515	+/–0.0894	0.0283	+/–0.0876	0.0603	pCi/g						
Cesium–134	U	0.0159	+/–0.0245	0.0193	+/–0.024	0.0412	pCi/g						
Cesium–137	U	–0.0142	+/–0.0185	0.0149	+/–0.0182	0.032	pCi/g						
Cobalt–60	U	0.000851	+/–0.0168	0.0138	+/–0.0165	0.0312	pCi/g						
Europium–152	U	0.00955	+/–0.0592	0.0444	+/–0.058	0.093	pCi/g						
Europium–154	U	–0.00287	+/–0.0537	0.0438	+/–0.0527	0.097	pCi/g						
Europium–155	U	0.0155	+/–0.059	0.0533	+/–0.0578	0.110	pCi/g						
Lead–212		0.516	+/–0.0796	0.0242	+/–0.078	0.0504	pCi/g						
Lead–214		0.544	+/–0.0929	0.0302	+/–0.091	0.0634	pCi/g						
Manganese–54	U	0.00801	+/–0.0184	0.0162	+/–0.0181	0.0348	pCi/g						
Niobium–94	U	0.000823	+/–0.0167	0.0144	+/–0.0164	0.0307	pCi/g						
Potassium–40		7.54	+/–0.944	0.130	+/–0.926	0.294	pCi/g						
Radium–226		0.515	+/–0.0894	0.0283	+/–0.0876	0.0603	pCi/g						
Silver–108m	U	0.00299	+/–0.0185	0.0137	+/–0.0181	0.0291	pCi/g						
Thallium–208		0.190	+/–0.0433	0.0153	+/–0.0424	0.0326	pCi/g						
Rad Gas Flow Proportional Counting													
GFPC, Sr90, solid–HTD2,ALL2 (CT)													
Strontium–90		0.00995	+/–0.00402	0.00336	+/–0.00403	0.00702	pCi/g		EXW1	08/12/05	2306	447618	2
Rad Liquid Scintillation Analysis													
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)													
Tritium	U	0.125	+/–1.70	1.43	+/–1.70	2.96	pCi/g		LAG1	08/07/05	0345	447279	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	B J1	08/01/05	0612	447439
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	B J1	07/29/05	0057	447438

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID: 5502–0002–008–C1C–02
Sample ID: 141673018

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	56	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID:	5502-0002-008-C2C-03	Project:	YANK01304
Sample ID:	141673019	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	05-JUL-05		
Receive Date:	28-JUL-05		
Collector:	Client		
Moisture:	8.06%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.412	+/-0.160	0.0492	+/-0.157	0.106	pCi/g		JPH1 08/08/05	1545	447538	1
Americium-241	U	-0.000601	+/-0.0602	0.0547	+/-0.0589	0.113	pCi/g					
Bismuth-212		0.455	+/-0.271	0.0939	+/-0.266	0.202	pCi/g					
Bismuth-214		0.546	+/-0.0842	0.0237	+/-0.0826	0.0504	pCi/g					
Cesium-134	U	0.0366	+/-0.0277	0.0176	+/-0.0271	0.0373	pCi/g					
Cesium-137	U	-0.0119	+/-0.0202	0.0139	+/-0.0198	0.0296	pCi/g					
Cobalt-60	U	-0.00914	+/-0.0181	0.014	+/-0.0177	0.0308	pCi/g					
Europium-152	U	0.00909	+/-0.0428	0.0371	+/-0.0419	0.0775	pCi/g					
Europium-154	U	-0.0813	+/-0.0528	0.0355	+/-0.0517	0.0785	pCi/g					
Europium-155	U	0.0351	+/-0.0465	0.0419	+/-0.0456	0.0863	pCi/g					
Lead-212		0.361	+/-0.0545	0.0208	+/-0.0534	0.0431	pCi/g					
Lead-214		0.589	+/-0.0933	0.0251	+/-0.0915	0.0526	pCi/g					
Manganese-54	U	0.0165	+/-0.0188	0.0167	+/-0.0185	0.0353	pCi/g					
Niobium-94	U	-0.00642	+/-0.0161	0.0132	+/-0.0158	0.028	pCi/g					
Potassium-40		7.45	+/-0.788	0.129	+/-0.772	0.286	pCi/g					
Radium-226		0.546	+/-0.0842	0.0237	+/-0.0826	0.0504	pCi/g					
Silver-108m	U	-0.00207	+/-0.0144	0.0119	+/-0.0141	0.0251	pCi/g					
Thallium-208		0.131	+/-0.044	0.0132	+/-0.0431	0.028	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.00456	+/-0.00497	0.00455	+/-0.00497	0.0095	pCi/g		EXW1 08/12/05	2306	447618	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	-0.398	+/-1.79	1.52	+/-1.79	3.15	pCi/g		LAG1 08/07/05	0417	447279	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	08/01/05	0612	447439
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	B J1	07/29/05	0057	447438

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID: 5502–0002–008–C2C–03
Sample ID: 141673019

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	40	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID:	5502-0002-008-C2C-04	Project:	YANK01304
Sample ID:	141673020	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	05-JUL-05		
Receive Date:	28-JUL-05		
Collector:	Client		
Moisture:	8.31%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)													
Actinium-228		0.426	+/-0.133	0.0456	+/-0.130	0.0991	pCi/g		JPH1	08/08/05	1546	447538	1
Americium-241	U	0.0319	+/-0.0686	0.0588	+/-0.0672	0.122	pCi/g						
Bismuth-212		0.275	+/-0.180	0.0968	+/-0.176	0.209	pCi/g						
Bismuth-214		0.510	+/-0.0855	0.0269	+/-0.0838	0.0571	pCi/g						
Cesium-134	U	0.023	+/-0.0186	0.017	+/-0.0182	0.0364	pCi/g						
Cesium-137	U	0.0263	+/-0.0257	0.0125	+/-0.0252	0.027	pCi/g						
Cobalt-60	U	0.0072	+/-0.0188	0.0163	+/-0.0184	0.0357	pCi/g						
Europium-152	U	-0.00588	+/-0.0408	0.0334	+/-0.040	0.0705	pCi/g						
Europium-154	U	0.018	+/-0.0514	0.0446	+/-0.0504	0.0975	pCi/g						
Europium-155	U	0.0468	+/-0.0424	0.0396	+/-0.0415	0.082	pCi/g						
Lead-212		0.481	+/-0.0622	0.0203	+/-0.0609	0.0424	pCi/g						
Lead-214		0.514	+/-0.0851	0.0257	+/-0.0834	0.0541	pCi/g						
Manganese-54	U	-0.0112	+/-0.017	0.013	+/-0.0167	0.0282	pCi/g						
Niobium-94	U	0.00181	+/-0.0156	0.0131	+/-0.0153	0.028	pCi/g						
Potassium-40		6.91	+/-0.773	0.111	+/-0.757	0.253	pCi/g						
Radium-226		0.510	+/-0.0855	0.0269	+/-0.0838	0.0571	pCi/g						
Silver-108m	U	0.00477	+/-0.0133	0.0119	+/-0.0131	0.0252	pCi/g						
Thallium-208		0.128	+/-0.041	0.0133	+/-0.0402	0.0284	pCi/g						
Rad Gas Flow Proportional Counting													
GFPC, Sr90, solid-HTD2,ALL2 (CT)													
Strontium-90	U	0.00619	+/-0.00409	0.00315	+/-0.00409	0.0066	pCi/g		EXW1	08/14/05	1218	447618	2
Rad Liquid Scintillation Analysis													
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)													
Tritium	U	0.893	+/-1.86	1.52	+/-1.86	3.16	pCi/g		LAG1	08/07/05	0449	447279	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	08/01/05	0613	447439
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	B J1	07/29/05	0057	447438

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID: 5502–0002–008–C2C–04
Sample ID: 141673020

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	52	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID:	5502-0001-009-C1C-01	Project:	YANK01304
Sample ID:	141673021	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	27-JUN-05		
Receive Date:	28-JUL-05		
Collector:	Client		
Moisture:	7.91%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.414	+/-0.155	0.0466	+/-0.151	0.101	pCi/g		JPH1 08/08/05	1547	447538	1
Americium-241	U	0.0184	+/-0.0612	0.0554	+/-0.060	0.114	pCi/g					
Bismuth-212		0.430	+/-0.195	0.0976	+/-0.191	0.210	pCi/g					
Bismuth-214		0.446	+/-0.0769	0.0277	+/-0.0754	0.0585	pCi/g					
Cesium-134	U	0.0253	+/-0.0256	0.0157	+/-0.0251	0.0337	pCi/g					
Cesium-137		0.151	+/-0.035	0.0125	+/-0.0343	0.0268	pCi/g					
Cobalt-60	U	-0.0141	+/-0.015	0.0105	+/-0.0147	0.0239	pCi/g					
Europium-152	U	0.016	+/-0.0424	0.0376	+/-0.0415	0.0788	pCi/g					
Europium-154	U	-0.0328	+/-0.0482	0.0365	+/-0.0473	0.0808	pCi/g					
Europium-155	U	0.0181	+/-0.0442	0.0391	+/-0.0433	0.0809	pCi/g					
Lead-212		0.416	+/-0.0572	0.0203	+/-0.056	0.0424	pCi/g					
Lead-214		0.485	+/-0.0818	0.0259	+/-0.0801	0.0544	pCi/g					
Manganese-54	U	-0.00371	+/-0.0172	0.0136	+/-0.0168	0.0294	pCi/g					
Niobium-94	U	0.00641	+/-0.0147	0.0126	+/-0.0144	0.0268	pCi/g					
Potassium-40		7.69	+/-0.846	0.0919	+/-0.829	0.213	pCi/g					
Radium-226		0.446	+/-0.0769	0.0277	+/-0.0754	0.0585	pCi/g					
Silver-108m	U	0.00399	+/-0.0135	0.0118	+/-0.0133	0.025	pCi/g					
Thallium-208		0.139	+/-0.0366	0.0119	+/-0.0359	0.0255	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90		0.0246	+/-0.00629	0.00441	+/-0.00632	0.00917	pCi/g		EXW1 08/14/05	1218	447618	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	-1.21	+/-1.44	1.25	+/-1.44	2.61	pCi/g		LAG1 08/07/05	0520	447279	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	08/01/05	0613	447439
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	B J1	07/29/05	0057	447438

The following Analytical Methods were performed

Method	Description

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID: 5502–0001–009–C1C–01
Sample ID: 141673021

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
1	EML HASL 300, 4.5.2.3										
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	44	(25%–125%)

Notes:
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** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID:	5502–0001–009–C1C–02	Project:	YANK01304
Sample ID:	141673022	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	27–JUN–05		
Receive Date:	28–JUL–05		
Collector:	Client		
Moisture:	5.73%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)												
Actinium–228		0.337	+/–0.140	0.0512	+/–0.137	0.109	pCi/g		JPH1 08/08/05	1550	447538	1
Americium–241	U	–0.0548	+/–0.0636	0.052	+/–0.0623	0.108	pCi/g					
Bismuth–212	U	0.205	+/–0.162	0.103	+/–0.159	0.220	pCi/g					
Bismuth–214		0.474	+/–0.0819	0.0228	+/–0.0803	0.0486	pCi/g					
Cesium–134	U	0.0212	+/–0.0183	0.0169	+/–0.0179	0.0358	pCi/g					
Cesium–137	U	–0.00172	+/–0.0176	0.0132	+/–0.0173	0.028	pCi/g					
Cobalt–60	U	0.013	+/–0.0171	0.015	+/–0.0167	0.0327	pCi/g					
Europium–152	U	–0.0228	+/–0.0373	0.0316	+/–0.0365	0.0664	pCi/g					
Europium–154	U	–0.0431	+/–0.0501	0.038	+/–0.0491	0.0834	pCi/g					
Europium–155	U	0.00693	+/–0.0404	0.0372	+/–0.0396	0.0768	pCi/g					
Lead–212		0.370	+/–0.0533	0.0216	+/–0.0522	0.0447	pCi/g					
Lead–214		0.524	+/–0.0838	0.0233	+/–0.0821	0.0489	pCi/g					
Manganese–54	U	0.0284	+/–0.0241	0.0142	+/–0.0236	0.0303	pCi/g					
Niobium–94	U	0.0157	+/–0.0136	0.0127	+/–0.0133	0.0269	pCi/g					
Potassium–40		8.31	+/–0.894	0.100	+/–0.876	0.228	pCi/g					
Radium–226		0.474	+/–0.0819	0.0228	+/–0.0803	0.0486	pCi/g					
Silver–108m	U	0.00494	+/–0.0141	0.0124	+/–0.0138	0.0261	pCi/g					
Thallium–208		0.140	+/–0.0427	0.0131	+/–0.0418	0.0279	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid–HTD2,ALL2 (CT)												
Strontium–90	U	0.00139	+/–0.00407	0.00335	+/–0.00407	0.00702	pCi/g		EXW1 08/14/05	1218	447618	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)												
Tritium	U	–1.36	+/–1.73	1.50	+/–1.73	3.13	pCi/g		LAG1 08/07/05	0552	447279	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	B J1	08/01/05	0613	447439
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	B J1	07/29/05	0057	447438

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID: 5502-0001-009-C1C-02
Sample ID: 141673022

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	47	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID:	5502-0001-009-C2C-03	Project:	YANK01304
Sample ID:	141673023	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	27-JUN-05		
Receive Date:	28-JUL-05		
Collector:	Client		
Moisture:	5.96%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.413	+/-0.121	0.0481	+/-0.119	0.103	pCi/g		JPH1 08/08/05	1551	447538	1
Americium-241	U	0.0367	+/-0.0862	0.0735	+/-0.0845	0.152	pCi/g					
Bismuth-212		0.353	+/-0.158	0.0848	+/-0.155	0.183	pCi/g					
Bismuth-214		0.407	+/-0.0769	0.023	+/-0.0753	0.0487	pCi/g					
Cesium-134	U	0.0181	+/-0.0165	0.0149	+/-0.0162	0.0318	pCi/g					
Cesium-137	U	-0.00422	+/-0.0146	0.012	+/-0.0144	0.0257	pCi/g					
Cobalt-60	U	0.0169	+/-0.0148	0.014	+/-0.0145	0.0308	pCi/g					
Europium-152	U	-0.0276	+/-0.0361	0.0306	+/-0.0354	0.0644	pCi/g					
Europium-154	U	-0.00259	+/-0.0428	0.0354	+/-0.0419	0.0782	pCi/g					
Europium-155	U	0.00779	+/-0.040	0.0363	+/-0.0392	0.0751	pCi/g					
Lead-212		0.418	+/-0.0587	0.019	+/-0.0575	0.0394	pCi/g					
Lead-214		0.438	+/-0.0737	0.0231	+/-0.0722	0.0484	pCi/g					
Manganese-54	U	-0.00406	+/-0.0142	0.0113	+/-0.0139	0.0245	pCi/g					
Niobium-94	U	-0.00211	+/-0.0132	0.0109	+/-0.013	0.0233	pCi/g					
Potassium-40		7.85	+/-0.808	0.129	+/-0.792	0.285	pCi/g					
Radium-226		0.407	+/-0.0769	0.023	+/-0.0753	0.0487	pCi/g					
Silver-108m	U	0.0114	+/-0.0118	0.011	+/-0.0116	0.0231	pCi/g					
Thallium-208		0.132	+/-0.036	0.0108	+/-0.0353	0.0232	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.00459	+/-0.00359	0.0028	+/-0.00359	0.00587	pCi/g		EXW1 08/14/05	1218	447618	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	-1.18	+/-1.81	1.56	+/-1.81	3.25	pCi/g		LAG1 08/07/05	0624	447279	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	08/01/05	0613	447439
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	B J1	07/29/05	0057	447438

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID: 5502–0001–009–C2C–03
Sample ID: 141673023

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	54	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID:	5502-0001-009-C2C-04	Project:	YANK01304
Sample ID:	141673024	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	27-JUN-05		
Receive Date:	28-JUL-05		
Collector:	Client		
Moisture:	6.86%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.344	+/-0.135	0.0441	+/-0.133	0.0955	pCi/g		JPH1 08/09/05	0721	447538	1
Americium-241	U	0.100	+/-0.0634	0.0576	+/-0.0621	0.119	pCi/g					
Bismuth-212		0.597	+/-0.276	0.0926	+/-0.270	0.200	pCi/g					
Bismuth-214		0.529	+/-0.0805	0.0262	+/-0.0789	0.0555	pCi/g					
Cesium-134	U	0.0196	+/-0.0286	0.017	+/-0.0281	0.0361	pCi/g					
Cesium-137	U	-0.0056	+/-0.0159	0.0131	+/-0.0156	0.028	pCi/g					
Cobalt-60	U	0.00568	+/-0.0143	0.0126	+/-0.014	0.0281	pCi/g					
Europium-152	U	-0.0142	+/-0.0413	0.0337	+/-0.0405	0.0709	pCi/g					
Europium-154	U	0.00703	+/-0.0491	0.0418	+/-0.0481	0.0913	pCi/g					
Europium-155	U	-0.0124	+/-0.0404	0.0366	+/-0.0396	0.0757	pCi/g					
Lead-212		0.432	+/-0.0561	0.0206	+/-0.055	0.0428	pCi/g					
Lead-214		0.568	+/-0.0828	0.0236	+/-0.0812	0.0496	pCi/g					
Manganese-54	U	-0.00232	+/-0.0179	0.0127	+/-0.0175	0.0274	pCi/g					
Niobium-94	U	-0.00695	+/-0.0133	0.0107	+/-0.0131	0.023	pCi/g					
Potassium-40		7.61	+/-0.809	0.0955	+/-0.793	0.219	pCi/g					
Radium-226		0.529	+/-0.0805	0.0262	+/-0.0789	0.0555	pCi/g					
Silver-108m	U	-0.000218	+/-0.0135	0.0105	+/-0.0132	0.0223	pCi/g					
Thallium-208		0.133	+/-0.0393	0.012	+/-0.0385	0.0258	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90		0.0235	+/-0.00474	0.00302	+/-0.00477	0.00632	pCi/g		EXW1 08/14/05	1218	447618	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	0.321	+/-1.84	1.53	+/-1.84	3.18	pCi/g		LAG1 08/07/05	0656	447279	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	08/01/05	0613	447439
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	B J1	07/29/05	0057	447438

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID: 5502-0001-009-C2C-04
Sample ID: 141673024

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	52	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

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B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID:	5502-0001-010-C1C-01	Project:	YANK01304
Sample ID:	141673025	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	23-JUN-05		
Receive Date:	28-JUL-05		
Collector:	Client		
Moisture:	9.16%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Alpha Spec Analysis												
Alphaspec Am241, Cm, Solid-TRU2,ALL2 (CT)												
Americium-241	U	-0.0139	+/-0.0287	0.0162	+/-0.0288	0.0711	pCi/g		JXG1 08/04/05	1357	447483	1
Curium-242	U	0.0171	+/-0.0335	0.00	+/-0.0335	0.0463	pCi/g					
Curium-243/244	U	0.00744	+/-0.0296	0.023	+/-0.0296	0.0848	pCi/g					
Alphaspec Pu, Solid-TRU2,ALL2 (CT)												
Plutonium-238	U	-0.00654	+/-0.0282	0.022	+/-0.0282	0.0809	pCi/g		JXG1 08/04/05	1357	447487	2
Plutonium-239/240	U	0.00381	+/-0.0289	0.0269	+/-0.0289	0.0906	pCi/g					
Liquid Scint Pu241, Solid-TRU2,ALL2 (CT)												
Plutonium-241	U	1.52	+/-2.60	2.14	+/-2.61	4.41	pCi/g		JXG1 08/07/05	0510	447490	3
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.536	+/-0.149	0.0478	+/-0.146	0.104	pCi/g		JPH1 08/09/05	0728	447538	4
Americium-241	U	0.028	+/-0.0735	0.0593	+/-0.0721	0.123	pCi/g					
Bismuth-212		0.347	+/-0.213	0.128	+/-0.209	0.272	pCi/g					
Bismuth-214		0.679	+/-0.100	0.0253	+/-0.0984	0.0538	pCi/g					
Cesium-134	UUI	0.00	+/-0.0306	0.0197	+/-0.0299	0.0418	pCi/g					
Cesium-137		0.244	+/-0.0391	0.0138	+/-0.0383	0.0294	pCi/g					
Cobalt-60		0.0489	+/-0.0252	0.0142	+/-0.0247	0.0316	pCi/g					
Europium-152	U	-0.0431	+/-0.0463	0.0379	+/-0.0454	0.0795	pCi/g					
Europium-154	U	-0.0222	+/-0.0612	0.041	+/-0.060	0.0904	pCi/g					
Europium-155	U	0.0108	+/-0.0498	0.0432	+/-0.0488	0.0892	pCi/g					
Lead-212		0.559	+/-0.071	0.0258	+/-0.0696	0.0534	pCi/g					
Lead-214		0.650	+/-0.0957	0.030	+/-0.0938	0.0627	pCi/g					
Manganese-54	U	-0.00503	+/-0.018	0.0142	+/-0.0177	0.0306	pCi/g					
Niobium-94	U	0.0294	+/-0.0174	0.0159	+/-0.0171	0.0336	pCi/g					
Potassium-40		8.79	+/-0.929	0.132	+/-0.911	0.293	pCi/g					
Radium-226		0.679	+/-0.100	0.0253	+/-0.0984	0.0538	pCi/g					
Silver-108m	U	-0.00778	+/-0.016	0.0131	+/-0.0156	0.0277	pCi/g					
Thallium-208		0.159	+/-0.0426	0.015	+/-0.0417	0.0318	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90		0.0136	+/-0.0041	0.00288	+/-0.00411	0.00602	pCi/g		EXW1 08/14/05	1219	447618	5
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	0.228	+/-1.84	1.53	+/-1.84	3.19	pCi/g		LAG1 08/07/05	0728	447279	6
Liquid Scint C14, Solid-HTD2,ALL2 (CT)												

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID: 5502–0001–010–C1C–01
Sample ID: 141673025

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Liquid Scintillation Analysis												
Liquid Scint C14, Solid–HTD2,ALL2 (CT)												
Carbon–14	U	–0.231	+/–0.375	0.319	+/–0.375	0.650	pCi/g		BXF1 08/02/05	0550	447285	7
Liquid Scint Fe55, Solid–HTD2,ALL2 (CT)												
Iron–55	U	–0.729	+/–3.25	2.37	+/–3.25	4.80	pCi/g		BXD1 08/13/05	0752	447648	8
Liquid Scint Ni63, Solid–HTD2,ALL2 (CT)												
Nickel–63	U	–0.58	+/–1.77	1.50	+/–1.77	3.08	pCi/g		BXD1 08/11/05	0435	451367	9
Liquid Scint Tc99, Solid–HTD2,ALL2 (CT)												
Technetium–99	U	–0.0471	+/–0.518	0.436	+/–0.518	0.892	pCi/g		BXD1 08/04/05	0223	447276	11

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	B J1	08/01/05	0613	447439
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	B J1	07/29/05	0057	447438

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL–300, Am–05–RC Modified
2	DOE EML HASL–300, Pu–11–RC Modified
3	DOE EML HASL–300, Pu–11–RC Modified
4	EML HASL 300, 4.5.2.3
5	EPA 905.0 Modified
6	EPA 906.0 Modified
7	EPA EERF C–01 Modified
8	DOE RESL Fe–1, Modified
9	DOE RESL Ni–1, Modified
10	DOE RESL Ni–1, Modified
11	DOE EML HASL–300, Tc–02–RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium–243	Alphaspec Am241, Cm, Solid–TRI	76	(15%–125%)
Plutonium–242	Alphaspec Pu, Solid–TRU2,ALL2	79	(15%–125%)
Carrier/Tracer Recovery	Liquid Scint Pu241, Solid–TRU2,A	77	(25%–125%)
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 (C	58	(25%–125%)
Carrier/Tracer Recovery	Liquid Scint Fe55, Solid–HTD2,Al	45	(15%–125%)

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Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID: 5502-0001-010-C1C-01
Sample ID: 141673025

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
Carrier/Tracer Recovery		Liquid Scint Ni63, Solid-HTD2,Al			64		(25%-125%)				
Carrier/Tracer Recovery		Liquid Scint Tc99, Solid-HTD2,A			72		(15%-125%)				

Notes:
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E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID:	5502-0001-010-C1C-02	Project:	YANK01304
Sample ID:	141673026	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	23-JUN-05		
Receive Date:	28-JUL-05		
Collector:	Client		
Moisture:	8.07%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.459	+/-0.181	0.0586	+/-0.177	0.128	pCi/g		JPH1 08/09/05	0729	447538	1
Americium-241	U	0.0386	+/-0.0273	0.0216	+/-0.0268	0.0447	pCi/g					
Bismuth-212		0.357	+/-0.224	0.145	+/-0.219	0.311	pCi/g					
Bismuth-214		0.413	+/-0.0952	0.0314	+/-0.0933	0.0669	pCi/g					
Cesium-134	U	0.0243	+/-0.0253	0.0231	+/-0.0248	0.0492	pCi/g					
Cesium-137	U	-0.0035	+/-0.0216	0.0161	+/-0.0212	0.0347	pCi/g					
Cobalt-60	U	0.0144	+/-0.0216	0.0197	+/-0.0211	0.0434	pCi/g					
Europium-152	U	0.00411	+/-0.0451	0.0387	+/-0.0442	0.0818	pCi/g					
Europium-154	U	0.0322	+/-0.0718	0.061	+/-0.0704	0.133	pCi/g					
Europium-155	U	0.0213	+/-0.058	0.0345	+/-0.0568	0.0717	pCi/g					
Lead-212		0.449	+/-0.0594	0.0213	+/-0.0582	0.0445	pCi/g					
Lead-214		0.515	+/-0.0913	0.0267	+/-0.0895	0.0566	pCi/g					
Manganese-54	U	-0.00524	+/-0.023	0.019	+/-0.0225	0.0409	pCi/g					
Niobium-94	U	7.910E-06	+/-0.0177	0.0152	+/-0.0174	0.0326	pCi/g					
Potassium-40		8.52	+/-1.02	0.160	+/-0.999	0.360	pCi/g					
Radium-226		0.413	+/-0.0952	0.0314	+/-0.0933	0.0669	pCi/g					
Silver-108m	U	-0.00165	+/-0.0163	0.0135	+/-0.016	0.0287	pCi/g					
Thallium-208		0.121	+/-0.0466	0.0152	+/-0.0457	0.0328	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.00388	+/-0.00374	0.00338	+/-0.00374	0.00709	pCi/g		EXW1 08/10/05	2132	447618	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	-0.668	+/-1.94	1.66	+/-1.94	3.45	pCi/g		LAG1 08/07/05	0759	447279	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	08/01/05	0613	447439
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	B J1	07/29/05	0057	447438

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID: 5502–0001–010–C1C–02
Sample ID: 141673026

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	62	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
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Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID:	5502–0001–010–C2C–03	Project:	YANK01304
Sample ID:	141673027	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	23–JUN–05		
Receive Date:	28–JUL–05		
Collector:	Client		
Moisture:	7.23%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)												
Actinium–228		0.581	+/–0.148	0.0521	+/–0.145	0.113	pCi/g		JPH1 08/09/05	0729	447538	1
Americium–241	U	0.0319	+/–0.0594	0.0559	+/–0.0582	0.116	pCi/g					
Bismuth–212	U	0.208	+/–0.186	0.136	+/–0.182	0.290	pCi/g					
Bismuth–214		0.455	+/–0.103	0.0283	+/–0.101	0.0606	pCi/g					
Cesium–134	U	0.029	+/–0.0313	0.0175	+/–0.0307	0.0377	pCi/g					
Cesium–137	U	–0.000771	+/–0.0225	0.0164	+/–0.022	0.0351	pCi/g					
Cobalt–60	U	–0.00289	+/–0.020	0.0161	+/–0.0196	0.0355	pCi/g					
Europium–152	U	–0.00398	+/–0.0525	0.039	+/–0.0514	0.0827	pCi/g					
Europium–154	U	0.0623	+/–0.065	0.0584	+/–0.0637	0.126	pCi/g					
Europium–155	U	0.0397	+/–0.0515	0.0472	+/–0.0504	0.0984	pCi/g					
Lead–212		0.471	+/–0.0661	0.0223	+/–0.0648	0.047	pCi/g					
Lead–214		0.488	+/–0.0994	0.027	+/–0.0974	0.0573	pCi/g					
Manganese–54	U	–0.00202	+/–0.0218	0.0178	+/–0.0213	0.0381	pCi/g					
Niobium–94	U	0.000558	+/–0.0167	0.0141	+/–0.0164	0.0302	pCi/g					
Potassium–40		7.47	+/–0.795	0.146	+/–0.779	0.325	pCi/g					
Radium–226		0.455	+/–0.103	0.0283	+/–0.101	0.0606	pCi/g					
Silver–108m	U	–0.00328	+/–0.0154	0.0126	+/–0.0151	0.027	pCi/g					
Thallium–208		0.152	+/–0.0373	0.0159	+/–0.0365	0.034	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid–HTD2,ALL2 (CT)												
Strontium–90	U	–0.00696	+/–0.00362	0.00392	+/–0.00363	0.00817	pCi/g		EXW1 08/10/05	2132	447618	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)												
Tritium	U	–1.38	+/–1.76	1.53	+/–1.76	3.18	pCi/g		LAG1 08/07/05	0831	447279	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	B J1	08/01/05	0613	447439
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	B J1	07/29/05	0057	447438

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID: 5502–0001–010–C2C–03
Sample ID: 141673027

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	63	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID:	5502-0001-010-C2C-04	Project:	YANK01304
Sample ID:	141673028	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	23-JUN-05		
Receive Date:	28-JUL-05		
Collector:	Client		
Moisture:	6.25%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.403	+/-0.111	0.0393	+/-0.109	0.0861	pCi/g		JPH1 08/09/05	0733	447538	1
Americium-241	U	0.0192	+/-0.0654	0.0535	+/-0.0641	0.111	pCi/g					
Bismuth-212		0.259	+/-0.154	0.102	+/-0.151	0.218	pCi/g					
Bismuth-214		0.473	+/-0.0737	0.0224	+/-0.0722	0.0478	pCi/g					
Cesium-134	U	0.0317	+/-0.0277	0.0174	+/-0.0272	0.037	pCi/g					
Cesium-137	U	-0.00514	+/-0.0161	0.0131	+/-0.0158	0.028	pCi/g					
Cobalt-60	U	-0.000663	+/-0.0167	0.0138	+/-0.0163	0.0306	pCi/g					
Europium-152	U	0.0458	+/-0.0388	0.0362	+/-0.038	0.0757	pCi/g					
Europium-154	U	0.00405	+/-0.0486	0.0411	+/-0.0476	0.0901	pCi/g					
Europium-155	U	0.0266	+/-0.0425	0.0382	+/-0.0416	0.0789	pCi/g					
Lead-212		0.448	+/-0.0601	0.0186	+/-0.0589	0.0388	pCi/g					
Lead-214		0.469	+/-0.0739	0.0251	+/-0.0724	0.0526	pCi/g					
Manganese-54	U	0.0147	+/-0.0204	0.0127	+/-0.020	0.0275	pCi/g					
Niobium-94	U	0.0115	+/-0.0142	0.0126	+/-0.014	0.0269	pCi/g					
Potassium-40		7.53	+/-0.771	0.101	+/-0.755	0.230	pCi/g					
Radium-226		0.473	+/-0.0737	0.0224	+/-0.0722	0.0478	pCi/g					
Silver-108m	U	0.00749	+/-0.0125	0.0113	+/-0.0123	0.0239	pCi/g					
Thallium-208		0.163	+/-0.0301	0.0127	+/-0.0295	0.0272	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	-0.00189	+/-0.0039	0.0039	+/-0.0039	0.00818	pCi/g		EXW1 08/10/05	2132	447618	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	-0.0757	+/-1.71	1.44	+/-1.71	3.00	pCi/g		LAG1 08/07/05	0903	447279	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	08/01/05	0613	447439
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	B J1	07/29/05	0057	447438

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID: 5502–0001–010–C2C–04
Sample ID: 141673028

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	57	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID:	5502–0000–001–C1C–01	Project:	YANK01304
Sample ID:	141673029	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	21–JUN–05		
Receive Date:	28–JUL–05		
Collector:	Client		
Moisture:	9%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)												
Actinium–228		0.530	+/–0.136	0.0534	+/–0.133	0.115	pCi/g		JPH1 08/09/05	0755	447538	1
Americium–241	U	0.0111	+/–0.117	0.0732	+/–0.114	0.151	pCi/g					
Bismuth–212		0.394	+/–0.192	0.126	+/–0.188	0.267	pCi/g					
Bismuth–214		0.403	+/–0.0918	0.0306	+/–0.0899	0.0647	pCi/g					
Cesium–134	U	0.00436	+/–0.021	0.0179	+/–0.0205	0.0382	pCi/g					
Cesium–137		0.153	+/–0.0379	0.0157	+/–0.0372	0.0333	pCi/g					
Cobalt–60	U	0.0451	+/–0.0237	0.0212	+/–0.0233	0.0452	pCi/g					
Europium–152	U	0.00689	+/–0.0573	0.0432	+/–0.0561	0.0904	pCi/g					
Europium–154	U	0.0189	+/–0.0561	0.0487	+/–0.055	0.105	pCi/g					
Europium–155	U	0.0249	+/–0.0532	0.0467	+/–0.0522	0.0965	pCi/g					
Lead–212		0.460	+/–0.0624	0.027	+/–0.0612	0.0559	pCi/g					
Lead–214		0.445	+/–0.0814	0.0313	+/–0.0798	0.0656	pCi/g					
Manganese–54	U	0.00377	+/–0.0191	0.0163	+/–0.0187	0.0348	pCi/g					
Niobium–94	U	0.0144	+/–0.0168	0.0152	+/–0.0165	0.0321	pCi/g					
Potassium–40		9.31	+/–0.909	0.153	+/–0.891	0.335	pCi/g					
Radium–226		0.403	+/–0.0918	0.0306	+/–0.0899	0.0647	pCi/g					
Silver–108m	U	–0.0112	+/–0.0178	0.0142	+/–0.0174	0.0299	pCi/g					
Thallium–208		0.148	+/–0.0401	0.0176	+/–0.0393	0.0371	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid–HTD2,ALL2 (CT)												
Strontium–90		0.0106	+/–0.00324	0.00223	+/–0.00326	0.00468	pCi/g		EXW1 08/14/05	1219	447618	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)												
Tritium	U	–1.17	+/–1.72	1.49	+/–1.72	3.10	pCi/g		LAG1 08/07/05	0935	447279	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	B J1	08/01/05	0613	447439
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	B J1	07/29/05	0057	447438

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID: 5502-0000-001-C1C-01
Sample ID: 141673029

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	68	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

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Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID:	5502-0000-001-C1C-02	Project:	YANK01304
Sample ID:	141673030	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	21-JUN-05		
Receive Date:	28-JUL-05		
Collector:	Client		
Moisture:	8.28%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.343	+/-0.110	0.0465	+/-0.108	0.0999	pCi/g		JPH1 08/09/05	0758	447538	1
Americium-241	U	-0.0118	+/-0.0647	0.0529	+/-0.0634	0.109	pCi/g					
Bismuth-212		0.311	+/-0.135	0.093	+/-0.132	0.200	pCi/g					
Bismuth-214		0.394	+/-0.0711	0.0222	+/-0.0697	0.0473	pCi/g					
Cesium-134	U	0.0109	+/-0.018	0.0158	+/-0.0176	0.0337	pCi/g					
Cesium-137	U	0.00807	+/-0.0157	0.0139	+/-0.0153	0.0295	pCi/g					
Cobalt-60	U	0.0165	+/-0.0191	0.0172	+/-0.0187	0.0371	pCi/g					
Europium-152	U	-0.00717	+/-0.0394	0.0336	+/-0.0386	0.0705	pCi/g					
Europium-154	U	0.00707	+/-0.0609	0.0443	+/-0.0597	0.0959	pCi/g					
Europium-155	U	0.00482	+/-0.0425	0.0379	+/-0.0417	0.0782	pCi/g					
Lead-212		0.382	+/-0.0503	0.0215	+/-0.0493	0.0446	pCi/g					
Lead-214		0.408	+/-0.0691	0.0244	+/-0.0677	0.0512	pCi/g					
Manganese-54	U	0.00481	+/-0.0171	0.0146	+/-0.0167	0.0311	pCi/g					
Niobium-94	U	0.008	+/-0.0181	0.0121	+/-0.0178	0.0258	pCi/g					
Potassium-40		8.85	+/-0.849	0.110	+/-0.832	0.246	pCi/g					
Radium-226		0.394	+/-0.0711	0.0222	+/-0.0697	0.0473	pCi/g					
Silver-108m	U	0.00207	+/-0.0135	0.0115	+/-0.0133	0.0243	pCi/g					
Thallium-208		0.139	+/-0.0362	0.0127	+/-0.0355	0.0269	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90		0.00882	+/-0.00311	0.00221	+/-0.00311	0.00464	pCi/g		EXW1 08/14/05	1219	447618	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	-0.081	+/-1.83	1.54	+/-1.83	3.20	pCi/g		LAG1 08/07/05	1007	447279	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	08/01/05	0613	447439
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	B J1	07/29/05	0057	447438

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID: 5502-0000-001-C1C-02
Sample ID: 141673030

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	74	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID:	5502-0000-001-C1C-03	Project:	YANK01304
Sample ID:	141673031	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	21-JUN-05		
Receive Date:	28-JUL-05		
Collector:	Client		
Moisture:	7.47%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.419	+/-0.124	0.0523	+/-0.121	0.112	pCi/g		JPH1 08/09/05	0805	447538	1
Americium-241	U	0.00856	+/-0.0264	0.0217	+/-0.0259	0.0446	pCi/g					
Bismuth-212	UUI	0.00	+/-0.267	0.121	+/-0.261	0.258	pCi/g					
Bismuth-214		0.421	+/-0.081	0.0286	+/-0.0794	0.0604	pCi/g					
Cesium-134	UUI	0.00	+/-0.0289	0.0193	+/-0.0283	0.0409	pCi/g					
Cesium-137	U	0.00946	+/-0.0175	0.0154	+/-0.0171	0.0327	pCi/g					
Cobalt-60	U	-0.00555	+/-0.0184	0.0148	+/-0.0181	0.0326	pCi/g					
Europium-152	U	-0.0628	+/-0.0458	0.0374	+/-0.0449	0.0782	pCi/g					
Europium-154	U	-0.0256	+/-0.0637	0.0429	+/-0.0625	0.0936	pCi/g					
Europium-155	U	0.0109	+/-0.0421	0.0382	+/-0.0412	0.0785	pCi/g					
Lead-212		0.489	+/-0.0704	0.0211	+/-0.069	0.0439	pCi/g					
Lead-214		0.490	+/-0.0803	0.0301	+/-0.0787	0.0626	pCi/g					
Manganese-54	U	0.00281	+/-0.0184	0.0161	+/-0.018	0.0344	pCi/g					
Niobium-94	U	0.0147	+/-0.0171	0.0153	+/-0.0168	0.0322	pCi/g					
Potassium-40		8.34	+/-0.905	0.138	+/-0.887	0.304	pCi/g					
Radium-226		0.421	+/-0.081	0.0286	+/-0.0794	0.0604	pCi/g					
Silver-108m	U	0.0032	+/-0.015	0.0133	+/-0.0147	0.028	pCi/g					
Thallium-208		0.164	+/-0.044	0.0149	+/-0.0431	0.0315	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	-0.00201	+/-0.00325	0.00282	+/-0.00325	0.00589	pCi/g		EXW1 08/14/05	2135	447618	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	-1.2	+/-1.76	1.53	+/-1.76	3.17	pCi/g		LAG1 08/07/05	1039	447279	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	08/01/05	0613	447439
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	B J1	07/29/05	0057	447438

The following Analytical Methods were performed

Method	Description

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID: 5502-0000-001-C1C-03
Sample ID: 141673031

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
1	EML HASL 300, 4.5.2.3										
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	61	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 – (843) 556–8171 – www.gel.com

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID:	5502–0000–001–C1C–04	Project:	YANK01304
Sample ID:	141673032	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	21–JUN–05		
Receive Date:	28–JUL–05		
Collector:	Client		
Moisture:	6.63%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)												
Actinium–228		0.422	+/–0.110	0.033	+/–0.108	0.0717	pCi/g		JPH1 08/09/05	0805	447538	1
Americium–241	U	–0.00645	+/–0.0719	0.0624	+/–0.0704	0.129	pCi/g					
Bismuth–212		0.290	+/–0.136	0.077	+/–0.133	0.166	pCi/g					
Bismuth–214		0.350	+/–0.0619	0.0178	+/–0.0607	0.0379	pCi/g					
Cesium–134	U	0.0288	+/–0.0173	0.0136	+/–0.017	0.029	pCi/g					
Cesium–137	U	0.00847	+/–0.0114	0.0104	+/–0.0112	0.0222	pCi/g					
Cobalt–60	U	0.0186	+/–0.0126	0.0111	+/–0.0123	0.0245	pCi/g					
Europium–152	U	–0.0161	+/–0.0303	0.0268	+/–0.0297	0.0562	pCi/g					
Europium–154	U	0.0153	+/–0.0397	0.0349	+/–0.0389	0.0759	pCi/g					
Europium–155	U	0.0124	+/–0.0363	0.0343	+/–0.0355	0.0708	pCi/g					
Lead–212		0.417	+/–0.0549	0.016	+/–0.0538	0.0334	pCi/g					
Lead–214		0.321	+/–0.071	0.020	+/–0.0696	0.042	pCi/g					
Manganese–54	U	–0.00351	+/–0.0137	0.0111	+/–0.0134	0.0239	pCi/g					
Niobium–94	U	0.00749	+/–0.0104	0.0094	+/–0.0102	0.0201	pCi/g					
Potassium–40		6.74	+/–0.684	0.0894	+/–0.670	0.202	pCi/g					
Radium–226		0.350	+/–0.0619	0.0178	+/–0.0607	0.0379	pCi/g					
Silver–108m	U	0.00241	+/–0.010	0.00908	+/–0.00981	0.0192	pCi/g					
Thallium–208		0.107	+/–0.0304	0.00983	+/–0.0298	0.021	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid–HTD2,ALL2 (CT)												
Strontium–90	U	0.00553	+/–0.00635	0.00505	+/–0.00635	0.0106	pCi/g		EXW1 08/14/05	2135	447618	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)												
Tritium	U	1.19	+/–1.91	1.56	+/–1.91	3.23	pCi/g		LAG1 08/07/05	1111	447279	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	B J1	08/01/05	0613	447439
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	B J1	07/29/05	0057	447438

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: August 16, 2005

Client Sample ID: 5502-0000-001-C1C-04
Sample ID: 141673032

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	30	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
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d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

QUALITY CONTROL DATA

GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: August 16, 2005

Client : Connecticut Yankee Atomic Power
Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut

Contact: Mr. Pete Hollenbeck

Workorder: 141673

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Alpha Spec										
Batch 447483										
QC1200899638 141673001 DUP										
Americium-241	U	0.00791	U	0.000728	pCi/g	166		(0% - 100%)	JXG1	08/04/05 13:57
Uncert:		+/-0.034		+/-0.0173						
TPU:		+/-0.034		+/-0.0173						
Curium-242	U	-0.0125	U	0.00	pCi/g	N/A		(0% - 100%)		
Uncert:		+/-0.0142		+/-0.0353						
TPU:		+/-0.0143		+/-0.0353						
Curium-243/244	U	0.0255	U	0.00781	pCi/g	106		(0% - 100%)		
Uncert:		+/-0.0408		+/-0.0311						
TPU:		+/-0.0409		+/-0.0311						
QC1200899640 LCS										
Americium-241	5.41			4.77	pCi/g		88	(75%-125%)		08/04/05 13:57
Uncert:				+/-0.481						
TPU:				+/-0.803						
Curium-242			U	-0.00306	pCi/g					
Uncert:				+/-0.0257						
TPU:				+/-0.0258						
Curium-243/244	6.65			6.55	pCi/g		99	(75%-125%)		
Uncert:				+/-0.562						
TPU:				+/-1.05						
QC1200899637 MB										
Americium-241			U	-0.0138	pCi/g					08/04/05 13:57
Uncert:				+/-0.0272						
TPU:				+/-0.0272						
Curium-242			U	-0.00657	pCi/g					
Uncert:				+/-0.0284						
TPU:				+/-0.0284						
Curium-243/244			U	-0.00324	pCi/g					
Uncert:				+/-0.0272						
TPU:				+/-0.0272						
QC1200899639 141673001 MS										
Americium-241	5.46 U	0.00791		5.05	pCi/g		93	(75%-125%)		08/04/05 13:57
Uncert:		+/-0.034		+/-0.559						
TPU:		+/-0.034		+/-0.858						
Curium-242	U	-0.0125	U	0.00538	pCi/g					
Uncert:		+/-0.0142		+/-0.0408						
TPU:		+/-0.0143		+/-0.0408						
Curium-243/244	6.74 U	0.0255		6.69	pCi/g		99	(75%-125%)		
Uncert:		+/-0.0408		+/-0.644						
TPU:		+/-0.0409		+/-1.08						
Batch 447487										
QC1200899651 141673001 DUP										
Plutonium-238	U	0.0138	U	-0.0133	pCi/g	N/A		(0% - 100%)	JXG1	08/04/05 13:57

QC Summary

Workorder: 141673

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Alpha Spec										
Batch 447487										
	Uncert:	+/-0.0271		+/-0.030						
	TPU:	+/-0.0272		+/-0.030						
Plutonium-239/240	U	0.00719	U	-0.00331	pCi/g	N/A		(0% - 100%)		
	Uncert:	+/-0.0286		+/-0.0278						
	TPU:	+/-0.0286		+/-0.0278						
QC1200899653 LCS										
Plutonium-238				0.0369	pCi/g			(75%-125%)		
	Uncert:			+/-0.0417						
	TPU:			+/-0.0419						
Plutonium-239/240	4.99			5.10	pCi/g		102	(75%-125%)		
	Uncert:			+/-0.491						
	TPU:			+/-0.699						
QC1200899650 MB										
Plutonium-238			U	-0.00583	pCi/g					08/04/05 13:57
	Uncert:			+/-0.0251						
	TPU:			+/-0.0251						
Plutonium-239/240			U	-0.00874	pCi/g					
	Uncert:			+/-0.00989						
	TPU:			+/-0.00994						
QC1200899652 141673001 MS										
Plutonium-238	U	0.0138	U	0.011	pCi/g			(75%-125%)		08/04/05 13:57
	Uncert:	+/-0.0271		+/-0.0481						
	TPU:	+/-0.0272		+/-0.0481						
Plutonium-239/240	5.04 U	0.00719		5.87	pCi/g		116	(75%-125%)		
	Uncert:	+/-0.0286		+/-0.543						
	TPU:	+/-0.0286		+/-0.796						
Batch 447490										
QC1200899655 141673001 DUP										
Plutonium-241	U	1.62	U	0.911	pCi/g	0		(0% - 100%)	JXG1	08/07/05 06:13
	Uncert:	+/-2.77		+/-2.43						
	TPU:	+/-2.78		+/-2.44						
QC1200899657 LCS										
Plutonium-241	44.4			33.0	pCi/g		74*	(75%-125%)		08/07/05 07:17
	Uncert:			+/-3.34						
	TPU:			+/-4.84						
QC1200899654 MB										
Plutonium-241			U	1.72	pCi/g					08/07/05 05:41
	Uncert:			+/-2.44						
	TPU:			+/-2.45						
QC1200899656 141673001 MS										
Plutonium-241	44.8 U	1.62		33.0	pCi/g		74*	(75%-125%)		08/07/05 06:45
	Uncert:	+/-2.77		+/-3.78						
	TPU:	+/-2.78		+/-5.30						
Rad Gamma Spec										
Batch 447538										
QC1200899784 141673013 DUP										
Actinium-228		0.544		0.430	pCi/g	23		(0% - 100%)	JPH1	08/08/05 15:53
	Uncert:	+/-0.132		+/-0.113						
				+/-0.111						

QC Summary

Workorder: 141673

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch 447538											
	TPU:	+/-0.129									
Americium-241	U	-0.0431	U	-0.00616	pCi/g	N/A		(0% - 100%)			
	Uncert:	+/-0.0603		+/-0.0404							
	TPU:	+/-0.0591		+/-0.0396							
Bismuth-212	UUI	0.00		0.393	pCi/g	54		(0% - 100%)			
	Uncert:	+/-0.272		+/-0.157							
	TPU:	+/-0.266		+/-0.154							
Bismuth-214		0.510		0.477	pCi/g	7		(0% - 100%)			
	Uncert:	+/-0.0911		+/-0.072							
	TPU:	+/-0.0892		+/-0.0705							
Cesium-134	U	0.0145	UUI	0.00	pCi/g	71		(0% - 100%)			
	Uncert:	+/-0.0298		+/-0.0192							
	TPU:	+/-0.0292		+/-0.0188							
Cesium-137		0.194		0.177	pCi/g	9		(0% - 100%)			
	Uncert:	+/-0.0337		+/-0.0345							
	TPU:	+/-0.0331		+/-0.0338							
Cobalt-60	UUI	0.00	U	0.00653	pCi/g	136		(0% - 100%)			
	Uncert:	+/-0.0217		+/-0.0136							
	TPU:	+/-0.0212		+/-0.0133							
Europium-152	U	0.0212	U	-0.0245	pCi/g	N/A		(0% - 100%)			
	Uncert:	+/-0.0431		+/-0.0321							
	TPU:	+/-0.0422		+/-0.0315							
Europium-154	U	0.00173	U	-0.00352	pCi/g	N/A		(0% - 100%)			
	Uncert:	+/-0.0439		+/-0.0397							
	TPU:	+/-0.0431		+/-0.039							
Europium-155	U	0.0111	U	0.0207	pCi/g	60		(0% - 100%)			
	Uncert:	+/-0.0521		+/-0.0367							
	TPU:	+/-0.0511		+/-0.0359							
Lead-212		0.466		0.444	pCi/g	5		(0% - 100%)			
	Uncert:	+/-0.0603		+/-0.0531							
	TPU:	+/-0.0591		+/-0.052							
Lead-214		0.586		0.612	pCi/g	4		(0% - 20%)			
	Uncert:	+/-0.0834		+/-0.0781							
	TPU:	+/-0.0817		+/-0.0765							
Manganese-54	U	0.0181	U	-0.00959	pCi/g	N/A		(0% - 100%)			
	Uncert:	+/-0.0238		+/-0.0134							
	TPU:	+/-0.0234		+/-0.0132							
Niobium-94	U	-0.000795	U	0.00647	pCi/g	N/A		(0% - 100%)			
	Uncert:	+/-0.0135		+/-0.0115							
	TPU:	+/-0.0132		+/-0.0112							
Potassium-40		7.02		7.31	pCi/g	4		(0% - 20%)			
	Uncert:	+/-0.781		+/-0.664							
	TPU:	+/-0.765		+/-0.651							
Radium-226		0.510		0.477	pCi/g	7		(0% - 100%)			
	Uncert:	+/-0.0911		+/-0.072							
	TPU:	+/-0.0892		+/-0.0705							
Silver-108m	U	-0.00709	U	0.000204	pCi/g	N/A		(0% - 100%)			
	Uncert:	+/-0.0135		+/-0.011							

QC Summary

Workorder: **141673**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 447538										
	TPU:	+/-0.0132		+/-0.0108						
Thallium-208		0.143		0.148	pCi/g	3		(0% - 100%)		
	Uncert:	+/-0.0341		+/-0.0312						
	TPU:	+/-0.0335		+/-0.0306						
QC1200899785 LCS										
Actinium-228			U	0.238	pCi/g					08/09/05 11:02
	Uncert:			+/-0.779						
	TPU:			+/-0.763						
Americium-241	24.4			26.3	pCi/g		108	(75%-125%)		
	Uncert:			+/-2.14						
	TPU:			+/-2.10						
Bismuth-212			U	-0.634	pCi/g					
	Uncert:			+/-1.70						
	TPU:			+/-1.66						
Bismuth-214			U	0.279	pCi/g					
	Uncert:			+/-0.391						
	TPU:			+/-0.383						
Cesium-134			U	-0.106	pCi/g					
	Uncert:			+/-0.215						
	TPU:			+/-0.211						
Cesium-137	9.42			10.3	pCi/g		109	(75%-125%)		
	Uncert:			+/-1.13						
	TPU:			+/-1.11						
Cobalt-60	14.5			15.0	pCi/g		104	(75%-125%)		
	Uncert:			+/-1.24						
	TPU:			+/-1.21						
Europium-152			U	-0.242	pCi/g					
	Uncert:			+/-0.461						
	TPU:			+/-0.451						
Europium-154			U	-0.0501	pCi/g					
	Uncert:			+/-0.555						
	TPU:			+/-0.544						
Europium-155			U	-0.471	pCi/g					
	Uncert:			+/-0.511						
	TPU:			+/-0.501						
Lead-212			U	0.192	pCi/g					
	Uncert:			+/-0.248						
	TPU:			+/-0.243						
Lead-214			U	0.0199	pCi/g					
	Uncert:			+/-0.347						
	TPU:			+/-0.340						
Manganese-54			U	0.129	pCi/g					
	Uncert:			+/-0.213						
	TPU:			+/-0.208						
Niobium-94			U	0.094	pCi/g					
	Uncert:			+/-0.214						
	TPU:			+/-0.210						
Potassium-40			U	3.10	pCi/g					

QC Summary

Workorder: 141673

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 447538										
	Uncert:			+/-2.19						
	TPU:			+/-2.14						
Radium-226			U	0.279	pCi/g			(75%-125%)		
	Uncert:			+/-0.391						
	TPU:			+/-0.383						
Silver-108m			U	-0.122	pCi/g					
	Uncert:			+/-0.170						
	TPU:			+/-0.167						
Thallium-208			U	0.227	pCi/g					
	Uncert:			+/-0.254						
	TPU:			+/-0.249						
QC1200899783 MB										
Actinium-228			U	0.00996	pCi/g					08/09/05 09:18
	Uncert:			+/-0.0501						
	TPU:			+/-0.0491						
Americium-241			U	-0.00418	pCi/g					
	Uncert:			+/-0.00818						
	TPU:			+/-0.00802						
Bismuth-212			U	-0.0118	pCi/g					
	Uncert:			+/-0.0749						
	TPU:			+/-0.0734						
Bismuth-214			U	0.0313	pCi/g					
	Uncert:			+/-0.0202						
	TPU:			+/-0.0198						
Cesium-134			U	0.00574	pCi/g					
	Uncert:			+/-0.0116						
	TPU:			+/-0.0113						
Cesium-137			U	0.0111	pCi/g					
	Uncert:			+/-0.0095						
	TPU:			+/-0.00931						
Cobalt-60			U	0.00696	pCi/g					
	Uncert:			+/-0.0108						
	TPU:			+/-0.0105						
Europium-152			U	-0.00432	pCi/g					
	Uncert:			+/-0.0257						
	TPU:			+/-0.0252						
Europium-154			U	-0.00458	pCi/g					
	Uncert:			+/-0.029						
	TPU:			+/-0.0284						
Europium-155			U	-0.00339	pCi/g					
	Uncert:			+/-0.018						
	TPU:			+/-0.0176						
Lead-212			U	0.0108	pCi/g					
	Uncert:			+/-0.0254						
	TPU:			+/-0.0249						
Lead-214			U	0.0119	pCi/g					
	Uncert:			+/-0.017						
	TPU:			+/-0.0167						

QC Summary

Workorder: 141673

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 447538										
Manganese-54			U	0.00684	pCi/g					
	Uncert:			+/-0.0201						
	TPU:			+/-0.0197						
Niobium-94			U	-0.0079	pCi/g					
	Uncert:			+/-0.00961						
	TPU:			+/-0.00942						
Potassium-40			U	0.057	pCi/g					
	Uncert:			+/-0.201						
	TPU:			+/-0.197						
Radium-226			U	0.0313	pCi/g					
	Uncert:			+/-0.0202						
	TPU:			+/-0.0198						
Silver-108m			U	-0.0028	pCi/g					
	Uncert:			+/-0.00843						
	TPU:			+/-0.00826						
Thallium-208			U	0.00135	pCi/g					
	Uncert:			+/-0.0172						
	TPU:			+/-0.0168						
Batch 447540										
QC1200899793 141589041 DUP										
Actinium-228		0.490		0.382	pCi/g	25		(0% - 100%)	MJH1	08/02/05 19:13
	Uncert:	+/-0.126		+/-0.123						
	TPU:	+/-0.123		+/-0.120						
Americium-241	U	0.00397	U	-0.0645	pCi/g	N/A		(0% - 100%)		
	Uncert:	+/-0.105		+/-0.0722						
	TPU:	+/-0.103		+/-0.0707						
Bismuth-212	UUI	0.00		0.299	pCi/g	18		(0% - 100%)		
	Uncert:	+/-0.228		+/-0.215						
	TPU:	+/-0.224		+/-0.211						
Bismuth-214		0.427		0.360	pCi/g	17		(0% - 100%)		
	Uncert:	+/-0.0831		+/-0.077						
	TPU:	+/-0.0814		+/-0.0755						
Cesium-134	U	0.00304	U	0.0281	pCi/g	161		(0% - 100%)		
	Uncert:	+/-0.0205		+/-0.0399						
	TPU:	+/-0.0201		+/-0.0391						
Cesium-137	U	-0.00317	U	0.0264	pCi/g	N/A		(0% - 100%)		
	Uncert:	+/-0.0158		+/-0.028						
	TPU:	+/-0.0154		+/-0.0275						
Cobalt-60	U	0.00988	U	0.0157	pCi/g	46		(0% - 100%)		
	Uncert:	+/-0.0164		+/-0.0205						
	TPU:	+/-0.0161		+/-0.0201						
Europium-152	U	0.0373	U	0.00334	pCi/g	167		(0% - 100%)		
	Uncert:	+/-0.0405		+/-0.0476						
	TPU:	+/-0.0397		+/-0.0467						
Europium-154	U	-0.0126	U	-0.000359	pCi/g	N/A		(0% - 100%)		
	Uncert:	+/-0.0477		+/-0.0584						
	TPU:	+/-0.0468		+/-0.0573						
Europium-155	U	0.103	U	0.0194	pCi/g	137		(0% - 100%)		

QC Summary

Workorder: 141673

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch 447540											
	Uncert:	+/-0.0854		+/-0.0453							
	TPU:	+/-0.0837		+/-0.0444							
Lead-212		0.376		0.331	pCi/g	13		(0% - 100%)			
	Uncert:	+/-0.0664		+/-0.0529							
	TPU:	+/-0.065		+/-0.0518							
Lead-214		0.409		0.440	pCi/g	7		(0% - 100%)			
	Uncert:	+/-0.0865		+/-0.0768							
	TPU:	+/-0.0847		+/-0.0752							
Manganese-54	U	0.00408	U	0.00189	pCi/g	73		(0% - 100%)			
	Uncert:	+/-0.0149		+/-0.018							
	TPU:	+/-0.0146		+/-0.0176							
Niobium-94	U	0.00289	U	0.00516	pCi/g	56		(0% - 100%)			
	Uncert:	+/-0.0141		+/-0.015							
	TPU:	+/-0.0138		+/-0.0147							
Potassium-40		7.89		7.08	pCi/g	11		(0% - 20%)			
	Uncert:	+/-0.892		+/-0.814							
	TPU:	+/-0.874		+/-0.798							
Radium-226		0.427		0.360	pCi/g	17		(0% - 100%)			
	Uncert:	+/-0.0831		+/-0.077							
	TPU:	+/-0.0814		+/-0.0755							
Silver-108m	U	0.00293	U	0.0133	pCi/g	128		(0% - 100%)			
	Uncert:	+/-0.0135		+/-0.0159							
	TPU:	+/-0.0132		+/-0.0155							
Thallium-208		0.113		0.143	pCi/g	23		(0% - 100%)			
	Uncert:	+/-0.0367		+/-0.0341							
	TPU:	+/-0.036		+/-0.0334							
QC1200899794 LCS											
Actinium-228			U	-0.0961	pCi/g					08/02/05	15:44
	Uncert:			+/-0.479							
	TPU:			+/-0.470							
Americium-241	24.4			24.7	pCi/g		101	(75%-125%)			
	Uncert:			+/-1.80							
	TPU:			+/-1.76							
Bismuth-212			U	-0.701	pCi/g						
	Uncert:			+/-1.03							
	TPU:			+/-1.01							
Bismuth-214			U	0.341	pCi/g						
	Uncert:			+/-0.225							
	TPU:			+/-0.221							
Cesium-134			U	0.0299	pCi/g						
	Uncert:			+/-0.131							
	TPU:			+/-0.128							
Cesium-137	9.42			9.78	pCi/g		104	(75%-125%)			
	Uncert:			+/-0.879							
	TPU:			+/-0.862							
Cobalt-60	14.5			14.9	pCi/g		103	(75%-125%)			
	Uncert:			+/-1.01							
	TPU:			+/-0.993							

QC Summary

Workorder: 141673

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 447540										
Europium-152			U	-0.0289	pCi/g					
	Uncert:			+/-0.263						
	TPU:			+/-0.258						
Europium-154			U	0.274	pCi/g					
	Uncert:			+/-0.305						
	TPU:			+/-0.299						
Europium-155			U	-0.0558	pCi/g					
	Uncert:			+/-0.297						
	TPU:			+/-0.291						
Lead-212			U	0.216	pCi/g					
	Uncert:			+/-0.142						
	TPU:			+/-0.139						
Lead-214			U	-0.0488	pCi/g					
	Uncert:			+/-0.194						
	TPU:			+/-0.190						
Manganese-54			U	0.00339	pCi/g					
	Uncert:			+/-0.118						
	TPU:			+/-0.116						
Niobium-94			U	-0.00487	pCi/g					
	Uncert:			+/-0.122						
	TPU:			+/-0.119						
Potassium-40			U	1.31	pCi/g					
	Uncert:			+/-1.19						
	TPU:			+/-1.16						
Radium-226			U	0.341	pCi/g			(75%-125%)		
	Uncert:			+/-0.225						
	TPU:			+/-0.221						
Silver-108m			U	-0.0766	pCi/g					
	Uncert:			+/-0.103						
	TPU:			+/-0.101						
Thallium-208			U	0.0135	pCi/g					
	Uncert:			+/-0.109						
	TPU:			+/-0.106						
QC1200899792 MB										
Actinium-228			U	0.0625	pCi/g					08/02/05 18:18
	Uncert:			+/-0.0669						
	TPU:			+/-0.0656						
Americium-241			U	0.00264	pCi/g					
	Uncert:			+/-0.0329						
	TPU:			+/-0.0323						
Bismuth-212			U	0.0196	pCi/g					
	Uncert:			+/-0.0881						
	TPU:			+/-0.0864						
Bismuth-214			U	0.0223	pCi/g					
	Uncert:			+/-0.023						
	TPU:			+/-0.0226						
Cesium-134			U	-0.000133	pCi/g					
	Uncert:			+/-0.0111						

QC Summary

Workorder: **141673**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch 447540											
	TPU:			+/-0.0109							
Cesium-137			U	-0.00203	pCi/g						
	Uncert:			+/-0.0107							
	TPU:			+/-0.0105							
Cobalt-60			U	0.0151	pCi/g						
	Uncert:			+/-0.0165							
	TPU:			+/-0.0162							
Europium-152			U	-0.00487	pCi/g						
	Uncert:			+/-0.0272							
	TPU:			+/-0.0267							
Europium-154			U	0.00871	pCi/g						
	Uncert:			+/-0.0335							
	TPU:			+/-0.0329							
Europium-155			U	0.0288	pCi/g						
	Uncert:			+/-0.0258							
	TPU:			+/-0.0253							
Lead-212			U	0.00624	pCi/g						
	Uncert:			+/-0.0224							
	TPU:			+/-0.0219							
Lead-214			U	0.00842	pCi/g						
	Uncert:			+/-0.0203							
	TPU:			+/-0.0199							
Manganese-54			U	-0.00563	pCi/g						
	Uncert:			+/-0.0104							
	TPU:			+/-0.0102							
Niobium-94			U	-0.0083	pCi/g						
	Uncert:			+/-0.0107							
	TPU:			+/-0.0105							
Potassium-40			U	0.0603	pCi/g						
	Uncert:			+/-0.117							
	TPU:			+/-0.114							
Radium-226			U	0.0223	pCi/g						
	Uncert:			+/-0.023							
	TPU:			+/-0.0226							
Silver-108m			U	0.00573	pCi/g						
	Uncert:			+/-0.00933							
	TPU:			+/-0.00915							
Thallium-208			U	0.00355	pCi/g						
	Uncert:			+/-0.0129							
	TPU:			+/-0.0126							
Rad Gas Flow											
Batch 447617											
QC1200899968 141673001 DUP											
Strontium-90	U	0.00556	U	-0.00164	pCi/g	N/A		(0% - 100%)	EXW1	08/07/05	23:41
	Uncert:	+/-0.00434		+/-0.00558							
	TPU:	+/-0.00434		+/-0.00558							
QC1200899970 LCS											
Strontium-90	0.993			0.898	pCi/g		90	(75%-125%)		08/07/05	21:38

QC Summary

Workorder: 141673

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gas Flow										
Batch 447617										
	Uncert:			+/-0.0487						
	TPU:			+/-0.0527						
QC1200899967 MB										
Strontium-90			U	0.00146	pCi/g					08/07/05 23:41
	Uncert:			+/-0.00293						
	TPU:			+/-0.00293						
QC1200899969 141673001 MS										
Strontium-90	8.57 U	0.00556		6.43	pCi/g		75	(75%-125%)		08/07/05 21:38
	Uncert:	+/-0.00434		+/-0.382						
	TPU:	+/-0.00434		+/-0.403						
Batch 447618										
QC1200899972 141673019 DUP										
Strontium-90	U	0.00456	U	0.0045	pCi/g	0		(0% - 100%)	EXW1	08/10/05 21:32
	Uncert:	+/-0.00497		+/-0.00508						
	TPU:	+/-0.00497		+/-0.00508						
QC1200899974 LCS										
Strontium-90	0.887			1.01	pCi/g		114	(75%-125%)		08/09/05 20:01
	Uncert:			+/-0.0656						
	TPU:			+/-0.0698						
QC1200899971 MB										
Strontium-90			U	0.00266	pCi/g					08/10/05 21:32
	Uncert:			+/-0.00293						
	TPU:			+/-0.00293						
QC1200899973 141673019 MS										
Strontium-90	3.30 U	0.00456		3.25	pCi/g		99	(75%-125%)		08/09/05 20:01
	Uncert:	+/-0.00497		+/-0.267						
	TPU:	+/-0.00497		+/-0.279						
Rad Liquid Scintillation										
Batch 447276										
QC1200899066 141673001 DUP										
Technetium-99	U	-0.128	U	-0.0474	pCi/g	N/A		(0% - 100%)	BXD1	08/04/05 03:59
	Uncert:	+/-0.527		+/-0.453						
	TPU:	+/-0.527		+/-0.453						
QC1200899068 LCS										
Technetium-99	39.4			31.5	pCi/g		80	(75%-125%)		08/04/05 04:30
	Uncert:			+/-1.02						
	TPU:			+/-1.29						
QC1200899065 MB										
Technetium-99			U	-0.139	pCi/g					08/04/05 02:55
	Uncert:			+/-0.482						
	TPU:			+/-0.482						
QC1200899067 141673001 MS										
Technetium-99	37.9 U	-0.128		38.0	pCi/g		100	(75%-125%)		08/04/05 03:27
	Uncert:	+/-0.527		+/-1.17						
	TPU:	+/-0.527		+/-1.50						
Batch 447277										
QC1200899070 141673001 DUP										
Tritium	U	-0.357	U	-0.951	pCi/g	N/A		(0% - 100%)	LAG1	08/06/05 11:17

QC Summary

Workorder: 141673

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Liquid Scintillation										
Batch 447277										
	Uncert:	+/-1.55		+/-1.86						
	TPU:	+/-1.55		+/-1.86						
QC1200899072 LCS										
Tritium	15.4			13.1	pCi/g		86	(75%-125%)		08/06/05 18:27
	Uncert:			+/-1.75						
	TPU:			+/-1.77						
QC1200899069 MB										
Tritium			U	0.603	pCi/g					08/06/05 17:44
	Uncert:			+/-1.13						
	TPU:			+/-1.13						
QC1200899071 141673001 MS										
Tritium	15.8 U	-0.357		17.2	pCi/g		109	(75%-125%)		08/06/05 18:05
	Uncert:	+/-1.55		+/-3.47						
	TPU:	+/-1.55		+/-3.48						
Batch 447279										
QC1200899076 141673017 DUP										
Tritium	U	-0.693	U	1.19	pCi/g	N/A		(0% - 100%)	LAG1	08/07/05 12:14
	Uncert:	+/-1.65		+/-1.85						
	TPU:	+/-1.65		+/-1.85						
QC1200899078 LCS										
Tritium	10.2			9.00	pCi/g		88	(75%-125%)		08/07/05 13:18
	Uncert:			+/-1.26						
	TPU:			+/-1.27						
QC1200899075 MB										
Tritium			U	0.0258	pCi/g					08/07/05 11:42
	Uncert:			+/-0.878						
	TPU:			+/-0.878						
QC1200899077 141673017 MS										
Tritium	10.2 U	-0.693		9.40	pCi/g		92	(75%-125%)		08/07/05 12:46
	Uncert:	+/-1.65		+/-2.23						
	TPU:	+/-1.65		+/-2.23						
Batch 447285										
QC1200899088 141714003 DUP										
Carbon-14		12.1		11.0	pCi/g	10		(0% - 20%)	BXF1	08/08/05 17:39
	Uncert:	+/-1.34		+/-1.34						
	TPU:	+/-1.35		+/-1.35						
QC1200899090 LCS										
Carbon-14	21.7			21.3	pCi/g		98	(75%-125%)		08/02/05 10:11
	Uncert:			+/-0.727						
	TPU:			+/-0.800						
QC1200899087 MB										
Carbon-14			U	-0.0782	pCi/g					08/02/05 07:49
	Uncert:			+/-0.387						
	TPU:			+/-0.387						
QC1200899089 141714003 MS										
Carbon-14	25.7	12.1		37.7	pCi/g		99	(75%-125%)		08/06/05 00:53
	Uncert:	+/-1.34		+/-1.31						
	TPU:	+/-1.35		+/-1.44						
Batch 447648										

QC Summary

Workorder: 141673

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Liquid Scintillation										
Batch 447648										
QC1200900070 141673001 DUP										
Iron-55	U	-1.09		9.77	pCi/g	N/A		(0% - 100%)	BXD1	08/10/05 14:27
	Uncert:	+/-3.41		+/-5.46						
	TPU:	+/-3.41		+/-5.48						
QC1200900072 LCS										
Iron-55	49.5			43.7	pCi/g		88	(75%-125%)		08/10/05 16:31
	Uncert:			+/-6.90						
	TPU:			+/-7.32						
QC1200900069 MB										
Iron-55			U	0.897	pCi/g					08/10/05 12:54
	Uncert:			+/-2.89						
	TPU:			+/-2.89						
QC1200900071 141673001 MS										
Iron-55	147 U	-1.09		118	pCi/g		81	(75%-125%)		08/10/05 15:59
	Uncert:	+/-3.41		+/-29.4						
	TPU:	+/-3.41		+/-30.2						
Batch 451367										
QC1200908780 141673001 DUP										
Nickel-63	U	-0.895	U	-0.552	pCi/g	N/A		(0% - 100%)	BXD1	08/11/05 07:41
	Uncert:	+/-1.29		+/-1.55						
	TPU:	+/-1.29		+/-1.55						
QC1200908782 LCS										
Nickel-63	117			112	pCi/g		96	(75%-125%)		08/11/05 09:14
	Uncert:			+/-3.02						
	TPU:			+/-7.14						
QC1200908779 MB										
Nickel-63			U	-0.715	pCi/g					08/11/05 06:54
	Uncert:			+/-1.17						
	TPU:			+/-1.17						
QC1200908781 141673001 MS										
Nickel-63	144 U	-0.895		141	pCi/g		98	(75%-125%)		08/11/05 08:28
	Uncert:	+/-1.29		+/-4.27						
	TPU:	+/-1.29		+/-9.19						

Notes:
The Qualifiers in this report are defined as follows:

- ** Indicates the analyte is a surrogate compound.
- B Target analyte was detected in the sample as well as the associated blank.
- BD Results below the MDC or low tracer recovery.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J Indicates an estimated value.
- U Target analyte was analyzed for but not detected above the MDL or LOD.
- UI Uncertain identification for gamma spectroscopy.
- X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
- d The 2:1 depletion requirement was not met for this sample

QC Summary

Workorder: **141673**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

h Sample preparation or preservation holding time exceeded.

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
** Indicates analyte is a surrogate compound.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptence criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

5502-0000-002-C1C-01	MSR#05-1930	141673001	447540	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.395	0.108	PCI/G	0		29/07/2005	38569.45972	3:39	0.0924	PCI/G	0.0418	PCI/G	1	8.5	167	G	PCI/G	PR	
5502-0000-002-C1C-01	MSR#05-1930	141673001	447483	14596-10-2	Americium-241	TRG 1	UAM05RCM	AM05RCM	REG	0.00791	0.034	PCI/G	0	U	1/8/2005	38565.94722	1:57	0.0961	PCI/G	0.0285	PCI/G	1	8.5	0.501	G	PCI/G	PR	
5502-0000-002-C1C-01	MSR#05-1930	141673001	447540	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0073	0.074	PCI/G	0	U	29/07/2005	38569.45972	3:39	0.128	PCI/G	0.0616	PCI/G	1	8.5	167	G	PCI/G	PR	
5502-0000-002-C1C-01	MSR#05-1930	141673001	447540	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0	0.316	PCI/G	0	UUI	29/07/2005	38569.45972	3:39	0.25	PCI/G	0.116	PCI/G	1	8.5	167	G	PCI/G	PR	
5502-0000-002-C1C-01	MSR#05-1930	141673001	447540	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.396	0.0777	PCI/G	0		29/07/2005	38569.45972	3:39	0.0545	PCI/G	0.0254	PCI/G	1	8.5	167	G	PCI/G	PR	
5502-0000-002-C1C-01	MSR#05-1930	141673001	447285	14762-75-5	Carbon-14	TRG 5	ULSC	LSC	REG	0.039	0.369	PCI/G	0	U		2/8/2005	4:17	0.629	PCI/G	0.309	PCI/G	1	8.5	3.16	G	PCI/G	PR	
5502-0000-002-C1C-01	MSR#05-1930	141673001	447540	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0164	0.0184	PCI/G	0	U	29/07/2005	38569.45972	3:39	0.0362	PCI/G	0.0168	PCI/G	1	8.5	167	G	PCI/G	PR	
5502-0000-002-C1C-01	MSR#05-1930	141673001	447540	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.152	0.0368	PCI/G	0		29/07/2005	38569.45972	3:39	0.0341	PCI/G	0.016	PCI/G	1	8.5	167	G	PCI/G	PR	
5502-0000-002-C1C-01	MSR#05-1930	141673001	447540	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.028	0.0266	PCI/G	0	U	29/07/2005	38569.45972	3:39	0.0362	PCI/G	0.0164	PCI/G	1	8.5	167	G	PCI/G	PR	
5502-0000-002-C1C-01	MSR#05-1930	141673001	447483	OER-100-93	Curium-242	TRG 1	UAM05RCM	AM05RCM	REG	-0.0125	0.0142	PCI/G	0	U	1/8/2005	38565.94722	1:57	0.116	PCI/G	0.0343	PCI/G	1	8.5	0.501	G	PCI/G	PR	
5502-0000-002-C1C-01	MSR#05-1930	141673001	447483	OER-101-57	Curium-243/244	TRG 1	UAM05RCM	AM05RCM	REG	0.0255	0.0408	PCI/G	0	U	1/8/2005	38565.94722	1:57	0.0723	PCI/G	0.0165	PCI/G	1	8.5	0.501	G	PCI/G	PR	
5502-0000-002-C1C-01	MSR#05-1930	141673001	447540	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0334	0.0461	PCI/G	0	U	29/07/2005	38569.45972	3:39	0.0803	PCI/G	0.0381	PCI/G	1	8.5	167	G	PCI/G	PR	
5502-0000-002-C1C-01	MSR#05-1930	141673001	447540	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0054	0.0593	PCI/G	0	U	29/07/2005	38569.45972	3:39	0.107	PCI/G	0.049	PCI/G	1	8.5	167	G	PCI/G	PR	
5502-0000-002-C1C-01	MSR#05-1930	141673001	447540	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0494	0.0486	PCI/G	0	U	29/07/2005	38569.45972	3:39	0.0937	PCI/G	0.0453	PCI/G	1	8.5	167	G	PCI/G	PR	
5502-0000-002-C1C-01	MSR#05-1930	141673001	447648	14681-59-5	Iron-55	TRG 26	ULSC	LSC	REG	-1.09	3.41	PCI/G	0	U	1/8/2005	38565.95347	4:47	5.15	PCI/G	2.55	PCI/G	1	8.5	3.32	G	PCI/G	PR	
5502-0000-002-C1C-01	MSR#05-1930	141673001	447540	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.441	0.062	PCI/G	0		29/07/2005	38569.45972	3:39	0.0454	PCI/G	0.0217	PCI/G	1	8.5	167	G	PCI/G	PR	
5502-0000-002-C1C-01	MSR#05-1930	141673001	447540	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.441	0.0847	PCI/G	0		29/07/2005	38569.45972	3:39	0.0574	PCI/G	0.0272	PCI/G	1	8.5	167	G	PCI/G	PR	
5502-0000-002-C1C-01	MSR#05-1930	141673001	447540	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.0156	0.0228	PCI/G	0	U	29/07/2005	38569.45972	3:39	0.0322	PCI/G	0.0149	PCI/G	1	8.5	167	G	PCI/G	PR	
5502-0000-002-C1C-01	MSR#05-1930	141673001	451367	13781-37-8	Nickel-63	TRG 30	ULSC	LSC	REG	-0.895	1.29	PCI/G	0	U	1/8/2005	38565.95208	3:01	2.27	PCI/G	1.11	PCI/G	1	8.5	1.28	G	PCI/G	PR	
5502-0000-002-C1C-01	MSR#05-1930	141673001	447540	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00923	0.0167	PCI/G	0	U	29/07/2005	38569.45972	3:39	0.0317	PCI/G	0.0149	PCI/G	1	8.5	167	G	PCI/G	PR	
5502-0000-002-C1C-01	MSR#05-1930	141673001	447487	13981-16-3	Plutonium-238	TRG 32	UPU11RCM	PU11RCM	REG	0.0138	0.0271	PCI/G	0	U	1/8/2005	38565.94722	1:57	0.0375	PCI/G	0	PCI/G	1	8.5	0.501	G	PCI/G	PR	
5502-0000-002-C1C-01	MSR#05-1930	141673001	447487	OER-100-70	Plutonium-239/240	TRG 32	UPU11RCM	PU11RCM	REG	0.00719	0.0286	PCI/G	0	U	1/8/2005	38565.94722	1:57	0.0821	PCI/G	0.0223	PCI/G	1	8.5	0.501	G	PCI/G	PR	
5502-0000-002-C1C-01	MSR#05-1930	141673001	447490	14119-32-5	Plutonium-241	TRG 36	UPU11RCM	PU11RCM	REG	1.62	2.77	PCI/G	0	U	1/8/2005	38565.94931	4:06	4.69	PCI/G	2.28	PCI/G	1	8.5	1.5	G	PCI/G	PR	
5502-0000-002-C1C-01	MSR#05-1930	141673001	447540	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.82	0.837	PCI/G	0		29/07/2005	38569.45972	3:39	0.28	PCI/G	0.123	PCI/G	1	8.5	167	G	PCI/G	PR	
5502-0000-002-C1C-01	MSR#05-1930	141673001	447540	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.396	0.0777	PCI/G	0		29/07/2005	38569.45972	3:39	0.0545	PCI/G	0.0254	PCI/G	1	8.5	167	G	PCI/G	PR	
5502-0000-002-C1C-01	MSR#05-1930	141673001	447540	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00686	0.0158	PCI/G	0	U	29/07/2005	38569.45972	3:39	0.0276	PCI/G	0.013	PCI/G	1	8.5	167	G	PCI/G	PR	
5502-0000-002-C1C-01	MSR#05-1930	141673001	447617	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00556	0.00434	PCI/G	0	U	1/8/2005	38565.94792	8:16	0.00811	PCI/G	0.00388	PCI/G	1	8.5	18	G	PCI/G	PR	
5502-0000-002-C1C-01	MSR#05-1930	141673001	447276	14133-76-7	Technetium-99	TRG 46	UTC02RCM	TC02RCM	REG	-0.128	0.527	PCI/G	0	U		4/8/2005	1:19	0.913	PCI/G	0.445	PCI/G	1	8.5	3.06	G	PCI/G	PR	
5502-0000-002-C1C-01	MSR#05-1930	141673001	447540	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.133	0.0349	PCI/G	0		29/07/2005	38569.45972	3:39	0.0349	PCI/G	0.0165	PCI/G	1	8.5	167	G	PCI/G	PR	
5502-0000-002-C1C-01	MSR#05-1930	141673001	447277	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-0.357	1.55	PCI/G	0	U		6/8/2005	10:15	2.7	PCI/G	1.31	PCI/G	1	8.5	9.47	G	PCI/G	PR	
5502-0000-002-C1C-02	MSR#05-1930	141673002	447540	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.413	0.117	PCI/G	0		29/07/2005	38569.45972	3:40	0.0936	PCI/G	0.0422	PCI/G	1	8.5	172	G	PCI/G	PR	
5502-0000-002-C1C-02	MSR#05-1930	141673002	447540	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0137	0.106	PCI/G	0	U	29/07/2005	38569.45972	3:40	0.179	PCI/G	0.0859	PCI/G	1	8.5	172	G	PCI/G	PR	
5502-0000-002-C1C-02	MSR#05-1930	141673002	447540	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0	0.173	PCI/G	0	UUI	29/07/2005	38569.45972	3:40	0.163	PCI/G	0.0724	PCI/G	1	8.5	172	G	PCI/G	PR	
5502-0000-002-C1C-02	MSR#05-1930	141673002	447540	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.346	0.0773	PCI/G	0		29/07/2005	38569.45972	3:40	0.0559	PCI/G	0.0261	PCI/G	1	8.5	172	G	PCI/G	PR	
5502-0000-002-C1C-02	MSR#05-1930	141673002	447540	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0291	0.0194	PCI/G	0	U	29/07/2005	38569.45972	3:40	0.0396	PCI/G	0.0185	PCI/G	1	8.5	172	G	PCI/G	PR	
5502-0000-002-C1C-02	MSR#05-1930	141673002	447540	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.00641	0.0169	PCI/G	0	U	29/07/2005	38569.45972	3:40	0.03	PCI/G	0.0139	PCI/G	1	8.5	172	G	PCI/G	PR	
5502-0000-002-C1C-02	MSR#05-1930	141673002	447540	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0143	0.0158	PCI/G	0	U	29/07/2005	38569.45972	3:40	0.0317	PCI/G	0.0141	PCI/G	1	8.5	172	G	PCI/G	PR	
5502-0000-002-C1C-02	MSR#05-1930	141673002	447540	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.000863	0.0415	PCI/G	0	U	29/07/2005	38569.45972	3:40	0.0751	PCI/G	0.0354	PCI/G	1	8.5	172	G	PCI/G	PR	
5502-0000-002-C1C-02	MSR#05-1930	141673002	447540	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0035	0.0545	PCI/G	0	U	29/07/2005	38569.45972	3:40	0.102	PCI/G	0.0461	PCI/G	1	8.5	172	G	PCI/G	PR	
5502-0000-002-C1C-02	MSR#05-1930	141673002	447540	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.035	0.0445	PCI/G	0	U	29/07/2005	38569.45972	3:40	0.0903	PCI/G	0.0434	PCI/G	1	8.5	172	G	PCI/G	PR	
5502-0000-002-C1C-02	MSR#05-1930	141673002	447540	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.435	0.0615	PCI/G	0		29/07/2005	38569.45972	3:40	0.0443	PCI/G	0.0211	PCI/G	1	8.5	172	G	PCI/G	PR	
5502-0000-002-C1C-02	MSR#05-1930	141673002	447540	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.382	0.0681	PCI/G	0		29/07/2005	38569.45972	3:40	0.0486	PCI/G	0.0227	PCI/G	1	8.5	172	G	PCI/G	PR	
5502-0000-002-C1C-02	MSR#05-1930	141673002	447540	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.00323	0.0179	PCI/G	0	U	29/07/2005	38569.45972	3:40	0.0329	PCI/G	0.0152	PCI/G	1	8.5	172	G	PCI/G	PR	
5502-0000-002-C1C-02	MSR#05-1930	141673002	447540	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.00115	0.0164	PCI/G	0	U	29/07/2005	38569.45972	3:40	0.0261	PCI/G	0.012	PCI/G	1	8.5	172	G	PCI/G	PR	
5502-0000-002-C1C-02	MSR#05-1930	141673002	447540	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.97	0.888	PCI/G	0		29/07/2005	38569.45972	3:40	0.268	PCI/G	0.116	PCI/G	1	8.5	172	G	PCI/G	PR	
5502-0000-002-C1C-02	MSR#05-1930	141673002	447540	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.346	0.0773	PCI/G	0		29/07/2005	38569.45972	3:40	0.0559	PCI/G	0.0261	PCI/G	1	8.5	172	G	PCI/G	PR	
5502-0000-002-C1C-02	MSR#05-1930	141673002	447540	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00369	0.0129	PCI/G	0	U	29/07/2005	38569.45972	3:40	0.0251	PCI/G	0.0117	PCI/G	1	8.5	172	G	PCI/G	PR	
5502-0000-002-C1C-02	MSR#05-1930	141673002	447617	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.00171	0.00335	PCI/G	0	U	1/8/2005	38565.94792	8:16	0.00705	PCI/G	0.00336	PCI/G	1	8.5	18.3	G	PCI/G	PR	
5502-0000-002-C1C-02	MSR#05-1930	141673002	447540	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.12	0.0359	PCI/G	0		29/07/2005	38569.45972	3:40	0.0307	PCI/G	0.0143	PCI/G	1	8.5	172	G	PCI/G	PR	
5502-0000-002-C1C-02	MSR#05-1930	141673002	447277	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	1.19	1.03	PCI/G	0	U		6/8/2005	12:20	2.05	PCI/G	0.977	PCI/G	1	8.5	9.93	G	PCI/G	PR	
5502-0000-003-C1C-01	MSR#05-1930	141673003	447540	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.379	0.152	PCI/G	0		29/07/2005	38569.45972	3:40	0.129	PCI/G	0.0592	PCI/G	1	9.1	164	G	PCI/G	PR	
5502-0000-003-C1C-01	MSR#05-1930	141673003	447540	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0239	0.0878	PCI/G	0	U	29/07/2005	38569.45972	3:40	0.15	PCI/G	0.0723	PCI/G	1	9.1	164	G	PCI/G	PR	
5502-0000-003-C1C-01	MSR#05-1930	141673003	447540	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.213	0.273	PCI/G	0	U	29/07/2005	38569.45972	3:40	0.276	PCI/G	0.128	PCI/G	1	9.1	164	G	PCI/G	PR	
5502-0000-003-C1C-01	MSR#05-1930	141673003	447540	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.391	0.0859	PCI/G	0		29/07/2005	38569.45972	3:40	0.065	PCI/G	0.0302	PCI/G	1	9.1	164	G	PCI/G	PR	
5502-0000-003-C1C-01	MSR#05-1930	141673003	447540	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0384	0.0255	PCI/G	0	U	29/07/2005	38569.45972	3:40	0.0515	PCI/G	0.0242	PCI/G	1	9.1	164	G	PCI/G	PR	
5502-0000-003-C1C-01	MSR#05-1930	141673003	447540	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.139	0.0355	PCI/G	0		29/07/2005	38569.45972	3:40	0.0351	PCI/G	0.0162	PCI/G	1	9.1	164	G	PCI/G	PR	
5502-0000-003-C1C-01	MSR#05-1930	141673003	447540	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0308	0.0433	PCI/G	0	U	29/07/2005	38569.45972	3:40	0.053	PCI/G	0.0244	PCI/G	1	9.1	164	G	PCI/G	PR	
5502-0000-003-C1C-01	MSR#05-1930	141673003	447540	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0067	0.0518	PCI/G	0	U	29/07/2005	38569.45972	3:40	0.0923	PCI/G	0.0437	PCI/G	1	9.1	164	G	PCI/G	PR	
5502-0000-003-C1C-01	MSR#05-1930	141673003	447540	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.00645	0.0636	PCI/G	0	U	29/07/2005	38569.45972	3:40	0.12	PCI/G	0.0545	PCI/G	1	9.1	164	G	PCI/G	PR	
5502-0000-003-C1C-01	MSR#05-1930	141673003	447540	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.00817	0.0502	PCI/G	0	U	29/07/2005	38569.45972	3:40	0.0982	PCI/G	0.0472	PCI/G	1	9.1	164	G	PCI/G	PR	
5502-0000-003-C1C-01	MSR#05-1930	141673003	447540	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.392	0.0625	PCI/G	0		29/07/2005	38569.45972	3:40	0.0541	PCI/G	0.0259	PCI/G	1	9.1	164	G	PCI/G	PR	
5502-0000-003-C1C-01	MSR#05-1930	141673003	447540	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.41	0.0908	PCI/G	0		29/07/2005	38569.45972	3:40	0.0655	PCI/G	0.031	PCI/G	1	9.1	164	G	PCI/G	PR	
5502-0000-003-C1C-01	MSR#05-1930	141673003	447540	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.00701	0.0299	PCI/G	0	U	29/07/2005	38569.45972	3:40	0.0387	PCI/G	0.0179	PCI/G	1	9.1	164	G	PCI/G	PR	
5502-0000-003-C1C-01	MSR#05-1930	141673003	447540	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0195	0.0172	PCI/G	0	U	29/07/2005	38569.45972	3:40	0.0347	PCI/G	0.0162	PCI/G	1	9.1	164	G	PCI/G	PR	
5502-0000-003-C1C-01	MSR#05-1930	141673003	447540	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.6	0.883	PCI/G	0		29/07/2005	38569.45972	3:40	0.298	PCI/G	0.129	PCI/G	1	9.1	164	G	PCI/G	PR	
5502-0000-003-C1C-01	MSR#05-1930	141673003	447540	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.391	0.0859	PCI/G	0		29/07/2005	38569.45972	3:40	0.065	PCI/G	0.0302	PCI/G	1	9.1	164	G	PCI/G	PR	
5502-0000-003-C1C-01	MSR#05-1930	141673003	447540	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.0055	0.018	PCI/G	0	U	29/07/2005	38569.45972	3:40	0.0311	PCI/G	0.0146	PCI/G	1	9.1	164	G	PCI/G	PR	
5502-0000-003-C1C-01	MSR#05-1930	141673003	447617	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.00067	0.00538	PCI/G	0	U	1/8/2005	38565.94792	8:16	0.0109	PCI/G	0.00525	PCI/G	1	9.1	18	G	PCI/G	PR	
5502-0000-003-C1C-01	MSR#05-1930	141673003	447540	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.137	0.0449	PCI/G	0		29/07/2005	38569.45972	3:40	0.033	PCI/G	0.0152	PCI/G	1	9.1	164	G	PCI/G	PR	
5502-0000-003-C1C-01	MSR#05-1930	141673003	447277	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-0.205	1.14	PCI/G	0	U		6/8/2005	12:41	2.5	PCI/G	1.19	PCI/G	1	9.1	9.01	G	PCI/G	PR	
5502-0000-003-C1C-02	MSR#05-1930	141673004	447540	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.416	0.168	PCI/G	0		29/07/2005	38569.45972	3:41	0.111	PCI/G	0.0501	PCI/G	1	7.4	149	G	PCI/G	PR	
5502-0000-003-C1C-02	MSR#05-1930	141673004	447540	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0859	0.0887	PCI/G	0	U	29/07/2005	38569.45972	3:41	0.135	PCI/G	0.0647	PCI/G	1	7.4	149	G	PCI/G	PR	
5502-0000-003-C1C-02	MSR#05-1930	141673004	447540	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.434	0.348	PCI/G	0		29/07/2005	38569.45972	3:41	0.278	PCI/G	0.129	PCI/G	1	7.4	149	G	PCI/G	PR	
5502-0000-003-C1C-02	MSR#05-1930	141673004	447540	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.328	0.0882	PCI/G	0		29/07/2005	38569.45972	3:41	0.0684	PCI/G	0.032	PCI/G	1	7.4	149	G	PCI/G	PR	
5502-0000-003-C1C-02	MSR#05-1930	141673004	447540	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.009	0.0227	PCI/G	0	U	29/07/2005	38569.45972	3:41	0.0428	PCI/G	0.0198	PCI/G	1	7.4	149	G	PCI/G	PR	
5502-0000-003-C1C-02	MSR#05-1930	141673004	447540	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.000562	0.0185	PCI/G	0	U	29/07/2005	38569.45972	3:41	0.0344	PCI/G	0.0159	PCI/G	1	7.4	149	G	PCI/G	PR	
5502-0000-003-C1C-02	MSR#05-1930	141673004	447540	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.00404	0.0224	PCI/G	0	U	29/07/2005	38569.45972	3:41	0.0404	PCI/G	0.0181	PCI/G	1	7.4	149	G	PCI/G	PR	
5502-0000-003-C1C-02	MSR#05-1930	141673004	447540	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0638	0.0528	PCI/G	0	U	29/07/2005	38569.45972	3:41	0.0942	PCI/G	0.0447	PCI/G	1	7.4	149	G	PCI/G	PR	
5502-0000-003-C1C-02	MSR#05-1930	141673004	447540	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0126	0.0616	PCI/G	0	U	29/07/2005	38569.45972	3:41	0.117	PCI/G	0.0528	PCI/G	1	7.4	149	G	PCI/G	PR	
5502-0000-003-C1C-02	MSR#05-1930	141673004	447540	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0635	0.057	PCI/G	0	U	29/07/2005	38569.45972	3:41	0.0933	PCI/G	0.0448	PCI/G	1	7.4	149	G	PCI/G	PR	
5502-0000-003-C1C-02	MSR#05-1930	141673004	447540	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.48	0.0725	PCI/G	0		29/07/2005	38569.45972	3:41	0.0585	PCI/G	0.0281	PCI/G	1	7.4	149	G	PCI/G	PR	
5502-0000-003-C1C-02	MSR#05-1930	141673004	447540	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.415	0.102	PCI/G	0		29/07/2005	38569.45972	3:41	0.0602	PCI/G	0.0284	PCI/G	1	7.4	149	G	PCI/G	PR	
5502-0000-003-C1C-02	MSR#05-1930	141673004	447540	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.032	0.0224	PCI/G	0	U	29/07/2005	38569.45972	3:41	0.045	PCI/G	0.0211	PCI/G	1	7.4	149	G	PCI/G	PR	
5502-0000-003-C1C-02	MSR#05-1930	141673004	447540	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.00447	0.0177	PCI/G	0	U	29/07/2005	38569.45972	3:41	0.0317	PCI/G	0.0147	PCI/G	1	7.4	149	G	PCI/G	PR	
5502-0000-003-C1C-02	MSR#05-1930	141673004	447540	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	8.61	1.01	PCI/G	0		29/07/2005	38569.45972	3:41	0.397	PCI/G	0.178	PCI/G	1	7.4	149	G	PCI/G	PR	
5502-0000-003-C1C-02	MSR#05-1930	141673004	447540	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.328	0.0882	PCI/G	0		29/07/2005	38569.45972	3:41	0.0684	PCI/G	0.032	PCI/G	1	7.4	149	G	PCI/G	PR	
5502-0000-003-C1C-02	MSR#05-1930	141673004	447540	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.0037	0.017	PCI/G	0	U	29/07/2005	38569.45972	3:41	0.0277	PCI/G	0.0129	PCI/G	1	7.4	149	G	PCI/G	PR	
5502-0000-003-C1C-02	MSR#05-1930	141673004	447617	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.000898	0.00475	PCI/G	0	U	1/8/2005	38565.94792	8:16	0.00974	PCI/G	0.00466	PCI/G	1	7.4	18.2	G	PCI/G	PR	
5502-0000-003-C1C-02	MSR#05-1930	141673004	447540	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.146	0.0443	PCI/G	0		29/07/2005	38569.45972	3:41	0.0332	PCI/G	0.0154	PCI/G	1	7.4	149	G	PCI/G	PR	
5502-0000-003-C1C-02	MSR#05-1930	141673004	447277	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	1.2	1.27	PCI/G	0	U		6/8/2005	1:03	2.55	PCI/G	1.21	PCI/G	1	7.4	9.19	G	PCI/G	PR	
5502-0001-005-C1C-01	MSR#05-1930	141673005	447540	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.546	0.175	PCI/G	0		29/07/2005	38569.45972	3:41	0.14	PCI/G	0.0647	PCI/G	1	7.5	151	G	PCI/G	PR	
5502-0001-005-C1C-01	MSR#05-1930	141673005	447540	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.00993	0.107	PCI/G	0	U	29/07/2005	38569.45972	3:41	0.194	PCI/G	0.0939	PCI/G	1	7.5	151	G	PCI/G	PR	

5502-0001-005-C1C-01	MSR#05-1930	141673005	447540	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.238	0.256	PCI/G	0	U	29/07/2005	38569.45972	3:41	0.309	PCI/G	0.144	PCI/G	1	7.5	151	G	PCI/G	PR	
5502-0001-005-C1C-01	MSR#05-1930	141673005	447540	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.708	0.111	PCI/G	0		29/07/2005	38569.45972	3:41	0.0824	PCI/G	0.0388	PCI/G	1	7.5	151	G	PCI/G	PR	
5502-0001-005-C1C-01	MSR#05-1930	141673005	447540	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0492	0.026	PCI/G	0	U	29/07/2005	38569.45972	3:41	0.0535	PCI/G	0.0251	PCI/G	1	7.5	151	G	PCI/G	PR	
5502-0001-005-C1C-01	MSR#05-1930	141673005	447540	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.322	0.0559	PCI/G	0		29/07/2005	38569.45972	3:41	0.0385	PCI/G	0.0179	PCI/G	1	7.5	151	G	PCI/G	PR	
5502-0001-005-C1C-01	MSR#05-1930	141673005	447540	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0192	0.0251	PCI/G	0	U	29/07/2005	38569.45972	3:41	0.0494	PCI/G	0.0227	PCI/G	1	7.5	151	G	PCI/G	PR	
5502-0001-005-C1C-01	MSR#05-1930	141673005	447540	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0369	0.0785	PCI/G	0	U	29/07/2005	38569.45972	3:41	0.117	PCI/G	0.0559	PCI/G	1	7.5	151	G	PCI/G	PR	
5502-0001-005-C1C-01	MSR#05-1930	141673005	447540	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0576	0.066	PCI/G	0	U	29/07/2005	38569.45972	3:41	0.11	PCI/G	0.0493	PCI/G	1	7.5	151	G	PCI/G	PR	
5502-0001-005-C1C-01	MSR#05-1930	141673005	447540	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0475	0.0696	PCI/G	0	U	29/07/2005	38569.45972	3:41	0.127	PCI/G	0.0613	PCI/G	1	7.5	151	G	PCI/G	PR	
5502-0001-005-C1C-01	MSR#05-1930	141673005	447540	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.643	0.0883	PCI/G	0		29/07/2005	38569.45972	3:41	0.0673	PCI/G	0.0323	PCI/G	1	7.5	151	G	PCI/G	PR	
5502-0001-005-C1C-01	MSR#05-1930	141673005	447540	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.902	0.14	PCI/G	0		29/07/2005	38569.45972	3:41	0.0873	PCI/G	0.0417	PCI/G	1	7.5	151	G	PCI/G	PR	
5502-0001-005-C1C-01	MSR#05-1930	141673005	447540	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.0124	0.0231	PCI/G	0	U	29/07/2005	38569.45972	3:41	0.0396	PCI/G	0.0183	PCI/G	1	7.5	151	G	PCI/G	PR	
5502-0001-005-C1C-01	MSR#05-1930	141673005	447540	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0084	0.0208	PCI/G	0	U	29/07/2005	38569.45972	3:41	0.0388	PCI/G	0.0182	PCI/G	1	7.5	151	G	PCI/G	PR	
5502-0001-005-C1C-01	MSR#05-1930	141673005	447540	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.75	0.903	PCI/G	0		29/07/2005	38569.45972	3:41	0.366	PCI/G	0.163	PCI/G	1	7.5	151	G	PCI/G	PR	
5502-0001-005-C1C-01	MSR#05-1930	141673005	447540	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.708	0.111	PCI/G	0		29/07/2005	38569.45972	3:41	0.0824	PCI/G	0.0388	PCI/G	1	7.5	151	G	PCI/G	PR	
5502-0001-005-C1C-01	MSR#05-1930	141673005	447540	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.0116	0.0232	PCI/G	0	U	29/07/2005	38569.45972	3:41	0.0422	PCI/G	0.02	PCI/G	1	7.5	151	G	PCI/G	PR	
5502-0001-005-C1C-01	MSR#05-1930	141673005	447617	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00613	0.00477	PCI/G	0	U	1/8/2005	38565.94792	8:16	0.00895	PCI/G	0.0043	PCI/G	1	7.5	18.3	G	PCI/G	PR	
5502-0001-005-C1C-01	MSR#05-1930	141673005	447540	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.213	0.044	PCI/G	0		29/07/2005	38569.45972	3:41	0.0437	PCI/G	0.0206	PCI/G	1	7.5	151	G	PCI/G	PR	
5502-0001-005-C1C-01	MSR#05-1930	141673005	447277	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	0.626	1.1	PCI/G	0	U		6/8/2005	1:24	2.28	PCI/G	1.09	PCI/G	1	7.5	9.45	G	PCI/G	PR	
5502-0001-005-C1C-02	MSR#05-1930	141673006	447540	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.615	0.199	PCI/G	0		29/07/2005	38569.45972	3:42	0.17	PCI/G	0.0792	PCI/G	1	8	146	G	PCI/G	PR	
5502-0001-005-C1C-02	MSR#05-1930	141673006	447540	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0371	0.04	PCI/G	0	U	29/07/2005	38569.45972	3:42	0.0764	PCI/G	0.0372	PCI/G	1	8	146	G	PCI/G	PR	
5502-0001-005-C1C-02	MSR#05-1930	141673006	447540	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.439	0.391	PCI/G	0		29/07/2005	38569.45972	3:42	0.389	PCI/G	0.183	PCI/G	1	8	146	G	PCI/G	PR	
5502-0001-005-C1C-02	MSR#05-1930	141673006	447540	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.673	0.147	PCI/G	0		29/07/2005	38569.45972	3:42	0.0888	PCI/G	0.0419	PCI/G	1	8	146	G	PCI/G	PR	
5502-0001-005-C1C-02	MSR#05-1930	141673006	447540	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0269	0.0362	PCI/G	0	U	29/07/2005	38569.45972	3:42	0.0673	PCI/G	0.0319	PCI/G	1	8	146	G	PCI/G	PR	
5502-0001-005-C1C-02	MSR#05-1930	141673006	447540	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.00519	0.037	PCI/G	0	U	29/07/2005	38569.45972	3:42	0.0587	PCI/G	0.0279	PCI/G	1	8	146	G	PCI/G	PR	
5502-0001-005-C1C-02	MSR#05-1930	141673006	447540	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0344	0.0338	PCI/G	0	U	29/07/2005	38569.45972	3:42	0.0602	PCI/G	0.0279	PCI/G	1	8	146	G	PCI/G	PR	
5502-0001-005-C1C-02	MSR#05-1930	141673006	447540	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.00432	0.0742	PCI/G	0	U	29/07/2005	38569.45972	3:42	0.133	PCI/G	0.0636	PCI/G	1	8	146	G	PCI/G	PR	
5502-0001-005-C1C-02	MSR#05-1930	141673006	447540	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.032	0.092	PCI/G	0	U	29/07/2005	38569.45972	3:42	0.152	PCI/G	0.0699	PCI/G	1	8	146	G	PCI/G	PR	
5502-0001-005-C1C-02	MSR#05-1930	141673006	447540	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	-0.0101	0.0641	PCI/G	0	U	29/07/2005	38569.45972	3:42	0.115	PCI/G	0.0557	PCI/G	1	8	146	G	PCI/G	PR	
5502-0001-005-C1C-02	MSR#05-1930	141673006	447540	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.51	0.0798	PCI/G	0		29/07/2005	38569.45972	3:42	0.0738	PCI/G	0.0356	PCI/G	1	8	146	G	PCI/G	PR	
5502-0001-005-C1C-02	MSR#05-1930	141673006	447540	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.721	0.125	PCI/G	0		29/07/2005	38569.45972	3:42	0.0893	PCI/G	0.0427	PCI/G	1	8	146	G	PCI/G	PR	
5502-0001-005-C1C-02	MSR#05-1930	141673006	447540	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0381	0.0706	PCI/G	0	U	29/07/2005	38569.45972	3:42	0.0546	PCI/G	0.0257	PCI/G	1	8	146	G	PCI/G	PR	
5502-0001-005-C1C-02	MSR#05-1930	141673006	447540	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.0102	0.0274	PCI/G	0	U	29/07/2005	38569.45972	3:42	0.0481	PCI/G	0.0228	PCI/G	1	8	146	G	PCI/G	PR	
5502-0001-005-C1C-02	MSR#05-1930	141673006	447540	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.63	0.984	PCI/G	0		29/07/2005	38569.45972	3:42	0.503	PCI/G	0.23	PCI/G	1	8	146	G	PCI/G	PR	
5502-0001-005-C1C-02	MSR#05-1930	141673006	447540	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.673	0.147	PCI/G	0		29/07/2005	38569.45972	3:42	0.0888	PCI/G	0.0419	PCI/G	1	8	146	G	PCI/G	PR	
5502-0001-005-C1C-02	MSR#05-1930	141673006	447540	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00348	0.0241	PCI/G	0	U	29/07/2005	38569.45972	3:42	0.0423	PCI/G	0.0201	PCI/G	1	8	146	G	PCI/G	PR	
5502-0001-005-C1C-02	MSR#05-1930	141673006	447617	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.000668	0.00476	PCI/G	0	U	1/8/2005	38565.94792	8:16	0.00958	PCI/G	0.00457	PCI/G	1	8	18.5	G	PCI/G	PR	
5502-0001-005-C1C-02	MSR#05-1930	141673006	447540	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.183	0.0615	PCI/G	0		29/07/2005	38569.45972	3:42	0.0496	PCI/G	0.0234	PCI/G	1	8	146	G	PCI/G	PR	
5502-0001-005-C1C-02	MSR#05-1930	141673006	447277	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	0.399	1.03	PCI/G	0	U		6/8/2005	1:46	2.15	PCI/G	1.02	PCI/G	1	8	9.71	G	PCI/G	PR	
5502-0001-005-C2C-03	MSR#05-1930	141673007	447540	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.463	0.133	PCI/G	0		29/07/2005	38569.45972	3:42	0.113	PCI/G	0.0514	PCI/G	1	7	150	G	PCI/G	PR	
5502-0001-005-C2C-03	MSR#05-1930	141673007	447540	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0128	0.0218	PCI/G	0	U	29/07/2005	38569.45972	3:42	0.0409	PCI/G	0.0197	PCI/G	1	7	150	G	PCI/G	PR	
5502-0001-005-C2C-03	MSR#05-1930	141673007	447540	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.463	0.241	PCI/G	0		29/07/2005	38569.45972	3:42	0.278	PCI/G	0.129	PCI/G	1	7	150	G	PCI/G	PR	
5502-0001-005-C2C-03	MSR#05-1930	141673007	447540	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.514	0.087	PCI/G	0		29/07/2005	38569.45972	3:42	0.0539	PCI/G	0.0249	PCI/G	1	7	150	G	PCI/G	PR	
5502-0001-005-C2C-03	MSR#05-1930	141673007	447540	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.00823	0.025	PCI/G	0	U	29/07/2005	38569.45972	3:42	0.0404	PCI/G	0.0188	PCI/G	1	7	150	G	PCI/G	PR	
5502-0001-005-C2C-03	MSR#05-1930	141673007	447540	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.0141	0.0175	PCI/G	0	U	29/07/2005	38569.45972	3:42	0.0292	PCI/G	0.0134	PCI/G	1	7	150	G	PCI/G	PR	
5502-0001-005-C2C-03	MSR#05-1930	141673007	447540	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0183	0.0219	PCI/G	0	U	29/07/2005	38569.45972	3:42	0.0434	PCI/G	0.0198	PCI/G	1	7	150	G	PCI/G	PR	
5502-0001-005-C2C-03	MSR#05-1930	141673007	447540	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0491	0.0456	PCI/G	0	U	29/07/2005	38569.45972	3:42	0.0741	PCI/G	0.0349	PCI/G	1	7	150	G	PCI/G	PR	
5502-0001-005-C2C-03	MSR#05-1930	141673007	447540	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0185	0.0588	PCI/G	0	U	29/07/2005	38569.45972	3:42	0.103	PCI/G	0.0463	PCI/G	1	7	150	G	PCI/G	PR	
5502-0001-005-C2C-03	MSR#05-1930	141673007	447540	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.00835	0.0385	PCI/G	0	U	29/07/2005	38569.45972	3:42	0.0682	PCI/G	0.0328	PCI/G	1	7	150	G	PCI/G	PR	
5502-0001-005-C2C-03	MSR#05-1930	141673007	447540	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.522	0.0731	PCI/G	0		29/07/2005	38569.45972	3:42	0.0428	PCI/G	0.0204	PCI/G	1	7	150	G	PCI/G	PR	
5502-0001-005-C2C-03	MSR#05-1930	141673007	447540	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.495	0.0959	PCI/G	0		29/07/2005	38569.45972	3:42	0.0558	PCI/G	0.0263	PCI/G	1	7	150	G	PCI/G	PR	
5502-0001-005-C2C-03	MSR#05-1930	141673007	447540	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0121	0.0204	PCI/G	0	U	29/07/2005	38569.45972	3:42	0.0381	PCI/G	0.0177	PCI/G	1	7	150	G	PCI/G	PR	
5502-0001-005-C2C-03	MSR#05-1930	141673007	447540	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0134	0.0257	PCI/G	0	U	29/07/2005	38569.45972	3:42	0.0324	PCI/G	0.0151	PCI/G	1	7	150	G	PCI/G	PR	
5502-0001-005-C2C-03	MSR#05-1930	141673007	447540	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.54	0.868	PCI/G	0		29/07/2005	38569.45972	3:42	0.318	PCI/G	0.14	PCI/G	1	7	150	G	PCI/G	PR	
5502-0001-005-C2C-03	MSR#05-1930	141673007	447540	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.514	0.087	PCI/G	0		29/07/2005	38569.45972	3:42	0.0539	PCI/G	0.0249	PCI/G	1	7	150	G	PCI/G	PR	
5502-0001-005-C2C-03	MSR#05-1930	141673007	447540	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00197	0.014	PCI/G	0	U	29/07/2005	38569.45972	3:42	0.026	PCI/G	0.0122	PCI/G	1	7	150	G	PCI/G	PR	
5502-0001-005-C2C-03	MSR#05-1930	141673007	447617	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.000696	0.00372	PCI/G	0	U	1/8/2005	38565.94792	8:16	0.00743	PCI/G	0.00357	PCI/G	1	7	18.2	G	PCI/G	PR	
5502-0001-005-C2C-03	MSR#05-1930	141673007	447540	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.163	0.0444	PCI/G	0		29/07/2005	38569.45972	3:42	0.0328	PCI/G	0.0153	PCI/G	1	7	150	G	PCI/G	PR	
5502-0001-005-C2C-03	MSR#05-1930	141673007	447277	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	1.09	1.19	PCI/G	0	U		6/8/2005	2:07	2.41	PCI/G	1.15	PCI/G	1	7	9.08	G	PCI/G	PR	
5502-0001-005-C2C-04	MSR#05-1930	141673008	447540	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.573	0.191	PCI/G	0		29/07/2005	38569.45972	3:43	0.138	PCI/G	0.0632	PCI/G	1	6.7	146	G	PCI/G	PR	
5502-0001-005-C2C-04	MSR#05-1930	141673008	447540	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0165	0.227	PCI/G	0	U	29/07/2005	38569.45972	3:43	0.303	PCI/G	0.145	PCI/G	1	6.7	146	G	PCI/G	PR	
5502-0001-005-C2C-04	MSR#05-1930	141673008	447540	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.481	0.288	PCI/G	0		29/07/2005	38569.45972	3:43	0.323	PCI/G	0.15	PCI/G	1	6.7	146	G	PCI/G	PR	
5502-0001-005-C2C-04	MSR#05-1930	141673008	447540	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.596	0.112	PCI/G	0		29/07/2005	38569.45972	3:43	0.0815	PCI/G	0.0382	PCI/G	1	6.7	146	G	PCI/G	PR	
5502-0001-005-C2C-04	MSR#05-1930	141673008	447540	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.031	0.0402	PCI/G	0	U	29/07/2005	38569.45972	3:43	0.0506	PCI/G	0.0236	PCI/G	1	6.7	146	G	PCI/G	PR	
5502-0001-005-C2C-04	MSR#05-1930	141673008	447540	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.0282	0.0252	PCI/G	0	U	29/07/2005	38569.45972	3:43	0.0484	PCI/G	0.0227	PCI/G	1	6.7	146	G	PCI/G	PR	
5502-0001-005-C2C-04	MSR#05-1930	141673008	447540	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0296	0.0257	PCI/G	0	U	29/07/2005	38569.45972	3:43	0.0522	PCI/G	0.0239	PCI/G	1	6.7	146	G	PCI/G	PR	
5502-0001-005-C2C-04	MSR#05-1930	141673008	447540	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0102	0.0714	PCI/G	0	U	29/07/2005	38569.45972	3:43	0.131	PCI/G	0.0625	PCI/G	1	6.7	146	G	PCI/G	PR	
5502-0001-005-C2C-04	MSR#05-1930	141673008	447540	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.00551	0.0676	PCI/G	0	U	29/07/2005	38569.45972	3:43	0.121	PCI/G	0.0547	PCI/G	1	6.7	146	G	PCI/G	PR	
5502-0001-005-C2C-04	MSR#05-1930	141673008	447540	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0577	0.0766	PCI/G	0	U	29/07/2005	38569.45972	3:43	0.144	PCI/G	0.0695	PCI/G	1	6.7	146	G	PCI/G	PR	
5502-0001-005-C2C-04	MSR#05-1930	141673008	447540	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.547	0.0862	PCI/G	0		29/07/2005	38569.45972	3:43	0.0769	PCI/G	0.0369	PCI/G	1	6.7	146	G	PCI/G	PR	
5502-0001-005-C2C-04	MSR#05-1930	141673008	447540	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.675	0.12	PCI/G	0		29/07/2005	38569.45972	3:43	0.085	PCI/G	0.0403	PCI/G	1	6.7	146	G	PCI/G	PR	
5502-0001-005-C2C-04	MSR#05-1930	141673008	447540	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0211	0.0243	PCI/G	0	U	29/07/2005	38569.45972	3:43	0.0445	PCI/G	0.0206	PCI/G	1	6.7	146	G	PCI/G	PR	
5502-0001-005-C2C-04	MSR#05-1930	141673008	447540	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00518	0.0223	PCI/G	0	U	29/07/2005	38569.45972	3:43	0.04	PCI/G	0.0187	PCI/G	1	6.7	146	G	PCI/G	PR	
5502-0001-005-C2C-04	MSR#05-1930	141673008	447540	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	8.45	0.956	PCI/G	0		29/07/2005	38569.45972	3:43	0.38	PCI/G	0.168	PCI/G	1	6.7	146	G	PCI/G	PR	
5502-0001-005-C2C-04	MSR#05-1930	141673008	447540	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.596	0.112	PCI/G	0		29/07/2005	38569.45972	3:43	0.0815	PCI/G	0.0382	PCI/G	1	6.7	146	G	PCI/G	PR	
5502-0001-005-C2C-04	MSR#05-1930	141673008	447540	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.0135	0.0221	PCI/G	0	U	29/07/2005	38569.45972	3:43	0.0383	PCI/G	0.018	PCI/G	1	6.7	146	G	PCI/G	PR	
5502-0001-005-C2C-04	MSR#05-1930	141673008	447617	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.00973	0.00373	PCI/G	0	U	1/8/2005	38565.94792	8:16	0.00863	PCI/G	0.00415	PCI/G	1	6.7	18.2	G	PCI/G	PR	
5502-0001-005-C2C-04	MSR#05-1930	141673008	447540	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.215	0.0435	PCI/G	0		29/07/2005	38569.45972	3:43	0.0423	PCI/G	0.0197	PCI/G	1	6.7	146	G	PCI/G	PR	
5502-0001-005-C2C-04	MSR#05-1930	141673008	447277	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	0.682	1.2	PCI/G	0	U		6/8/2005	2:29	2.48	PCI/G	1.18	PCI/G	1	6.7	9.16	G	PCI/G	PR	
5502-0002-006-C1C-01	MSR#05-1930	141673009	447540	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.525	0.115	PCI/G	0		29/07/2005	38569.45972	3:43	0.0935	PCI/G	0.0442	PCI/G	1	7.8	172	G	PCI/G	PR	
5502-0002-006-C1C-01	MSR#05-1930	141673009	447483	14596-10-2	Americium-241	TRG 1	UAM05RCM	AM05RCM	REG	-0.0141	0.0287	PCI/G	0	U	1/8/2005	38565.94722	1:57	0.071	PCI/G	0.0162	PCI/G	1	7.8	0.498	G	PCI/G	PR	
5502-0002-006-C1C-01	MSR#05-1930	141673009	447540	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0147	0.0443	PCI/G	0	U	29/07/2005	38569.45972	3:43	0.0887	PCI/G	0.043	PCI/G	1	7.8	172	G	PCI/G	PR	
5502-0002-006-C1C-01	MSR#05-1930	141673009	447540	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0	0.25	PCI/G	0	UUI	29/07/2005	38569.45972	3:43	0.179	PCI/G	0.0846	PCI/G	1	7.8	172	G	PCI/G	PR	
5502-0002-006-C1C-01	MSR#05-1930	141673009	447540	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.579	0.0819	PCI/G	0		29/07/2005	38569.45972	3:43	0.0464	PCI/G	0.0221	PCI/G	1	7.8	172	G	PCI/G	PR	
5502-0002-006-C1C-01	MSR#05-1930	141673009	447285	14762-75-5	Carbon-14	TRG 5	ULSC	LSC	REG	-0.0178	0.374	PCI/G	0	U		2/8/2005	5:04	0.64	PCI/G	0.314	PCI/G	1	7.8	3.15	G	PCI/G	PR	
5502-0002-006-C1C-01	MSR#05-1930	141673009	447540	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0	0.0294	PCI/G	0	UUI	29/07/2005	38569.45972	3:43	0.0323	PCI/G	0.0154	PCI/G	1	7.8	172	G	PCI/G	PR	
5502-0002-006-C1C-01	MSR#05-1930	141673009	447540	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.132	0.0291	PCI/G	0		29/07/2005	38569.45972	3:43	0.0251	PCI/G	0.0119	PCI/G	1	7.8	172	G	PCI/G	PR	
5502-0002-006-C1C-01	MSR#05-1930	141673009	447540	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.00437	0.0145	PCI/G	0	U	29/07/2005	38569.45972	3:43	0.0264	PCI/G	0.0123	PCI/G	1	7.8	172	G	PCI/G	PR	
5502-0002-006-C1C-01	MSR#05-1930	141673009	447483	OER-100-93	Curium-242	TRG 1	UAM05RCM	AM05RCM	REG	0	0.0316	PCI/G	0	U	1/8/2005	38565.94722	1:57	0.0437	PCI/G	0	PCI/G	1	7.8	0.498	G	PCI/G	PR	
5502-0002-006-C1C-01	MSR#05-1930	141673009	447483	OER-101-57	Curium-243/244	TRG 1	UAM05RCM	AM05RCM	REG	0.0251	0.0401	PCI/G	0	U	1/8/2005	38565.94722	1:57	0.0712	PCI/G	0.0163	PCI/G	1	7.8	0.498	G	PCI/G	PR	
5502-0002-006-C1C-01	MSR#05-1930	141673009	447540	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0104	0.0396	PCI/G	0	U	29/07/2005	38569.45972	3:43	0.0647	PCI/G	0.031	PCI/G	1	7.8	172	G	PCI/G	PR	
5502-0002-006-C1C-01	MSR#05-1930	141673009	447540	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0233	0.0442	PCI/G	0	U	29/07/2005	38569.45972	3:43	0.0749	PCI/G	0.0349	PCI/G	1	7.8	172	G	PCI/G	PR	
5502-0002-006-C1C-01	MSR#05-1930	141673009	447540	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0471	0.0421	PCI/G	0	U	29/07/2005	38569.45972	3:43	0.0822	PCI/G	0.0399	PCI/G	1	7.8	172	G	PCI/G	PR	

5502-0002-006-C1C-01	MSR#05-1930	141673009	447648	14681-59-5	Iron-55	TRG 26	ULSC	LSC	REG	6.26	3.72	PCI/G	0		1/8/2005	38565.95278	10:41	5.58	PCI/G	2.77	PCI/G	1	7.8	3.37	G	PCI/G	PR	
5502-0002-006-C1C-01	MSR#05-1930	141673009	447540	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.499	0.059	PCI/G	0		29/07/2005	38569.45972	3:43	0.0385	PCI/G	0.0186	PCI/G	1	7.8	172	G	PCI/G	PR	
5502-0002-006-C1C-01	MSR#05-1930	141673009	447540	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.72	0.0941	PCI/G	0		29/07/2005	38569.45972	3:43	0.0447	PCI/G	0.0214	PCI/G	1	7.8	172	G	PCI/G	PR	
5502-0002-006-C1C-01	MSR#05-1930	141673009	447540	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.015	0.017	PCI/G	0	U	29/07/2005	38569.45972	3:43	0.0268	PCI/G	0.0127	PCI/G	1	7.8	172	G	PCI/G	PR	
5502-0002-006-C1C-01	MSR#05-1930	141673009	451367	13781-37-8	Nickel-63	TRG 30	ULSC	LSC	REG	-0.505	1.83	PCI/G	0	U	1/8/2005	38565.95208	3:48	3.17	PCI/G	1.55	PCI/G	1	7.8	1.06	G	PCI/G	PR	
5502-0002-006-C1C-01	MSR#05-1930	141673009	447540	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.00879	0.0138	PCI/G	0	U	29/07/2005	38569.45972	3:43	0.0237	PCI/G	0.0113	PCI/G	1	7.8	172	G	PCI/G	PR	
5502-0002-006-C1C-01	MSR#05-1930	141673009	447487	13981-16-3	Plutonium-238	TRG 32	UPU11RCM	PU11RCM	REG	0.0366	0.0503	PCI/G	0	U	1/8/2005	38565.94722	1:57	0.0862	PCI/G	0.0234	PCI/G	1	7.8	0.498	G	PCI/G	PR	
5502-0002-006-C1C-01	MSR#05-1930	141673009	447487	OER-100-70	Plutonium-239/240	TRG 32	UPU11RCM	PU11RCM	REG	0.0145	0.0285	PCI/G	0	U	1/8/2005	38565.94722	1:57	0.0393	PCI/G	0	PCI/G	1	7.8	0.498	G	PCI/G	PR	
5502-0002-006-C1C-01	MSR#05-1930	141673009	447490	14119-32-5	Plutonium-241	TRG 36	UPU11RCM	PU11RCM	REG	0.0425	2.61	PCI/G	0	U	1/8/2005	38565.94931	4:38	4.51	PCI/G	2.19	PCI/G	1	7.8	1.5	G	PCI/G	PR	
5502-0002-006-C1C-01	MSR#05-1930	141673009	447540	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	9.28	0.774	PCI/G	0		29/07/2005	38569.45972	3:43	0.214	PCI/G	0.0979	PCI/G	1	7.8	172	G	PCI/G	PR	
5502-0002-006-C1C-01	MSR#05-1930	141673009	447540	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.579	0.0819	PCI/G	0		29/07/2005	38569.45972	3:43	0.0464	PCI/G	0.0221	PCI/G	1	7.8	172	G	PCI/G	PR	
5502-0002-006-C1C-01	MSR#05-1930	141673009	447540	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00522	0.0119	PCI/G	0	U	29/07/2005	38569.45972	3:43	0.0208	PCI/G	0.00988	PCI/G	1	7.8	172	G	PCI/G	PR	
5502-0002-006-C1C-01	MSR#05-1930	141673009	447617	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00631	0.00283	PCI/G	0		1/8/2005	38565.94861	11:18	0.00499	PCI/G	0.00239	PCI/G	1	7.8	18	G	PCI/G	PR	
5502-0002-006-C1C-01	MSR#05-1930	141673009	447276	14133-76-7	Technetium-99	TRG 46	UTC02RCM	TC02RCM	REG	-0.485	0.53	PCI/G	0	U		4/8/2005	1:51	0.937	PCI/G	0.457	PCI/G	1	7.8	3.06	G	PCI/G	PR	
5502-0002-006-C1C-01	MSR#05-1930	141673009	447540	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.162	0.0338	PCI/G	0		29/07/2005	38569.45972	3:43	0.0258	PCI/G	0.0123	PCI/G	1	7.8	172	G	PCI/G	PR	
5502-0002-006-C1C-01	MSR#05-1930	141673009	447277	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	1.53	1.26	PCI/G	0	U		6/8/2005	2:51	2.5	PCI/G	1.19	PCI/G	1	7.8	9.41	G	PCI/G	PR	
5502-0002-006-C1C-02	MSR#05-1930	141673010	447540	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.715	0.18	PCI/G	0		29/07/2005	38569.45972	4:27	0.151	PCI/G	0.0701	PCI/G	1	8.6	163	G	PCI/G	PR	
5502-0002-006-C1C-02	MSR#05-1930	141673010	447540	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0465	0.0436	PCI/G	0	U	29/07/2005	38569.45972	4:27	0.0742	PCI/G	0.0363	PCI/G	1	8.6	163	G	PCI/G	PR	
5502-0002-006-C1C-02	MSR#05-1930	141673010	447540	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.537	0.288	PCI/G	0		29/07/2005	38569.45972	4:27	0.305	PCI/G	0.142	PCI/G	1	8.6	163	G	PCI/G	PR	
5502-0002-006-C1C-02	MSR#05-1930	141673010	447540	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	1.45	0.183	PCI/G	0		29/07/2005	38569.45972	4:27	0.0875	PCI/G	0.0415	PCI/G	1	8.6	163	G	PCI/G	PR	
5502-0002-006-C1C-02	MSR#05-1930	141673010	447540	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0352	0.0343	PCI/G	0	U	29/07/2005	38569.45972	4:27	0.0564	PCI/G	0.0266	PCI/G	1	8.6	163	G	PCI/G	PR	
5502-0002-006-C1C-02	MSR#05-1930	141673010	447540	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.0451	0.0331	PCI/G	0	U	29/07/2005	38569.45972	4:27	0.0458	PCI/G	0.0216	PCI/G	1	8.6	163	G	PCI/G	PR	
5502-0002-006-C1C-02	MSR#05-1930	141673010	447540	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.00812	0.0252	PCI/G	0	U	29/07/2005	38569.45972	4:27	0.0476	PCI/G	0.0218	PCI/G	1	8.6	163	G	PCI/G	PR	
5502-0002-006-C1C-02	MSR#05-1930	141673010	447540	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0221	0.0673	PCI/G	0	U	29/07/2005	38569.45972	4:27	0.125	PCI/G	0.06	PCI/G	1	8.6	163	G	PCI/G	PR	
5502-0002-006-C1C-02	MSR#05-1930	141673010	447540	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0215	0.0715	PCI/G	0	U	29/07/2005	38569.45972	4:27	0.135	PCI/G	0.0617	PCI/G	1	8.6	163	G	PCI/G	PR	
5502-0002-006-C1C-02	MSR#05-1930	141673010	447540	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0506	0.0645	PCI/G	0	U	29/07/2005	38569.45972	4:27	0.12	PCI/G	0.0586	PCI/G	1	8.6	163	G	PCI/G	PR	
5502-0002-006-C1C-02	MSR#05-1930	141673010	447540	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.614	0.0961	PCI/G	0		29/07/2005	38569.45972	4:27	0.0774	PCI/G	0.0376	PCI/G	1	8.6	163	G	PCI/G	PR	
5502-0002-006-C1C-02	MSR#05-1930	141673010	447540	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	1.59	0.19	PCI/G	0		29/07/2005	38569.45972	4:27	0.0844	PCI/G	0.0404	PCI/G	1	8.6	163	G	PCI/G	PR	
5502-0002-006-C1C-02	MSR#05-1930	141673010	447540	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.0303	0.0303	PCI/G	0	U	29/07/2005	38569.45972	4:27	0.0426	PCI/G	0.0199	PCI/G	1	8.6	163	G	PCI/G	PR	
5502-0002-006-C1C-02	MSR#05-1930	141673010	447540	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.00822	0.0231	PCI/G	0	U	29/07/2005	38569.45972	4:27	0.04	PCI/G	0.0188	PCI/G	1	8.6	163	G	PCI/G	PR	
5502-0002-006-C1C-02	MSR#05-1930	141673010	447540	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	8.26	1	PCI/G	0		29/07/2005	38569.45972	4:27	0.45	PCI/G	0.205	PCI/G	1	8.6	163	G	PCI/G	PR	
5502-0002-006-C1C-02	MSR#05-1930	141673010	447540	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	1.45	0.183	PCI/G	0		29/07/2005	38569.45972	4:27	0.0875	PCI/G	0.0415	PCI/G	1	8.6	163	G	PCI/G	PR	
5502-0002-006-C1C-02	MSR#05-1930	141673010	447540	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.0226	0.0215	PCI/G	0	U	29/07/2005	38569.45972	4:27	0.0364	PCI/G	0.0172	PCI/G	1	8.6	163	G	PCI/G	PR	
5502-0002-006-C1C-02	MSR#05-1930	141673010	447617	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.000721	0.00347	PCI/G	0	U	1/8/2005	38565.94861	11:18	0.00696	PCI/G	0.00332	PCI/G	1	8.6	12.7	G	PCI/G	PR	
5502-0002-006-C1C-02	MSR#05-1930	141673010	447540	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.251	0.0621	PCI/G	0		29/07/2005	38569.45972	4:27	0.0412	PCI/G	0.0193	PCI/G	1	8.6	163	G	PCI/G	PR	
5502-0002-006-C1C-02	MSR#05-1930	141673010	447277	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	0.693	1.15	PCI/G	0	U		6/8/2005	3:12	2.37	PCI/G	1.13	PCI/G	1	8.6	9.72	G	PCI/G	PR	
5502-0002-006-C2C-03	MSR#05-1930	141673011	447540	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.46	0.189	PCI/G	0		29/07/2005	38569.45972	4:28	0.123	PCI/G	0.0566	PCI/G	1	8.1	143	G	PCI/G	PR	
5502-0002-006-C2C-03	MSR#05-1930	141673011	447540	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0262	0.115	PCI/G	0	U	29/07/2005	38569.45972	4:28	0.193	PCI/G	0.093	PCI/G	1	8.1	143	G	PCI/G	PR	
5502-0002-006-C2C-03	MSR#05-1930	141673011	447540	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.693	0.337	PCI/G	0		29/07/2005	38569.45972	4:28	0.251	PCI/G	0.116	PCI/G	1	8.1	143	G	PCI/G	PR	
5502-0002-006-C2C-03	MSR#05-1930	141673011	447540	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.624	0.105	PCI/G	0		29/07/2005	38569.45972	4:28	0.0592	PCI/G	0.0276	PCI/G	1	8.1	143	G	PCI/G	PR	
5502-0002-006-C2C-03	MSR#05-1930	141673011	447540	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.003	0.0218	PCI/G	0	U	29/07/2005	38569.45972	4:28	0.0391	PCI/G	0.0181	PCI/G	1	8.1	143	G	PCI/G	PR	
5502-0002-006-C2C-03	MSR#05-1930	141673011	447540	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.00427	0.0187	PCI/G	0	U	29/07/2005	38569.45972	4:28	0.0329	PCI/G	0.0153	PCI/G	1	8.1	143	G	PCI/G	PR	
5502-0002-006-C2C-03	MSR#05-1930	141673011	447540	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.00615	0.0191	PCI/G	0	U	29/07/2005	38569.45972	4:28	0.029	PCI/G	0.0126	PCI/G	1	8.1	143	G	PCI/G	PR	
5502-0002-006-C2C-03	MSR#05-1930	141673011	447540	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0133	0.0451	PCI/G	0	U	29/07/2005	38569.45972	4:28	0.0851	PCI/G	0.0403	PCI/G	1	8.1	143	G	PCI/G	PR	
5502-0002-006-C2C-03	MSR#05-1930	141673011	447540	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0192	0.068	PCI/G	0	U	29/07/2005	38569.45972	4:28	0.12	PCI/G	0.0546	PCI/G	1	8.1	143	G	PCI/G	PR	
5502-0002-006-C2C-03	MSR#05-1930	141673011	447540	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.00804	0.0523	PCI/G	0	U	29/07/2005	38569.45972	4:28	0.0968	PCI/G	0.0466	PCI/G	1	8.1	143	G	PCI/G	PR	
5502-0002-006-C2C-03	MSR#05-1930	141673011	447540	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.461	0.0767	PCI/G	0		29/07/2005	38569.45972	4:28	0.0526	PCI/G	0.0252	PCI/G	1	8.1	143	G	PCI/G	PR	
5502-0002-006-C2C-03	MSR#05-1930	141673011	447540	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.751	0.124	PCI/G	0		29/07/2005	38569.45972	4:28	0.0638	PCI/G	0.0303	PCI/G	1	8.1	143	G	PCI/G	PR	
5502-0002-006-C2C-03	MSR#05-1930	141673011	447540	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.000611	0.021	PCI/G	0	U	29/07/2005	38569.45972	4:28	0.0371	PCI/G	0.0172	PCI/G	1	8.1	143	G	PCI/G	PR	
5502-0002-006-C2C-03	MSR#05-1930	141673011	447540	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00856	0.0172	PCI/G	0	U	29/07/2005	38569.45972	4:28	0.032	PCI/G	0.015	PCI/G	1	8.1	143	G	PCI/G	PR	
5502-0002-006-C2C-03	MSR#05-1930	141673011	447540	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	8.82	0.995	PCI/G	0		29/07/2005	38569.45972	4:28	0.335	PCI/G	0.148	PCI/G	1	8.1	143	G	PCI/G	PR	
5502-0002-006-C2C-03	MSR#05-1930	141673011	447540	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.624	0.105	PCI/G	0		29/07/2005	38569.45972	4:28	0.0592	PCI/G	0.0276	PCI/G	1	8.1	143	G	PCI/G	PR	
5502-0002-006-C2C-03	MSR#05-1930	141673011	447540	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00871	0.0162	PCI/G	0	U	29/07/2005	38569.45972	4:28	0.0248	PCI/G	0.0115	PCI/G	1	8.1	143	G	PCI/G	PR	
5502-0002-006-C2C-03	MSR#05-1930	141673011	447617	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.00635	0.00542	PCI/G	0	U	1/8/2005	38565.94861	11:19	0.0117	PCI/G	0.00561	PCI/G	1	8.1	18	G	PCI/G	PR	
5502-0002-006-C2C-03	MSR#05-1930	141673011	447540	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.154	0.0409	PCI/G	0		29/07/2005	38569.45972	4:28	0.0323	PCI/G	0.0151	PCI/G	1	8.1	143	G	PCI/G	PR	
5502-0002-006-C2C-03	MSR#05-1930	141673011	447277	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	0.651	1.15	PCI/G	0	U		6/8/2005	3:34	2.37	PCI/G	1.13	PCI/G	1	8.1	9.35	G	PCI/G	PR	
5502-0002-006-C2C-04	MSR#05-1930	141673012	447540	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.611	0.142	PCI/G	0		29/07/2005	38569.45972	6:17	0.135	PCI/G	0.0619	PCI/G	1	7.8	142	G	PCI/G	PR	
5502-0002-006-C2C-04	MSR#05-1930	141673012	447540	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0646	0.0892	PCI/G	0	U	29/07/2005	38569.45972	6:17	0.149	PCI/G	0.0717	PCI/G	1	7.8	142	G	PCI/G	PR	
5502-0002-006-C2C-04	MSR#05-1930	141673012	447540	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.487	0.237	PCI/G	0		29/07/2005	38569.45972	6:17	0.245	PCI/G	0.112	PCI/G	1	7.8	142	G	PCI/G	PR	
5502-0002-006-C2C-04	MSR#05-1930	141673012	447540	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.577	0.113	PCI/G	0		29/07/2005	38569.45972	6:17	0.0606	PCI/G	0.0281	PCI/G	1	7.8	142	G	PCI/G	PR	
5502-0002-006-C2C-04	MSR#05-1930	141673012	447540	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0241	0.0342	PCI/G	0	U	29/07/2005	38569.45972	6:17	0.0449	PCI/G	0.0209	PCI/G	1	7.8	142	G	PCI/G	PR	
5502-0002-006-C2C-04	MSR#05-1930	141673012	447540	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.0104	0.0206	PCI/G	0	U	29/07/2005	38569.45972	6:17	0.0355	PCI/G	0.0164	PCI/G	1	7.8	142	G	PCI/G	PR	
5502-0002-006-C2C-04	MSR#05-1930	141673012	447540	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0118	0.0208	PCI/G	0	U	29/07/2005	38569.45972	6:17	0.0415	PCI/G	0.0187	PCI/G	1	7.8	142	G	PCI/G	PR	
5502-0002-006-C2C-04	MSR#05-1930	141673012	447540	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0093	0.0522	PCI/G	0	U	29/07/2005	38569.45972	6:17	0.0899	PCI/G	0.0424	PCI/G	1	7.8	142	G	PCI/G	PR	
5502-0002-006-C2C-04	MSR#05-1930	141673012	447540	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0116	0.0622	PCI/G	0	U	29/07/2005	38569.45972	6:17	0.113	PCI/G	0.0506	PCI/G	1	7.8	142	G	PCI/G	PR	
5502-0002-006-C2C-04	MSR#05-1930	141673012	447540	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0441	0.074	PCI/G	0	U	29/07/2005	38569.45972	6:17	0.0952	PCI/G	0.0458	PCI/G	1	7.8	142	G	PCI/G	PR	
5502-0002-006-C2C-04	MSR#05-1930	141673012	447540	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.526	0.0739	PCI/G	0		29/07/2005	38569.45972	6:17	0.0541	PCI/G	0.0259	PCI/G	1	7.8	142	G	PCI/G	PR	
5502-0002-006-C2C-04	MSR#05-1930	141673012	447540	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.668	0.111	PCI/G	0		29/07/2005	38569.45972	6:17	0.0655	PCI/G	0.0309	PCI/G	1	7.8	142	G	PCI/G	PR	
5502-0002-006-C2C-04	MSR#05-1930	141673012	447540	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0122	0.0213	PCI/G	0	U	29/07/2005	38569.45972	6:17	0.0363	PCI/G	0.0167	PCI/G	1	7.8	142	G	PCI/G	PR	
5502-0002-006-C2C-04	MSR#05-1930	141673012	447540	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.00807	0.0194	PCI/G	0	U	29/07/2005	38569.45972	6:17	0.0335	PCI/G	0.0156	PCI/G	1	7.8	142	G	PCI/G	PR	
5502-0002-006-C2C-04	MSR#05-1930	141673012	447540	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	8.64	1.02	PCI/G	0		29/07/2005	38569.45972	6:17	0.335	PCI/G	0.146	PCI/G	1	7.8	142	G	PCI/G	PR	
5502-0002-006-C2C-04	MSR#05-1930	141673012	447540	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.577	0.113	PCI/G	0		29/07/2005	38569.45972	6:17	0.0606	PCI/G	0.0281	PCI/G	1	7.8	142	G	PCI/G	PR	
5502-0002-006-C2C-04	MSR#05-1930	141673012	447540	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00883	0.0175	PCI/G	0	U	29/07/2005	38569.45972	6:17	0.0312	PCI/G	0.0146	PCI/G	1	7.8	142	G	PCI/G	PR	
5502-0002-006-C2C-04	MSR#05-1930	141673012	447617	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00308	0.00337	PCI/G	0	U	1/8/2005	38565.94861	11:19	0.00645	PCI/G	0.00308	PCI/G	1	7.8	18.1	G	PCI/G	PR	
5502-0002-006-C2C-04	MSR#05-1930	141673012	447540	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.182	0.0471	PCI/G	0		29/07/2005	38569.45972	6:17	0.0369	PCI/G	0.0172	PCI/G	1	7.8	142	G	PCI/G	PR	
5502-0002-006-C2C-04	MSR#05-1930	141673012	447277	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	1.42	1.17	PCI/G	0	U		6/8/2005	3:56	2.31	PCI/G	1.1	PCI/G	1	7.8	9.89	G	PCI/G	PR	
5502-0002-007-C1C-01	MSR#05-1930	141673013	447538	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.544	0.132	PCI/G	0		29/07/2005	38569.46389	11:00	0.0858	PCI/G	0.0394	PCI/G	1	5.9	156	G	PCI/G	PR	
5502-0002-007-C1C-01	MSR#05-1930	141673013	447538	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0431	0.0603	PCI/G	0	U	29/07/2005	38569.46389	11:00	0.11	PCI/G	0.0532	PCI/G	1	5.9	156	G	PCI/G	PR	
5502-0002-007-C1C-01	MSR#05-1930	141673013	447538	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0	0.272	PCI/G	0	UUI	29/07/2005	38569.46389	11:00	0.205	PCI/G	0.0957	PCI/G	1	5.9	156	G	PCI/G	PR	
5502-0002-007-C1C-01	MSR#05-1930	141673013	447538	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.51	0.0911	PCI/G	0		29/07/2005	38569.46389	11:00	0.0492	PCI/G	0.0231	PCI/G	1	5.9	156	G	PCI/G	PR	
5502-0002-007-C1C-01	MSR#05-1930	141673013	447538	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0145	0.0298	PCI/G	0	U	29/07/2005	38569.46389	11:00	0.0352	PCI/G	0.0166	PCI/G	1	5.9	156	G	PCI/G	PR	
5502-0002-007-C1C-01	MSR#05-1930	141673013	447538	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.194	0.0337	PCI/G	0		29/07/2005	38569.46389	11:00	0.0248	PCI/G	0.0116	PCI/G	1	5.9	156	G	PCI/G	PR	
5502-0002-007-C1C-01	MSR#05-1930	141673013	447538	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0	0.0217	PCI/G	0	UUI	29/07/2005	38569.46389	11:00	0.0337	PCI/G	0.0155	PCI/G	1	5.9	156	G	PCI/G	PR	
5502-0002-007-C1C-01	MSR#05-1930	141673013	447538	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0212	0.0431	PCI/G	0	U	29/07/2005	38569.46389	11:00	0.0809	PCI/G	0.0388	PCI/G	1	5.9	156	G	PCI/G	PR	
5502-0002-007-C1C-01	MSR#05-1930	141673013	447538	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.00173	0.0439	PCI/G	0	U	29/07/2005	38569.46389	11:00	0.0808	PCI/G	0.0368	PCI/G	1	5.9	156	G	PCI/G	PR	
5502-0002-007-C1C-01	MSR#05-1930	141673013	447538	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0111	0.0521	PCI/G	0	U	29/07/2005	38569.46389	11:00	0.0763	PCI/G	0.0369	PCI/G	1	5.9	156	G	PCI/G	PR	
5502-0002-007-C1C-01	MSR#05-1930	141673013	447538	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.466	0.0603	PCI/G	0		29/07/2005	38569.46389	11:00	0.0424	PCI/G	0.0204	PCI/G	1	5.9	156	G	PCI/G	PR	
5502-0002-007-C1C-01	MSR#05-1930	141673013	447538	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.586	0.0834	PCI/G	0		29/07/2005	38569.46389	11:00	0.0499	PCI/G	0.0237	PCI/G	1	5.9	156	G	PCI/G	PR	
5502-0002-007-C1C-01	MSR#05-1930	141673013	447538	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0181	0.0238	PCI/G	0	U	29/07/2005	38569.46389	11:00	0.0274	PCI/G	0.0128	PCI/G	1	5.9	156	G	PCI/G	PR	
5502-0002-007-C1C-01	MSR#05-1930	141673013	447538	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.000795	0.0135	PCI/G	0	U	29/07/2005	38569.46389	11:00	0.0238	PCI/G	0.0112	PCI/G	1	5.9	156	G	PCI/G	PR	
5502-0002-007-C1C-01	MSR#05-1930	141673013	447538	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.02	0.781	PCI/G	0		29/07/2005	38569.46389	11:00	0.265	PCI/G	0.119	PCI/G	1	5.9	156	G	PCI/G	PR	
5502-0002-007-C1C-01	MSR#05-1930	141673013	447538	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.51	0.0911	PCI/G	0		29/07/2005	38569.46389	11:00	0.0492	PCI/G	0.0231	PCI/G	1	5.9	156	G	PCI/G	PR	

5502-0002-007-C1C-01	MSR#05-1930	141673013	447538	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00709	0.0135	PCI/G	0	U	29/07/2005	38569.46389	11:00	0.0238	PCI/G	0.0112	PCI/G	1	5.9	156	G	PCI/G	PR	
5502-0002-007-C1C-01	MSR#05-1930	141673013	447617	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00275	0.00358	PCI/G	0	U	1/8/2005	38565.94861	11:19	0.00691	PCI/G	0.00331	PCI/G	1	5.9	18.2	G	PCI/G	PR	
5502-0002-007-C1C-01	MSR#05-1930	141673013	447538	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.143	0.0341	PCI/G	0		29/07/2005	38569.46389	11:00	0.0272	PCI/G	0.0128	PCI/G	1	5.9	156	G	PCI/G	PR	
5502-0002-007-C1C-02	MSR#05-1930	141673014	447538	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.423	0.181	PCI/G	0		29/07/2005	38569.46389	10:01	0.152	PCI/G	0.0679	PCI/G	1	6.5	159	G	PCI/G	PR	
5502-0002-007-C1C-02	MSR#05-1930	141673014	447538	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0232	0.0414	PCI/G	0	U	29/07/2005	38569.46389	10:01	0.0707	PCI/G	0.0341	PCI/G	1	6.5	159	G	PCI/G	PR	
5502-0002-007-C1C-02	MSR#05-1930	141673014	447538	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.473	0.294	PCI/G	0		29/07/2005	38569.46389	10:01	0.366	PCI/G	0.167	PCI/G	1	6.5	159	G	PCI/G	PR	
5502-0002-007-C1C-02	MSR#05-1930	141673014	447538	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.654	0.128	PCI/G	0		29/07/2005	38569.46389	10:01	0.0911	PCI/G	0.0421	PCI/G	1	6.5	159	G	PCI/G	PR	
5502-0002-007-C1C-02	MSR#05-1930	141673014	447538	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.053	0.0421	PCI/G	0	U	29/07/2005	38569.46389	10:01	0.0643	PCI/G	0.0297	PCI/G	1	6.5	159	G	PCI/G	PR	
5502-0002-007-C1C-02	MSR#05-1930	141673014	447538	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.0134	0.0284	PCI/G	0	U	29/07/2005	38569.46389	10:01	0.054	PCI/G	0.025	PCI/G	1	6.5	159	G	PCI/G	PR	
5502-0002-007-C1C-02	MSR#05-1930	141673014	447538	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.0136	0.0272	PCI/G	0	U	29/07/2005	38569.46389	10:01	0.0474	PCI/G	0.0206	PCI/G	1	6.5	159	G	PCI/G	PR	
5502-0002-007-C1C-02	MSR#05-1930	141673014	447538	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0377	0.0746	PCI/G	0	U	29/07/2005	38569.46389	10:01	0.127	PCI/G	0.0598	PCI/G	1	6.5	159	G	PCI/G	PR	
5502-0002-007-C1C-02	MSR#05-1930	141673014	447538	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0222	0.0861	PCI/G	0	U	29/07/2005	38569.46389	10:01	0.166	PCI/G	0.0744	PCI/G	1	6.5	159	G	PCI/G	PR	
5502-0002-007-C1C-02	MSR#05-1930	141673014	447538	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0336	0.065	PCI/G	0	U	29/07/2005	38569.46389	10:01	0.122	PCI/G	0.0588	PCI/G	1	6.5	159	G	PCI/G	PR	
5502-0002-007-C1C-02	MSR#05-1930	141673014	447538	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.564	0.101	PCI/G	0		29/07/2005	38569.46389	10:01	0.0761	PCI/G	0.0363	PCI/G	1	6.5	159	G	PCI/G	PR	
5502-0002-007-C1C-02	MSR#05-1930	141673014	447538	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.628	0.132	PCI/G	0		29/07/2005	38569.46389	10:01	0.092	PCI/G	0.0433	PCI/G	1	6.5	159	G	PCI/G	PR	
5502-0002-007-C1C-02	MSR#05-1930	141673014	447538	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.00334	0.0255	PCI/G	0	U	29/07/2005	38569.46389	10:01	0.0493	PCI/G	0.0224	PCI/G	1	6.5	159	G	PCI/G	PR	
5502-0002-007-C1C-02	MSR#05-1930	141673014	447538	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00137	0.0263	PCI/G	0	U	29/07/2005	38569.46389	10:01	0.0478	PCI/G	0.0221	PCI/G	1	6.5	159	G	PCI/G	PR	
5502-0002-007-C1C-02	MSR#05-1930	141673014	447538	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.93	1.05	PCI/G	0		29/07/2005	38569.46389	10:01	0.494	PCI/G	0.216	PCI/G	1	6.5	159	G	PCI/G	PR	
5502-0002-007-C1C-02	MSR#05-1930	141673014	447538	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.654	0.128	PCI/G	0		29/07/2005	38569.46389	10:01	0.0911	PCI/G	0.0421	PCI/G	1	6.5	159	G	PCI/G	PR	
5502-0002-007-C1C-02	MSR#05-1930	141673014	447538	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00795	0.0224	PCI/G	0	U	29/07/2005	38569.46389	10:01	0.0428	PCI/G	0.0199	PCI/G	1	6.5	159	G	PCI/G	PR	
5502-0002-007-C1C-02	MSR#05-1930	141673014	447617	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.00217	0.00329	PCI/G	0	U	1/8/2005	38565.94861	11:19	0.00698	PCI/G	0.00333	PCI/G	1	6.5	18.3	G	PCI/G	PR	
5502-0002-007-C1C-02	MSR#05-1930	141673014	447538	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.157	0.0553	PCI/G	0		29/07/2005	38569.46389	10:01	0.0423	PCI/G	0.0192	PCI/G	1	6.5	159	G	PCI/G	PR	
5502-0002-007-C1C-02	MSR#05-1930	141673014	447277	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	0.505	1.19	PCI/G	0	U		6/8/2005	4:39	2.48	PCI/G	1.18	PCI/G	1	6.5	9.31	G	PCI/G	PR	
5502-0002-007-C2C-03	MSR#05-1930	141673015	447538	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.363	0.275	PCI/G	0		29/07/2005	38569.46389	10:02	0.226	PCI/G	0.104	PCI/G	1	6.6	151	G	PCI/G	PR	
5502-0002-007-C2C-03	MSR#05-1930	141673015	447538	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0115	0.0468	PCI/G	0	U	29/07/2005	38569.46389	10:02	0.0874	PCI/G	0.0422	PCI/G	1	6.6	151	G	PCI/G	PR	
5502-0002-007-C2C-03	MSR#05-1930	141673015	447538	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.367	0.29	PCI/G	0	U	29/07/2005	38569.46389	10:02	0.46	PCI/G	0.213	PCI/G	1	6.6	151	G	PCI/G	PR	
5502-0002-007-C2C-03	MSR#05-1930	141673015	447538	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.796	0.158	PCI/G	0		29/07/2005	38569.46389	10:02	0.106	PCI/G	0.0492	PCI/G	1	6.6	151	G	PCI/G	PR	
5502-0002-007-C2C-03	MSR#05-1930	141673015	447538	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0	0.0669	PCI/G	0	UUI	29/07/2005	38569.46389	10:02	0.0773	PCI/G	0.0361	PCI/G	1	6.6	151	G	PCI/G	PR	
5502-0002-007-C2C-03	MSR#05-1930	141673015	447538	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.014	0.0341	PCI/G	0	U	29/07/2005	38569.46389	10:02	0.0647	PCI/G	0.0303	PCI/G	1	6.6	151	G	PCI/G	PR	
5502-0002-007-C2C-03	MSR#05-1930	141673015	447538	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.019	0.0416	PCI/G	0	U	29/07/2005	38569.46389	10:02	0.0712	PCI/G	0.0324	PCI/G	1	6.6	151	G	PCI/G	PR	
5502-0002-007-C2C-03	MSR#05-1930	141673015	447538	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0126	0.089	PCI/G	0	U	29/07/2005	38569.46389	10:02	0.163	PCI/G	0.0775	PCI/G	1	6.6	151	G	PCI/G	PR	
5502-0002-007-C2C-03	MSR#05-1930	141673015	447538	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.00247	0.115	PCI/G	0	U	29/07/2005	38569.46389	10:02	0.211	PCI/G	0.0971	PCI/G	1	6.6	151	G	PCI/G	PR	
5502-0002-007-C2C-03	MSR#05-1930	141673015	447538	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0882	0.0968	PCI/G	0	U	29/07/2005	38569.46389	10:02	0.137	PCI/G	0.066	PCI/G	1	6.6	151	G	PCI/G	PR	
5502-0002-007-C2C-03	MSR#05-1930	141673015	447538	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.514	0.09	PCI/G	0		29/07/2005	38569.46389	10:02	0.0835	PCI/G	0.0399	PCI/G	1	6.6	151	G	PCI/G	PR	
5502-0002-007-C2C-03	MSR#05-1930	141673015	447538	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.669	0.152	PCI/G	0		29/07/2005	38569.46389	10:02	0.107	PCI/G	0.0505	PCI/G	1	6.6	151	G	PCI/G	PR	
5502-0002-007-C2C-03	MSR#05-1930	141673015	447538	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0306	0.0294	PCI/G	0	U	29/07/2005	38569.46389	10:02	0.0536	PCI/G	0.0245	PCI/G	1	6.6	151	G	PCI/G	PR	
5502-0002-007-C2C-03	MSR#05-1930	141673015	447538	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0276	0.0331	PCI/G	0	U	29/07/2005	38569.46389	10:02	0.0637	PCI/G	0.03	PCI/G	1	6.6	151	G	PCI/G	PR	
5502-0002-007-C2C-03	MSR#05-1930	141673015	447538	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	8.7	1.21	PCI/G	0		29/07/2005	38569.46389	10:02	0.539	PCI/G	0.238	PCI/G	1	6.6	151	G	PCI/G	PR	
5502-0002-007-C2C-03	MSR#05-1930	141673015	447538	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.796	0.158	PCI/G	0		29/07/2005	38569.46389	10:02	0.106	PCI/G	0.0492	PCI/G	1	6.6	151	G	PCI/G	PR	
5502-0002-007-C2C-03	MSR#05-1930	141673015	447538	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.0103	0.0285	PCI/G	0	U	29/07/2005	38569.46389	10:02	0.0498	PCI/G	0.0234	PCI/G	1	6.6	151	G	PCI/G	PR	
5502-0002-007-C2C-03	MSR#05-1930	141673015	447617	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.00533	0.00378	PCI/G	0	U	1/8/2005	38565.94861	11:20	0.00826	PCI/G	0.00397	PCI/G	1	6.6	18.4	G	PCI/G	PR	
5502-0002-007-C2C-03	MSR#05-1930	141673015	447538	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.196	0.0715	PCI/G	0		29/07/2005	38569.46389	10:02	0.0591	PCI/G	0.0276	PCI/G	1	6.6	151	G	PCI/G	PR	
5502-0002-007-C2C-03	MSR#05-1930	141673015	447277	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	0.828	1.23	PCI/G	0	U		6/8/2005	5:00	2.52	PCI/G	1.2	PCI/G	1	6.6	9.57	G	PCI/G	PR	
5502-0002-007-C2C-04	MSR#05-1930	141673016	447538	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.507	0.133	PCI/G	0		29/07/2005	38569.46389	11:21	0.116	PCI/G	0.0535	PCI/G	1	8.3	147	G	PCI/G	PR	
5502-0002-007-C2C-04	MSR#05-1930	141673016	447538	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0148	0.068	PCI/G	0	U	29/07/2005	38569.46389	11:21	0.119	PCI/G	0.0573	PCI/G	1	8.3	147	G	PCI/G	PR	
5502-0002-007-C2C-04	MSR#05-1930	141673016	447538	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.477	0.257	PCI/G	0		29/07/2005	38569.46389	11:21	0.235	PCI/G	0.109	PCI/G	1	8.3	147	G	PCI/G	PR	
5502-0002-007-C2C-04	MSR#05-1930	141673016	447538	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.515	0.104	PCI/G	0		29/07/2005	38569.46389	11:21	0.0645	PCI/G	0.0303	PCI/G	1	8.3	147	G	PCI/G	PR	
5502-0002-007-C2C-04	MSR#05-1930	141673016	447538	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0	0.0234	PCI/G	0	UUI	29/07/2005	38569.46389	11:21	0.0471	PCI/G	0.0222	PCI/G	1	8.3	147	G	PCI/G	PR	
5502-0002-007-C2C-04	MSR#05-1930	141673016	447538	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.372	0.0634	PCI/G	0		29/07/2005	38569.46389	11:21	0.0316	PCI/G	0.0147	PCI/G	1	8.3	147	G	PCI/G	PR	
5502-0002-007-C2C-04	MSR#05-1930	141673016	447538	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.00459	0.0246	PCI/G	0	U	29/07/2005	38569.46389	11:21	0.0365	PCI/G	0.0166	PCI/G	1	8.3	147	G	PCI/G	PR	
5502-0002-007-C2C-04	MSR#05-1930	141673016	447538	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0445	0.0394	PCI/G	0	U	29/07/2005	38569.46389	11:21	0.0904	PCI/G	0.0429	PCI/G	1	8.3	147	G	PCI/G	PR	
5502-0002-007-C2C-04	MSR#05-1930	141673016	447538	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.00783	0.0708	PCI/G	0	U	29/07/2005	38569.46389	11:21	0.11	PCI/G	0.0507	PCI/G	1	8.3	147	G	PCI/G	PR	
5502-0002-007-C2C-04	MSR#05-1930	141673016	447538	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	-0.011	0.0522	PCI/G	0	U	29/07/2005	38569.46389	11:21	0.0954	PCI/G	0.0457	PCI/G	1	8.3	147	G	PCI/G	PR	
5502-0002-007-C2C-04	MSR#05-1930	141673016	447538	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.479	0.0663	PCI/G	0		29/07/2005	38569.46389	11:21	0.0517	PCI/G	0.0247	PCI/G	1	8.3	147	G	PCI/G	PR	
5502-0002-007-C2C-04	MSR#05-1930	141673016	447538	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.64	0.1	PCI/G	0		29/07/2005	38569.46389	11:21	0.0607	PCI/G	0.0287	PCI/G	1	8.3	147	G	PCI/G	PR	
5502-0002-007-C2C-04	MSR#05-1930	141673016	447538	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.00339	0.0194	PCI/G	0	U	29/07/2005	38569.46389	11:21	0.0349	PCI/G	0.0162	PCI/G	1	8.3	147	G	PCI/G	PR	
5502-0002-007-C2C-04	MSR#05-1930	141673016	447538	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.0022	0.0171	PCI/G	0	U	29/07/2005	38569.46389	11:21	0.0305	PCI/G	0.0142	PCI/G	1	8.3	147	G	PCI/G	PR	
5502-0002-007-C2C-04	MSR#05-1930	141673016	447538	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.49	0.86	PCI/G	0		29/07/2005	38569.46389	11:21	0.285	PCI/G	0.127	PCI/G	1	8.3	147	G	PCI/G	PR	
5502-0002-007-C2C-04	MSR#05-1930	141673016	447538	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.515	0.104	PCI/G	0		29/07/2005	38569.46389	11:21	0.0645	PCI/G	0.0303	PCI/G	1	8.3	147	G	PCI/G	PR	
5502-0002-007-C2C-04	MSR#05-1930	141673016	447538	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.0175	0.0178	PCI/G	0	U	29/07/2005	38569.46389	11:21	0.0291	PCI/G	0.0137	PCI/G	1	8.3	147	G	PCI/G	PR	
5502-0002-007-C2C-04	MSR#05-1930	141673016	447617	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.0107	0.0032	PCI/G	0		1/8/2005	38565.94931	11:41	0.00517	PCI/G	0.00246	PCI/G	1	8.3	18.2	G	PCI/G	PR	
5502-0002-007-C2C-04	MSR#05-1930	141673016	447538	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.126	0.0451	PCI/G	0		29/07/2005	38569.46389	11:21	0.0379	PCI/G	0.0179	PCI/G	1	8.3	147	G	PCI/G	PR	
5502-0002-007-C2C-04	MSR#05-1930	141673016	447277	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-0.0698	1.13	PCI/G	0	U		6/8/2005	5:22	2.45	PCI/G	1.16	PCI/G	1	8.3	9.62	G	PCI/G	PR	
5502-0002-008-C1C-01	MSR#05-1930	141673017	447538	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.465	0.125	PCI/G	0		29/07/2005	38569.46389	1:48	0.108	PCI/G	0.0498	PCI/G	1	7.5	148	G	PCI/G	PR	
5502-0002-008-C1C-01	MSR#05-1930	141673017	447538	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0429	0.0644	PCI/G	0	U	29/07/2005	38569.46389	1:48	0.107	PCI/G	0.0513	PCI/G	1	7.5	148	G	PCI/G	PR	
5502-0002-008-C1C-01	MSR#05-1930	141673017	447538	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.299	0.216	PCI/G	0		29/07/2005	38569.46389	1:48	0.275	PCI/G	0.129	PCI/G	1	7.5	148	G	PCI/G	PR	
5502-0002-008-C1C-01	MSR#05-1930	141673017	447538	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.477	0.0956	PCI/G	0		29/07/2005	38569.46389	1:48	0.0649	PCI/G	0.0305	PCI/G	1	7.5	148	G	PCI/G	PR	
5502-0002-008-C1C-01	MSR#05-1930	141673017	447538	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0242	0.0196	PCI/G	0	U	29/07/2005	38569.46389	1:48	0.0388	PCI/G	0.0181	PCI/G	1	7.5	148	G	PCI/G	PR	
5502-0002-008-C1C-01	MSR#05-1930	141673017	447538	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.00268	0.0174	PCI/G	0	U	29/07/2005	38569.46389	1:48	0.0321	PCI/G	0.0149	PCI/G	1	7.5	148	G	PCI/G	PR	
5502-0002-008-C1C-01	MSR#05-1930	141673017	447538	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.00687	0.0202	PCI/G	0	U	29/07/2005	38569.46389	1:48	0.0376	PCI/G	0.0172	PCI/G	1	7.5	148	G	PCI/G	PR	
5502-0002-008-C1C-01	MSR#05-1930	141673017	447538	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.00132	0.0454	PCI/G	0	U	29/07/2005	38569.46389	1:48	0.0826	PCI/G	0.039	PCI/G	1	7.5	148	G	PCI/G	PR	
5502-0002-008-C1C-01	MSR#05-1930	141673017	447538	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0343	0.0536	PCI/G	0	U	29/07/2005	38569.46389	1:48	0.0894	PCI/G	0.0403	PCI/G	1	7.5	148	G	PCI/G	PR	
5502-0002-008-C1C-01	MSR#05-1930	141673017	447538	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.039	0.0701	PCI/G	0	U	29/07/2005	38569.46389	1:48	0.103	PCI/G	0.0494	PCI/G	1	7.5	148	G	PCI/G	PR	
5502-0002-008-C1C-01	MSR#05-1930	141673017	447538	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.429	0.0805	PCI/G	0		29/07/2005	38569.46389	1:48	0.0662	PCI/G	0.032	PCI/G	1	7.5	148	G	PCI/G	PR	
5502-0002-008-C1C-01	MSR#05-1930	141673017	447538	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.442	0.0875	PCI/G	0		29/07/2005	38569.46389	1:48	0.0616	PCI/G	0.0292	PCI/G	1	7.5	148	G	PCI/G	PR	
5502-0002-008-C1C-01	MSR#05-1930	141673017	447538	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.00132	0.0209	PCI/G	0	U	29/07/2005	38569.46389	1:48	0.0324	PCI/G	0.015	PCI/G	1	7.5	148	G	PCI/G	PR	
5502-0002-008-C1C-01	MSR#05-1930	141673017	447538	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.022	0.0267	PCI/G	0	U	29/07/2005	38569.46389	1:48	0.0306	PCI/G	0.0143	PCI/G	1	7.5	148	G	PCI/G	PR	
5502-0002-008-C1C-01	MSR#05-1930	141673017	447538	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.37	0.833	PCI/G	0		29/07/2005	38569.46389	1:48	0.277	PCI/G	0.122	PCI/G	1	7.5	148	G	PCI/G	PR	
5502-0002-008-C1C-01	MSR#05-1930	141673017	447538	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.477	0.0956	PCI/G	0		29/07/2005	38569.46389	1:48	0.0649	PCI/G	0.0305	PCI/G	1	7.5	148	G	PCI/G	PR	
5502-0002-008-C1C-01	MSR#05-1930	141673017	447538	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00781	0.0159	PCI/G	0	U	29/07/2005	38569.46389	1:48	0.0294	PCI/G	0.0139	PCI/G	1	7.5	148	G	PCI/G	PR	
5502-0002-008-C1C-01	MSR#05-1930	141673017	447618	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00434	0.00428	PCI/G	0	U	1/8/2005	38566.09167	11:06	0.00815	PCI/G	0.0039	PCI/G	1	7.5	19.5	G	PCI/G	PR	
5502-0002-008-C1C-01	MSR#05-1930	141673017	447538	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.141	0.0359	PCI/G	0		29/07/2005	38569.46389	1:48	0.0355	PCI/G	0.0167	PCI/G	1	7.5	148	G	PCI/G	PR	
5502-0002-008-C1C-01	MSR#05-1930	141673017	447279	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-0.693	1.65	PCI/G	0	U		7/8/2005	3:13	2.94	PCI/G	1.41	PCI/G	1	7.5	15.1	G	PCI/G	PR	
5502-0002-008-C1C-02	MSR#05-1930	141673018	447538	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.475	0.139	PCI/G	0		29/07/2005	38569.46389	3:44	0.112	PCI/G	0.0516	PCI/G	1	7.4	148	G	PCI/G	PR	
5502-0002-008-C1C-02	MSR#05-1930	141673018	447538	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0146	0.173	PCI/G	0	U	29/07/2005	38569.46389	3:44	0.212	PCI/G	0.103	PCI/G	1	7.4	148	G	PCI/G	PR	
5502-0002-008-C1C-02	MSR#05-1930	141673018	447538	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.583	0.25	PCI/G	0		29/07/2005	38569.46389	3:44	0.257	PCI/G	0.119	PCI/G	1	7.4	148	G	PCI/G	PR	
5502-0002-008-C1C-02	MSR#05-1930	141673018	447538	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.515	0.0894	PCI/G	0		29/07/2005	38569.46389	3:44	0.0603	PCI/G	0.0283	PCI/G	1	7.4	148	G	PCI/G	PR	
5502-0002-008-C1C-02	MSR#05-1930	141673018	447538	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0159	0.0245	PCI/G	0	U	29/07/2005	38569.46389	3:44	0.0412	PCI/G	0.0193	PCI/G	1	7.4	148	G	PCI/G	PR	
5502-0002-008-C1C-02	MSR#05-1930	141673018	447538	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.0142	0.0185	PCI/G	0	U	29/07/2005	38569.46389	3:44	0.032	PCI/G	0.0149	PCI/G	1	7.4	148	G	PCI/G	PR	
5502-0002-008-C1C-02	MSR#05-1930	141673018	447538	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.000851	0.0168	PCI/G	0	U	29/07/2005	38569.46389	3:44	0.0312	PCI/G	0.0138	PCI/G	1	7.4	148	G	PCI/G	PR	
5502-0002-008-C1C-02	MSR#05-1930	141673018	447538	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.00955	0.0592	PCI/G	0	U	29/07/2005	38569.46389	3:44	0.093	PCI/G	0.0444	PCI/G	1	7.4	148	G	PCI/G	PR	
5502-0002-008-C1C-02	MSR#05-1930	141673018	447538	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.00287	0.0537	PCI/G	0	U	29/07/2005	38569.46389	3:44	0.097	PCI/G	0.0438	PCI/G	1	7.4	148	G	PCI/G	PR	

5502-0002-008-C1C-02	MSR#05-1930	141673018	447538	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0155	0.059	PCI/G	0	U	29/07/2005	38569.46389	3:44	0.11	PCI/G	0.0533	PCI/G	1	7.4	148	G	PCI/G	PR	
5502-0002-008-C1C-02	MSR#05-1930	141673018	447538	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.516	0.0796	PCI/G	0		29/07/2005	38569.46389	3:44	0.0504	PCI/G	0.0242	PCI/G	1	7.4	148	G	PCI/G	PR	
5502-0002-008-C1C-02	MSR#05-1930	141673018	447538	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.544	0.0929	PCI/G	0		29/07/2005	38569.46389	3:44	0.0634	PCI/G	0.0302	PCI/G	1	7.4	148	G	PCI/G	PR	
5502-0002-008-C1C-02	MSR#05-1930	141673018	447538	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.00801	0.0184	PCI/G	0	U	29/07/2005	38569.46389	3:44	0.0348	PCI/G	0.0162	PCI/G	1	7.4	148	G	PCI/G	PR	
5502-0002-008-C1C-02	MSR#05-1930	141673018	447538	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.000823	0.0167	PCI/G	0	U	29/07/2005	38569.46389	3:44	0.0307	PCI/G	0.0144	PCI/G	1	7.4	148	G	PCI/G	PR	
5502-0002-008-C1C-02	MSR#05-1930	141673018	447538	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.54	0.944	PCI/G	0		29/07/2005	38569.46389	3:44	0.294	PCI/G	0.13	PCI/G	1	7.4	148	G	PCI/G	PR	
5502-0002-008-C1C-02	MSR#05-1930	141673018	447538	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.515	0.0894	PCI/G	0		29/07/2005	38569.46389	3:44	0.0603	PCI/G	0.0283	PCI/G	1	7.4	148	G	PCI/G	PR	
5502-0002-008-C1C-02	MSR#05-1930	141673018	447538	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00299	0.0185	PCI/G	0	U	29/07/2005	38569.46389	3:44	0.0291	PCI/G	0.0137	PCI/G	1	7.4	148	G	PCI/G	PR	
5502-0002-008-C1C-02	MSR#05-1930	141673018	447618	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00995	0.00402	PCI/G	0		1/8/2005	38566.09167	11:06	0.00702	PCI/G	0.00336	PCI/G	1	7.4	19.4	G	PCI/G	PR	
5502-0002-008-C1C-02	MSR#05-1930	141673018	447538	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.19	0.0433	PCI/G	0		29/07/2005	38569.46389	3:44	0.0326	PCI/G	0.0153	PCI/G	1	7.4	148	G	PCI/G	PR	
5502-0002-008-C1C-02	MSR#05-1930	141673018	447279	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	0.125	1.7	PCI/G	0	U		7/8/2005	3:45	2.96	PCI/G	1.43	PCI/G	1	7.4	15	G	PCI/G	PR	
5502-0002-008-C2C-03	MSR#05-1930	141673019	447538	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.412	0.16	PCI/G	0		29/07/2005	38569.46389	3:45	0.106	PCI/G	0.0492	PCI/G	1	8.1	151	G	PCI/G	PR	
5502-0002-008-C2C-03	MSR#05-1930	141673019	447538	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.000601	0.0602	PCI/G	0	U	29/07/2005	38569.46389	3:45	0.113	PCI/G	0.0547	PCI/G	1	8.1	151	G	PCI/G	PR	
5502-0002-008-C2C-03	MSR#05-1930	141673019	447538	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.455	0.271	PCI/G	0		29/07/2005	38569.46389	3:45	0.202	PCI/G	0.0939	PCI/G	1	8.1	151	G	PCI/G	PR	
5502-0002-008-C2C-03	MSR#05-1930	141673019	447538	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.546	0.0842	PCI/G	0		29/07/2005	38569.46389	3:45	0.0504	PCI/G	0.0237	PCI/G	1	8.1	151	G	PCI/G	PR	
5502-0002-008-C2C-03	MSR#05-1930	141673019	447538	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0366	0.0277	PCI/G	0	U	29/07/2005	38569.46389	3:45	0.0373	PCI/G	0.0176	PCI/G	1	8.1	151	G	PCI/G	PR	
5502-0002-008-C2C-03	MSR#05-1930	141673019	447538	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.0119	0.0202	PCI/G	0	U	29/07/2005	38569.46389	3:45	0.0296	PCI/G	0.0139	PCI/G	1	8.1	151	G	PCI/G	PR	
5502-0002-008-C2C-03	MSR#05-1930	141673019	447538	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.00914	0.0181	PCI/G	0	U	29/07/2005	38569.46389	3:45	0.0308	PCI/G	0.014	PCI/G	1	8.1	151	G	PCI/G	PR	
5502-0002-008-C2C-03	MSR#05-1930	141673019	447538	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.00909	0.0428	PCI/G	0	U	29/07/2005	38569.46389	3:45	0.0775	PCI/G	0.0371	PCI/G	1	8.1	151	G	PCI/G	PR	
5502-0002-008-C2C-03	MSR#05-1930	141673019	447538	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0813	0.0528	PCI/G	0	U	29/07/2005	38569.46389	3:45	0.0785	PCI/G	0.0355	PCI/G	1	8.1	151	G	PCI/G	PR	
5502-0002-008-C2C-03	MSR#05-1930	141673019	447538	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0351	0.0465	PCI/G	0	U	29/07/2005	38569.46389	3:45	0.0863	PCI/G	0.0419	PCI/G	1	8.1	151	G	PCI/G	PR	
5502-0002-008-C2C-03	MSR#05-1930	141673019	447538	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.361	0.0545	PCI/G	0		29/07/2005	38569.46389	3:45	0.0431	PCI/G	0.0208	PCI/G	1	8.1	151	G	PCI/G	PR	
5502-0002-008-C2C-03	MSR#05-1930	141673019	447538	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.589	0.0933	PCI/G	0		29/07/2005	38569.46389	3:45	0.0526	PCI/G	0.0251	PCI/G	1	8.1	151	G	PCI/G	PR	
5502-0002-008-C2C-03	MSR#05-1930	141673019	447538	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0165	0.0188	PCI/G	0	U	29/07/2005	38569.46389	3:45	0.0353	PCI/G	0.0167	PCI/G	1	8.1	151	G	PCI/G	PR	
5502-0002-008-C2C-03	MSR#05-1930	141673019	447538	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.00642	0.0161	PCI/G	0	U	29/07/2005	38569.46389	3:45	0.028	PCI/G	0.0132	PCI/G	1	8.1	151	G	PCI/G	PR	
5502-0002-008-C2C-03	MSR#05-1930	141673019	447538	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.45	0.788	PCI/G	0		29/07/2005	38569.46389	3:45	0.286	PCI/G	0.129	PCI/G	1	8.1	151	G	PCI/G	PR	
5502-0002-008-C2C-03	MSR#05-1930	141673019	447538	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.546	0.0842	PCI/G	0		29/07/2005	38569.46389	3:45	0.0504	PCI/G	0.0237	PCI/G	1	8.1	151	G	PCI/G	PR	
5502-0002-008-C2C-03	MSR#05-1930	141673019	447538	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00207	0.0144	PCI/G	0	U	29/07/2005	38569.46389	3:45	0.0251	PCI/G	0.0119	PCI/G	1	8.1	151	G	PCI/G	PR	
5502-0002-008-C2C-03	MSR#05-1930	141673019	447618	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00456	0.00497	PCI/G	0	U	1/8/2005	38566.09167	11:06	0.0095	PCI/G	0.00455	PCI/G	1	8.1	19.4	G	PCI/G	PR	
5502-0002-008-C2C-03	MSR#05-1930	141673019	447538	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.131	0.044	PCI/G	0		29/07/2005	38569.46389	3:45	0.028	PCI/G	0.0132	PCI/G	1	8.1	151	G	PCI/G	PR	
5502-0002-008-C2C-03	MSR#05-1930	141673019	447279	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-0.398	1.79	PCI/G	0	U		7/8/2005	4:17	3.15	PCI/G	1.52	PCI/G	1	8.1	15	G	PCI/G	PR	
5502-0002-008-C2C-04	MSR#05-1930	141673020	447538	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.426	0.133	PCI/G	0		29/07/2005	38569.46389	3:46	0.0991	PCI/G	0.0456	PCI/G	1	8.3	145	G	PCI/G	PR	
5502-0002-008-C2C-04	MSR#05-1930	141673020	447538	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0319	0.0686	PCI/G	0	U	29/07/2005	38569.46389	3:46	0.122	PCI/G	0.0588	PCI/G	1	8.3	145	G	PCI/G	PR	
5502-0002-008-C2C-04	MSR#05-1930	141673020	447538	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.275	0.18	PCI/G	0		29/07/2005	38569.46389	3:46	0.209	PCI/G	0.0968	PCI/G	1	8.3	145	G	PCI/G	PR	
5502-0002-008-C2C-04	MSR#05-1930	141673020	447538	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.51	0.0855	PCI/G	0		29/07/2005	38569.46389	3:46	0.0571	PCI/G	0.0269	PCI/G	1	8.3	145	G	PCI/G	PR	
5502-0002-008-C2C-04	MSR#05-1930	141673020	447538	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.023	0.0186	PCI/G	0	U	29/07/2005	38569.46389	3:46	0.0364	PCI/G	0.017	PCI/G	1	8.3	145	G	PCI/G	PR	
5502-0002-008-C2C-04	MSR#05-1930	141673020	447538	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.0263	0.0257	PCI/G	0	U	29/07/2005	38569.46389	3:46	0.027	PCI/G	0.0125	PCI/G	1	8.3	145	G	PCI/G	PR	
5502-0002-008-C2C-04	MSR#05-1930	141673020	447538	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0072	0.0188	PCI/G	0	U	29/07/2005	38569.46389	3:46	0.0357	PCI/G	0.0163	PCI/G	1	8.3	145	G	PCI/G	PR	
5502-0002-008-C2C-04	MSR#05-1930	141673020	447538	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.00588	0.0408	PCI/G	0	U	29/07/2005	38569.46389	3:46	0.0705	PCI/G	0.0334	PCI/G	1	8.3	145	G	PCI/G	PR	
5502-0002-008-C2C-04	MSR#05-1930	141673020	447538	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.018	0.0514	PCI/G	0	U	29/07/2005	38569.46389	3:46	0.0975	PCI/G	0.0446	PCI/G	1	8.3	145	G	PCI/G	PR	
5502-0002-008-C2C-04	MSR#05-1930	141673020	447538	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0468	0.0424	PCI/G	0	U	29/07/2005	38569.46389	3:46	0.082	PCI/G	0.0396	PCI/G	1	8.3	145	G	PCI/G	PR	
5502-0002-008-C2C-04	MSR#05-1930	141673020	447538	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.481	0.0622	PCI/G	0		29/07/2005	38569.46389	3:46	0.0424	PCI/G	0.0203	PCI/G	1	8.3	145	G	PCI/G	PR	
5502-0002-008-C2C-04	MSR#05-1930	141673020	447538	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.514	0.0851	PCI/G	0		29/07/2005	38569.46389	3:46	0.0541	PCI/G	0.0257	PCI/G	1	8.3	145	G	PCI/G	PR	
5502-0002-008-C2C-04	MSR#05-1930	141673020	447538	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.0112	0.017	PCI/G	0	U	29/07/2005	38569.46389	3:46	0.0282	PCI/G	0.013	PCI/G	1	8.3	145	G	PCI/G	PR	
5502-0002-008-C2C-04	MSR#05-1930	141673020	447538	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00181	0.0156	PCI/G	0	U	29/07/2005	38569.46389	3:46	0.028	PCI/G	0.0131	PCI/G	1	8.3	145	G	PCI/G	PR	
5502-0002-008-C2C-04	MSR#05-1930	141673020	447538	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	6.91	0.773	PCI/G	0		29/07/2005	38569.46389	3:46	0.253	PCI/G	0.111	PCI/G	1	8.3	145	G	PCI/G	PR	
5502-0002-008-C2C-04	MSR#05-1930	141673020	447538	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.51	0.0855	PCI/G	0		29/07/2005	38569.46389	3:46	0.0571	PCI/G	0.0269	PCI/G	1	8.3	145	G	PCI/G	PR	
5502-0002-008-C2C-04	MSR#05-1930	141673020	447538	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00477	0.0133	PCI/G	0	U	29/07/2005	38569.46389	3:46	0.0252	PCI/G	0.0119	PCI/G	1	8.3	145	G	PCI/G	PR	
5502-0002-008-C2C-04	MSR#05-1930	141673020	447618	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00619	0.00409	PCI/G	0	U	1/8/2005	38566.1625	12:18	0.0066	PCI/G	0.00315	PCI/G	1	8.3	19.3	G	PCI/G	PR	
5502-0002-008-C2C-04	MSR#05-1930	141673020	447538	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.128	0.041	PCI/G	0		29/07/2005	38569.46389	3:46	0.0284	PCI/G	0.0133	PCI/G	1	8.3	145	G	PCI/G	PR	
5502-0002-008-C2C-04	MSR#05-1930	141673020	447279	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	0.893	1.86	PCI/G	0	U		7/8/2005	4:49	3.16	PCI/G	1.52	PCI/G	1	8.3	15.1	G	PCI/G	PR	
5502-0001-009-C1C-01	MSR#05-1930	141673021	447538	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.414	0.155	PCI/G	0		29/07/2005	38569.46389	3:47	0.101	PCI/G	0.0466	PCI/G	1	7.9	145	G	PCI/G	PR	
5502-0001-009-C1C-01	MSR#05-1930	141673021	447538	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0184	0.0612	PCI/G	0	U	29/07/2005	38569.46389	3:47	0.114	PCI/G	0.0554	PCI/G	1	7.9	145	G	PCI/G	PR	
5502-0001-009-C1C-01	MSR#05-1930	141673021	447538	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.43	0.195	PCI/G	0		29/07/2005	38569.46389	3:47	0.21	PCI/G	0.0976	PCI/G	1	7.9	145	G	PCI/G	PR	
5502-0001-009-C1C-01	MSR#05-1930	141673021	447538	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.446	0.0769	PCI/G	0		29/07/2005	38569.46389	3:47	0.0585	PCI/G	0.0277	PCI/G	1	7.9	145	G	PCI/G	PR	
5502-0001-009-C1C-01	MSR#05-1930	141673021	447538	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0253	0.0256	PCI/G	0	U	29/07/2005	38569.46389	3:47	0.0337	PCI/G	0.0157	PCI/G	1	7.9	145	G	PCI/G	PR	
5502-0001-009-C1C-01	MSR#05-1930	141673021	447538	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.151	0.035	PCI/G	0		29/07/2005	38569.46389	3:47	0.0268	PCI/G	0.0125	PCI/G	1	7.9	145	G	PCI/G	PR	
5502-0001-009-C1C-01	MSR#05-1930	141673021	447538	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.0141	0.015	PCI/G	0	U	29/07/2005	38569.46389	3:47	0.0239	PCI/G	0.0105	PCI/G	1	7.9	145	G	PCI/G	PR	
5502-0001-009-C1C-01	MSR#05-1930	141673021	447538	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.016	0.0424	PCI/G	0	U	29/07/2005	38569.46389	3:47	0.0788	PCI/G	0.0376	PCI/G	1	7.9	145	G	PCI/G	PR	
5502-0001-009-C1C-01	MSR#05-1930	141673021	447538	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0328	0.0482	PCI/G	0	U	29/07/2005	38569.46389	3:47	0.0808	PCI/G	0.0365	PCI/G	1	7.9	145	G	PCI/G	PR	
5502-0001-009-C1C-01	MSR#05-1930	141673021	447538	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0181	0.0442	PCI/G	0	U	29/07/2005	38569.46389	3:47	0.0809	PCI/G	0.0391	PCI/G	1	7.9	145	G	PCI/G	PR	
5502-0001-009-C1C-01	MSR#05-1930	141673021	447538	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.416	0.0572	PCI/G	0		29/07/2005	38569.46389	3:47	0.0424	PCI/G	0.0203	PCI/G	1	7.9	145	G	PCI/G	PR	
5502-0001-009-C1C-01	MSR#05-1930	141673021	447538	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.485	0.0818	PCI/G	0		29/07/2005	38569.46389	3:47	0.0544	PCI/G	0.0259	PCI/G	1	7.9	145	G	PCI/G	PR	
5502-0001-009-C1C-01	MSR#05-1930	141673021	447538	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.00371	0.0172	PCI/G	0	U	29/07/2005	38569.46389	3:47	0.0294	PCI/G	0.0136	PCI/G	1	7.9	145	G	PCI/G	PR	
5502-0001-009-C1C-01	MSR#05-1930	141673021	447538	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00641	0.0147	PCI/G	0	U	29/07/2005	38569.46389	3:47	0.0268	PCI/G	0.0126	PCI/G	1	7.9	145	G	PCI/G	PR	
5502-0001-009-C1C-01	MSR#05-1930	141673021	447538	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.69	0.846	PCI/G	0		29/07/2005	38569.46389	3:47	0.213	PCI/G	0.0919	PCI/G	1	7.9	145	G	PCI/G	PR	
5502-0001-009-C1C-01	MSR#05-1930	141673021	447538	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.446	0.0769	PCI/G	0		29/07/2005	38569.46389	3:47	0.0585	PCI/G	0.0277	PCI/G	1	7.9	145	G	PCI/G	PR	
5502-0001-009-C1C-01	MSR#05-1930	141673021	447538	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00399	0.0135	PCI/G	0	U	29/07/2005	38569.46389	3:47	0.025	PCI/G	0.0118	PCI/G	1	7.9	145	G	PCI/G	PR	
5502-0001-009-C1C-01	MSR#05-1930	141673021	447618	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.0246	0.00629	PCI/G	0		1/8/2005	38566.1625	12:18	0.00917	PCI/G	0.00441	PCI/G	1	7.9	20.2	G	PCI/G	PR	
5502-0001-009-C1C-01	MSR#05-1930	141673021	447538	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.139	0.0366	PCI/G	0		29/07/2005	38569.46389	3:47	0.0255	PCI/G	0.0119	PCI/G	1	7.9	145	G	PCI/G	PR	
5502-0001-009-C1C-01	MSR#05-1930	141673021	447279	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-1.21	1.44	PCI/G	0	U		7/8/2005	5:20	2.61	PCI/G	1.25	PCI/G	1	7.9	15.1	G	PCI/G	PR	
5502-0001-009-C1C-02	MSR#05-1930	141673022	447538	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.337	0.14	PCI/G	0		29/07/2005	38569.46389	3:50	0.109	PCI/G	0.0512	PCI/G	1	5.7	169	G	PCI/G	PR	
5502-0001-009-C1C-02	MSR#05-1930	141673022	447538	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0548	0.0636	PCI/G	0	U	29/07/2005	38569.46389	3:50	0.108	PCI/G	0.052	PCI/G	1	5.7	169	G	PCI/G	PR	
5502-0001-009-C1C-02	MSR#05-1930	141673022	447538	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.205	0.162	PCI/G	0	U	29/07/2005	38569.46389	3:50	0.22	PCI/G	0.103	PCI/G	1	5.7	169	G	PCI/G	PR	
5502-0001-009-C1C-02	MSR#05-1930	141673022	447538	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.474	0.0819	PCI/G	0		29/07/2005	38569.46389	3:50	0.0486	PCI/G	0.0228	PCI/G	1	5.7	169	G	PCI/G	PR	
5502-0001-009-C1C-02	MSR#05-1930	141673022	447538	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0212	0.0183	PCI/G	0	U	29/07/2005	38569.46389	3:50	0.0358	PCI/G	0.0169	PCI/G	1	5.7	169	G	PCI/G	PR	
5502-0001-009-C1C-02	MSR#05-1930	141673022	447538	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.00172	0.0176	PCI/G	0	U	29/07/2005	38569.46389	3:50	0.028	PCI/G	0.0132	PCI/G	1	5.7	169	G	PCI/G	PR	
5502-0001-009-C1C-02	MSR#05-1930	141673022	447538	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.013	0.0171	PCI/G	0	U	29/07/2005	38569.46389	3:50	0.0327	PCI/G	0.015	PCI/G	1	5.7	169	G	PCI/G	PR	
5502-0001-009-C1C-02	MSR#05-1930	141673022	447538	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0228	0.0373	PCI/G	0	U	29/07/2005	38569.46389	3:50	0.0664	PCI/G	0.0316	PCI/G	1	5.7	169	G	PCI/G	PR	
5502-0001-009-C1C-02	MSR#05-1930	141673022	447538	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0431	0.0501	PCI/G	0	U	29/07/2005	38569.46389	3:50	0.0834	PCI/G	0.038	PCI/G	1	5.7	169	G	PCI/G	PR	
5502-0001-009-C1C-02	MSR#05-1930	141673022	447538	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.00693	0.0404	PCI/G	0	U	29/07/2005	38569.46389	3:50	0.0768	PCI/G	0.0372	PCI/G	1	5.7	169	G	PCI/G	PR	
5502-0001-009-C1C-02	MSR#05-1930	141673022	447538	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.37	0.0533	PCI/G	0		29/07/2005	38569.46389	3:50	0.0447	PCI/G	0.0216	PCI/G	1	5.7	169	G	PCI/G	PR	
5502-0001-009-C1C-02	MSR#05-1930	141673022	447538	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.524	0.0838	PCI/G	0		29/07/2005	38569.46389	3:50	0.0489	PCI/G	0.0233	PCI/G	1	5.7	169	G	PCI/G	PR	
5502-0001-009-C1C-02	MSR#05-1930	141673022	447538	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0284	0.0241	PCI/G	0	U	29/07/2005	38569.46389	3:50	0.0303	PCI/G	0.0142	PCI/G	1	5.7	169	G	PCI/G	PR	
5502-0001-009-C1C-02	MSR#05-1930	141673022	447538	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0157	0.0136	PCI/G	0	U	29/07/2005	38569.46389	3:50	0.0269	PCI/G	0.0127	PCI/G	1	5.7	169	G	PCI/G	PR	
5502-0001-009-C1C-02	MSR#05-1930	141673022	447538	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	8.31	0.894	PCI/G	0		29/07/2005	38569.46389	3:50	0.228	PCI/G	0.1	PCI/G	1	5.7	169	G	PCI/G	PR	
5502-0001-009-C1C-02	MSR#05-1930	141673022	447538	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.474	0.0819	PCI/G	0		29/07/2005	38569.46389	3:50	0.0486	PCI/G	0.0228	PCI/G	1	5.7	169	G	PCI/G	PR	
5502-0001-009-C1C-02	MSR#05-1930	141673022	447538	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00494	0.0141	PCI/G	0	U	29/07/2005	38569.46389	3:50	0.0261	PCI/G	0.0124	PCI/G	1	5.7	169	G	PCI/G	PR	
5502-0001-009-C1C-02	MSR#05-1930	141673022	447618	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00139	0.00407	PCI/G	0	U	1/8/2005	38566.1625	12:18	0.00702	PCI/G	0.00335	PCI/G	1	5.7	19.8	G	PCI/G	PR	
5502-0001-009-C1C-02	MSR#05-1930	141673022	447538	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.14	0.0427	PCI/G	0		29/07/2005	38569.46389	3:50	0.0279	PCI/G	0.0131	PCI/G	1	5.7	169	G	PCI/G	PR	
5502-0001-009-C1C-02	MSR#05-1930	141673022	447279	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-1.36	1.73	PCI/G	0	U		7/8/2005	5:52	3.13	PCI/G	1.5	PCI/G	1	5.7	15.1	G	PCI/G	PR	
5502-0001-009-C2C-03	MSR#05-1930	141673023	447538	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.413	0.121	PCI/G	0		29/07/2005	38569.46389	3:51	0.103	PCI/G	0.0481	PCI/G	1	6	155	G	PCI/G	PR	

5502-0001-009-C2C-03	MSR#05-1930	141673023	447538	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0367	0.0862	PCI/G	0	U	29/07/2005	38569.46389	3:51	0.152	PCI/G	0.0735	PCI/G	1	6	155	G	PCI/G	PR	
5502-0001-009-C2C-03	MSR#05-1930	141673023	447538	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.353	0.158	PCI/G	0		29/07/2005	38569.46389	3:51	0.183	PCI/G	0.0848	PCI/G	1	6	155	G	PCI/G	PR	
5502-0001-009-C2C-03	MSR#05-1930	141673023	447538	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.407	0.0769	PCI/G	0		29/07/2005	38569.46389	3:51	0.0487	PCI/G	0.023	PCI/G	1	6	155	G	PCI/G	PR	
5502-0001-009-C2C-03	MSR#05-1930	141673023	447538	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0181	0.0165	PCI/G	0	U	29/07/2005	38569.46389	3:51	0.0318	PCI/G	0.0149	PCI/G	1	6	155	G	PCI/G	PR	
5502-0001-009-C2C-03	MSR#05-1930	141673023	447538	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.00422	0.0146	PCI/G	0	U	29/07/2005	38569.46389	3:51	0.0257	PCI/G	0.012	PCI/G	1	6	155	G	PCI/G	PR	
5502-0001-009-C2C-03	MSR#05-1930	141673023	447538	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0169	0.0148	PCI/G	0	U	29/07/2005	38569.46389	3:51	0.0308	PCI/G	0.014	PCI/G	1	6	155	G	PCI/G	PR	
5502-0001-009-C2C-03	MSR#05-1930	141673023	447538	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0276	0.0361	PCI/G	0	U	29/07/2005	38569.46389	3:51	0.0644	PCI/G	0.0306	PCI/G	1	6	155	G	PCI/G	PR	
5502-0001-009-C2C-03	MSR#05-1930	141673023	447538	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.00259	0.0428	PCI/G	0	U	29/07/2005	38569.46389	3:51	0.0782	PCI/G	0.0354	PCI/G	1	6	155	G	PCI/G	PR	
5502-0001-009-C2C-03	MSR#05-1930	141673023	447538	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.00779	0.04	PCI/G	0	U	29/07/2005	38569.46389	3:51	0.0751	PCI/G	0.0363	PCI/G	1	6	155	G	PCI/G	PR	
5502-0001-009-C2C-03	MSR#05-1930	141673023	447538	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.418	0.0587	PCI/G	0		29/07/2005	38569.46389	3:51	0.0394	PCI/G	0.019	PCI/G	1	6	155	G	PCI/G	PR	
5502-0001-009-C2C-03	MSR#05-1930	141673023	447538	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.438	0.0737	PCI/G	0		29/07/2005	38569.46389	3:51	0.0484	PCI/G	0.0231	PCI/G	1	6	155	G	PCI/G	PR	
5502-0001-009-C2C-03	MSR#05-1930	141673023	447538	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.00406	0.0142	PCI/G	0	U	29/07/2005	38569.46389	3:51	0.0245	PCI/G	0.0113	PCI/G	1	6	155	G	PCI/G	PR	
5502-0001-009-C2C-03	MSR#05-1930	141673023	447538	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.00211	0.0132	PCI/G	0	U	29/07/2005	38569.46389	3:51	0.0233	PCI/G	0.0109	PCI/G	1	6	155	G	PCI/G	PR	
5502-0001-009-C2C-03	MSR#05-1930	141673023	447538	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.85	0.808	PCI/G	0		29/07/2005	38569.46389	3:51	0.285	PCI/G	0.129	PCI/G	1	6	155	G	PCI/G	PR	
5502-0001-009-C2C-03	MSR#05-1930	141673023	447538	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.407	0.0769	PCI/G	0		29/07/2005	38569.46389	3:51	0.0487	PCI/G	0.023	PCI/G	1	6	155	G	PCI/G	PR	
5502-0001-009-C2C-03	MSR#05-1930	141673023	447538	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.0114	0.0118	PCI/G	0	U	29/07/2005	38569.46389	3:51	0.0231	PCI/G	0.011	PCI/G	1	6	155	G	PCI/G	PR	
5502-0001-009-C2C-03	MSR#05-1930	141673023	447618	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00459	0.00359	PCI/G	0	U	1/8/2005	38566.1625	12:18	0.00587	PCI/G	0.0028	PCI/G	1	6	19.6	G	PCI/G	PR	
5502-0001-009-C2C-03	MSR#05-1930	141673023	447538	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.132	0.036	PCI/G	0		29/07/2005	38569.46389	3:51	0.0232	PCI/G	0.0108	PCI/G	1	6	155	G	PCI/G	PR	
5502-0001-009-C2C-03	MSR#05-1930	141673023	447279	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-1.18	1.81	PCI/G	0	U		7/8/2005	6:24	3.25	PCI/G	1.56	PCI/G	1	6	15	G	PCI/G	PR	
5502-0001-009-C2C-04	MSR#05-1930	141673024	447538	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.344	0.135	PCI/G	0		29/07/2005	38569.46458	7:21	0.0955	PCI/G	0.0441	PCI/G	1	6.9	159	G	PCI/G	PR	
5502-0001-009-C2C-04	MSR#05-1930	141673024	447538	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.1	0.0634	PCI/G	0	U	29/07/2005	38569.46458	7:21	0.119	PCI/G	0.0576	PCI/G	1	6.9	159	G	PCI/G	PR	
5502-0001-009-C2C-04	MSR#05-1930	141673024	447538	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.597	0.276	PCI/G	0		29/07/2005	38569.46458	7:21	0.2	PCI/G	0.0926	PCI/G	1	6.9	159	G	PCI/G	PR	
5502-0001-009-C2C-04	MSR#05-1930	141673024	447538	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.529	0.0805	PCI/G	0		29/07/2005	38569.46458	7:21	0.0555	PCI/G	0.0262	PCI/G	1	6.9	159	G	PCI/G	PR	
5502-0001-009-C2C-04	MSR#05-1930	141673024	447538	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0196	0.0286	PCI/G	0	U	29/07/2005	38569.46458	7:21	0.0361	PCI/G	0.017	PCI/G	1	6.9	159	G	PCI/G	PR	
5502-0001-009-C2C-04	MSR#05-1930	141673024	447538	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.0056	0.0159	PCI/G	0	U	29/07/2005	38569.46458	7:21	0.028	PCI/G	0.0131	PCI/G	1	6.9	159	G	PCI/G	PR	
5502-0001-009-C2C-04	MSR#05-1930	141673024	447538	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.00568	0.0143	PCI/G	0	U	29/07/2005	38569.46458	7:21	0.0281	PCI/G	0.0126	PCI/G	1	6.9	159	G	PCI/G	PR	
5502-0001-009-C2C-04	MSR#05-1930	141673024	447538	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0142	0.0413	PCI/G	0	U	29/07/2005	38569.46458	7:21	0.0709	PCI/G	0.0337	PCI/G	1	6.9	159	G	PCI/G	PR	
5502-0001-009-C2C-04	MSR#05-1930	141673024	447538	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.00703	0.0491	PCI/G	0	U	29/07/2005	38569.46458	7:21	0.0913	PCI/G	0.0418	PCI/G	1	6.9	159	G	PCI/G	PR	
5502-0001-009-C2C-04	MSR#05-1930	141673024	447538	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	-0.0124	0.0404	PCI/G	0	U	29/07/2005	38569.46458	7:21	0.0757	PCI/G	0.0366	PCI/G	1	6.9	159	G	PCI/G	PR	
5502-0001-009-C2C-04	MSR#05-1930	141673024	447538	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.432	0.0561	PCI/G	0		29/07/2005	38569.46458	7:21	0.0428	PCI/G	0.0206	PCI/G	1	6.9	159	G	PCI/G	PR	
5502-0001-009-C2C-04	MSR#05-1930	141673024	447538	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.568	0.0828	PCI/G	0		29/07/2005	38569.46458	7:21	0.0496	PCI/G	0.0236	PCI/G	1	6.9	159	G	PCI/G	PR	
5502-0001-009-C2C-04	MSR#05-1930	141673024	447538	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.00232	0.0179	PCI/G	0	U	29/07/2005	38569.46458	7:21	0.0274	PCI/G	0.0127	PCI/G	1	6.9	159	G	PCI/G	PR	
5502-0001-009-C2C-04	MSR#05-1930	141673024	447538	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.00695	0.0133	PCI/G	0	U	29/07/2005	38569.46458	7:21	0.023	PCI/G	0.0107	PCI/G	1	6.9	159	G	PCI/G	PR	
5502-0001-009-C2C-04	MSR#05-1930	141673024	447538	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.61	0.809	PCI/G	0		29/07/2005	38569.46458	7:21	0.219	PCI/G	0.0955	PCI/G	1	6.9	159	G	PCI/G	PR	
5502-0001-009-C2C-04	MSR#05-1930	141673024	447538	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.529	0.0805	PCI/G	0		29/07/2005	38569.46458	7:21	0.0555	PCI/G	0.0262	PCI/G	1	6.9	159	G	PCI/G	PR	
5502-0001-009-C2C-04	MSR#05-1930	141673024	447538	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.000218	0.0135	PCI/G	0	U	29/07/2005	38569.46458	7:21	0.0223	PCI/G	0.0105	PCI/G	1	6.9	159	G	PCI/G	PR	
5502-0001-009-C2C-04	MSR#05-1930	141673024	447618	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.0235	0.00474	PCI/G	0		1/8/2005	38566.1625	12:18	0.00632	PCI/G	0.00302	PCI/G	1	6.9	19.9	G	PCI/G	PR	
5502-0001-009-C2C-04	MSR#05-1930	141673024	447538	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.133	0.0393	PCI/G	0		29/07/2005	38569.46458	7:21	0.0258	PCI/G	0.012	PCI/G	1	6.9	159	G	PCI/G	PR	
5502-0001-009-C2C-04	MSR#05-1930	141673024	447279	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	0.321	1.84	PCI/G	0	U		7/8/2005	6:56	3.18	PCI/G	1.53	PCI/G	1	6.9	15.1	G	PCI/G	PR	
5502-0001-010-C1C-01	MSR#05-1930	141673025	447538	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.536	0.149	PCI/G	0		29/07/2005	38569.46458	7:28	0.104	PCI/G	0.0478	PCI/G	1	9.2	137	G	PCI/G	PR	
5502-0001-010-C1C-01	MSR#05-1930	141673025	447483	14596-10-2	Americium-241	TRG 1	UAM05RCM	AM05RCM	REG	-0.0139	0.0287	PCI/G	0	U	1/8/2005	38566.15556	1:57	0.0711	PCI/G	0.0162	PCI/G	1	9.2	0.504	G	PCI/G	PR	
5502-0001-010-C1C-01	MSR#05-1930	141673025	447538	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.028	0.0735	PCI/G	0	U	29/07/2005	38569.46458	7:28	0.123	PCI/G	0.0593	PCI/G	1	9.2	137	G	PCI/G	PR	
5502-0001-010-C1C-01	MSR#05-1930	141673025	447538	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.347	0.213	PCI/G	0		29/07/2005	38569.46458	7:28	0.272	PCI/G	0.128	PCI/G	1	9.2	137	G	PCI/G	PR	
5502-0001-010-C1C-01	MSR#05-1930	141673025	447538	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.679	0.1	PCI/G	0		29/07/2005	38569.46458	7:28	0.0538	PCI/G	0.0253	PCI/G	1	9.2	137	G	PCI/G	PR	
5502-0001-010-C1C-01	MSR#05-1930	141673025	447285	14762-75-5	Carbon-14	TRG 5	ULSC	LSC	REG	-0.231	0.375	PCI/G	0	U		2/8/2005	5:50	0.65	PCI/G	0.319	PCI/G	1	9.2	3.08	G	PCI/G	PR	
5502-0001-010-C1C-01	MSR#05-1930	141673025	447538	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0	0.0306	PCI/G	0	UUI	29/07/2005	38569.46458	7:28	0.0418	PCI/G	0.0197	PCI/G	1	9.2	137	G	PCI/G	PR	
5502-0001-010-C1C-01	MSR#05-1930	141673025	447538	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.244	0.0391	PCI/G	0		29/07/2005	38569.46458	7:28	0.0294	PCI/G	0.0138	PCI/G	1	9.2	137	G	PCI/G	PR	
5502-0001-010-C1C-01	MSR#05-1930	141673025	447538	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0489	0.0252	PCI/G	0		29/07/2005	38569.46458	7:28	0.0316	PCI/G	0.0142	PCI/G	1	9.2	137	G	PCI/G	PR	
5502-0001-010-C1C-01	MSR#05-1930	141673025	447483	OER-100-93	Curium-242	TRG 1	UAM05RCM	AM05RCM	REG	0.0171	0.0335	PCI/G	0	U	1/8/2005	38566.15556	1:57	0.0463	PCI/G	0	PCI/G	1	9.2	0.504	G	PCI/G	PR	
5502-0001-010-C1C-01	MSR#05-1930	141673025	447483	OER-101-57	Curium-243/244	TRG 1	UAM05RCM	AM05RCM	REG	0.00744	0.0296	PCI/G	0	U	1/8/2005	38566.15556	1:57	0.0848	PCI/G	0.023	PCI/G	1	9.2	0.504	G	PCI/G	PR	
5502-0001-010-C1C-01	MSR#05-1930	141673025	447538	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0431	0.0463	PCI/G	0	U	29/07/2005	38569.46458	7:28	0.0795	PCI/G	0.0379	PCI/G	1	9.2	137	G	PCI/G	PR	
5502-0001-010-C1C-01	MSR#05-1930	141673025	447538	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0222	0.0612	PCI/G	0	U	29/07/2005	38569.46458	7:28	0.0904	PCI/G	0.041	PCI/G	1	9.2	137	G	PCI/G	PR	
5502-0001-010-C1C-01	MSR#05-1930	141673025	447538	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0108	0.0498	PCI/G	0	U	29/07/2005	38569.46458	7:28	0.0892	PCI/G	0.0432	PCI/G	1	9.2	137	G	PCI/G	PR	
5502-0001-010-C1C-01	MSR#05-1930	141673025	447648	14681-59-5	Iron-55	TRG 26	ULSC	LSC	REG	-0.729	3.25	PCI/G	0	U	1/8/2005	38566.16181	7:52	4.8	PCI/G	2.37	PCI/G	1	9.2	3.28	G	PCI/G	PR	
5502-0001-010-C1C-01	MSR#05-1930	141673025	447538	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.559	0.071	PCI/G	0		29/07/2005	38569.46458	7:28	0.0534	PCI/G	0.0258	PCI/G	1	9.2	137	G	PCI/G	PR	
5502-0001-010-C1C-01	MSR#05-1930	141673025	447538	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.65	0.0957	PCI/G	0		29/07/2005	38569.46458	7:28	0.0627	PCI/G	0.03	PCI/G	1	9.2	137	G	PCI/G	PR	
5502-0001-010-C1C-01	MSR#05-1930	141673025	447538	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.00503	0.018	PCI/G	0	U	29/07/2005	38569.46458	7:28	0.0306	PCI/G	0.0142	PCI/G	1	9.2	137	G	PCI/G	PR	
5502-0001-010-C1C-01	MSR#05-1930	141673025	451367	13781-37-8	Nickel-63	TRG 30	ULSC	LSC	REG	-0.58	1.77	PCI/G	0	U	1/8/2005	38566.16042	4:35	3.08	PCI/G	1.5	PCI/G	1	9.2	1.06	G	PCI/G	PR	
5502-0001-010-C1C-01	MSR#05-1930	141673025	447538	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0294	0.0174	PCI/G	0	U	29/07/2005	38569.46458	7:28	0.0336	PCI/G	0.0159	PCI/G	1	9.2	137	G	PCI/G	PR	
5502-0001-010-C1C-01	MSR#05-1930	141673025	447487	13981-16-3	Plutonium-238	TRG 32	UPU11RCM	PU11RCM	REG	-0.00654	0.0282	PCI/G	0	U	1/8/2005	38566.15556	1:57	0.0809	PCI/G	0.022	PCI/G	1	9.2	0.504	G	PCI/G	PR	
5502-0001-010-C1C-01	MSR#05-1930	141673025	447487	OER-100-70	Plutonium-239/240	TRG 32	UPU11RCM	PU11RCM	REG	0.00381	0.0289	PCI/G	0	U	1/8/2005	38566.15556	1:57	0.0906	PCI/G	0.0269	PCI/G	1	9.2	0.504	G	PCI/G	PR	
5502-0001-010-C1C-01	MSR#05-1930	141673025	447490	14119-32-5	Plutonium-241	TRG 36	UPU11RCM	PU11RCM	REG	1.52	2.6	PCI/G	0	U	1/8/2005	38566.15764	5:10	4.41	PCI/G	2.14	PCI/G	1	9.2	1.52	G	PCI/G	PR	
5502-0001-010-C1C-01	MSR#05-1930	141673025	447538	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	8.79	0.929	PCI/G	0		29/07/2005	38569.46458	7:28	0.293	PCI/G	0.132	PCI/G	1	9.2	137	G	PCI/G	PR	
5502-0001-010-C1C-01	MSR#05-1930	141673025	447538	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.679	0.1	PCI/G	0		29/07/2005	38569.46458	7:28	0.0538	PCI/G	0.0253	PCI/G	1	9.2	137	G	PCI/G	PR	
5502-0001-010-C1C-01	MSR#05-1930	141673025	447538	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00778	0.016	PCI/G	0	U	29/07/2005	38569.46458	7:28	0.0277	PCI/G	0.0131	PCI/G	1	9.2	137	G	PCI/G	PR	
5502-0001-010-C1C-01	MSR#05-1930	141673025	447618	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.0136	0.0041	PCI/G	0		1/8/2005	38566.1625	12:19	0.00602	PCI/G	0.00288	PCI/G	1	9.2	19.4	G	PCI/G	PR	
5502-0001-010-C1C-01	MSR#05-1930	141673025	447276	14133-76-7	Technetium-99	TRG 46	UTC02RCM	TC02RCM	REG	-0.0471	0.518	PCI/G	0	U		4/8/2005	2:23	0.892	PCI/G	0.436	PCI/G	1	9.2	3.02	G	PCI/G	PR	
5502-0001-010-C1C-01	MSR#05-1930	141673025	447538	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.159	0.0426	PCI/G	0		29/07/2005	38569.46458	7:28	0.0318	PCI/G	0.015	PCI/G	1	9.2	137	G	PCI/G	PR	
5502-0001-010-C1C-01	MSR#05-1930	141673025	447279	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	0.228	1.84	PCI/G	0	U		7/8/2005	7:28	3.19	PCI/G	1.53	PCI/G	1	9.2	15	G	PCI/G	PR	
5502-0001-010-C1C-02	MSR#05-1930	141673026	447538	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.459	0.181	PCI/G	0		29/07/2005	38569.46458	7:29	0.128	PCI/G	0.0586	PCI/G	1	8.1	143	G	PCI/G	PR	
5502-0001-010-C1C-02	MSR#05-1930	141673026	447538	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0386	0.0273	PCI/G	0	U	29/07/2005	38569.46458	7:29	0.0447	PCI/G	0.0216	PCI/G	1	8.1	143	G	PCI/G	PR	
5502-0001-010-C1C-02	MSR#05-1930	141673026	447538	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.357	0.224	PCI/G	0		29/07/2005	38569.46458	7:29	0.311	PCI/G	0.145	PCI/G	1	8.1	143	G	PCI/G	PR	
5502-0001-010-C1C-02	MSR#05-1930	141673026	447538	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.413	0.0952	PCI/G	0		29/07/2005	38569.46458	7:29	0.0669	PCI/G	0.0314	PCI/G	1	8.1	143	G	PCI/G	PR	
5502-0001-010-C1C-02	MSR#05-1930	141673026	447538	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0243	0.0253	PCI/G	0	U	29/07/2005	38569.46458	7:29	0.0492	PCI/G	0.0231	PCI/G	1	8.1	143	G	PCI/G	PR	
5502-0001-010-C1C-02	MSR#05-1930	141673026	447538	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.0035	0.0216	PCI/G	0	U	29/07/2005	38569.46458	7:29	0.0347	PCI/G	0.0161	PCI/G	1	8.1	143	G	PCI/G	PR	
5502-0001-010-C1C-02	MSR#05-1930	141673026	447538	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0144	0.0216	PCI/G	0	U	29/07/2005	38569.46458	7:29	0.0434	PCI/G	0.0197	PCI/G	1	8.1	143	G	PCI/G	PR	
5502-0001-010-C1C-02	MSR#05-1930	141673026	447538	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.00411	0.0451	PCI/G	0	U	29/07/2005	38569.46458	7:29	0.0818	PCI/G	0.0387	PCI/G	1	8.1	143	G	PCI/G	PR	
5502-0001-010-C1C-02	MSR#05-1930	141673026	447538	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0322	0.0718	PCI/G	0	U	29/07/2005	38569.46458	7:29	0.133	PCI/G	0.061	PCI/G	1	8.1	143	G	PCI/G	PR	
5502-0001-010-C1C-02	MSR#05-1930	141673026	447538	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0213	0.058	PCI/G	0	U	29/07/2005	38569.46458	7:29	0.0717	PCI/G	0.0345	PCI/G	1	8.1	143	G	PCI/G	PR	
5502-0001-010-C1C-02	MSR#05-1930	141673026	447538	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.449	0.0594	PCI/G	0		29/07/2005	38569.46458	7:29	0.0445	PCI/G	0.0213	PCI/G	1	8.1	143	G	PCI/G	PR	
5502-0001-010-C1C-02	MSR#05-1930	141673026	447538	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.515	0.0913	PCI/G	0		29/07/2005	38569.46458	7:29	0.0566	PCI/G	0.0267	PCI/G	1	8.1	143	G	PCI/G	PR	
5502-0001-010-C1C-02	MSR#05-1930	141673026	447538	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.00524	0.023	PCI/G	0	U	29/07/2005	38569.46458	7:29	0.0409	PCI/G	0.019	PCI/G	1	8.1	143	G	PCI/G	PR	
5502-0001-010-C1C-02	MSR#05-1930	141673026	447538	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	7.91E-06	0.0177	PCI/G	0	U	29/07/2005	38569.46458	7:29	0.0326	PCI/G	0.0152	PCI/G	1	8.1	143	G	PCI/G	PR	
5502-0001-010-C1C-02	MSR#05-1930	141673026	447538	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	8.52	1.02	PCI/G	0		29/07/2005	38569.46458	7:29	0.36	PCI/G	0.16	PCI/G	1	8.1	143	G	PCI/G	PR	
5502-0001-010-C1C-02	MSR#05-1930	141673026	447538	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.413	0.0952	PCI/G	0		29/07/2005	38569.46458	7:29	0.0669	PCI/G	0.0314	PCI/G	1	8.1	143	G	PCI/G	PR	
5502-0001-010-C1C-02	MSR#05-1930	141673026	447538	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00165	0.0163	PCI/G	0	U	29/07/2005	38569.46458	7:29	0.0287	PCI/G	0.0135	PCI/G	1	8.1	143	G	PCI/G	PR	
5502-0001-010-C1C-02	MSR#05-1930	141673026	447618	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00388	0.00374	PCI/G	0	U	1/8/2005	38566.15972	9:32	0.00709	PCI/G	0.00338	PCI/G	1	8.1	19.7	G	PCI/G	PR	
5502-0001-010-C1C-02	MSR#05-1930	141673026	447538	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.121	0.0466	PCI/G	0		29/07/2005	38569.46458	7:29	0.0328	PCI/G	0.0152	PCI/G	1	8.1	143	G	PCI/G	PR	
5502-0001-010-C1C-02	MSR#05-1930	141673026	447279	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-0.668	1.94	PCI/G	0	U		7/8/2005	7:59	3.45	PCI/G	1.66	PCI/G	1	8.1	15	G	PCI/G	PR	
5502-0001-010-C2C-03	MSR#05-1930	141673027	447538	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.581	0.148	PCI/G	0		29/07/2005	38569.46458	7:29	0.113	PCI/G	0.0521	PCI/G	1	7.2	143	G	PCI/G	PR	
5502-0001-010-C2C-03	MSR#05-1930	141673027	447538	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0319	0.0594	PCI/G	0	U	29/07/2005	38569.46458	7:29	0.116	PCI/G	0.0559	PCI/G	1	7.2	143	G	PCI/G	PR	
5502-0001-010-C2C-03	MSR#05-1930	141673027	447538	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.208	0.186	PCI/G	0	U	29/07/2005	38569.46458	7:29	0.29	PCI/G	0.136	PCI/G	1	7.2	143	G	PCI/G	PR	

5502-0001-010-C2C-03	MSR#05-1930	141673027	447538	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.455	0.103	PCI/G	0		29/07/2005	38569.46458	7:29	0.0606	PCI/G	0.0283	PCI/G	1	7.2	143	G	PCI/G	PR	
5502-0001-010-C2C-03	MSR#05-1930	141673027	447538	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.029	0.0313	PCI/G	0	U	29/07/2005	38569.46458	7:29	0.0377	PCI/G	0.0175	PCI/G	1	7.2	143	G	PCI/G	PR	
5502-0001-010-C2C-03	MSR#05-1930	141673027	447538	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.000771	0.0225	PCI/G	0	U	29/07/2005	38569.46458	7:29	0.0351	PCI/G	0.0164	PCI/G	1	7.2	143	G	PCI/G	PR	
5502-0001-010-C2C-03	MSR#05-1930	141673027	447538	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.00289	0.02	PCI/G	0	U	29/07/2005	38569.46458	7:29	0.0355	PCI/G	0.0161	PCI/G	1	7.2	143	G	PCI/G	PR	
5502-0001-010-C2C-03	MSR#05-1930	141673027	447538	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.00398	0.0525	PCI/G	0	U	29/07/2005	38569.46458	7:29	0.0827	PCI/G	0.039	PCI/G	1	7.2	143	G	PCI/G	PR	
5502-0001-010-C2C-03	MSR#05-1930	141673027	447538	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0623	0.065	PCI/G	0	U	29/07/2005	38569.46458	7:29	0.126	PCI/G	0.0584	PCI/G	1	7.2	143	G	PCI/G	PR	
5502-0001-010-C2C-03	MSR#05-1930	141673027	447538	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0397	0.0515	PCI/G	0	U	29/07/2005	38569.46458	7:29	0.0984	PCI/G	0.0472	PCI/G	1	7.2	143	G	PCI/G	PR	
5502-0001-010-C2C-03	MSR#05-1930	141673027	447538	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.471	0.0661	PCI/G	0		29/07/2005	38569.46458	7:29	0.047	PCI/G	0.0223	PCI/G	1	7.2	143	G	PCI/G	PR	
5502-0001-010-C2C-03	MSR#05-1930	141673027	447538	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.488	0.0994	PCI/G	0		29/07/2005	38569.46458	7:29	0.0573	PCI/G	0.027	PCI/G	1	7.2	143	G	PCI/G	PR	
5502-0001-010-C2C-03	MSR#05-1930	141673027	447538	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.00202	0.0218	PCI/G	0	U	29/07/2005	38569.46458	7:29	0.0381	PCI/G	0.0178	PCI/G	1	7.2	143	G	PCI/G	PR	
5502-0001-010-C2C-03	MSR#05-1930	141673027	447538	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.000558	0.0167	PCI/G	0	U	29/07/2005	38569.46458	7:29	0.0302	PCI/G	0.0141	PCI/G	1	7.2	143	G	PCI/G	PR	
5502-0001-010-C2C-03	MSR#05-1930	141673027	447538	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.47	0.795	PCI/G	0		29/07/2005	38569.46458	7:29	0.325	PCI/G	0.146	PCI/G	1	7.2	143	G	PCI/G	PR	
5502-0001-010-C2C-03	MSR#05-1930	141673027	447538	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.455	0.103	PCI/G	0		29/07/2005	38569.46458	7:29	0.0606	PCI/G	0.0283	PCI/G	1	7.2	143	G	PCI/G	PR	
5502-0001-010-C2C-03	MSR#05-1930	141673027	447538	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00328	0.0154	PCI/G	0	U	29/07/2005	38569.46458	7:29	0.027	PCI/G	0.0126	PCI/G	1	7.2	143	G	PCI/G	PR	
5502-0001-010-C2C-03	MSR#05-1930	141673027	447618	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.00696	0.00362	PCI/G	0	U	1/8/2005	38566.15972	9:32	0.00817	PCI/G	0.00392	PCI/G	1	7.2	19.5	G	PCI/G	PR	
5502-0001-010-C2C-03	MSR#05-1930	141673027	447538	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.152	0.0373	PCI/G	0		29/07/2005	38569.46458	7:29	0.034	PCI/G	0.0159	PCI/G	1	7.2	143	G	PCI/G	PR	
5502-0001-010-C2C-03	MSR#05-1930	141673027	447279	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-1.38	1.76	PCI/G	0	U		7/8/2005	8:31	3.18	PCI/G	1.53	PCI/G	1	7.2	15	G	PCI/G	PR	
5502-0001-010-C2C-04	MSR#05-1930	141673028	447538	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.403	0.111	PCI/G	0		29/07/2005	38569.46458	7:33	0.0861	PCI/G	0.0393	PCI/G	1	6.3	159	G	PCI/G	PR	
5502-0001-010-C2C-04	MSR#05-1930	141673028	447538	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0192	0.0654	PCI/G	0	U	29/07/2005	38569.46458	7:33	0.111	PCI/G	0.0535	PCI/G	1	6.3	159	G	PCI/G	PR	
5502-0001-010-C2C-04	MSR#05-1930	141673028	447538	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.259	0.154	PCI/G	0		29/07/2005	38569.46458	7:33	0.218	PCI/G	0.102	PCI/G	1	6.3	159	G	PCI/G	PR	
5502-0001-010-C2C-04	MSR#05-1930	141673028	447538	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.473	0.0737	PCI/G	0		29/07/2005	38569.46458	7:33	0.0478	PCI/G	0.0224	PCI/G	1	6.3	159	G	PCI/G	PR	
5502-0001-010-C2C-04	MSR#05-1930	141673028	447538	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0317	0.0277	PCI/G	0	U	29/07/2005	38569.46458	7:33	0.037	PCI/G	0.0174	PCI/G	1	6.3	159	G	PCI/G	PR	
5502-0001-010-C2C-04	MSR#05-1930	141673028	447538	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.00514	0.0161	PCI/G	0	U	29/07/2005	38569.46458	7:33	0.028	PCI/G	0.0131	PCI/G	1	6.3	159	G	PCI/G	PR	
5502-0001-010-C2C-04	MSR#05-1930	141673028	447538	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.000663	0.0167	PCI/G	0	U	29/07/2005	38569.46458	7:33	0.0306	PCI/G	0.0138	PCI/G	1	6.3	159	G	PCI/G	PR	
5502-0001-010-C2C-04	MSR#05-1930	141673028	447538	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0458	0.0388	PCI/G	0	U	29/07/2005	38569.46458	7:33	0.0757	PCI/G	0.0362	PCI/G	1	6.3	159	G	PCI/G	PR	
5502-0001-010-C2C-04	MSR#05-1930	141673028	447538	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.00405	0.0486	PCI/G	0	U	29/07/2005	38569.46458	7:33	0.0901	PCI/G	0.0411	PCI/G	1	6.3	159	G	PCI/G	PR	
5502-0001-010-C2C-04	MSR#05-1930	141673028	447538	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0266	0.0425	PCI/G	0	U	29/07/2005	38569.46458	7:33	0.0789	PCI/G	0.0382	PCI/G	1	6.3	159	G	PCI/G	PR	
5502-0001-010-C2C-04	MSR#05-1930	141673028	447538	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.448	0.0601	PCI/G	0		29/07/2005	38569.46458	7:33	0.0388	PCI/G	0.0186	PCI/G	1	6.3	159	G	PCI/G	PR	
5502-0001-010-C2C-04	MSR#05-1930	141673028	447538	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.469	0.0739	PCI/G	0		29/07/2005	38569.46458	7:33	0.0526	PCI/G	0.0251	PCI/G	1	6.3	159	G	PCI/G	PR	
5502-0001-010-C2C-04	MSR#05-1930	141673028	447538	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0147	0.0204	PCI/G	0	U	29/07/2005	38569.46458	7:33	0.0275	PCI/G	0.0127	PCI/G	1	6.3	159	G	PCI/G	PR	
5502-0001-010-C2C-04	MSR#05-1930	141673028	447538	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0115	0.0142	PCI/G	0	U	29/07/2005	38569.46458	7:33	0.0269	PCI/G	0.0126	PCI/G	1	6.3	159	G	PCI/G	PR	
5502-0001-010-C2C-04	MSR#05-1930	141673028	447538	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.53	0.771	PCI/G	0		29/07/2005	38569.46458	7:33	0.23	PCI/G	0.101	PCI/G	1	6.3	159	G	PCI/G	PR	
5502-0001-010-C2C-04	MSR#05-1930	141673028	447538	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.473	0.0737	PCI/G	0		29/07/2005	38569.46458	7:33	0.0478	PCI/G	0.0224	PCI/G	1	6.3	159	G	PCI/G	PR	
5502-0001-010-C2C-04	MSR#05-1930	141673028	447538	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00749	0.0125	PCI/G	0	U	29/07/2005	38569.46458	7:33	0.0239	PCI/G	0.0113	PCI/G	1	6.3	159	G	PCI/G	PR	
5502-0001-010-C2C-04	MSR#05-1930	141673028	447618	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.00189	0.0039	PCI/G	0	U	1/8/2005	38566.15972	9:32	0.00818	PCI/G	0.0039	PCI/G	1	6.3	19.3	G	PCI/G	PR	
5502-0001-010-C2C-04	MSR#05-1930	141673028	447538	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.163	0.0301	PCI/G	0		29/07/2005	38569.46458	7:33	0.0272	PCI/G	0.0127	PCI/G	1	6.3	159	G	PCI/G	PR	
5502-0001-010-C2C-04	MSR#05-1930	141673028	447279	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-0.0757	1.71	PCI/G	0	U		7/8/2005	9:03	3	PCI/G	1.44	PCI/G	1	6.3	15	G	PCI/G	PR	
5502-0000-001-C1C-01	MSR#05-1930	141673029	447538	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.53	0.136	PCI/G	0		29/07/2005	38569.46458	7:55	0.115	PCI/G	0.0534	PCI/G	1	9	156	G	PCI/G	PR	
5502-0000-001-C1C-01	MSR#05-1930	141673029	447538	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0111	0.117	PCI/G	0	U	29/07/2005	38569.46458	7:55	0.151	PCI/G	0.0732	PCI/G	1	9	156	G	PCI/G	PR	
5502-0000-001-C1C-01	MSR#05-1930	141673029	447538	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.394	0.192	PCI/G	0		29/07/2005	38569.46458	7:55	0.267	PCI/G	0.126	PCI/G	1	9	156	G	PCI/G	PR	
5502-0000-001-C1C-01	MSR#05-1930	141673029	447538	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.403	0.0918	PCI/G	0		29/07/2005	38569.46458	7:55	0.0647	PCI/G	0.0306	PCI/G	1	9	156	G	PCI/G	PR	
5502-0000-001-C1C-01	MSR#05-1930	141673029	447538	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.00436	0.021	PCI/G	0	U	29/07/2005	38569.46458	7:55	0.0382	PCI/G	0.0179	PCI/G	1	9	156	G	PCI/G	PR	
5502-0000-001-C1C-01	MSR#05-1930	141673029	447538	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.153	0.0379	PCI/G	0		29/07/2005	38569.46458	7:55	0.0333	PCI/G	0.0157	PCI/G	1	9	156	G	PCI/G	PR	
5502-0000-001-C1C-01	MSR#05-1930	141673029	447538	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0451	0.0237	PCI/G	0	U	29/07/2005	38569.46458	7:55	0.0452	PCI/G	0.0212	PCI/G	1	9	156	G	PCI/G	PR	
5502-0000-001-C1C-01	MSR#05-1930	141673029	447538	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.00689	0.0573	PCI/G	0	U	29/07/2005	38569.46458	7:55	0.0904	PCI/G	0.0432	PCI/G	1	9	156	G	PCI/G	PR	
5502-0000-001-C1C-01	MSR#05-1930	141673029	447538	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0189	0.0561	PCI/G	0	U	29/07/2005	38569.46458	7:55	0.105	PCI/G	0.0487	PCI/G	1	9	156	G	PCI/G	PR	
5502-0000-001-C1C-01	MSR#05-1930	141673029	447538	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0249	0.0532	PCI/G	0	U	29/07/2005	38569.46458	7:55	0.0965	PCI/G	0.0467	PCI/G	1	9	156	G	PCI/G	PR	
5502-0000-001-C1C-01	MSR#05-1930	141673029	447538	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.46	0.0624	PCI/G	0		29/07/2005	38569.46458	7:55	0.0559	PCI/G	0.027	PCI/G	1	9	156	G	PCI/G	PR	
5502-0000-001-C1C-01	MSR#05-1930	141673029	447538	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.445	0.0814	PCI/G	0		29/07/2005	38569.46458	7:55	0.0656	PCI/G	0.0313	PCI/G	1	9	156	G	PCI/G	PR	
5502-0000-001-C1C-01	MSR#05-1930	141673029	447538	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.00377	0.0191	PCI/G	0	U	29/07/2005	38569.46458	7:55	0.0348	PCI/G	0.0163	PCI/G	1	9	156	G	PCI/G	PR	
5502-0000-001-C1C-01	MSR#05-1930	141673029	447538	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0144	0.0168	PCI/G	0	U	29/07/2005	38569.46458	7:55	0.0321	PCI/G	0.0152	PCI/G	1	9	156	G	PCI/G	PR	
5502-0000-001-C1C-01	MSR#05-1930	141673029	447538	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	9.31	0.909	PCI/G	0		29/07/2005	38569.46458	7:55	0.335	PCI/G	0.153	PCI/G	1	9	156	G	PCI/G	PR	
5502-0000-001-C1C-01	MSR#05-1930	141673029	447538	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.403	0.0918	PCI/G	0		29/07/2005	38569.46458	7:55	0.0647	PCI/G	0.0306	PCI/G	1	9	156	G	PCI/G	PR	
5502-0000-001-C1C-01	MSR#05-1930	141673029	447538	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.0112	0.0178	PCI/G	0	U	29/07/2005	38569.46458	7:55	0.0299	PCI/G	0.0142	PCI/G	1	9	156	G	PCI/G	PR	
5502-0000-001-C1C-01	MSR#05-1930	141673029	447618	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.0106	0.00324	PCI/G	0		1/8/2005	38566.1625	12:19	0.00468	PCI/G	0.00223	PCI/G	1	9	19.3	G	PCI/G	PR	
5502-0000-001-C1C-01	MSR#05-1930	141673029	447538	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.148	0.0401	PCI/G	0		29/07/2005	38569.46458	7:55	0.0371	PCI/G	0.0176	PCI/G	1	9	156	G	PCI/G	PR	
5502-0000-001-C1C-01	MSR#05-1930	141673029	447279	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-1.17	1.72	PCI/G	0	U		7/8/2005	9:35	3.1	PCI/G	1.49	PCI/G	1	9	15.1	G	PCI/G	PR	
5502-0000-001-C1C-02	MSR#05-1930	141673030	447538	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.343	0.11	PCI/G	0		29/07/2005	38569.46458	7:58	0.0999	PCI/G	0.0465	PCI/G	1	8.3	159	G	PCI/G	PR	
5502-0000-001-C1C-02	MSR#05-1930	141673030	447538	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0118	0.0647	PCI/G	0	U	29/07/2005	38569.46458	7:58	0.109	PCI/G	0.0529	PCI/G	1	8.3	159	G	PCI/G	PR	
5502-0000-001-C1C-02	MSR#05-1930	141673030	447538	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.311	0.135	PCI/G	0		29/07/2005	38569.46458	7:58	0.2	PCI/G	0.093	PCI/G	1	8.3	159	G	PCI/G	PR	
5502-0000-001-C1C-02	MSR#05-1930	141673030	447538	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.394	0.0711	PCI/G	0		29/07/2005	38569.46458	7:58	0.0473	PCI/G	0.0222	PCI/G	1	8.3	159	G	PCI/G	PR	
5502-0000-001-C1C-02	MSR#05-1930	141673030	447538	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0109	0.018	PCI/G	0	U	29/07/2005	38569.46458	7:58	0.0337	PCI/G	0.0158	PCI/G	1	8.3	159	G	PCI/G	PR	
5502-0000-001-C1C-02	MSR#05-1930	141673030	447538	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.00807	0.0157	PCI/G	0	U	29/07/2005	38569.46458	7:58	0.0295	PCI/G	0.0139	PCI/G	1	8.3	159	G	PCI/G	PR	
5502-0000-001-C1C-02	MSR#05-1930	141673030	447538	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0165	0.0191	PCI/G	0	U	29/07/2005	38569.46458	7:58	0.0371	PCI/G	0.0172	PCI/G	1	8.3	159	G	PCI/G	PR	
5502-0000-001-C1C-02	MSR#05-1930	141673030	447538	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.00717	0.0394	PCI/G	0	U	29/07/2005	38569.46458	7:58	0.0705	PCI/G	0.0336	PCI/G	1	8.3	159	G	PCI/G	PR	
5502-0000-001-C1C-02	MSR#05-1930	141673030	447538	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.00707	0.0609	PCI/G	0	U	29/07/2005	38569.46458	7:58	0.0959	PCI/G	0.0443	PCI/G	1	8.3	159	G	PCI/G	PR	
5502-0000-001-C1C-02	MSR#05-1930	141673030	447538	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.00482	0.0425	PCI/G	0	U	29/07/2005	38569.46458	7:58	0.0782	PCI/G	0.0379	PCI/G	1	8.3	159	G	PCI/G	PR	
5502-0000-001-C1C-02	MSR#05-1930	141673030	447538	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.382	0.0503	PCI/G	0		29/07/2005	38569.46458	7:58	0.0446	PCI/G	0.0215	PCI/G	1	8.3	159	G	PCI/G	PR	
5502-0000-001-C1C-02	MSR#05-1930	141673030	447538	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.408	0.0691	PCI/G	0		29/07/2005	38569.46458	7:58	0.0512	PCI/G	0.0244	PCI/G	1	8.3	159	G	PCI/G	PR	
5502-0000-001-C1C-02	MSR#05-1930	141673030	447538	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.00481	0.0171	PCI/G	0	U	29/07/2005	38569.46458	7:58	0.0311	PCI/G	0.0146	PCI/G	1	8.3	159	G	PCI/G	PR	
5502-0000-001-C1C-02	MSR#05-1930	141673030	447538	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.008	0.0181	PCI/G	0	U	29/07/2005	38569.46458	7:58	0.0258	PCI/G	0.0121	PCI/G	1	8.3	159	G	PCI/G	PR	
5502-0000-001-C1C-02	MSR#05-1930	141673030	447538	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	8.85	0.849	PCI/G	0		29/07/2005	38569.46458	7:58	0.246	PCI/G	0.11	PCI/G	1	8.3	159	G	PCI/G	PR	
5502-0000-001-C1C-02	MSR#05-1930	141673030	447538	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.394	0.0711	PCI/G	0		29/07/2005	38569.46458	7:58	0.0473	PCI/G	0.0222	PCI/G	1	8.3	159	G	PCI/G	PR	
5502-0000-001-C1C-02	MSR#05-1930	141673030	447538	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00207	0.0135	PCI/G	0	U	29/07/2005	38569.46458	7:58	0.0243	PCI/G	0.0115	PCI/G	1	8.3	159	G	PCI/G	PR	
5502-0000-001-C1C-02	MSR#05-1930	141673030	447618	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00882	0.00311	PCI/G	0		1/8/2005	38566.1625	12:19	0.00464	PCI/G	0.00221	PCI/G	1	8.3	18.7	G	PCI/G	PR	
5502-0000-001-C1C-02	MSR#05-1930	141673030	447538	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.139	0.0362	PCI/G	0		29/07/2005	38569.46458	7:58	0.0269	PCI/G	0.0127	PCI/G	1	8.3	159	G	PCI/G	PR	
5502-0000-001-C1C-02	MSR#05-1930	141673030	447279	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-0.081	1.83	PCI/G	0	U		7/8/2005	10:07	3.2	PCI/G	1.54	PCI/G	1	8.3	15	G	PCI/G	PR	
5502-0000-001-C1C-03	MSR#05-1930	141673031	447538	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.419	0.124	PCI/G	0		29/07/2005	38569.46458	8:05	0.112	PCI/G	0.0523	PCI/G	1	7.5	173	G	PCI/G	PR	
5502-0000-001-C1C-03	MSR#05-1930	141673031	447538	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.00856	0.0264	PCI/G	0	U	29/07/2005	38569.46458	8:05	0.0446	PCI/G	0.0217	PCI/G	1	7.5	173	G	PCI/G	PR	
5502-0000-001-C1C-03	MSR#05-1930	141673031	447538	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0	0.267	PCI/G	0	UUI	29/07/2005	38569.46458	8:05	0.258	PCI/G	0.121	PCI/G	1	7.5	173	G	PCI/G	PR	
5502-0000-001-C1C-03	MSR#05-1930	141673031	447538	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.421	0.081	PCI/G	0		29/07/2005	38569.46458	8:05	0.0604	PCI/G	0.0286	PCI/G	1	7.5	173	G	PCI/G	PR	
5502-0000-001-C1C-03	MSR#05-1930	141673031	447538	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0	0.0289	PCI/G	0	UUI	29/07/2005	38569.46458	8:05	0.0409	PCI/G	0.0193	PCI/G	1	7.5	173	G	PCI/G	PR	
5502-0000-001-C1C-03	MSR#05-1930	141673031	447538	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.00946	0.0175	PCI/G	0	U	29/07/2005	38569.46458	8:05	0.0327	PCI/G	0.0154	PCI/G	1	7.5	173	G	PCI/G	PR	
5502-0000-001-C1C-03	MSR#05-1930	141673031	447538	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.00555	0.0184	PCI/G	0	U	29/07/2005	38569.46458	8:05	0.0326	PCI/G	0.0148	PCI/G	1	7.5	173	G	PCI/G	PR	
5502-0000-001-C1C-03	MSR#05-1930	141673031	447538	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0628	0.0458	PCI/G	0	U	29/07/2005	38569.46458	8:05	0.0782	PCI/G	0.0374	PCI/G	1	7.5	173	G	PCI/G	PR	
5502-0000-001-C1C-03	MSR#05-1930	141673031	447538	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0256	0.0637	PCI/G	0	U	29/07/2005	38569.46458	8:05	0.0936	PCI/G	0.0429	PCI/G	1	7.5	173	G	PCI/G	PR	
5502-0000-001-C1C-03	MSR#05-1930	141673031	447538	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0109	0.0421	PCI/G	0	U	29/07/2005	38569.46458	8:05	0.0785	PCI/G	0.0382	PCI/G	1	7.5	173	G	PCI/G	PR	
5502-0000-001-C1C-03	MSR#05-1930	141673031	447538	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.489	0.0704	PCI/G	0		29/07/2005	38569.46458	8:05	0.0439	PCI/G	0.0211	PCI/G	1	7.5	173	G	PCI/G	PR	
5502-0000-001-C1C-03	MSR#05-1930	141673031	447538	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.49	0.0803	PCI/G	0		29/07/2005	38569.46458	8:05	0.0626	PCI/G	0.0301	PCI/G	1	7.5	173	G	PCI/G	PR	
5502-0000-001-C1C-03	MSR#05-1930	141673031	447538	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.00281	0.0184	PCI/G	0	U	29/07/2005	38569.46458	8:05	0.0344	PCI/G	0.0161	PCI/G	1	7.5	173	G	PCI/G	PR	
5502-0000-001-C1C-03	MSR#05-1930	141673031	447538	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0147	0.0171	PCI/G	0	U	29/07/2005	38569.46458	8:05	0.0322	PCI/G	0.0153	PCI/G	1	7.5	173	G	PCI/G	PR	
5502-0000-001-C1C-03	MSR#05-1930	141673031	447538	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	8.34	0.905	PCI/G	0		29/07/2005	38569.46458	8:05	0.304	PCI/G	0.138	PCI/G	1	7.5	173	G	PCI/G	PR	

5502-0000-001-C1C-03	MSR#05-1930	141673031	447538	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.421	0.081	PCI/G	0		29/07/2005	38569.46458	8:05	0.0604	PCI/G	0.0286	PCI/G	1	7.5	173	G		PCI/G	PR	
5502-0000-001-C1C-03	MSR#05-1930	141673031	447538	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.0032	0.015	PCI/G	0	U	29/07/2005	38569.46458	8:05	0.028	PCI/G	0.0133	PCI/G	1	7.5	173	G		PCI/G	PR	
5502-0000-001-C1C-03	MSR#05-1930	141673031	447618	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.00201	0.00325	PCI/G	0	U	1/8/2005	38566.1625	9:35	0.00589	PCI/G	0.00282	PCI/G	1	7.5	18.8	G		PCI/G	PR	
5502-0000-001-C1C-03	MSR#05-1930	141673031	447538	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.164	0.044	PCI/G	0		29/07/2005	38569.46458	8:05	0.0315	PCI/G	0.0149	PCI/G	1	7.5	173	G		PCI/G	PR	
5502-0000-001-C1C-03	MSR#05-1930	141673031	447279	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-1.2	1.76	PCI/G	0	U		7/8/2005	10:39	3.17	PCI/G	1.53	PCI/G	1	7.5	15.1	G		PCI/G	PR	
5502-0000-001-C1C-04	MSR#05-1930	141673032	447538	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.422	0.11	PCI/G	0		29/07/2005	38569.46458	8:05	0.0717	PCI/G	0.033	PCI/G	1	6.6	184	G		PCI/G	PR	
5502-0000-001-C1C-04	MSR#05-1930	141673032	447538	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.00645	0.0719	PCI/G	0	U	29/07/2005	38569.46458	8:05	0.129	PCI/G	0.0624	PCI/G	1	6.6	184	G		PCI/G	PR	
5502-0000-001-C1C-04	MSR#05-1930	141673032	447538	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.29	0.136	PCI/G	0		29/07/2005	38569.46458	8:05	0.166	PCI/G	0.077	PCI/G	1	6.6	184	G		PCI/G	PR	
5502-0000-001-C1C-04	MSR#05-1930	141673032	447538	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.35	0.0619	PCI/G	0		29/07/2005	38569.46458	8:05	0.0379	PCI/G	0.0178	PCI/G	1	6.6	184	G		PCI/G	PR	
5502-0000-001-C1C-04	MSR#05-1930	141673032	447538	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0288	0.0173	PCI/G	0	U	29/07/2005	38569.46458	8:05	0.029	PCI/G	0.0136	PCI/G	1	6.6	184	G		PCI/G	PR	
5502-0000-001-C1C-04	MSR#05-1930	141673032	447538	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.00847	0.0114	PCI/G	0	U	29/07/2005	38569.46458	8:05	0.0222	PCI/G	0.0104	PCI/G	1	6.6	184	G		PCI/G	PR	
5502-0000-001-C1C-04	MSR#05-1930	141673032	447538	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0186	0.0126	PCI/G	0	U	29/07/2005	38569.46458	8:05	0.0245	PCI/G	0.0111	PCI/G	1	6.6	184	G		PCI/G	PR	
5502-0000-001-C1C-04	MSR#05-1930	141673032	447538	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0161	0.0303	PCI/G	0	U	29/07/2005	38569.46458	8:05	0.0562	PCI/G	0.0268	PCI/G	1	6.6	184	G		PCI/G	PR	
5502-0000-001-C1C-04	MSR#05-1930	141673032	447538	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0153	0.0397	PCI/G	0	U	29/07/2005	38569.46458	8:05	0.0759	PCI/G	0.0349	PCI/G	1	6.6	184	G		PCI/G	PR	
5502-0000-001-C1C-04	MSR#05-1930	141673032	447538	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0124	0.0363	PCI/G	0	U	29/07/2005	38569.46458	8:05	0.0708	PCI/G	0.0343	PCI/G	1	6.6	184	G		PCI/G	PR	
5502-0000-001-C1C-04	MSR#05-1930	141673032	447538	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.417	0.0549	PCI/G	0		29/07/2005	38569.46458	8:05	0.0334	PCI/G	0.016	PCI/G	1	6.6	184	G		PCI/G	PR	
5502-0000-001-C1C-04	MSR#05-1930	141673032	447538	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.321	0.071	PCI/G	0		29/07/2005	38569.46458	8:05	0.042	PCI/G	0.02	PCI/G	1	6.6	184	G		PCI/G	PR	
5502-0000-001-C1C-04	MSR#05-1930	141673032	447538	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.00351	0.0137	PCI/G	0	U	29/07/2005	38569.46458	8:05	0.0239	PCI/G	0.0111	PCI/G	1	6.6	184	G		PCI/G	PR	
5502-0000-001-C1C-04	MSR#05-1930	141673032	447538	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00749	0.0104	PCI/G	0	U	29/07/2005	38569.46458	8:05	0.0201	PCI/G	0.0094	PCI/G	1	6.6	184	G		PCI/G	PR	
5502-0000-001-C1C-04	MSR#05-1930	141673032	447538	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	6.74	0.684	PCI/G	0		29/07/2005	38569.46458	8:05	0.202	PCI/G	0.0894	PCI/G	1	6.6	184	G		PCI/G	PR	
5502-0000-001-C1C-04	MSR#05-1930	141673032	447538	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.35	0.0619	PCI/G	0		29/07/2005	38569.46458	8:05	0.0379	PCI/G	0.0178	PCI/G	1	6.6	184	G		PCI/G	PR	
5502-0000-001-C1C-04	MSR#05-1930	141673032	447538	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00241	0.01	PCI/G	0	U	29/07/2005	38569.46458	8:05	0.0192	PCI/G	0.00908	PCI/G	1	6.6	184	G		PCI/G	PR	
5502-0000-001-C1C-04	MSR#05-1930	141673032	447618	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00553	0.00635	PCI/G	0	U	1/8/2005	38566.1625	9:35	0.0106	PCI/G	0.00505	PCI/G	1	6.6	18.8	G		PCI/G	PR	
5502-0000-001-C1C-04	MSR#05-1930	141673032	447538	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.107	0.0304	PCI/G	0		29/07/2005	38569.46458	8:05	0.021	PCI/G	0.00983	PCI/G	1	6.6	184	G		PCI/G	PR	
5502-0000-001-C1C-04	MSR#05-1930	141673032	447279	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	1.19	1.91	PCI/G	0	U		7/8/2005	11:11	3.23	PCI/G	1.56	PCI/G	1	6.6	15	G		PCI/G	PR	
	MSR#05-1930	1200899065	447276	14133-76-7	Technetium-99	TRG	U	TC02RCM	LB1	-0.139	0.482	PCI/G	0	U		4/8/2005	2:55	0.835	PCI/G	0.408	PCI/G	1	0	3	G		PCI/G	PR	
5502-0000-002-C1C-01	MSR#05-1930	1200899066	447276	14133-76-7	Technetium-99	TRG	U	TC02RCM	LR1	-0.0474	0.453	PCI/G	0	U		4/8/2005	3:59	0.781	PCI/G	0.381	PCI/G	1	8.5	3.42	G		PCI/G -0.1	28 PR	
5502-0000-002-C1C-01	MSR#05-1930	1200899067	447276	14133-76-7	Technetium-99	TRG	U	TC02RCM	MS1	38	1.17	PCI/G	0			4/8/2005	3:27	0.863	PCI/G	0.421	PCI/G	1	8.5	3.12	G	37	.9 PCI/G 37.8	PR	
	MSR#05-1930	1200899068	447276	14133-76-7	Technetium-99	TRG	U	TC02RCM	BS1	31.5	1.02	PCI/G	0			4/8/2005	4:30	0.784	PCI/G	0.383	PCI/G	1	0	3	G	39	.4 PCI/G	PR	
	MSR#05-1930	1200899069	447277	10028-17-8	Tritium	TRG	U	E906.0	LB1	0.603	1.13	PCI/G	0	U		6/8/2005	5:44	2.35	PCI/G	1.12	PCI/G	1	0	9.93	G		PCI/G	PR	
5502-0000-002-C1C-01	MSR#05-1930	1200899070	447277	10028-17-8	Tritium	TRG	U	E906.0	LR1	-0.951	1.86	PCI/G	0	U		6/8/2005	11:17	3.28	PCI/G	1.59	PCI/G	1	8.5	9.31	G		PCI/G -0.3	57 PR	
5502-0000-002-C1C-01	MSR#05-1930	1200899071	447277	10028-17-8	Tritium	TRG	U	E906.0	MS1	17.2	3.47	PCI/G	0			6/8/2005	6:05	5.23	PCI/G	2.49	PCI/G	1	8.5	9.72	G	15	.8 PCI/G 15.4	PR	
	MSR#05-1930	1200899072	447277	10028-17-8	Tritium	TRG	U	E906.0	BS1	13.1	1.75	PCI/G	0			6/8/2005	6:27	2.23	PCI/G	1.06	PCI/G	1	0	9.93	G	15	.4 PCI/G	PR	
	MSR#05-1930	1200899075	447279	10028-17-8	Tritium	TRG	U	E906.0	LB1	0.0258	0.878	PCI/G	0	U		7/8/2005	11:42	1.53	PCI/G	0.736	PCI/G	1	0	15	G		PCI/G	PR	
5502-0002-008-C1C-01	MSR#05-1930	1200899076	447279	10028-17-8	Tritium	TRG	U	E906.0	LR1	1.19	1.85	PCI/G	0	U		7/8/2005	12:14	3.14	PCI/G	1.51	PCI/G	1	7.5	15	G		PCI/G -0.6	93 PR	
5502-0002-008-C1C-01	MSR#05-1930	1200899077	447279	10028-17-8	Tritium	TRG	U	E906.0	MS1	9.4	2.23	PCI/G	0			7/8/2005	12:46	3.19	PCI/G	1.53	PCI/G	1	7.5	15	G	10	.2 PCI/G 9.51	PR	
	MSR#05-1930	1200899078	447279	10028-17-8	Tritium	TRG	U	E906.0	BS1	9	1.26	PCI/G	0			7/8/2005	1:18	1.58	PCI/G	0.762	PCI/G	1	0	15	G	10	.2 PCI/G	PR	
	MSR#05-1930	1200899087	447285	14762-75-5	Carbon-14	TRG	U	LSC	LB1	-0.0782	0.387	PCI/G	0	U		2/8/2005	7:49	0.665	PCI/G	0.327	PCI/G	1	0	3	G		PCI/G	PR	
	MSR#05-1930	1200899090	447285	14762-75-5	Carbon-14	TRG	U	LSC	BS1	21.3	0.727	PCI/G	0			2/8/2005	10:11	0.668	PCI/G	0.328	PCI/G	1	0	3	G	21	.7 PCI/G	PR	
	MSR#05-1930	1200899637	447483	14596-10-2	Americium-241	TRG	U	AM05RCM	LB1	-0.0138	0.0272	PCI/G	0	U		4/8/2005	1:57	0.0673	PCI/G	0.0154	PCI/G	1	0	0.504	G		PCI/G	PR	
	MSR#05-1930	1200899637	447483	OER-100-93	Curium-242	TRG	U	AM05RCM	LB1	-0.00657	0.0284	PCI/G	0	U		4/8/2005	1:57	0.0812	PCI/G	0.0221	PCI/G	1	0	0.504	G		PCI/G	PR	
	MSR#05-1930	1200899637	447483	OER-101-57	Curium-243/244	TRG	U	AM05RCM	LB1	-0.00324	0.0272	PCI/G	0	U		4/8/2005	1:57	0.0673	PCI/G	0.0154	PCI/G	1	0	0.504	G		PCI/G	PR	
5502-0000-002-C1C-01	MSR#05-1930	1200899638	447483	14596-10-2	Americium-241	TRG	U	AM05RCM	LR1	0.000728	0.0173	PCI/G	0	U		4/8/2005	1:57	0.0746	PCI/G	0.0171	PCI/G	1	8.5	0.498	G		PCI/G 0.00	791 PR	
5502-0000-002-C1C-01	MSR#05-1930	1200899638	447483	OER-100-93	Curium-242	TRG	U	AM05RCM	LR1	0	0.0353	PCI/G	0	U		4/8/2005	1:57	0.0488	PCI/G	0	PCI/G	1	8.5	0.498	G		PCI/G -0.0	125 PR	
5502-0000-002-C1C-01	MSR#05-1930	1200899638	447483	OER-101-57	Curium-243/244	TRG	U	AM05RCM	LR1	0.00781	0.0311	PCI/G	0	U		4/8/2005	1:57	0.0891	PCI/G	0.0242	PCI/G	1	8.5	0.498	G		PCI/G 0.02	55 PR	
5502-0000-002-C1C-01	MSR#05-1930	1200899639	447483	14596-10-2	Americium-241	TRG	U	AM05RCM	MS1	5.05	0.559	PCI/G	0			4/8/2005	1:57	0.146	PCI/G	0.0515	PCI/G	1	8.5	0.499	G	5.	46 PCI/G 5.47	PR	
5502-0000-002-C1C-01	MSR#05-1930	1200899639	447483	OER-100-93	Curium-242	TRG	U	AM05RCM	MS1	0.00538	0.0408	PCI/G	0	U		4/8/2005	1:57	0.128	PCI/G	0.0379	PCI/G	1	8.5	0.499	G		PCI/G	PR	
5502-0000-002-C1C-01	MSR#05-1930	1200899639	447483	OER-101-57	Curium-243/244	TRG	U	AM05RCM	MS1	6.69	0.644	PCI/G	0			4/8/2005	1:57	0.159	PCI/G	0.0578	PCI/G	1	8.5	0.499	G	6.	74 PCI/G 6.77	PR	
	MSR#05-1930	1200899640	447483	14596-10-2	Americium-241	TRG	U	AM05RCM	BS1	4.77	0.481	PCI/G	0			4/8/2005	1:57	0.0981	PCI/G	0.032	PCI/G	1	0	0.504	G	5.	41 PCI/G	PR	
	MSR#05-1930	1200899640	447483	OER-100-93	Curium-242	TRG	U	AM05RCM	BS1	-0.00306	0.0257	PCI/G	0	U		4/8/2005	1:57	0.0637	PCI/G	0.0145	PCI/G	1	0	0.504	G		PCI/G	PR	
	MSR#05-1930	1200899640	447483	OER-101-57	Curium-243/244	TRG	U	AM05RCM	BS1	6.55	0.562	PCI/G	0			4/8/2005	1:57	0.0627	PCI/G	0.0143	PCI/G	1	0	0.504	G	6.	65 PCI/G	PR	
	MSR#05-1930	1200899650	447487	13981-16-3	Plutonium-238	TRG	U	PU11RCM	LB1	-0.00583	0.0251	PCI/G	0	U		4/8/2005	1:57	0.072	PCI/G	0.0196	PCI/G	1	0	0.504	G		PCI/G	PR	
	MSR#05-1930	1200899650	447487	OER-100-70	Plutonium-239/240	TRG	U	PU11RCM	LB1	-0.00874	0.00989	PCI/G	0	U		4/8/2005	1:57	0.0808	PCI/G	0.024	PCI/G	1	0	0.504	G		PCI/G	PR	
5502-0000-002-C1C-01	MSR#05-1930	1200899651	447487	13981-16-3	Plutonium-238	TRG	U	PU11RCM	LR1	-0.0133	0.03	PCI/G	0	U		4/8/2005	1:57	0.1	PCI/G	0.0315	PCI/G	1	8.5	0.498	G		PCI/G 0.01	38 PR	
5502-0000-002-C1C-01	MSR#05-1930	1200899651	447487	OER-100-70	Plutonium-239/240	TRG	U	PU11RCM	LR1	-0.00331	0.0278	PCI/G	0	U		4/8/2005	1:57	0.0688	PCI/G	0.0157	PCI/G	1	8.5	0.498	G		PCI/G 0.00	719 PR	
5502-0000-002-C1C-01	MSR#05-1930	1200899652	447487	13981-16-3	Plutonium-238	TRG	U	PU11RCM	MS1	0.011	0.0481	PCI/G	0	U		4/8/2005	1:57	0.125	PCI/G	0.0448	PCI/G	1	8.5	0.499	G		PCI/G	PR	
5502-0000-002-C1C-01	MSR#05-1930	1200899652	447487	OER-100-70	Plutonium-239/240	TRG	U	PU11RCM	MS1	5.87	0.543	PCI/G	0			4/8/2005	1:57	0.0652	PCI/G	0.0149	PCI/G	1	8.5	0.499	G	5.	04 PCI/G 5.05	PR	
	MSR#05-1930	1200899653	447487	13981-16-3	Plutonium-238	TRG	U	PU11RCM	BS1	0.0369	0.0417	PCI/G	0			4/8/2005	1:57	0.0333	PCI/G	0	PCI/G	1	0	0.504	G		PCI/G	PR	
	MSR#05-1930	1200899653	447487	OER-100-70	Plutonium-239/240	TRG	U	PU11RCM	BS1	5.1	0.491	PCI/G	0			4/8/2005	1:57	0.0729	PCI/G	0.0198	PCI/G	1	0	0.504	G	4.	99 PCI/G	PR	
	MSR#05-1930	1200899654	447490	14119-32-5	Plutonium-241	TRG	U	PU11RCM	LB1	1.72	2.44	PCI/G	0	U		7/8/2005	5:41	4.12	PCI/G	2	PCI/G	1	0	1.52	G		PCI/G	PR	
5502-0000-002-C1C-01	MSR#05-1930	1200899655	447490	14119-32-5	Plutonium-241	TRG	U	PU11RCM	LR1	0.911	2.43	PCI/G	0	U		7/8/2005	6:13	4.15	PCI/G	2.02	PCI/G	1	8.5	1.51	G		PCI/G 1.62	PR	
5502-0000-002-C1C-01	MSR#05-1930	1200899656	447490	14119-32-5	Plutonium-241	TRG	U	PU11RCM	MS1	33	3.78	PCI/G	0			7/8/2005	6:45	4.85	PCI/G	2.35	PCI/G	1	8.5	1.51	G	44	.8 PCI/G 46.4	PR	
	MSR#05-1930	1200899657	447490	14119-32-5	Plutonium-241	TRG	U	PU11RCM	BS1	33	3.34	PCI/G	0			7/8/2005	7:17	4.13	PCI/G	2.01	PCI/G	1	0	1.52	G	44	.4 PCI/G	PR	
	MSR#05-1930	1200899783	447538	14331-83-0	Actinium-228	TRG	U	HASL300	LB1	0.00996	0.0501	PCI/G	0	U		9/8/2005	9:18	0.0799	PCI/G	0.0369	PCI/G	1	0	180	G		PCI/G	PR	
	MSR#05-1930	1200899783	447538	14596-10-2	Americium-241	TRG	U	HASL300	LB1	-0.00418	0.00818	PCI/G	0	U		9/8/2005	9:18	0.0154	PCI/G	0.00724	PCI/G	1	0	180	G		PCI/G	PR	
	MSR#05-1930	1200899783	447538	14913-49-6	Bismuth-212	TRG	U	HASL300	LB1	-0.0118	0.0749	PCI/G	0	U		9/8/2005	9:18	0.136	PCI/G	0.0622	PCI/G	1	0	180	G		PCI/G	PR	
	MSR#05-1930	1200899783	447538	14733-03-0	Bismuth-214	TRG	U	HASL300	LB1	0.0313	0.0202	PCI/G	0	U		9/8/2005	9:18	0.0417	PCI/G	0.0196	PCI/G	1	0	180	G		PCI/G	PR	
	MSR#05-1930	1200899783	447538	13967-70-9	Cesium-134	TRG	U	HASL300	LB1	0.00574	0.0116	PCI/G	0	U		9/8/2005	9:18	0.0222	PCI/G	0.0102	PCI/G	1	0	180	G		PCI/G	PR	
	MSR#05-1930	1200899783	447538	10045-97-3	Cesium-137	TRG	U	HASL300	LB1	0.0111	0.0095	PCI/G	0	U		9/8/2005	9:18	0.0164	PCI/G	0.00746	PCI/G	1	0	180	G		PCI/G	PR	
	MSR#05-1930	1200899783	447538	10198-40-0	Cobalt-60	TRG	U	HASL300	LB1	0.00696	0.0108	PCI/G	0	U		9/8/2005	9:18	0.022	PCI/G	0.00981	PCI/G	1	0	180	G		PCI/G	PR	
	MSR#05-1930	1200899783	447538	14683-23-9	Europium-152	TRG	U	HASL300	LB1	-0.00432	0.0257	PCI/G	0	U		9/8/2005	9:18	0.0464	PCI/G	0.0218	PCI/G	1	0	180	G		PCI/G	PR	
	MSR#05-1930	1200899783	447538	15585-10-1	Europium-154	TRG	U	HASL300	LB1	-0.00458	0.029	PCI/G	0	U		9/8/2005	9:18	0.0534	PCI/G	0.0235	PCI/G	1	0	180	G		PCI/G	PR	
	MSR#05-1930	1200899783	447538	14391-16-3	Europium-155	TRG	U	HASL300	LB1	-0.00339	0.018	PCI/G	0	U		9/8/2005	9:18	0.0327	PCI/G	0.0155	PCI/G	1	0	180	G		PCI/G	PR	
	MSR#05-1930	1200899783	447538	15092-94-1	Lead-212	TRG	U	HASL300	LB1	0.0108	0.0254	PCI/G	0	U		9/8/2005	9:18	0.0247	PCI/G	0.0117	PCI/G	1	0	180	G		PCI/G	PR	
	MSR#05-1930	1200899783	447538	15067-28-4	Lead-214	TRG	U	HASL300	LB1	0.0119	0.017	PCI/G	0	U		9/8/2005	9:18	0.0329	PCI/G	0.0155	PCI/G	1	0	180	G		PCI/G	PR	
	MSR#05-1930	1200899783	447538	13966-31-9	Manganese-54	TRG	U	HASL300	LB1	0.00684	0.0201	PCI/G	0	U		9/8/2005	9:18	0.0157	PCI/G	0.00704	PCI/G	1	0	180	G		PCI/G	PR	
	MSR#05-1930	1200899783	447538	14681-63-1	Niobium-94	TRG	U	HASL300	LB1	-0.0079	0.00961	PCI/G	0	U		9/8/2005	9:18	0.0162	PCI/G	0.0074	PCI/G	1	0	180	G		PCI/G	PR	
	MSR#05-1930	1200899783	447538	13966-00-2	Potassium-40	TRG	U	HASL300	LB1	0.057	0.201	PCI/G	0	U		9/8/2005	9:18	0.182	PCI/G	0.079	PCI/G	1	0	180	G		PCI/G	PR	
	MSR#05-1930	1200899783	447538	13982-63-3	Radium-226	TRG	U	HASL300	LB1	0.0313	0.0202	PCI/G	0	U		9/8/2005	9:18	0.0417	PCI/G	0.0196	PCI/G	1	0	180	G		PCI/G	PR	
	MSR#05-1930	1200899783	447538	14391-65-2	Silver-108m	TRG	U	HASL300	LB1	-0.0028	0.00843	PCI/G	0	U		9/8/2005	9:18	0.0159	PCI/G	0.00738	PCI/G	1	0	180	G		PCI/G	PR	
	MSR#05-1930	1200899783	447538	14913-50-9	Thallium-208	TRG	U	HASL300	LB1	0.00135	0.0172	PCI/G	0	U		9/8/2005	9:18	0.0172	PCI/G	0.0079	PCI/G	1	0	180	G		PCI/G	PR	
5502-0002-007-C1C-01	MSR#05-1930	1200899784	447538	14331-83-0	Actinium-228	TRG	U	HASL300	LR1	0.43	0.113	PCI/G	0			8/8/2005	3:53	0.0736	PCI/G	0.0347	PCI/G	1	5.9	156	G		PCI/G 0.54	4 PR	
5502-0002-007-C1C-01	MSR#05-1930	1200899784	447538	14596-10-2	Americium-241	TRG	U	HASL300	LR1	-0.00616	0.0404	PCI/G	0	U		8/8/2005	3:53	0.0776	PCI/G	0.0377	PCI/G	1	5.9	156	G		PCI/G -0.0	431 PR	
5502-0002-007-C1C-01	MSR#05-1930	1200899784	447538	14913-49-6	Bismuth-212	TRG	U	HASL300	LR1	0.393	0.157	PCI/G	0			8/8/2005	3:53	0.167	PCI/G	0.0794	PCI/G	1	5.9	156	G		PCI/G 0.00	PR	
5502-0002-007-C1C-01	MSR#05-1930	1200899784	447538	14733-03-0	Bismuth-214	TRG	U	HASL300	LR1	0.477	0.072	PCI/G	0			8/8/2005	3:53	0.0406	PCI/G	0.0194	PCI/G	1	5.9	156	G		PCI/G 0.51	0 PR	
5502-0002-007-C1C-01	MSR#05-1930	1200899784	447538	13967-70-9	Cesium-134	TRG	U	HASL300	LR1	0	0.0192	PCI/G	0	UUI		8/8/2005	3:53	0.0267	PCI/G	0.0128	PCI/G	1	5.9	156	G		PCI/G 0.01	45 PR	
5502-0002-007-C1C-01	MSR#05-1930	1200899784	447538	10045-97-3	Cesium-137	TRG	U	HASL300	LR1	0.177	0.0345	PCI/G	0			8/8/2005	3:53	0.0207	PCI/G	0.00983	PCI/G	1	5.9	156	G		PCI/G 0.19	4 PR	
5502-0002-007-C1C-01	MSR#05-1930	1200899784	447538	10198-40-0	Cobalt-60	TRG	U	HASL300	LR1	0.00653	0.0136	PCI/G	0	U		8/8/2005	3:53	0.0247	PCI/G	0.0116	PCI/G	1	5.9	156	G		PCI/G 0.00	PR	
5502-0002-007-C1C-01	MSR#05-1930	1200899784	447538	14683-23-9	Europium-152	TRG	U	HASL300	LR1	-0.0245	0.0321	PCI/G	0	U		8/8/2005	3:53	0.0555	PCI/G	0.0266	PCI/G	1	5.9	156	G		PCI/G 0.02	12 PR	
5502-0002-007-C1C-01	MSR#05-1930	1200899784	447538	15585-10-1	Europium-154	TRG	U	HASL300	LR1	-0.00352	0.0397	PCI/G	0	U		8/8/2005	3:53	0.0693	PCI/G	0.0325	PCI/G	1	5.9	156	G		PCI/G 0.00	173 PR	
5502-0002-007-C1C-01	MSR#05-1930	1200899784	447538	14391-16-3	Europium-155	TRG	U	HASL300	LR1	0.0207	0.0367	PCI/G	0	U		8/8/2005	3:53	0.0689	PCI/G	0.0335	PCI/G	1	5.9	156	G		PCI/G 0.01	11 PR	
5502-0002-007-C1C-01	MSR#05-1930	1200899784	447538	15092-94-1	Lead-212	TRG	U	HASL300	LR1	0.444	0.0531	PCI/G	0			8/8/2005	3:53	0.0355	PCI/G	0.0172	PCI/G	1	5.9	156	G		PCI/G 0.46	6 PR	

5502-0002-007-C1C-01	MSR#05-1930	1200899784	447538	15067-28-4	Lead-214	TRG	U		HASL300	LR1	0.612	0.0781	PCI/G	0			8/8/2005	3:53	0.0424	PCI/G	0.0204	PCI/G	1	5.9	156	G		PCI/G	0.58		6	PR	
5502-0002-007-C1C-01	MSR#05-1930	1200899784	447538	13966-31-9	Manganese-54	TRG	U		HASL300	LR1	-0.00959	0.0134	PCI/G	0	U		8/8/2005	3:53	0.0223	PCI/G	0.0106	PCI/G	1	5.9	156	G		PCI/G	0.01		81	PR	
5502-0002-007-C1C-01	MSR#05-1930	1200899784	447538	14681-63-1	Niobium-94	TRG	U		HASL300	LR1	0.00647	0.0115	PCI/G	0	U		8/8/2005	3:53	0.0209	PCI/G	0.00999	PCI/G	1	5.9	156	G		PCI/G	-0.0		00795	PR	
5502-0002-007-C1C-01	MSR#05-1930	1200899784	447538	13966-00-2	Potassium-40	TRG	U		HASL300	LR1	7.31	0.664	PCI/G	0			8/8/2005	3:53	0.208	PCI/G	0.0963	PCI/G	1	5.9	156	G		PCI/G	7.02		PR		
5502-0002-007-C1C-01	MSR#05-1930	1200899784	447538	13982-63-3	Radium-226	TRG	U		HASL300	LR1	0.477	0.072	PCI/G	0			8/8/2005	3:53	0.0406	PCI/G	0.0194	PCI/G	1	5.9	156	G		PCI/G	0.51		0	PR	
5502-0002-007-C1C-01	MSR#05-1930	1200899784	447538	14391-65-2	Silver-108m	TRG	U		HASL300	LR1	0.000204	0.011	PCI/G	0	U		8/8/2005	3:53	0.0193	PCI/G	0.00926	PCI/G	1	5.9	156	G		PCI/G	-0.0		0709	PR	
5502-0002-007-C1C-01	MSR#05-1930	1200899784	447538	14913-50-9	Thallium-208	TRG	U		HASL300	LR1	0.148	0.0312	PCI/G	0			8/8/2005	3:53	0.0209	PCI/G	0.00993	PCI/G	1	5.9	156	G		PCI/G	0.14		3	PR	
	MSR#05-1930	1200899785	447538	14331-83-0	Actinium-228	TRG	U		HASL300	BS1	0.238	0.779	PCI/G	0	U		9/8/2005	11:02	1.39	PCI/G	0.657	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-1930	1200899785	447538	14596-10-2	Americium-241	TRG	U		HASL300	BS1	26.3	2.14	PCI/G	0			9/8/2005	11:02	0.842	PCI/G	0.414	PCI/G	1	0	100	G	24	.4	PCI/G		PR		
	MSR#05-1930	1200899785	447538	14913-49-6	Bismuth-212	TRG	U		HASL300	BS1	-0.634	1.7	PCI/G	0	U		9/8/2005	11:02	2.76	PCI/G	1.31	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-1930	1200899785	447538	14733-03-0	Bismuth-214	TRG	U		HASL300	BS1	0.279	0.391	PCI/G	0	U		9/8/2005	11:02	0.68	PCI/G	0.326	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-1930	1200899785	447538	13967-70-9	Cesium-134	TRG	U		HASL300	BS1	-0.106	0.215	PCI/G	0	U		9/8/2005	11:02	0.367	PCI/G	0.173	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-1930	1200899785	447538	10045-97-3	Cesium-137	TRG	U		HASL300	BS1	10.3	1.13	PCI/G	0			9/8/2005	11:02	0.406	PCI/G	0.195	PCI/G	1	0	100	G	9.	.42	PCI/G		PR		
	MSR#05-1930	1200899785	447538	10198-40-0	Cobalt-60	TRG	U		HASL300	BS1	15	1.24	PCI/G	0			9/8/2005	11:02	0.369	PCI/G	0.17	PCI/G	1	0	100	G	14	.5	PCI/G		PR		
	MSR#05-1930	1200899785	447538	14683-23-9	Europium-152	TRG	U		HASL300	BS1	-0.242	0.461	PCI/G	0	U		9/8/2005	11:02	0.769	PCI/G	0.37	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-1930	1200899785	447538	15585-10-1	Europium-154	TRG	U		HASL300	BS1	-0.0501	0.555	PCI/G	0	U		9/8/2005	11:02	0.967	PCI/G	0.446	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-1930	1200899785	447538	14391-16-3	Europium-155	TRG	U		HASL300	BS1	-0.471	0.511	PCI/G	0	U		9/8/2005	11:02	0.814	PCI/G	0.398	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-1930	1200899785	447538	15092-94-1	Lead-212	TRG	U		HASL300	BS1	0.192	0.248	PCI/G	0	U		9/8/2005	11:02	0.439	PCI/G	0.213	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-1930	1200899785	447538	15067-28-4	Lead-214	TRG	U		HASL300	BS1	0.0199	0.347	PCI/G	0	U		9/8/2005	11:02	0.593	PCI/G	0.286	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-1930	1200899785	447538	13966-31-9	Manganese-54	TRG	U		HASL300	BS1	0.129	0.213	PCI/G	0	U		9/8/2005	11:02	0.385	PCI/G	0.183	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-1930	1200899785	447538	14681-63-1	Niobium-94	TRG	U		HASL300	BS1	0.094	0.214	PCI/G	0	U		9/8/2005	11:02	0.364	PCI/G	0.174	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-1930	1200899785	447538	13966-00-2	Potassium-40	TRG	U		HASL300	BS1	3.1	2.19	PCI/G	0	U		9/8/2005	11:02	4.26	PCI/G	1.99	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-1930	1200899785	447538	13982-63-3	Radium-226	TRG	U		HASL300	BS1	0.279	0.391	PCI/G	0	U		9/8/2005	11:02	0.68	PCI/G	0.326	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-1930	1200899785	447538	14391-65-2	Silver-108m	TRG	U		HASL300	BS1	-0.122	0.17	PCI/G	0	U		9/8/2005	11:02	0.279	PCI/G	0.133	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-1930	1200899785	447538	14913-50-9	Thallium-208	TRG	U		HASL300	BS1	0.227	0.254	PCI/G	0	U		9/8/2005	11:02	0.359	PCI/G	0.172	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-1930	1200899792	447540	14331-83-0	Actinium-228	TRG	U		HASL300	LB1	0.0625	0.0669	PCI/G	0	U		2/8/2005	6:18	0.0913	PCI/G	0.0418	PCI/G	1	0	190	G		PCI/G			PR		
	MSR#05-1930	1200899792	447540	14596-10-2	Americium-241	TRG	U		HASL300	LB1	0.00264	0.0329	PCI/G	0	U		2/8/2005	6:18	0.0673	PCI/G	0.0317	PCI/G	1	0	190	G		PCI/G			PR		
	MSR#05-1930	1200899792	447540	14913-49-6	Bismuth-212	TRG	U		HASL300	LB1	0.0196	0.0881	PCI/G	0	U		2/8/2005	6:18	0.168	PCI/G	0.0766	PCI/G	1	0	190	G		PCI/G			PR		
	MSR#05-1930	1200899792	447540	14733-03-0	Bismuth-214	TRG	U		HASL300	LB1	0.0223	0.023	PCI/G	0	U		2/8/2005	6:18	0.0466	PCI/G	0.0216	PCI/G	1	0	190	G		PCI/G			PR		
	MSR#05-1930	1200899792	447540	13967-70-9	Cesium-134	TRG	U		HASL300	LB1	-0.000133	0.0111	PCI/G	0	U		2/8/2005	6:18	0.0207	PCI/G	0.00925	PCI/G	1	0	190	G		PCI/G			PR		
	MSR#05-1930	1200899792	447540	10045-97-3	Cesium-137	TRG	U		HASL300	LB1	-0.00203	0.0107	PCI/G	0	U		2/8/2005	6:18	0.0197	PCI/G	0.00888	PCI/G	1	0	190	G		PCI/G			PR		
	MSR#05-1930	1200899792	447540	10198-40-0	Cobalt-60	TRG	U		HASL300	LB1	0.0151	0.0165	PCI/G	0	U		2/8/2005	6:18	0.0229	PCI/G	0.00998	PCI/G	1	0	190	G		PCI/G			PR		
	MSR#05-1930	1200899792	447540	14683-23-9	Europium-152	TRG	U		HASL300	LB1	-0.00487	0.0272	PCI/G	0	U		2/8/2005	6:18	0.0523	PCI/G	0.0243	PCI/G	1	0	190	G		PCI/G			PR		
	MSR#05-1930	1200899792	447540	15585-10-1	Europium-154	TRG	U		HASL300	LB1	0.00871	0.0335	PCI/G	0	U		2/8/2005	6:18	0.0671	PCI/G	0.0295	PCI/G	1	0	190	G		PCI/G			PR		
	MSR#05-1930	1200899792	447540	14391-16-3	Europium-155	TRG	U		HASL300	LB1	0.0288	0.0258	PCI/G	0	U		2/8/2005	6:18	0.0541	PCI/G	0.0256	PCI/G	1	0	190	G		PCI/G			PR		
	MSR#05-1930	1200899792	447540	15092-94-1	Lead-212	TRG	U		HASL300	LB1	0.00624	0.0224	PCI/G	0	U		2/8/2005	6:18	0.0371	PCI/G	0.0177	PCI/G	1	0	190	G		PCI/G			PR		
	MSR#05-1930	1200899792	447540	15067-28-4	Lead-214	TRG	U		HASL300	LB1	0.00842	0.0203	PCI/G	0	U		2/8/2005	6:18	0.0408	PCI/G	0.019	PCI/G	1	0	190	G		PCI/G			PR		
	MSR#05-1930	1200899792	447540	13966-31-9	Manganese-54	TRG	U		HASL300	LB1	-0.00583	0.0104	PCI/G	0	U		2/8/2005	6:18	0.0178	PCI/G	0.00792	PCI/G	1	0	190	G		PCI/G			PR		
	MSR#05-1930	1200899792	447540	14681-63-1	Niobium-94	TRG	U		HASL300	LB1	-0.0083	0.0107	PCI/G	0	U		2/8/2005	6:18	0.018	PCI/G	0.00815	PCI/G	1	0	190	G		PCI/G			PR		
	MSR#05-1930	1200899792	447540	13966-00-2	Potassium-40	TRG	U		HASL300	LB1	0.0603	0.117	PCI/G	0	U		2/8/2005	6:18	0.242	PCI/G	0.106	PCI/G	1	0	190	G		PCI/G			PR		
	MSR#05-1930	1200899792	447540	13982-63-3	Radium-226	TRG	U		HASL300	LB1	0.0223	0.023	PCI/G	0	U		2/8/2005	6:18	0.0466	PCI/G	0.0216	PCI/G	1	0	190	G		PCI/G			PR		
	MSR#05-1930	1200899792	447540	14391-65-2	Silver-108m	TRG	U		HASL300	LB1	0.00573	0.00933	PCI/G	0	U		2/8/2005	6:18	0.019	PCI/G	0.00879	PCI/G	1	0	190	G		PCI/G			PR		
	MSR#05-1930	1200899792	447540	14913-50-9	Thallium-208	TRG	U		HASL300	LB1	0.00355	0.0129	PCI/G	0	U		2/8/2005	6:18	0.0183	PCI/G	0.00826	PCI/G	1	0	190	G		PCI/G			PR		
	MSR#05-1930	1200899794	447540	14331-83-0	Actinium-228	TRG	U		HASL300	BS1	-0.0961	0.479	PCI/G	0	U		2/8/2005	3:44	0.811	PCI/G	0.394	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-1930	1200899794	447540	14596-10-2	Americium-241	TRG	U		HASL300	BS1	24.7	1.8	PCI/G	0			2/8/2005	3:44	0.478	PCI/G	0.237	PCI/G	1	0	100	G	24	.4	PCI/G		PR		
	MSR#05-1930	1200899794	447540	14913-49-6	Bismuth-212	TRG	U		HASL300	BS1	-0.701	1.03	PCI/G	0	U		2/8/2005	3:44	1.63	PCI/G	0.791	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-1930	1200899794	447540	14733-03-0	Bismuth-214	TRG	U		HASL300	BS1	0.341	0.225	PCI/G	0	U		2/8/2005	3:44	0.386	PCI/G	0.188	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-1930	1200899794	447540	13967-70-9	Cesium-134	TRG	U		HASL300	BS1	0.0299	0.131	PCI/G	0	U		2/8/2005	3:44	0.227	PCI/G	0.11	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-1930	1200899794	447540	10045-97-3	Cesium-137	TRG	U		HASL300	BS1	9.78	0.879	PCI/G	0			2/8/2005	3:44	0.236	PCI/G	0.115	PCI/G	1	0	100	G	9.	.42	PCI/G		PR		
	MSR#05-1930	1200899794	447540	10198-40-0	Cobalt-60	TRG	U		HASL300	BS1	14.9	1.01	PCI/G	0			2/8/2005	3:44	0.237	PCI/G	0.114	PCI/G	1	0	100	G	14	.5	PCI/G		PR		
	MSR#05-1930	1200899794	447540	14683-23-9	Europium-152	TRG	U		HASL300	BS1	-0.0289	0.263	PCI/G	0	U		2/8/2005	3:44	0.441	PCI/G	0.216	PCI/43	1	0	100	G		PCI/G			PR		
	MSR#05-1930	1200899794	447540	15585-10-1	Europium-154	TRG	U		HASL300	BS1	0.274	0.305	PCI/G	0	U		2/8/2005	3:44	0.545	PCI/G	0.26	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-1930	1200899794	447540	14391-16-3	Europium-155	TRG	U		HASL300	BS1	-0.0558	0.297	PCI/G	0	U		2/8/2005	3:44	0.481	PCI/G	0.237	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-1930	1200899794	447540	15092-94-1	Lead-212	TRG	U		HASL300	BS1	0.216	0.142	PCI/G	0	U		2/8/2005	3:44	0.248	PCI/G	0.122	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-1930	1200899794	447540	15067-28-4	Lead-214	TRG	U		HASL300	BS1	-0.0488	0.194	PCI/G	0	U		2/8/2005	3:44	0.324	PCI/G	0.158	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-1930	1200899794	447540	13966-31-9	Manganese-54	TRG	U		HASL300	BS1	0.00339	0.118	PCI/G	0	U		2/8/2005	3:44	0.203	PCI/G	0.0986	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-1930	1200899794	447540	14681-63-1	Niobium-94	TRG	U		HASL300	BS1	-0.00487	0.122	PCI/G	0	U		2/8/2005	3:44	0.198	PCI/G	0.0966	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-1930	1200899794	447540	13966-00-2	Potassium-40	TRG	U		HASL300	BS1	1.31	1.19	PCI/G	0	U		2/8/2005	3:44	2.12	PCI/G	1.02	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-1930	1200899794	447540	13982-63-3	Radium-226	TRG	U		HASL300	BS1	0.341	0.225	PCI/G	0	U		2/8/2005	3:44	0.386	PCI/G	0.188	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-1930	1200899794	447540	14391-65-2	Silver-108m	TRG	U		HASL300	BS1	-0.0766	0.103	PCI/G	0	U		2/8/2005	3:44	0.168	PCI/G	0.0823	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-1930	1200899794	447540	14913-50-9	Thallium-208	TRG	U		HASL300	BS1	0.0135	0.109	PCI/G	0	U		2/8/2005	3:44	0.202	PCI/G	0.0986	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-1930	1200899967	447617	10098-97-2	Strontium-90	TRG	U		E905M	LB1	0.00146	0.00293	PCI/G	0	U		7/8/2005	11:41	0.00576	PCI/G	0.00276	PCI/G	1	0	18	G		PCI/G			PR		
5502-0000-002-C1C-01	MSR#05-1930	1200899968	447617	10098-97-2	Strontium-90	TRG	U		E905M	LR1	-0.00164	0.00558	PCI/G	0	U		7/8/2005	11:41	0.0116	PCI/G	0.00552	PCI/G	1	8.5	12.6	G		PCI/G	0.00		556	PR	
5502-0000-002-C1C-01	MSR#05-1930	1200899969	447617	10098-97-2	Strontium-90	TRG	U		E905M	MS1	6.43	0.382	PCI/G	0			7/8/2005	9:38	0.127	PCI/G	0.0655	PCI/G	1	8.5	2.09	G	8.	57	PCI/G	8.58	PR		
	MSR#05-1930	1200899970	447617	10098-97-2	Strontium-90	TRG	U		E905M	BS1	0.898	0.0487	PCI/G	0			7/8/2005	9:38	0.0154	PCI/G	0.00676	PCI/G	1	0	18	G	0.	993	PCI/G		PR		
	MSR#05-1930	1200899971	447618	10098-97-2	Strontium-90	TRG	U		E905M	LB1	0.00266	0.00293	PCI/G	0	U		10/8/2005	9:32	0.00561	PCI/G	0.00268	PCI/G	1	0	20.2	G		PCI/G			PR		
5502-0002-008-C2C-03	MSR#05-1930	1200899972	447618	10098-97-2	Strontium-90	TRG	U		E905M	LR1	0.0045	0.00508	PCI/G	0	U		10/8/2005	9:32	0.00973	PCI/G	0.00464	PCI/G	1	8.1	19.7	G		PCI/G	0.00		456	PR	
5502-0002-008-C2C-03	MSR#05-1930	1200899973	447618	10098-97-2	Strontium-90	TRG	U		E905M	MS1	3.25	0.267	PCI/G	0			9/8/2005	8:01	0.124	PCI/G	0.0545	PCI/G	1	8.1	5.44	G	3.	30	PCI/G	3.30	PR		
	MSR#05-1930	1200899974	447618	10098-97-2	Strontium-90	TRG	U		E905M	BS1	1.01	0.0656	PCI/G	0			9/8/2005	8:01	0.029	PCI/G	0.0131	PCI/G	1	0	20.2	G	0.	987	PCI/G		PR		
	MSR#05-1930	1200900069	447648	14681-59-5	Iron-55	TRG	U		LSC	LB1	0.897	2.89	PCI/G	0	U		10/8/2005	12:54	4.08	PCI/G	2.01	PCI/G	1	0	3	G		PCI/G			PR		
5502-0000-002-C1C-01	MSR#05-1930	1200900070	447648	14681-59-5	Iron-55	TRG	U		LSC	LR1	9.77	5.46	PCI/G	0			10/8/2005	2:27	7.84	PCI/G	3.86	PCI/G	1	8.5	3.23	G		PCI/G	-1.0		9	PR	
5502-0000-002-C1C-01	MSR#05-1930	1200900071	447648	14681-59-5	Iron-55	TRG	U		LSC	MS1	118	29.4	PCI/G	0			10/8/2005	3:59	39	PCI/G	19.1	PCI/G	1	8.5	1.04	G	14	7	PCI/G	146	PR		
	MSR#05-1930	1200900072	447648	14681-59-5	Iron-55	TRG	U		LSC	BS1	43.7	6.9	PCI/G	0			10/8/2005	4:31	8.58	PCI/G	4.19	PCI/G	1	0	3	G	49	.5	PCI/G		PR		
	MSR#05-1930	1200908779	451367	13781-37-8	Nickel-63	TRG	U		LSC	LB1	-0.715	1.17	PCI/G	0	U		11/8/2005	6:54	2.06	PCI/G	1	PCI/G	1	0	1.28	G		PCI/G			PR		
5502-0000-002-C1C-01	MSR#05-1930	1200908780	451367	13781-37-8	Nickel-63	TRG	U		LSC	LR2	-0.552	1.55	PCI/G	0	U		11/8/2005	7:41	2.69	PCI/G	1.31	PCI/G	1	8.5	1.07	G		PCI/G	-0.8		95	PR	
5502-0000-002-C1C-01	MSR#05-1930	1200908781	451367	13781-37-8	Nickel-63	TRG	U		LSC	MS2	141	4.27	PCI/G	0			11/8/2005	8:28	3.01	PCI/G	1.47	PCI/G	1	8.5	1.04	G	14	4	PCI/G	143	PR		
	MSR#05-1930	1200908782	451367	13781-37-8	Nickel-63	TRG	U		LSC	BS1	112	3.02	PCI/G	0			11/8/2005	9:14	1.96	PCI/G	0.954	PCI/G	1	0	1.28	G	11	7	PCI/G		PR		

Table of Contents

General Narrative **1**

Chain of Custody and Supporting Documentation **4**

Radiological Analysis **10**
Sample Data Summary 30
Quality Control Data 84

General Narrative

CASE NARRATIVE
For
CONNECTICUT YANKEE
RE: Concrete, Soil & Sediment
PO# 002332
Work Order: 152490
SDG: MSR #05-2817

January 19, 2006

Laboratory Identification:
General Engineering Laboratories, LLC

Mailing Address:
P.O. Box 30712
Charleston, South Carolina 29417

Express Mail Delivery and Shipping Address:
2040 Savage Road
Charleston, South Carolina 29407

Telephone Number:
(843) 556-8171

Summary:

Sample receipt
The sample(s) for the CY Project arrived at General Engineering Laboratories, LLC, (GEL) in Charleston, South Carolina on December 21, 2005. All sample containers arrived without any visible signs of tampering or breakage. The chain of custody contained the proper documentation and signatures.

The laboratory received the following sample(s):

Sample ID	Client Sample ID
152490001	5502-0002-021-IC-01
152490002	5502-0002-021-IC-02
152490003	5502-0002-021-IC-03
152490004	5502-0002-021-IC-04
152490005	5502-0002-021-IC-05
152490006	5502-0002-022-IC-02
152490007	5502-0002-022-IC-03
152490008	5502-0002-022-IC-04

Sample ID	Client Sample ID
152490009	5502-0002-022-IC-05
152490010	5502-0002-023-IC-01
152490011	5502-0002-023-IC-02
152490012	5502-0002-023-IC-03
152490013	5502-0002-023-IC-04
152490014	5502-0002-023-IC-05
152490015	5502-0002-024-IC-02
152490016	5502-0002-024-IC-03
152490017	5502-0002-024-IC-04
152490018	5502-0002-024-IC-05
152490019	5502-0002-022-IC-01
152490020	5502-0002-024-IC-01
152490021, 024	Sediment
152490022	9802-0000-022-RA/IS
152490023	9802-0000-025-RA/IS

Items of Note:

There were no items of note.

Case Narrative:
Sample analyses were conducted using methodology as outlined in General Engineering Laboratories (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are listed below by analytical parameter.

Analytical Request:

Eighteen concrete samples were analyzed for CHGAM, Sr-90 and H-3.
Two concrete samples were analyzed for CHALL.
One sediment sample was analyzed for CHALL.
Two soil samples were analyzed for CHALL

Internal Chain of Custody:
Custody was maintained for all the samples.

Data Package:
The enclosed data package contains the following sections: Case Narrative, Chain of Custody and Supporting Documentation and all analytical fractions.

I certify that this data package is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or a designee, as verified by the following signature.

Cheryl Jones
Project Manager

Chain of Custody and Supporting Documentation

Chain of Custody Form

No. 2005-00549

Connecticut Yankee Atomic Power Company
362 Injun Hollow Road, East Hampton, CT 06424
860-267-2556

Project Name: Haddam Neck Decommissioning

Contact Name & Phone:
Pete Hollenbeck 860-267-3923

Analytical Lab (Name, City, State):
General Engineering Laboratories
2040 Savage Road
Charleston, SC 29407
ATT: Cheryl Jones (843-556-8171)

Priority: ☒ 30 D. ☐ 15 D. ☐ 7 D.
Other:

Lab Use Only
Comments:
152490 %

	Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	CHGAM	H-3	Sr-90	CHALL			Comment, Preservation	Lab Sample ID
01	5502-0002-021-IC-01 .1	12/13/05	1628	CT	CR	BP	X	X	X					
02	5502-0002-021-IC-02 .1	12/13/05	1628	CT	CR	BP	X	X	X					
03	5502-0002-021-IC-03 .1	12/13/05	1628	CT	CR	BP	X	X	X					
04	5502-0002-021-IC-04 .1	12/13/05	1628	CT	CR	BP	X	X	X					
05	5502-0002-021-IC-05 .1	12/13/05	1628	CT	CR	BP	X	X	X					
06	5502-0002-022-IC-01 .2	12/14/05	1440	CT	CR	BP				X				
07	5502-0002-022-IC-02 .1	12/14/05	1440	CT	CR	BP	X	X	X					
08	5502-0002-022-IC-03 .1	12/14/05	1440	CT	CR	BP	X	X	X					
09	5502-0002-022-IC-04 .1	12/14/05	1440	CT	CR	BP	X	X	X					
	5502-0002-022-IC-05 .1	12/14/05	1440	CT	CR	BP	X	X	X					

NOTES: PO #: 002332 MSR #: 05-2817 ☒ LTP QA ☐ Radwaste QA ☐ Non QA

Samples Shipped Via:
☒ Fed Ex
☐ UPS
☐ Hand
☐ Other
7913 1260 2760
Bill of Lading #

Internal Container Temp.: 15 Deg. C

Custody Sealed? Y N
Custody Seal Intact? Y N

1) Relinquished By [signature] Date/Time 12/20/05 1430	2) Received By [signature] Date/Time 12-21-05 1045
3) Relinquished By Date/Time	4) Received By Date/Time
5) Relinquished By Date/Time	6) Received By Date/Time

Chain of Custody Form

Connecticut Yankee Atomic Power Company
362 Injun Hollow Road, East Hampton, CT 06424
860-267-2556

No. 2005-00550

Project Name: Haddam Neck Decommissioning

Contact Name & Phone:
Pete Hollenbeck 860-267-3923

Analytical Lab (Name, City, State):
General Engineering Laboratories
2040 Savage Road
Charleston, SC 29407
ATT: Cheryl Jones (843-556-8171)

Priority: ☒ 30 D. ☐ 15 D. ☐ 7 D.
Other: Sediment sample, 3 day TAT Requested

Lab Use Only
Comments: 152490 %

	Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	CHGAM	H-3	Sr-90	CHALL			Comment, Preservation	Lab Sample ID
010	5502-0002-023-IC-01 .1	12/15/05	1025	CT	CR	BP	X	X	X					
011	5502-0002-023-IC-02 .	12/15/05	1025	CT	CR	BP	X	X	X					
012	5502-0002-023-IC-03 .1	12/15/05	1025	CT	CR	BP	X	X	X					
013	5502-0002-023-IC-04 .1	12/15/05	1025	CT	CR	BP	X	X	X					
014	5502-0002-023-IC-05 .1	12/15/05	1025	CT	CR	BP	X	X	X					
020	5502-0002-024-IC-01 .2	12/15/05	1428	CT	CR	BP				X				
015	5502-0002-024-IC-02 .1	12/15/05	1428	CT	CR	BP	X	X	X					
016	5502-0002-024-IC-03 .1	12/15/05	1428	CT	CR	BP	X	X	X					
017	5502-0002-024-IC-04 .1	12/15/05	1428	CT	CR	BP	X	X	X					
018	5502-0002-024-IC-05 .1	12/15/05	1428	CT	CR	BP	X	X	X					
019	Sediment .3/.5	12/15/05	1327	SE	G	500ml/PB				X				

5/21/2006

NOTES: PO #: 002332 MSR #: 05-2817 ☒ LTP QA ☐ Radwaste QA ☐ Non QA

Samples Shipped Via:
☒ Fed Ex
☐ UPS
☐ Hand
☐ Other
7913 1260 2760
Bill of Lading #

Internal Container Temp.: 15 Deg. C

Custody Sealed? Y N
Custody Seal Intact? Y N

1) Relinquished By [signature] Date/Time 12/20/05 1430	2) Received By [signature] Date/Time 12/21/05 1045
3) Relinquished By Date/Time	4) Received By Date/Time
5) Relinquished By Date/Time	6) Received By Date/Time

Chain of Custody Form

No. 2005-00551

Connecticut Yankee Atomic Power Company
362 Injun Hollow Road, East Hampton, CT 06424
860-267-2556

Project Name: Haddam Neck Decommissioning

Contact Name & Phone:
Pete Hollenbeck 860-267-3923

Analytical Lab (Name, City, State):
General Engineering Laboratories
2040 Savage Road
Charleston, SC 29407
ATT: Cheryl Jones (843-556-8171)

Priority: ☒ 30 D. ☐ 15 D. ☐ 7 D.
Other:

Lab Use Only
Comments: 152490%

	Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	Analyses Requested: CHALL						Comment, Preservation	Lab Sample ID
022	9802-0000-022-RA/IS -4	11/3/05	1338	TS	G	1LM	X							
023	9802-0000-025-RA/IS -4	11/3/05	1352	TS	G	1LM	X							

NOTES: PO #: 002332 MSR #:05-2817 ☒ LTP QA ☐ Radwaste QA ☐ Non QA

Sr-90 RDL = 0.025 pCi/g H-3 RDL = 1-2 pCi/g

Samples Shipped Via:
☒ Fed Ex
☐ UPS
☐ Hand
☐ Other
7913 1260 2760
Bill of Lading #

Internal Container Temp.: 15 Deg. C

Custody Sealed? Y N
Custody Seal Intact? Y N

1) Relinquished By: [signature] Date/Time 12/20/05 1430	2) Received By: [signature] Date/Time 12-21-05 1045
3) Relinquished By Date/Time	4) Received By Date/Time
5) Relinquished By Date/Time	6) Received By Date/Time

Figure 1. Sample Check-in List

Date/Time Received: 12-21-05 1045

SDG#: MSR# 05-2817

Work Order Number: 152490

Shipping Container ID: 7913 1260 2760 Chain of Custody # 2005-00549, 00550, 00551

1. Custody Seals on shipping container intact? Yes [ ] No [ ] NA ✓
2. Custody Seals dated and signed? Yes [ ] No [ ] NA ✓
3. Chain-of-Custody record present? Yes [✓] No [ ]
4. Cooler temperature 15°C
5. Vermiculite/packing materials is: Wet [ ] Dry [ ] NA ✓
6. Number of samples in shipping container: 23
7. Sample holding times exceeded? Yes [ ] No [✓]

8. Samples have:

✓ tape ____ hazard labels

✓ custody seals ____ appropriate sample labels

9. Samples are:

✓ in good condition ____ leaking

____ broken ____ have air bubbles

10. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
11. Description of anomalies (include sample numbers): _____

Sample Custodian/Laboratory: [signature] Date: 12-21-05

Telephoned to: _____ On _____ By _____

SAMPLE RECEIPT & REVIEW FORM

GENERAL ENGINEERING LABORATORIES, LLC

PM use only

Client: CONN YANK / RAD DATA	SDG/ARCOC/Work Order: 152490
Date Received: 12-21-05	PM(A) Review (ensure non-conforming items are resolved prior to signing):
Received By: MK	

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?				Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within (4 +/- 2 C)? Record preservation method.				Circle Coolant # ice bags blue ice dry ice none other describe)
3	Chain of custody documents included with shipment?				
4	Sample containers intact and sealed?				Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?				Sample ID's, containers affected and observed pH:
6	VOA vials free of headspace (defined as < 6mm bubble)?				Sample ID's and containers affected:
7	Are Encore containers present? (If yes, immediately deliver to VOA laboratory)				
8	Samples received within holding time?				Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?				Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?				Sample ID's affected:
11	Number of containers received match number indicated on COC?				Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?				COCs: 2005-00549, 550, 551
14	Air Bill ,Tracking #'s, & Additional Comments				

	Suspected Hazard Information	Non-Regulated	Regulated	High Level	RSO RAD Receipt # _____ *If > x2 area background is observed on samples identified as "non-regulated/non-radioactive", contact the Radiation Safety group for further investigation.
A	Radiological Classification?		✓		Maximum Counts Observed*: cpm 30
B	PCB Regulated?	✓			Comments:
C	Shipped as DOT Hazardous Material? If yes, contact Waste Manager or ESH Manager.		✓		Hazard Class Shipped: UN#:

PM (or PMA) review of Hazard classification: _____ Initials _____ Date: 12/21/05

RADIOLOGICAL ANALYSIS

Radiochemistry Case Narrative
Connecticut Yankee Atomic Power Co. (YANK)
SDG MSR#05-2817

Method/Analysis Information

Product:	**Alphaspec Am241, Cm, Solid-TRU2,ALL2 (CT)**
Analytical Method:	DOE EML HASL-300, Am-05-RC Modified
Prep Method:	Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method:	Dry Soil Prep
Analytical Batch Number:	491017
Prep Batch Number:	489884
Dry Soil Prep GL-RAD-A-021 Batch Number:	489883

Sample ID	Client ID
152490019	5502-0002-022-IC-01
152490020	5502-0002-024-IC-01
152490022	9802-0000-022-RA/IS
152490023	9802-0000-025-RA/IS
152490024	Sediment
1201003410	Method Blank (MB)
1201003411	152490019(5502-0002-022-IC-01) Sample Duplicate (DUP)
1201003412	152490019(5502-0002-022-IC-01) Matrix Spike (MS)
1201003413	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 14.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 152490019 (5502-0002-022-IC-01).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Manual Integration
No manual integrations were performed on data in this batch.

Additional Comments
Sample 152490019 and the duplicate 1201003411 did not meet the Am-241 relative percent difference requirement, however they did meet the relative error ratio requirement at 1.40.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Alphaspec Pu, Solid-TRU2,ALL2 (CT)**
Analytical Method:	DOE EML HASL-300, Pu-11-RC Modified
Prep Method:	Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method:	Dry Soil Prep
Analytical Batch Number:	491018
Prep Batch Number:	489884
Dry Soil Prep GL-RAD-A-021 Batch Number:	489883

Sample ID	Client ID
152490019	5502-0002-022-IC-01
152490020	5502-0002-024-IC-01
152490022	9802-0000-022-RA/IS
152490023	9802-0000-025-RA/IS
152490024	Sediment
1201003414	Method Blank (MB)
1201003415	152490019(5502-0002-022-IC-01) Sample Duplicate (DUP)
1201003416	152490019(5502-0002-022-IC-01) Matrix Spike (MS)
1201003417	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering

Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 14.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 152490019 (5502-0002-022-IC-01).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Manual Integration
No manual integrations were performed on data in this batch.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Liquid Scint Pu241, Solid-TRU2,ALL2 (CT)**
Analytical Method:	DOE EML HASL-300, Pu-11-RC Modified
Prep Method:	Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method:	Dry Soil Prep

Analytical Batch Number:	491019
Prep Batch Number:	489884
Dry Soil Prep GL-RAD-A-021 Batch Number:	489883

Sample ID	Client ID
152490019	5502-0002-022-IC-01
152490020	5502-0002-024-IC-01
152490022	9802-0000-022-RA/IS
152490023	9802-0000-025-RA/IS
152490024	Sediment
1201003418	Method Blank (MB)
1201003419	152490019(5502-0002-022-IC-01) Sample Duplicate (DUP)
1201003420	152490019(5502-0002-022-IC-01) Matrix Spike (MS)
1201003421	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-035 REV# 8.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 152490019 (5502-0002-022-IC-01).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Manual Integration
No manual integrations were performed on data in this batch.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)**
Analytical Method:	EML HASL 300, 4.5.2.3
Prep Method:	Dry Soil Prep
Analytical Batch Number:	490174
Prep Batch Number:	489883

Sample ID	Client ID
152490001	5502-0002-021-IC-01
152490002	5502-0002-021-IC-02
152490003	5502-0002-021-IC-03
152490004	5502-0002-021-IC-04
152490005	5502-0002-021-IC-05
152490006	5502-0002-022-IC-02
152490007	5502-0002-022-IC-03
152490008	5502-0002-022-IC-04
152490009	5502-0002-022-IC-05
152490010	5502-0002-023-IC-01
152490011	5502-0002-023-IC-02
152490012	5502-0002-023-IC-03
152490013	5502-0002-023-IC-04
152490014	5502-0002-023-IC-05
152490015	5502-0002-024-IC-02
152490016	5502-0002-024-IC-03
152490017	5502-0002-024-IC-04
152490018	5502-0002-024-IC-05
152490019	5502-0002-022-IC-01
152490020	5502-0002-024-IC-01
1201001564	Method Blank (MB)
1201001565	152490001(5502-0002-021-IC-01) Sample Duplicate (DUP)
1201001566	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering

Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-013 REV# 10.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 152490001 (5502-0002-021-IC-01).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information

Qualifier	Reason	Analyte	Sample
UI	Data rejected due to interference.	Europium-155	152490019
		Manganese-54	152490006
			152490016
			152490020
UI	Data rejected due to low abundance.	Actinium-228	152490002
			152490005
		Cesium-134	152490015
			152490016

			152490020
		Cesium-137	152490004
		Cobalt-60	152490009
		Lead-212	1201001564
		Thallium-208	152490005

Method/Analysis Information

Product:	**Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived**
Analytical Method:	EML HASL 300, 4.5.2.3
Prep Method:	Dry Soil Prep
Analytical Batch Number:	490175
Prep Batch Number:	489883

Sample ID	Client ID
152490021	Sediment
152490022	9802-0000-022-RA/IS
152490023	9802-0000-025-RA/IS
1201001567	Method Blank (MB)
1201001568	152490021(Sediment) Sample Duplicate (DUP)
1201001569	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-013 REV# 10.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 152490021 (Sediment).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Additional Comments
The relative percent difference between samples 1201001568 (Sediment) and 152490021 (Sediment) for Tl-208 did not meet the duplication criteria. However, when a relative error ratio is calculated, precision is shown at 1.244.

Qualifier information

Qualifier	Reason	Analyte	Sample
UI	Data rejected due to low abundance.	Cobalt-60	1201001567
		Europium-154	152490023

Method/Analysis Information

Product:	**GFPC, Sr90, solid-HTD2,ALL2 (CT)**
Analytical Method:	EPA 905.0 Modified
Prep Method:	Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method:	Dry Soil Prep
Analytical Batch Number:	490254
Prep Batch Number:	489884
Dry Soil Prep GL-RAD-A-021 Batch Number:	489883

Sample ID	Client ID
152490001	5502-0002-021-IC-01
152490002	5502-0002-021-IC-02
152490003	5502-0002-021-IC-03
152490004	5502-0002-021-IC-04
152490005	5502-0002-021-IC-05
1201001681	Method Blank (MB)
1201001682	152553020(9804-0000-Z12-42-04) Sample Duplicate (DUP)
1201001683	152553020(9804-0000-Z12-42-04) Matrix Spike (MS)
1201001684	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-004 REV# 9.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 152553020 (9804-0000-Z12-42-04).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Chemical Recoveries
All chemical recoveries meet the required acceptance limits for this sample set.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**GFPC, Sr90, solid-HTD2,ALL2 (CT)**
Analytical Method:	EPA 905.0 Modified
Prep Method:	Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method:	Dry Soil Prep
Analytical Batch Number:	490257
Prep Batch Number:	489884

Dry Soil Prep GL-RAD-A-021 Batch Number: 489883

Sample ID	Client ID
152490006	5502-0002-022-IC-02
152490007	5502-0002-022-IC-03
152490008	5502-0002-022-IC-04
152490009	5502-0002-022-IC-05
152490010	5502-0002-023-IC-01
152490011	5502-0002-023-IC-02
152490012	5502-0002-023-IC-03
152490013	5502-0002-023-IC-04
152490014	5502-0002-023-IC-05
152490015	5502-0002-024-IC-02
152490016	5502-0002-024-IC-03
152490017	5502-0002-024-IC-04
152490018	5502-0002-024-IC-05
152490019	5502-0002-022-IC-01
152490020	5502-0002-024-IC-01
152490021	Sediment
152490022	9802-0000-022-RA/IS
152490023	9802-0000-025-RA/IS
1201001685	Method Blank (MB)
1201001686	152490021(Sediment) Sample Duplicate (DUP)
1201001687	152490021(Sediment) Matrix Spike (MS)
1201001688	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-004 REV# 9.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 152490021 (Sediment).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Chemical Recoveries
All chemical recoveries meet the required acceptance limits for this sample set.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Liquid Scint Tc99, Solid-HTD2,ALL2 (CT)**
Analytical Method:	DOE EML HASL-300, Tc-02-RC Modified
Analytical Batch Number:	490797

Sample ID	Client ID
152490019	5502-0002-022-IC-01
152490020	5502-0002-024-IC-01
152490022	9802-0000-022-RA/IS
152490023	9802-0000-025-RA/IS
152490024	Sediment
1201002918	Method Blank (MB)
1201002919	152490022(9802-0000-022-RA/IS) Sample Duplicate (DUP)
1201002920	152490022(9802-0000-022-RA/IS) Matrix Spike (MS)
1201002921	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-005 REV# 12.

Calibration Information:

Calibration Information

All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 152490022 (9802-0000-022-RA/IS).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Liquid Scint Fe55, Solid-HTD2,ALL2 (CT)**
Analytical Method:	DOE RESL Fe-1, Modified
Prep Method:	Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method:	Dry Soil Prep
Analytical Batch Number:	491662
Prep Batch Number:	489884
Dry Soil Prep GL-RAD-A-021 Batch Number:	489883

Sample ID	Client ID
152490019	5502-0002-022-IC-01
152490020	5502-0002-024-IC-01
152490022	9802-0000-022-RA/IS

152490023	9802-0000-025-RA/IS
152490024	Sediment
1201004971	Method Blank (MB)
1201004972	152490019(5502-0002-022-IC-01) Sample Duplicate (DUP)
1201004973	152490019(5502-0002-022-IC-01) Matrix Spike (MS)
1201004974	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-040 REV# 3.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 152490019 (5502-0002-022-IC-01).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
Sample 152490020 (5502-0002-024-IC-01) was recounted due to high MDA.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Liquid Scint Ni63, Solid-HTD2,ALL2 (CT)**
Analytical Method:	DOE RESL Ni-1, Modified
Prep Method:	Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method:	Dry Soil Prep
Analytical Batch Number:	491663
Prep Batch Number:	489884
Dry Soil Prep GL-RAD-A-021 Batch Number:	489883

Sample ID	Client ID
152490019	5502-0002-022-IC-01
152490020	5502-0002-024-IC-01
152490022	9802-0000-022-RA/IS
152490023	9802-0000-025-RA/IS
152490024	Sediment
1201004975	Method Blank (MB)
1201004976	152490019(5502-0002-022-IC-01) Sample Duplicate (DUP)
1201004977	152490019(5502-0002-022-IC-01) Matrix Spike (MS)
1201004978	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-022 REV# 7.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 152490019 (5502-0002-022-IC-01).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time

All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Additional Comments
The blank result for 1201004975 (MB) is greater than the MDA but less than the detection limit.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)**
Analytical Method:	EPA 906.0 Modified
Analytical Batch Number:	490362

Sample ID	Client ID
152490001	5502-0002-021-IC-01
152490002	5502-0002-021-IC-02
152490003	5502-0002-021-IC-03
152490004	5502-0002-021-IC-04
152490005	5502-0002-021-IC-05
152490006	5502-0002-022-IC-02
152490021	Sediment
152490022	9802-0000-022-RA/IS
152490023	9802-0000-025-RA/IS
1201001994	Method Blank (MB)
1201001995	152490021(Sediment) Sample Duplicate (DUP)
1201001996	152490021(Sediment) Matrix Spike (MS)
1201001997	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-002 REV# 10.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 152490021 (Sediment).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
Samples 1201001994 (MB), 1201001995 (Sediment), 152490021 (Sediment), 152490022 (9802-0000-022-RA/IS), and 152490023 (9802-0000-025-RA/IS) were recounted due to high MDAs.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)**
Analytical Method:	EPA 906.0 Modified
Analytical Batch Number:	490365

Sample ID	Client ID
152490007	5502-0002-022-IC-03
152490008	5502-0002-022-IC-04
152490009	5502-0002-022-IC-05
152490010	5502-0002-023-IC-01
152490011	5502-0002-023-IC-02
152490012	5502-0002-023-IC-03
152490013	5502-0002-023-IC-04
152490014	5502-0002-023-IC-05

152490015	5502-0002-024-IC-02
152490016	5502-0002-024-IC-03
152490017	5502-0002-024-IC-04
152490018	5502-0002-024-IC-05
152490019	5502-0002-022-IC-01
152490020	5502-0002-024-IC-01
1201002006	Method Blank (MB)
1201002007	152490007(5502-0002-022-IC-03) Sample Duplicate (DUP)
1201002008	152490007(5502-0002-022-IC-03) Matrix Spike (MS)
1201002009	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-002 REV# 10.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 152490007 (5502-0002-022-IC-03).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
Samples 1201002007 (5502-0002-022-IC-03), 152490007 (5502-0002-022-IC-03), 152490008 (5502-0002-022-IC-04), 152490009 (5502-0002-022-IC-05), 152490010 (5502-0002-023-IC-01), 152490011 (5502-0002-023-IC-02), 152490012 (5502-0002-023-IC-03), 152490013 (5502-0002-023-IC-04), 152490014 (5502-0002-023-IC-05), 152490015 (5502-0002-024-IC-02), 152490016 (5502-0002-024-IC-03), 152490017 (5502-0002-024-IC-04), 152490018 (5502-0002-024-IC-05), 152490019 (5502-0002-022-IC-01), and 152490020 (5502-0002-024-IC-01) were recounted due to high MDAs.

Samples 152490018 (5502-0002-024-IC-05), 152490019 (5502-0002-022-IC-01), and 152490020 (5502-0002-024-IC-01) were recounted to verify results. Final counts being reported.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Liquid Scint C14, Solid-HTD2,ALL2 (CT)**
Analytical Method:	EPA EERF C-01 Modified
Analytical Batch Number:	493626

Sample ID	Client ID
152490019	5502-0002-022-IC-01
152490020	5502-0002-024-IC-01
152490022	9802-0000-022-RA/IS
152490023	9802-0000-025-RA/IS
152490024	Sediment
1201009269	Method Blank (MB)
1201009270	152490019(5502-0002-022-IC-01) Sample Duplicate (DUP)
1201009271	152490019(5502-0002-022-IC-01) Matrix Spike (MS)
1201009272	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-003 REV# 8.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 152490019 (5502-0002-022-IC-01).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
Samples were reprepped due to high blank activity.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information
Manual qualifiers were not required.

Certification Statement
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:
GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.
The following data validator verified the information presented in this case narrative:

Reviewer: 1/18/06

SAMPLE DATA SUMMARY

GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

YANK001 Connecticut Yankee Atomic Power Co.

Client SDG: MSR#05-2817 GEL Work Order: 152490

The Qualifiers in this report are defined as follows:

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
< Result is less than amount reported.
> Result is greater than amount reported.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
D Sample has been diluted and reanalyzed after initially exceeding inst. calibration range
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
P The response between the confirmation and the primary columns is >40% Different.
R Sample results are rejected.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
Y QC Samples were not spiked with this compound.
Z Paint Filter qualifier: Particulates passed through the filter. No free liquids were observed.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
ND The analyte concentration is not detected above the reporting limit.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.
** Indicates the analyte is a surrogate compound.
This data report has been prepared and reviewed in accordance with General Engineering Laboratories, LLC standard operating procedures. Please direct any questions to your Project Manager, Cheryl Jones.

Reviewed by

GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 – (843) 556-8171 – www.gel.com

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID:	5502-0002-021-IC-01	Project:	YANK01204
Sample ID:	152490001	Client ID:	YANK001
Matrix:	Solid	Vol. Recv.:	
Collect Date:	13-DEC-05		
Receive Date:	21-DEC-05		
Collector:	Client		
Moisture:	6.03%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.393	+/-0.147	0.0674	+/-0.144	0.141	pCi/g		MJH1 01/10/06	2204	490174	1
Americium-241	U	0.0457	+/-0.0447	0.0369	+/-0.0438	0.0752	pCi/g					
Bismuth-212		0.358	+/-0.315	0.143	+/-0.308	0.299	pCi/g					
Bismuth-214		0.791	+/-0.103	0.0358	+/-0.101	0.0744	pCi/g					
Cesium-134	U	0.0202	+/-0.0243	0.0217	+/-0.0238	0.0454	pCi/g					
Cesium-137		0.936	+/-0.0714	0.019	+/-0.0699	0.0396	pCi/g					
Cobalt-60		0.676	+/-0.0624	0.0162	+/-0.0612	0.035	pCi/g					
Europium-152	U	0.0265	+/-0.0543	0.0479	+/-0.0533	0.0987	pCi/g					
Europium-154	U	-0.0515	+/-0.0597	0.0449	+/-0.0585	0.0966	pCi/g					
Europium-155	U	0.0399	+/-0.0514	0.0456	+/-0.0503	0.0931	pCi/g					
Lead-212		0.461	+/-0.0542	0.0267	+/-0.0532	0.0546	pCi/g					
Lead-214		0.840	+/-0.089	0.033	+/-0.0872	0.068	pCi/g					
Manganese-54	U	0.00156	+/-0.0233	0.0199	+/-0.0228	0.0416	pCi/g					
Niobium-94	U	-0.0056	+/-0.0204	0.0174	+/-0.020	0.0362	pCi/g					
Potassium-40		6.74	+/-0.728	0.139	+/-0.713	0.304	pCi/g					
Radium-226		0.791	+/-0.103	0.0358	+/-0.101	0.0744	pCi/g					
Silver-108m	U	-0.00539	+/-0.0207	0.0174	+/-0.0203	0.036	pCi/g					
Thallium-208		0.207	+/-0.0377	0.0185	+/-0.0369	0.0386	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.00167	+/-0.00291	0.00276	+/-0.00291	0.00589	pCi/g		SXF1 12/29/05	1630	490254	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	-1.49	+/-1.85	1.61	+/-1.85	3.35	pCi/g		MXP1 12/28/05	2106	490362	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	AXP2	12/26/05	1443	489884
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	12/22/05	0759	489883

The following Analytical Methods were performed

Method	Description

GENERAL ENGINEERING LABORATORIES, LLC
2040 Savage Road Charleston SC 29407 – (843) 556-8171 – www.gel.com

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID: 5502-0002-021-IC-01
Sample ID: 152490001

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
1	EML HASL 300, 4.5.2.3										
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	100	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

GENERAL ENGINEERING LABORATORIES, LLC

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID:	5502-0002-021-IC-02	Project:	YANK01204
Sample ID:	152490002	Client ID:	YANK001
Matrix:	Solid	Vol. Recv.:	
Collect Date:	13-DEC-05		
Receive Date:	21-DEC-05		
Collector:	Client		
Moisture:	5.35%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228	UUI	0.00	+/-0.149	0.108	+/-0.146	0.225	pCi/g		MJH1 01/11/06	0634	490174	1
Americium-241	U	0.0834	+/-0.210	0.139	+/-0.206	0.288	pCi/g					
Bismuth-212		0.559	+/-0.347	0.137	+/-0.340	0.292	pCi/g					
Bismuth-214		0.849	+/-0.131	0.0304	+/-0.128	0.0648	pCi/g					
Cesium-134	U	0.0294	+/-0.0224	0.0209	+/-0.0219	0.0445	pCi/g					
Cesium-137	U	0.0129	+/-0.0371	0.0162	+/-0.0363	0.0347	pCi/g					
Cobalt-60	U	0.0235	+/-0.0373	0.0184	+/-0.0366	0.0402	pCi/g					
Europium-152	U	-0.00514	+/-0.0604	0.052	+/-0.0592	0.109	pCi/g					
Europium-154	U	0.0264	+/-0.0738	0.055	+/-0.0723	0.119	pCi/g					
Europium-155	U	0.0347	+/-0.0689	0.0612	+/-0.0675	0.127	pCi/g					
Lead-212		0.530	+/-0.0749	0.0303	+/-0.0734	0.063	pCi/g					
Lead-214		0.884	+/-0.130	0.034	+/-0.127	0.0716	pCi/g					
Manganese-54	U	0.00213	+/-0.0208	0.0178	+/-0.0203	0.038	pCi/g					
Niobium-94	U	-0.00178	+/-0.0189	0.0153	+/-0.0185	0.0326	pCi/g					
Potassium-40		8.48	+/-0.901	0.139	+/-0.883	0.311	pCi/g					
Radium-226		0.849	+/-0.131	0.0304	+/-0.128	0.0648	pCi/g					
Silver-108m	U	0.0305	+/-0.0249	0.0169	+/-0.0244	0.0357	pCi/g					
Thallium-208		0.173	+/-0.0413	0.019	+/-0.0405	0.0402	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.00203	+/-0.00224	0.00207	+/-0.00224	0.00463	pCi/g		SXF1 12/29/05	1630	490254	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	-0.281	+/-1.93	1.63	+/-1.93	3.39	pCi/g		MXP1 12/28/05	2138	490362	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	AXP2	12/26/05	1443	489884
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	12/22/05	0759	489883

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
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362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID: 5502-0002-021-IC-02
Sample ID: 152490002

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	91	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

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Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID:	5502-0002-021-IC-03	Project:	YANK01204
Sample ID:	152490003	Client ID:	YANK001
Matrix:	Solid	Vol. Recv.:	
Collect Date:	13-DEC-05		
Receive Date:	21-DEC-05		
Collector:	Client		
Moisture:	6.24%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.471	+/-0.138	0.0407	+/-0.135	0.0905	pCi/g		MJH1 01/11/06	1807	490174	1
Americium-241	U	0.0388	+/-0.0986	0.0894	+/-0.0966	0.186	pCi/g					
Bismuth-212		0.226	+/-0.216	0.103	+/-0.211	0.224	pCi/g					
Bismuth-214		0.505	+/-0.0844	0.0259	+/-0.0827	0.0555	pCi/g					
Cesium-134	U	0.00861	+/-0.0199	0.0174	+/-0.0195	0.0374	pCi/g					
Cesium-137	U	0.00977	+/-0.0248	0.0144	+/-0.0243	0.031	pCi/g					
Cobalt-60	U	0.00556	+/-0.0153	0.0135	+/-0.015	0.0305	pCi/g					
Europium-152	U	-0.0307	+/-0.0418	0.0333	+/-0.041	0.071	pCi/g					
Europium-154	U	0.0251	+/-0.0499	0.0446	+/-0.0489	0.0988	pCi/g					
Europium-155	U	0.0282	+/-0.0457	0.0442	+/-0.0448	0.092	pCi/g					
Lead-212		0.436	+/-0.0584	0.0239	+/-0.0572	0.0499	pCi/g					
Lead-214		0.601	+/-0.0926	0.0251	+/-0.0908	0.0533	pCi/g					
Manganese-54	U	0.0154	+/-0.0177	0.016	+/-0.0173	0.0344	pCi/g					
Niobium-94	U	-0.00184	+/-0.015	0.0126	+/-0.0147	0.0271	pCi/g					
Potassium-40		7.65	+/-0.875	0.133	+/-0.857	0.301	pCi/g					
Radium-226		0.505	+/-0.0844	0.0259	+/-0.0827	0.0555	pCi/g					
Silver-108m	U	-0.00257	+/-0.0139	0.0122	+/-0.0136	0.0261	pCi/g					
Thallium-208		0.140	+/-0.0424	0.0137	+/-0.0416	0.0295	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.00149	+/-0.00265	0.00237	+/-0.00265	0.00504	pCi/g		SXF1 12/29/05	1630	490254	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	-2.07	+/-1.89	1.67	+/-1.89	3.46	pCi/g		MXP1 12/28/05	2210	490362	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	AXP2	12/26/05	1443	489884
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	12/22/05	0759	489883

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

GENERAL ENGINEERING LABORATORIES, LLC

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID: 5502–0002–021–IC–03
Sample ID: 152490003

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	78	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

GENERAL ENGINEERING LABORATORIES, LLC

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID:	5502-0002-021-IC-04	Project:	YANK01204
Sample ID:	152490004	Client ID:	YANK001
Matrix:	Solid	Vol. Recv.:	
Collect Date:	13-DEC-05		
Receive Date:	21-DEC-05		
Collector:	Client		
Moisture:	5.16%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.442	+/-0.125	0.0481	+/-0.122	0.101	pCi/g		MJH1 01/11/06	1807	490174	1
Americium-241	U	0.0147	+/-0.0365	0.0296	+/-0.0358	0.0603	pCi/g					
Bismuth-212		0.322	+/-0.274	0.107	+/-0.269	0.224	pCi/g					
Bismuth-214		0.759	+/-0.0818	0.0254	+/-0.0801	0.0528	pCi/g					
Cesium-134	U	0.0136	+/-0.0189	0.0168	+/-0.0185	0.0351	pCi/g					
Cesium-137	UUI	0.00	+/-0.022	0.0231	+/-0.0215	0.0474	pCi/g					
Cobalt-60	U	0.0203	+/-0.0306	0.0175	+/-0.030	0.0369	pCi/g					
Europium-152	U	-0.0369	+/-0.0427	0.0359	+/-0.0419	0.0739	pCi/g					
Europium-154	U	-0.00781	+/-0.0477	0.0386	+/-0.0468	0.0823	pCi/g					
Europium-155	U	0.0326	+/-0.042	0.0373	+/-0.0411	0.076	pCi/g					
Lead-212		0.397	+/-0.047	0.0204	+/-0.046	0.0417	pCi/g					
Lead-214		0.840	+/-0.0783	0.0259	+/-0.0767	0.0534	pCi/g					
Manganese-54	U	0.0163	+/-0.017	0.0153	+/-0.0167	0.0319	pCi/g					
Niobium-94	U	0.00459	+/-0.0155	0.0136	+/-0.0152	0.0283	pCi/g					
Potassium-40		7.47	+/-0.603	0.131	+/-0.591	0.282	pCi/g					
Radium-226		0.759	+/-0.0818	0.0254	+/-0.0801	0.0528	pCi/g					
Silver-108m	U	-0.0131	+/-0.0149	0.0122	+/-0.0146	0.0253	pCi/g					
Thallium-208		0.140	+/-0.0352	0.0141	+/-0.0345	0.0293	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.002	+/-0.00237	0.00208	+/-0.00237	0.0044	pCi/g		SXF1 12/29/05	1630	490254	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	-0.383	+/-1.94	1.64	+/-1.94	3.42	pCi/g		MXP1 12/28/05	2243	490362	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	AXP2	12/26/05	1443	489884
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	12/22/05	0759	489883

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

GENERAL ENGINEERING LABORATORIES, LLC
2040 Savage Road Charleston SC 29407 – (843) 556–8171 – www.gel.com

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID: 5502–0002–021–IC–04
Sample ID: 152490004

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 (	105	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

GENERAL ENGINEERING LABORATORIES, LLC

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID:	5502-0002-021-IC-05	Project:	YANK01204
Sample ID:	152490005	Client ID:	YANK001
Matrix:	Solid	Vol. Recv.:	
Collect Date:	13-DEC-05		
Receive Date:	21-DEC-05		
Collector:	Client		
Moisture:	5.42%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228	UUI	0.00	+/-0.144	0.108	+/-0.141	0.227	pCi/g		MJH1 01/11/06	1812	490174	1
Americium-241	U	0.0284	+/-0.0834	0.0737	+/-0.0817	0.153	pCi/g					
Bismuth-212	U	0.0946	+/-0.272	0.124	+/-0.267	0.269	pCi/g					
Bismuth-214		0.513	+/-0.106	0.0298	+/-0.104	0.0642	pCi/g					
Cesium-134	U	-0.00312	+/-0.0224	0.0186	+/-0.022	0.0404	pCi/g					
Cesium-137	U	0.00739	+/-0.0184	0.0164	+/-0.018	0.0354	pCi/g					
Cobalt-60	U	-0.000795	+/-0.0221	0.0185	+/-0.0216	0.0413	pCi/g					
Europium-152	U	0.0225	+/-0.0531	0.0464	+/-0.052	0.0979	pCi/g					
Europium-154	U	0.0181	+/-0.0573	0.0506	+/-0.0562	0.113	pCi/g					
Europium-155	U	0.0172	+/-0.0511	0.048	+/-0.0501	0.0998	pCi/g					
Lead-212		0.369	+/-0.0576	0.0269	+/-0.0564	0.0561	pCi/g					
Lead-214		0.534	+/-0.104	0.0312	+/-0.102	0.0661	pCi/g					
Manganese-54	U	0.0175	+/-0.0257	0.0156	+/-0.0252	0.0343	pCi/g					
Niobium-94	U	0.00048	+/-0.0188	0.0161	+/-0.0184	0.0345	pCi/g					
Potassium-40		7.77	+/-0.748	0.131	+/-0.733	0.305	pCi/g					
Radium-226		0.513	+/-0.106	0.0298	+/-0.104	0.0642	pCi/g					
Silver-108m	U	0.00723	+/-0.0186	0.016	+/-0.0183	0.0339	pCi/g					
Thallium-208	UUI	0.00	+/-0.035	0.0325	+/-0.0343	0.0675	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.00242	+/-0.00247	0.00214	+/-0.00247	0.00454	pCi/g		SXF1 12/29/05	1631	490254	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	-1.85	+/-1.78	1.57	+/-1.78	3.26	pCi/g		MXP1 12/28/05	2315	490362	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	AXP2	12/26/05	1443	489884
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	12/22/05	0759	489883

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID: 5502–0002–021–IC–05
Sample ID: 152490005

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	96	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID:	5502-0002-022-IC-02	Project:	YANK01204
Sample ID:	152490006	Client ID:	YANK001
Matrix:	Solid	Vol. Recv.:	
Collect Date:	14-DEC-05		
Receive Date:	21-DEC-05		
Collector:	Client		
Moisture:	5.61%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.392	+/-0.0965	0.0337	+/-0.0946	0.0711	pCi/g		MJH1 01/11/06	1919	490174	1
Americium-241	U	0.0618	+/-0.104	0.0635	+/-0.102	0.130	pCi/g					
Bismuth-212		0.242	+/-0.125	0.0686	+/-0.123	0.144	pCi/g					
Bismuth-214		0.530	+/-0.0714	0.0186	+/-0.070	0.0386	pCi/g					
Cesium-134	U	0.024	+/-0.0182	0.0116	+/-0.0178	0.0242	pCi/g					
Cesium-137	U	0.00369	+/-0.0113	0.00984	+/-0.011	0.0206	pCi/g					
Cobalt-60	U	-0.00399	+/-0.0132	0.0105	+/-0.0129	0.0224	pCi/g					
Europium-152	U	-0.00889	+/-0.0329	0.0275	+/-0.0323	0.0567	pCi/g					
Europium-154	U	-0.0309	+/-0.0372	0.0283	+/-0.0364	0.0604	pCi/g					
Europium-155	U	0.0154	+/-0.0365	0.033	+/-0.0358	0.0673	pCi/g					
Lead-212		0.413	+/-0.0556	0.0163	+/-0.0544	0.0334	pCi/g					
Lead-214		0.551	+/-0.0787	0.0196	+/-0.0772	0.0404	pCi/g					
Manganese-54	UUI	0.00	+/-0.0236	0.00971	+/-0.0231	0.0204	pCi/g					
Niobium-94	U	0.00668	+/-0.0111	0.00973	+/-0.0109	0.0202	pCi/g					
Potassium-40		7.88	+/-0.715	0.0855	+/-0.701	0.185	pCi/g					
Radium-226		0.530	+/-0.0714	0.0186	+/-0.070	0.0386	pCi/g					
Silver-108m	U	0.000299	+/-0.0107	0.0089	+/-0.0105	0.0185	pCi/g					
Thallium-208		0.132	+/-0.0308	0.00957	+/-0.0302	0.020	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.000898	+/-0.00341	0.00345	+/-0.00341	0.0074	pCi/g		SXF1 12/30/05	1044	490257	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	-0.427	+/-1.95	1.65	+/-1.95	3.43	pCi/g		MXP1 12/28/05	2347	490362	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	AXP2	12/26/05	1443	489884
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	12/22/05	0759	489883

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID: 5502–0002–022–IC–02
Sample ID: 152490006

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	100	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID:	5502-0002-022-IC-03	Project:	YANK01204
Sample ID:	152490007	Client ID:	YANK001
Matrix:	Solid	Vol. Recv.:	
Collect Date:	14-DEC-05		
Receive Date:	21-DEC-05		
Collector:	Client		
Moisture:	5.53%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.423	+/-0.163	0.0598	+/-0.160	0.129	pCi/g		MJH1 01/11/06	1920	490174	1
Americium-241	U	-0.0176	+/-0.0929	0.0745	+/-0.091	0.154	pCi/g					
Bismuth-212		0.433	+/-0.226	0.125	+/-0.221	0.270	pCi/g					
Bismuth-214		0.874	+/-0.129	0.0313	+/-0.127	0.0667	pCi/g					
Cesium-134	U	0.00727	+/-0.0264	0.0225	+/-0.0259	0.0479	pCi/g					
Cesium-137	U	-0.00966	+/-0.0272	0.0192	+/-0.0266	0.0409	pCi/g					
Cobalt-60	U	0.0122	+/-0.0214	0.019	+/-0.021	0.0418	pCi/g					
Europium-152	U	-0.00258	+/-0.0535	0.0455	+/-0.0524	0.0956	pCi/g					
Europium-154	U	0.0897	+/-0.0878	0.0644	+/-0.086	0.139	pCi/g					
Europium-155	U	0.0296	+/-0.0607	0.0539	+/-0.0595	0.111	pCi/g					
Lead-212		0.511	+/-0.0742	0.0264	+/-0.0727	0.0548	pCi/g					
Lead-214		1.02	+/-0.130	0.034	+/-0.127	0.0713	pCi/g					
Manganese-54	U	0.00103	+/-0.0219	0.0182	+/-0.0214	0.0391	pCi/g					
Niobium-94	U	0.000548	+/-0.0185	0.0156	+/-0.0181	0.0334	pCi/g					
Potassium-40		8.19	+/-0.893	0.140	+/-0.875	0.318	pCi/g					
Radium-226		0.874	+/-0.129	0.0313	+/-0.127	0.0667	pCi/g					
Silver-108m	U	-0.000209	+/-0.0184	0.0153	+/-0.018	0.0324	pCi/g					
Thallium-208		0.147	+/-0.0427	0.0162	+/-0.0419	0.0347	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	-0.00156	+/-0.00175	0.00203	+/-0.00175	0.00437	pCi/g		SXF1 12/30/05	1045	490257	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	1.47	+/-1.46	1.18	+/-1.46	2.43	pCi/g		MXP1 01/11/06	0834	490365	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	AXP2	12/26/05	1443	489884
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	12/22/05	0759	489883

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID: 5502-0002-022-IC-03
Sample ID: 152490007

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	103	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID:	5502-0002-022-IC-04	Project:	YANK01204
Sample ID:	152490008	Client ID:	YANK001
Matrix:	Solid	Vol. Recv.:	
Collect Date:	14-DEC-05		
Receive Date:	21-DEC-05		
Collector:	Client		
Moisture:	5.67%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.470	+/-0.198	0.0657	+/-0.194	0.142	pCi/g		MJH1 01/11/06	1921	490174	1
Americium-241	U	-0.0332	+/-0.0335	0.0295	+/-0.0328	0.0607	pCi/g					
Bismuth-212		0.740	+/-0.282	0.138	+/-0.277	0.298	pCi/g					
Bismuth-214		0.646	+/-0.132	0.0342	+/-0.129	0.0728	pCi/g					
Cesium-134	U	0.0109	+/-0.0253	0.0218	+/-0.0248	0.0468	pCi/g					
Cesium-137	U	-0.00378	+/-0.0218	0.018	+/-0.0213	0.0386	pCi/g					
Cobalt-60	U	-0.00923	+/-0.0235	0.0186	+/-0.0231	0.0412	pCi/g					
Europium-152	U	-0.0299	+/-0.0566	0.0482	+/-0.0555	0.101	pCi/g					
Europium-154	U	0.0527	+/-0.0707	0.0637	+/-0.0693	0.138	pCi/g					
Europium-155	U	0.0185	+/-0.0526	0.0474	+/-0.0515	0.0978	pCi/g					
Lead-212		0.578	+/-0.090	0.0278	+/-0.0882	0.0578	pCi/g					
Lead-214		0.757	+/-0.125	0.036	+/-0.122	0.0756	pCi/g					
Manganese-54	U	-0.00511	+/-0.0235	0.020	+/-0.0231	0.0429	pCi/g					
Niobium-94	U	0.00649	+/-0.0203	0.0175	+/-0.0199	0.0373	pCi/g					
Potassium-40		8.26	+/-0.926	0.197	+/-0.908	0.434	pCi/g					
Radium-226		0.646	+/-0.132	0.0342	+/-0.129	0.0728	pCi/g					
Silver-108m	U	-0.00184	+/-0.019	0.0164	+/-0.0186	0.0347	pCi/g					
Thallium-208		0.168	+/-0.0591	0.0176	+/-0.0579	0.0377	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	-0.0036	+/-0.00327	0.0038	+/-0.00327	0.00812	pCi/g		SXF1 12/30/05	1045	490257	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	1.84	+/-1.50	1.20	+/-1.50	2.48	pCi/g		MXP1 01/11/06	0936	490365	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	AXP2	12/26/05	1443	489884
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	12/22/05	0759	489883

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID: 5502–0002–022–IC–04
Sample ID: 152490008

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	96	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID:	5502-0002-022-IC-05	Project:	YANK01204
Sample ID:	152490009	Client ID:	YANK001
Matrix:	Solid	Vol. Recv.:	
Collect Date:	14-DEC-05		
Receive Date:	21-DEC-05		
Collector:	Client		
Moisture:	5.4%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.614	+/-0.174	0.0667	+/-0.171	0.145	pCi/g		MJH1 01/11/06	1923	490174	1
Americium-241	U	-0.0297	+/-0.102	0.0787	+/-0.0996	0.164	pCi/g					
Bismuth-212		0.361	+/-0.302	0.142	+/-0.296	0.307	pCi/g					
Bismuth-214		0.861	+/-0.121	0.0335	+/-0.118	0.072	pCi/g					
Cesium-134	U	0.0477	+/-0.0337	0.024	+/-0.0331	0.0516	pCi/g					
Cesium-137	U	-0.0266	+/-0.0231	0.0176	+/-0.0226	0.0381	pCi/g					
Cobalt-60	UUI	0.00	+/-0.0255	0.0224	+/-0.025	0.0497	pCi/g					
Europium-152	U	-0.011	+/-0.061	0.0511	+/-0.0598	0.108	pCi/g					
Europium-154	U	-0.0467	+/-0.0947	0.0628	+/-0.0928	0.138	pCi/g					
Europium-155	U	0.0441	+/-0.0614	0.0541	+/-0.0602	0.112	pCi/g					
Lead-212		0.484	+/-0.0648	0.029	+/-0.0635	0.0605	pCi/g					
Lead-214		1.00	+/-0.103	0.0375	+/-0.101	0.0791	pCi/g					
Manganese-54	U	0.0102	+/-0.0239	0.0207	+/-0.0234	0.0448	pCi/g					
Niobium-94	U	0.00989	+/-0.0197	0.0174	+/-0.0193	0.0375	pCi/g					
Potassium-40		8.86	+/-0.907	0.163	+/-0.889	0.374	pCi/g					
Radium-226		0.861	+/-0.121	0.0335	+/-0.118	0.072	pCi/g					
Silver-108m	U	0.0082	+/-0.0234	0.0177	+/-0.0229	0.0376	pCi/g					
Thallium-208		0.165	+/-0.0511	0.0199	+/-0.0501	0.0426	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.00261	+/-0.00391	0.00378	+/-0.00391	0.00813	pCi/g		SXF1 12/30/05	1045	490257	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	0.912	+/-1.48	1.21	+/-1.48	2.50	pCi/g		MXP1 01/11/06	1038	490365	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	AXP2	12/26/05	1443	489884
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	12/22/05	0759	489883

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID: 5502–0002–022–IC–05
Sample ID: 152490009

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	92	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID:	5502-0002-023-IC-01	Project:	YANK01204
Sample ID:	152490010	Client ID:	YANK001
Matrix:	Solid	Vol. Recv.:	
Collect Date:	15-DEC-05		
Receive Date:	21-DEC-05		
Collector:	Client		
Moisture:	4.37%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.459	+/-0.154	0.0688	+/-0.151	0.149	pCi/g		MJH1 01/11/06	1923	490174	1
Americium-241	U	0.122	+/-0.153	0.101	+/-0.150	0.208	pCi/g					
Bismuth-212		0.383	+/-0.243	0.144	+/-0.238	0.310	pCi/g					
Bismuth-214		0.955	+/-0.114	0.0399	+/-0.112	0.0846	pCi/g					
Cesium-134	U	0.0213	+/-0.026	0.0234	+/-0.0255	0.050	pCi/g					
Cesium-137		0.320	+/-0.0521	0.0211	+/-0.0511	0.0449	pCi/g					
Cobalt-60		0.153	+/-0.0526	0.0212	+/-0.0516	0.0465	pCi/g					
Europium-152	U	-0.0274	+/-0.0818	0.059	+/-0.0802	0.124	pCi/g					
Europium-154	U	-0.0677	+/-0.0673	0.0495	+/-0.066	0.110	pCi/g					
Europium-155	U	0.0498	+/-0.087	0.0678	+/-0.0853	0.140	pCi/g					
Lead-212		0.607	+/-0.0762	0.0363	+/-0.0747	0.0753	pCi/g					
Lead-214		1.09	+/-0.130	0.044	+/-0.128	0.0921	pCi/g					
Manganese-54	U	0.00736	+/-0.0258	0.022	+/-0.0253	0.047	pCi/g					
Niobium-94	U	0.0225	+/-0.0249	0.0187	+/-0.0244	0.0399	pCi/g					
Potassium-40		8.23	+/-0.862	0.198	+/-0.845	0.437	pCi/g					
Radium-226		0.955	+/-0.114	0.0399	+/-0.112	0.0846	pCi/g					
Silver-108m	U	-0.0111	+/-0.0236	0.019	+/-0.0232	0.0402	pCi/g					
Thallium-208		0.192	+/-0.0508	0.0218	+/-0.0498	0.0462	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	-0.00515	+/-0.00273	0.00333	+/-0.00274	0.00704	pCi/g		SXF1 12/30/05	1045	490257	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	0.730	+/-1.45	1.20	+/-1.45	2.47	pCi/g		MXP1 01/11/06	1141	490365	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	AXP2	12/26/05	1443	489884
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	12/22/05	0759	489883

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID: 5502-0002-023-IC-01
Sample ID: 152490010

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	102	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID:	5502-0002-023-IC-02	Project:	YANK01204
Sample ID:	152490011	Client ID:	YANK001
Matrix:	Solid	Vol. Recv.:	
Collect Date:	15-DEC-05		
Receive Date:	21-DEC-05		
Collector:	Client		
Moisture:	4.44%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		1.05	+/-0.241	0.0609	+/-0.237	0.131	pCi/g		MJH1 01/11/06	1924	490174	1
Americium-241	U	0.00424	+/-0.117	0.109	+/-0.114	0.225	pCi/g					
Bismuth-212		0.932	+/-0.312	0.139	+/-0.306	0.295	pCi/g					
Bismuth-214		0.697	+/-0.104	0.029	+/-0.102	0.0615	pCi/g					
Cesium-134	U	0.0199	+/-0.0283	0.022	+/-0.0278	0.0466	pCi/g					
Cesium-137	U	-0.00498	+/-0.0215	0.0178	+/-0.021	0.0377	pCi/g					
Cobalt-60	U	-0.00581	+/-0.0237	0.0192	+/-0.0232	0.0418	pCi/g					
Europium-152	U	0.00322	+/-0.0471	0.0422	+/-0.0461	0.0884	pCi/g					
Europium-154	U	0.0328	+/-0.0773	0.067	+/-0.0757	0.143	pCi/g					
Europium-155	U	0.059	+/-0.0606	0.0566	+/-0.0594	0.117	pCi/g					
Lead-212		1.14	+/-0.118	0.0285	+/-0.116	0.059	pCi/g					
Lead-214		0.791	+/-0.114	0.030	+/-0.112	0.063	pCi/g					
Manganese-54	U	0.00379	+/-0.0239	0.020	+/-0.0235	0.0423	pCi/g					
Niobium-94	U	0.00881	+/-0.0181	0.0158	+/-0.0178	0.0334	pCi/g					
Potassium-40		24.4	+/-1.98	0.118	+/-1.94	0.271	pCi/g					
Radium-226		0.697	+/-0.104	0.029	+/-0.102	0.0615	pCi/g					
Silver-108m	U	-0.00701	+/-0.0157	0.0133	+/-0.0154	0.0283	pCi/g					
Thallium-208		0.312	+/-0.0535	0.0164	+/-0.0525	0.0348	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	-0.00506	+/-0.00235	0.00291	+/-0.00236	0.00613	pCi/g		SXF1 12/30/05	1045	490257	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	1.19	+/-1.43	1.16	+/-1.43	2.39	pCi/g		MXP1 01/11/06	1243	490365	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	AXP2	12/26/05	1443	489884
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	12/22/05	0759	489883

The following Analytical Methods were performed

Method	Description

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID: 5502-0002-023-IC-02
Sample ID: 152490011

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
1	EML HASL 300, 4.5.2.3										
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	91	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID:	5502–0002–023–IC–03	Project:	YANK01204
Sample ID:	152490012	Client ID:	YANK001
Matrix:	Solid	Vol. Recv.:	
Collect Date:	15–DEC–05		
Receive Date:	21–DEC–05		
Collector:	Client		
Moisture:	5.95%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)												
Actinium–228		0.434	+/–0.175	0.0847	+/–0.171	0.180	pCi/g		MJH1 01/11/06	1925	490174	1
Americium–241	U	0.0378	+/–0.0373	0.0327	+/–0.0365	0.0672	pCi/g					
Bismuth–212	U	0.178	+/–0.247	0.183	+/–0.242	0.385	pCi/g					
Bismuth–214		0.737	+/–0.116	0.0382	+/–0.114	0.0807	pCi/g					
Cesium–134	U	0.0463	+/–0.0336	0.0261	+/–0.0329	0.0552	pCi/g					
Cesium–137	U	–0.00228	+/–0.0294	0.0221	+/–0.0288	0.0467	pCi/g					
Cobalt–60	U	0.00825	+/–0.0238	0.0208	+/–0.0233	0.0454	pCi/g					
Europium–152	U	0.034	+/–0.0636	0.0574	+/–0.0624	0.120	pCi/g					
Europium–154	U	–0.0632	+/–0.0765	0.0593	+/–0.075	0.129	pCi/g					
Europium–155	U	–0.00145	+/–0.0574	0.0518	+/–0.0562	0.107	pCi/g					
Lead–212		0.498	+/–0.0762	0.0309	+/–0.0746	0.0641	pCi/g					
Lead–214		0.816	+/–0.117	0.0394	+/–0.115	0.0822	pCi/g					
Manganese–54	U	0.0151	+/–0.0283	0.0248	+/–0.0277	0.0524	pCi/g					
Niobium–94	U	–0.00306	+/–0.0243	0.0208	+/–0.0238	0.0438	pCi/g					
Potassium–40		8.03	+/–0.982	0.174	+/–0.962	0.386	pCi/g					
Radium–226		0.737	+/–0.116	0.0382	+/–0.114	0.0807	pCi/g					
Silver–108m	U	0.00279	+/–0.0232	0.0201	+/–0.0228	0.042	pCi/g					
Thallium–208		0.204	+/–0.0538	0.0207	+/–0.0527	0.0438	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid–HTD2,ALL2 (CT)												
Strontium–90	U	–5.150E–06	+/–0.00226	0.00235	+/–0.00226	0.00504	pCi/g		SXF1 12/30/05	1046	490257	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)												
Tritium	U	1.54	+/–1.45	1.17	+/–1.45	2.41	pCi/g		MXP1 01/11/06	1346	490365	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	AXP2	12/26/05	1443	489884
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	TC1	12/22/05	0759	489883

The following Analytical Methods were performed

Method	Description

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID: 5502-0002-023-IC-03
Sample ID: 152490012

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
1	EML HASL 300, 4.5.2.3										
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	99	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID:	5502-0002-023-IC-04	Project:	YANK01204
Sample ID:	152490013	Client ID:	YANK001
Matrix:	Solid	Vol. Recv.:	
Collect Date:	15-DEC-05		
Receive Date:	21-DEC-05		
Collector:	Client		
Moisture:	4.68%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.540	+/-0.181	0.0588	+/-0.177	0.128	pCi/g		MJH1 01/11/06	1926	490174	1
Americium-241	U	-0.0013	+/-0.0222	0.0193	+/-0.0217	0.0401	pCi/g					
Bismuth-212		0.302	+/-0.186	0.134	+/-0.183	0.287	pCi/g					
Bismuth-214		0.786	+/-0.117	0.0273	+/-0.114	0.0587	pCi/g					
Cesium-134	U	0.0217	+/-0.0238	0.0211	+/-0.0233	0.0452	pCi/g					
Cesium-137	U	-0.00975	+/-0.0198	0.0134	+/-0.0194	0.0293	pCi/g					
Cobalt-60	U	-0.0102	+/-0.0226	0.0172	+/-0.0221	0.0384	pCi/g					
Europium-152	U	0.00248	+/-0.0498	0.0416	+/-0.0488	0.0877	pCi/g					
Europium-154	U	-0.0295	+/-0.0619	0.0475	+/-0.0607	0.106	pCi/g					
Europium-155	U	0.0251	+/-0.0522	0.0333	+/-0.0512	0.0692	pCi/g					
Lead-212		0.441	+/-0.0669	0.0223	+/-0.0655	0.0467	pCi/g					
Lead-214		0.841	+/-0.116	0.0277	+/-0.114	0.0586	pCi/g					
Manganese-54	U	0.000852	+/-0.0206	0.0169	+/-0.0202	0.0365	pCi/g					
Niobium-94	U	0.0116	+/-0.0187	0.0164	+/-0.0184	0.035	pCi/g					
Potassium-40		8.31	+/-0.962	0.155	+/-0.943	0.350	pCi/g					
Radium-226		0.786	+/-0.117	0.0273	+/-0.114	0.0587	pCi/g					
Silver-108m	U	0.000497	+/-0.0177	0.0137	+/-0.0173	0.0291	pCi/g					
Thallium-208		0.178	+/-0.0465	0.0148	+/-0.0455	0.0319	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.00242	+/-0.0037	0.00359	+/-0.0037	0.0077	pCi/g		SXF1 12/30/05	1046	490257	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	-0.0504	+/-1.41	1.18	+/-1.41	2.44	pCi/g		MXP1 01/11/06	1448	490365	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	AXP2	12/26/05	1443	489884
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	12/22/05	0759	489883

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID: 5502-0002-023-IC-04
Sample ID: 152490013

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	103	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID:	5502-0002-023-IC-05	Project:	YANK01204
Sample ID:	152490014	Client ID:	YANK001
Matrix:	Solid	Vol. Recv.:	
Collect Date:	15-DEC-05		
Receive Date:	21-DEC-05		
Collector:	Client		
Moisture:	4.9%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.551	+/-0.189	0.070	+/-0.186	0.148	pCi/g		MJH1 01/13/06	0710	490174	1
Americium-241	U	-0.00613	+/-0.0348	0.0286	+/-0.0341	0.0587	pCi/g					
Bismuth-212	U	0.245	+/-0.310	0.152	+/-0.304	0.320	pCi/g					
Bismuth-214		0.782	+/-0.129	0.0373	+/-0.126	0.0781	pCi/g					
Cesium-134	U	0.0293	+/-0.0274	0.0236	+/-0.0269	0.0496	pCi/g					
Cesium-137	U	0.0145	+/-0.0247	0.022	+/-0.0242	0.046	pCi/g					
Cobalt-60	U	0.00911	+/-0.0239	0.0207	+/-0.0234	0.0444	pCi/g					
Europium-152	U	-0.0324	+/-0.0577	0.0488	+/-0.0565	0.101	pCi/g					
Europium-154	U	0.0188	+/-0.0715	0.0615	+/-0.0701	0.131	pCi/g					
Europium-155	U	0.044	+/-0.063	0.0463	+/-0.0617	0.0951	pCi/g					
Lead-212		0.444	+/-0.0663	0.0278	+/-0.065	0.0574	pCi/g					
Lead-214		0.846	+/-0.130	0.0359	+/-0.127	0.0745	pCi/g					
Manganese-54	U	0.00424	+/-0.0258	0.022	+/-0.0253	0.0462	pCi/g					
Niobium-94	U	0.0095	+/-0.0223	0.0196	+/-0.0218	0.0409	pCi/g					
Potassium-40		7.59	+/-0.857	0.140	+/-0.840	0.311	pCi/g					
Radium-226		0.782	+/-0.129	0.0373	+/-0.126	0.0781	pCi/g					
Silver-108m	U	0.00921	+/-0.0206	0.0179	+/-0.0202	0.0373	pCi/g					
Thallium-208		0.149	+/-0.0522	0.0216	+/-0.0511	0.0451	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.00135	+/-0.00342	0.00342	+/-0.00342	0.00731	pCi/g		SXF1 12/30/05	1046	490257	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	0.868	+/-1.41	1.15	+/-1.41	2.38	pCi/g		MXP1 01/11/06	1551	490365	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	AXP2	12/26/05	1443	489884
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	12/22/05	0759	489883

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID: 5502–0002–023–IC–05
Sample ID: 152490014

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	102	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID:	5502–0002–024–IC–02	Project:	YANK01204
Sample ID:	152490015	Client ID:	YANK001
Matrix:	Solid	Vol. Recv.:	
Collect Date:	15–DEC–05		
Receive Date:	21–DEC–05		
Collector:	Client		
Moisture:	5.7%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)												
Actinium–228		0.439	+/–0.152	0.0449	+/–0.149	0.0964	pCi/g		MJH1 01/11/06	1927	490174	1
Americium–241	U	0.000612	+/–0.0904	0.0776	+/–0.0886	0.161	pCi/g					
Bismuth–212		0.486	+/–0.188	0.0925	+/–0.184	0.198	pCi/g					
Bismuth–214		0.460	+/–0.0692	0.0247	+/–0.0678	0.0523	pCi/g					
Cesium–134	UUI	0.00	+/–0.0201	0.016	+/–0.0197	0.034	pCi/g					
Cesium–137	U	–0.0172	+/–0.0157	0.0118	+/–0.0154	0.0253	pCi/g					
Cobalt–60	U	–0.00219	+/–0.0162	0.0129	+/–0.0158	0.0282	pCi/g					
Europium–152	U	0.0113	+/–0.0401	0.0361	+/–0.0393	0.0758	pCi/g					
Europium–154	U	0.0424	+/–0.0484	0.039	+/–0.0474	0.0847	pCi/g					
Europium–155	U	–0.0168	+/–0.0491	0.0441	+/–0.0481	0.0916	pCi/g					
Lead–212		0.448	+/–0.0453	0.0216	+/–0.0444	0.0449	pCi/g					
Lead–214		0.600	+/–0.0729	0.0252	+/–0.0714	0.053	pCi/g					
Manganese–54	U	0.00767	+/–0.0165	0.0146	+/–0.0162	0.031	pCi/g					
Niobium–94	U	0.00335	+/–0.0141	0.0119	+/–0.0138	0.0252	pCi/g					
Potassium–40		9.61	+/–0.682	0.110	+/–0.668	0.243	pCi/g					
Radium–226		0.460	+/–0.0692	0.0247	+/–0.0678	0.0523	pCi/g					
Silver–108m	U	–0.0113	+/–0.0137	0.0112	+/–0.0134	0.0237	pCi/g					
Thallium–208		0.148	+/–0.0371	0.0119	+/–0.0364	0.0253	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid–HTD2,ALL2 (CT)												
Strontium–90	U	0.00357	+/–0.00262	0.00236	+/–0.00262	0.00506	pCi/g		SXF1 12/30/05	1046	490257	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)												
Tritium	U	0.589	+/–1.44	1.19	+/–1.44	2.45	pCi/g		MXP1 01/11/06	1653	490365	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	AXP2	12/26/05	1443	489884
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	TC1	12/22/05	0759	489883

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID: 5502–0002–024–IC–02
Sample ID: 152490015

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	103	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID:	5502–0002–024–IC–03	Project:	YANK01204
Sample ID:	152490016	Client ID:	YANK001
Matrix:	Solid	Vol. Recv.:	
Collect Date:	15–DEC–05		
Receive Date:	21–DEC–05		
Collector:	Client		
Moisture:	5.44%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)												
Actinium–228		0.521	+/–0.0903	0.0345	+/–0.0885	0.0732	pCi/g		MJH1 01/11/06	2233	490174	1
Americium–241	U	–0.00854	+/–0.0517	0.0406	+/–0.0506	0.0833	pCi/g					
Bismuth–212		0.458	+/–0.164	0.0689	+/–0.161	0.146	pCi/g					
Bismuth–214		0.516	+/–0.0562	0.0182	+/–0.0551	0.0381	pCi/g					
Cesium–134	UUI	0.00	+/–0.0233	0.012	+/–0.0228	0.0252	pCi/g					
Cesium–137	U	–0.00394	+/–0.0116	0.00952	+/–0.0113	0.0201	pCi/g					
Cobalt–60	U	–0.00638	+/–0.013	0.0102	+/–0.0127	0.022	pCi/g					
Europium–152	U	–0.0011	+/–0.0317	0.0264	+/–0.0311	0.0548	pCi/g					
Europium–154	U	0.0354	+/–0.0363	0.0327	+/–0.0356	0.0699	pCi/g					
Europium–155	U	0.0116	+/–0.0293	0.0272	+/–0.0287	0.0559	pCi/g					
Lead–212		0.391	+/–0.0326	0.0143	+/–0.0319	0.0296	pCi/g					
Lead–214		0.572	+/–0.0512	0.0201	+/–0.0502	0.0416	pCi/g					
Manganese–54	UUI	0.00	+/–0.00787	0.0104	+/–0.00771	0.0218	pCi/g					
Niobium–94	U	0.00813	+/–0.0108	0.00946	+/–0.0106	0.0198	pCi/g					
Potassium–40		8.15	+/–0.508	0.0869	+/–0.498	0.190	pCi/g					
Radium–226		0.516	+/–0.0562	0.0182	+/–0.0551	0.0381	pCi/g					
Silver–108m	U	0.00202	+/–0.00957	0.0085	+/–0.00938	0.0178	pCi/g					
Thallium–208		0.125	+/–0.0235	0.00939	+/–0.0231	0.0197	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid–HTD2,ALL2 (CT)												
Strontium–90	U	0.000539	+/–0.00402	0.00412	+/–0.00402	0.00888	pCi/g		SXF1 12/30/05	1047	490257	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)												
Tritium	U	0.783	+/–1.43	1.17	+/–1.43	2.42	pCi/g		MXP1 01/11/06	1756	490365	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	AXP2	12/26/05	1443	489884
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	TC1	12/22/05	0759	489883

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID: 5502-0002-024-IC-03
Sample ID: 152490016

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	84	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID:	5502-0002-024-IC-04	Project:	YANK01204
Sample ID:	152490017	Client ID:	YANK001
Matrix:	Solid	Vol. Recv.:	
Collect Date:	15-DEC-05		
Receive Date:	21-DEC-05		
Collector:	Client		
Moisture:	6.08%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.428	+/-0.0834	0.0255	+/-0.0818	0.0534	pCi/g		MJH1 01/11/06	2233	490174	1
Americium-241	U	-0.0114	+/-0.0293	0.0272	+/-0.0287	0.0556	pCi/g					
Bismuth-212		0.270	+/-0.118	0.0577	+/-0.116	0.120	pCi/g					
Bismuth-214		0.420	+/-0.0618	0.015	+/-0.0606	0.0311	pCi/g					
Cesium-134	U	0.0132	+/-0.0107	0.00937	+/-0.0105	0.0195	pCi/g					
Cesium-137	U	-0.00264	+/-0.00893	0.00749	+/-0.00875	0.0156	pCi/g					
Cobalt-60	U	-0.00519	+/-0.00988	0.0078	+/-0.00968	0.0165	pCi/g					
Europium-152	U	0.00442	+/-0.0242	0.0211	+/-0.0237	0.0434	pCi/g					
Europium-154	U	-0.0339	+/-0.0289	0.0218	+/-0.0283	0.046	pCi/g					
Europium-155	U	0.0368	+/-0.038	0.0235	+/-0.0372	0.0481	pCi/g					
Lead-212		0.375	+/-0.0413	0.0125	+/-0.0405	0.0256	pCi/g					
Lead-214		0.516	+/-0.0624	0.0145	+/-0.0612	0.0299	pCi/g					
Manganese-54	U	0.000901	+/-0.00998	0.00831	+/-0.00978	0.0173	pCi/g					
Niobium-94	U	0.00661	+/-0.00834	0.00729	+/-0.00817	0.0151	pCi/g					
Potassium-40		8.38	+/-0.620	0.0645	+/-0.608	0.138	pCi/g					
Radium-226		0.420	+/-0.0618	0.015	+/-0.0606	0.0311	pCi/g					
Silver-108m	U	-0.00407	+/-0.00795	0.00654	+/-0.00779	0.0136	pCi/g					
Thallium-208		0.135	+/-0.0248	0.00731	+/-0.0243	0.0152	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.00368	+/-0.00386	0.00361	+/-0.00387	0.00778	pCi/g		SXF1 12/30/05	1046	490257	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	2.30	+/-1.43	1.13	+/-1.43	2.34	pCi/g		MXP1 01/11/06	1858	490365	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	AXP2	12/26/05	1443	489884
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	12/22/05	0759	489883

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID: 5502–0002–024–IC–04
Sample ID: 152490017

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	96	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID:	5502-0002-024-IC-05	Project:	YANK01204
Sample ID:	152490018	Client ID:	YANK001
Matrix:	Solid	Vol. Recv.:	
Collect Date:	15-DEC-05		
Receive Date:	21-DEC-05		
Collector:	Client		
Moisture:	5.58%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.392	+/-0.0994	0.0347	+/-0.0974	0.0731	pCi/g		MJH1 01/11/06	2234	490174	1
Americium-241	U	0.0162	+/-0.0574	0.0387	+/-0.0563	0.0794	pCi/g					
Bismuth-212		0.216	+/-0.131	0.0683	+/-0.128	0.144	pCi/g					
Bismuth-214		0.421	+/-0.0579	0.0172	+/-0.0568	0.0359	pCi/g					
Cesium-134	U	0.010	+/-0.0129	0.0114	+/-0.0127	0.0239	pCi/g					
Cesium-137	U	-0.00302	+/-0.0111	0.00938	+/-0.0109	0.0197	pCi/g					
Cobalt-60	U	-0.00415	+/-0.0119	0.00957	+/-0.0117	0.0206	pCi/g					
Europium-152	U	0.0274	+/-0.0296	0.0266	+/-0.029	0.055	pCi/g					
Europium-154	U	-0.0355	+/-0.0393	0.0304	+/-0.0385	0.0648	pCi/g					
Europium-155	U	0.0272	+/-0.0313	0.0286	+/-0.0307	0.0586	pCi/g					
Lead-212		0.323	+/-0.0429	0.015	+/-0.0421	0.0309	pCi/g					
Lead-214		0.495	+/-0.0674	0.017	+/-0.066	0.0353	pCi/g					
Manganese-54	U	0.000774	+/-0.0125	0.0105	+/-0.0122	0.022	pCi/g					
Niobium-94	U	0.00245	+/-0.0105	0.00907	+/-0.0103	0.019	pCi/g					
Potassium-40		7.93	+/-0.697	0.0814	+/-0.683	0.178	pCi/g					
Radium-226		0.421	+/-0.0579	0.0172	+/-0.0568	0.0359	pCi/g					
Silver-108m	U	-0.0126	+/-0.0104	0.00826	+/-0.0102	0.0172	pCi/g					
Thallium-208		0.0809	+/-0.0273	0.0101	+/-0.0267	0.021	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.000752	+/-0.00411	0.00427	+/-0.00411	0.0093	pCi/g		SXF1 12/30/05	1409	490257	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium		12.4	+/-1.78	1.17	+/-1.80	2.41	pCi/g		MXP1 01/12/06	1636	490365	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	AXP2	12/26/05	1443	489884
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	12/22/05	0759	489883

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID: 5502-0002-024-IC-05
Sample ID: 152490018

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	89	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID:	5502-0002-022-IC-01	Project:	YANK01204
Sample ID:	152490019	Client ID:	YANK001
Matrix:	Solid	Vol. Recv.:	
Collect Date:	14-DEC-05		
Receive Date:	21-DEC-05		
Collector:	Client		
Moisture:	8.49%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Alpha Spec Analysis												
Alphaspec Am241, Cm, Solid-TRU2,ALL2 (CT)												
Americium-241		0.243	+/-0.0747	0.021	+/-0.0804	0.0571	pCi/g		LCW1 01/07/06	0848	491017	1
Curium-242	U	0.00173	+/-0.0131	0.0122	+/-0.0131	0.0411	pCi/g					
Curium-243/244	U	0.0428	+/-0.0394	0.027	+/-0.0398	0.069	pCi/g					
Alphaspec Pu, Solid-TRU2,ALL2 (CT)												
Plutonium-238	U	-0.00442	+/-0.022	0.0261	+/-0.022	0.0709	pCi/g		LCW1 01/07/06	0848	491018	2
Plutonium-239/240	U	0.00746	+/-0.0252	0.0223	+/-0.0252	0.0632	pCi/g					
Liquid Scint Pu241, Solid-TRU2,ALL2 (CT)												
Plutonium-241	U	0.480	+/-1.20	0.994	+/-1.20	2.04	pCi/g		LCW1 01/10/06	1346	491019	3
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.584	+/-0.222	0.0842	+/-0.217	0.173	pCi/g		MJH1 01/11/06	2235	490174	4
Americium-241		0.155	+/-0.0411	0.0267	+/-0.0402	0.0542	pCi/g					
Bismuth-212		0.391	+/-0.280	0.165	+/-0.275	0.340	pCi/g					
Bismuth-214		0.704	+/-0.104	0.0355	+/-0.102	0.073	pCi/g					
Cesium-134	U	0.033	+/-0.0284	0.0244	+/-0.0278	0.0502	pCi/g					
Cesium-137		1.01	+/-0.0949	0.0188	+/-0.093	0.0389	pCi/g					
Cobalt-60		2.83	+/-0.177	0.0179	+/-0.173	0.0377	pCi/g					
Europium-152	U	0.0189	+/-0.0534	0.0469	+/-0.0523	0.096	pCi/g					
Europium-154	U	0.0637	+/-0.0664	0.0505	+/-0.0651	0.106	pCi/g					
Europium-155	UUI	0.00	+/-0.0567	0.037	+/-0.0556	0.0754	pCi/g					
Lead-212		0.551	+/-0.0736	0.0258	+/-0.0722	0.0527	pCi/g					
Lead-214		0.807	+/-0.116	0.0321	+/-0.113	0.0659	pCi/g					
Manganese-54	U	-0.013	+/-0.0253	0.0213	+/-0.0248	0.0439	pCi/g					
Niobium-94	U	-0.0148	+/-0.0246	0.017	+/-0.0241	0.0351	pCi/g					
Potassium-40		8.12	+/-0.766	0.120	+/-0.750	0.259	pCi/g					
Radium-226		0.704	+/-0.104	0.0355	+/-0.102	0.073	pCi/g					
Silver-108m	U	0.0149	+/-0.019	0.0167	+/-0.0186	0.0343	pCi/g					
Thallium-208		0.156	+/-0.0421	0.0182	+/-0.0412	0.0375	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	9.110E-05	+/-0.00387	0.00411	+/-0.00387	0.00894	pCi/g		SXF1 12/30/05	1409	490257	5
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium		12.7	+/-1.74	1.12	+/-1.75	2.31	pCi/g		MXP1 01/12/06	1738	490365	6
Liquid Scint C14, Solid-HTD2,ALL2 (CT)												

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID: 5502-0002-022-IC-01
Sample ID: 152490019

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Liquid Scintillation Analysis												
Liquid Scint C14, Solid-HTD2,ALL2 (CT)												
Carbon-14		1.44	+/-0.369	0.282	+/-0.370	0.575	pCi/g		SLN1 01/12/06	1922	493626	7
Liquid Scint Fe55, Solid-HTD2,ALL2 (CT)												
Iron-55	U	-0.355	+/-1.11	0.871	+/-1.11	1.77	pCi/g		BXF1 01/11/06	1733	491662	9
Liquid Scint Ni63, Solid-HTD2,ALL2 (CT)												
Nickel-63	U	0.444	+/-1.75	1.46	+/-1.75	2.99	pCi/g		BXF1 01/09/06	2027	491663	10
Liquid Scint Tc99, Solid-HTD2,ALL2 (CT)												
Technetium-99	U	0.359	+/-0.387	0.312	+/-0.387	0.646	pCi/g		SLN1 01/11/06	1542	490797	11
Solid Preparation												
Laboratory Composite - CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	AXP2	12/26/05	1443	489884
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	12/22/05	0759	489883
GL-RAD-A-026	Laboratory sample composite				489882

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, Pu-11-RC Modified
4	EML HASL 300, 4.5.2.3
5	EPA 905.0 Modified
6	EPA 906.0 Modified
7	EPA EERF C-01 Modified
8	EPA EERF C-01 Modified
9	DOE RESL Fe-1, Modified
10	DOE RESL Ni-1, Modified
11	DOE EML HASL-300, Tc-02-RC Modified
12	GL-RAD-A-026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243	Alphaspec Am241, Cm, Solid-TRI	103	(15%-125%)

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Company : Connecticut Yankee Atomic Power
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362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID: 5502-0002-022-IC-01
Sample ID: 152490019

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
Plutonium-242		Alphaspec Pu, Solid-TRU2,ALL2			97		(15%-125%)				
Carrier/Tracer Recovery		Liquid Scint Pu241, Solid-TRU2,/			94		(25%-125%)				
Carrier/Tracer Recovery		GFPC, Sr90, solid-HTD2,ALL2 ((			84		(25%-125%)				
Carrier/Tracer Recovery		Liquid Scint Fe55, Solid-HTD2,Al			65		(15%-125%)				
Carrier/Tracer Recovery		Liquid Scint Ni63, Solid-HTD2,Al			85		(25%-125%)				
Carrier/Tracer Recovery		Liquid Scint Tc99, Solid-HTD2,A			82		(15%-125%)				

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID:	5502-0002-024-IC-01	Project:	YANK01204
Sample ID:	152490020	Client ID:	YANK001
Matrix:	Solid	Vol. Recv.:	
Collect Date:	15-DEC-05		
Receive Date:	21-DEC-05		
Collector:	Client		
Moisture:	5.46%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Alpha Spec Analysis												
Alphaspec Am241, Cm, Solid-TRU2,ALL2 (CT)												
Americium-241		0.0414	+/-0.0313	0.00674	+/-0.0317	0.0295	pCi/g		LCW1 01/07/06	0848	491017	1
Curium-242	U	0.00	+/-0.0128	0.00	+/-0.0128	0.0177	pCi/g					
Curium-243/244	U	-0.0242	+/-0.0163	0.0278	+/-0.0165	0.0716	pCi/g					
Alphaspec Pu, Solid-TRU2,ALL2 (CT)												
Plutonium-238	U	-0.0101	+/-0.0225	0.0287	+/-0.0225	0.0726	pCi/g		LCW1 01/07/06	0848	491018	2
Plutonium-239/240	U	0.00473	+/-0.0207	0.0192	+/-0.0207	0.0537	pCi/g					
Liquid Scint Pu241, Solid-TRU2,ALL2 (CT)												
Plutonium-241	U	1.43	+/-2.09	1.72	+/-2.09	3.52	pCi/g		LCW1 01/10/06	1433	491019	3
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.304	+/-0.0957	0.0361	+/-0.0937	0.0759	pCi/g		MJH1 01/11/06	2235	490174	4
Americium-241	U	-0.00512	+/-0.0393	0.0375	+/-0.0385	0.077	pCi/g					
Bismuth-212		0.205	+/-0.148	0.0718	+/-0.145	0.151	pCi/g					
Bismuth-214		0.383	+/-0.0559	0.0171	+/-0.0548	0.0358	pCi/g					
Cesium-134	UUI	0.00	+/-0.0208	0.0121	+/-0.0204	0.0253	pCi/g					
Cesium-137		0.340	+/-0.031	0.00886	+/-0.0304	0.0186	pCi/g					
Cobalt-60		0.186	+/-0.0263	0.009	+/-0.0257	0.0194	pCi/g					
Europium-152	U	0.0132	+/-0.0279	0.0254	+/-0.0273	0.0525	pCi/g					
Europium-154	U	-0.0102	+/-0.0352	0.0295	+/-0.0345	0.0629	pCi/g					
Europium-155	U	0.0107	+/-0.0247	0.0256	+/-0.0242	0.0524	pCi/g					
Lead-212		0.341	+/-0.0312	0.0146	+/-0.0305	0.0301	pCi/g					
Lead-214		0.376	+/-0.0508	0.018	+/-0.0498	0.0372	pCi/g					
Manganese-54	UUI	0.00	+/-0.029	0.00932	+/-0.0284	0.0196	pCi/g					
Niobium-94	U	0.00093	+/-0.0101	0.00889	+/-0.00989	0.0186	pCi/g					
Potassium-40		7.09	+/-0.433	0.0758	+/-0.424	0.166	pCi/g					
Radium-226		0.383	+/-0.0559	0.0171	+/-0.0548	0.0358	pCi/g					
Silver-108m	U	-0.00254	+/-0.00979	0.00844	+/-0.0096	0.0176	pCi/g					
Thallium-208		0.104	+/-0.0209	0.00943	+/-0.0205	0.0197	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	-0.00319	+/-0.00372	0.00439	+/-0.00372	0.00949	pCi/g		SXF1 12/30/05	1409	490257	5
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	2.06	+/-1.46	1.16	+/-1.46	2.39	pCi/g		MXP1 01/12/06	1840	490365	6
Liquid Scint C14, Solid-HTD2,ALL2 (CT)												

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Certificate of Analysis

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362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID: 5502-0002-024-IC-01
Sample ID: 152490020

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
Rad Liquid Scintillation Analysis											
Liquid Scint C14, Solid-HTD2,ALL2 (CT)											
Carbon-14	U	-0.104	+/-0.328	0.277	+/-0.328	0.566	pCi/g		SLN1 01/12/06	2009	493626 7
Liquid Scint Fe55, Solid-HTD2,ALL2 (CT)											
Iron-55	U	-1.04	+/-1.42	1.15	+/-1.42	2.34	pCi/g		BXF1 01/13/06	0404	491662 9
Liquid Scint Ni63, Solid-HTD2,ALL2 (CT)											
Nickel-63	U	0.299	+/-1.87	1.56	+/-1.87	3.20	pCi/g		BXF1 01/09/06	2114	491663 10
Liquid Scint Tc99, Solid-HTD2,ALL2 (CT)											
Technetium-99	U	-0.00812	+/-0.352	0.296	+/-0.352	0.612	pCi/g		SLN1 01/11/06	1558	490797 11
Solid Preparation											
Laboratory Composite - CONCRETE											

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	AXP2	12/26/05	1443	489884
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	12/22/05	0759	489883
GL-RAD-A-026	Laboratory sample composite				489882

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, Pu-11-RC Modified
4	EML HASL 300, 4.5.2.3
5	EPA 905.0 Modified
6	EPA 906.0 Modified
7	EPA EERF C-01 Modified
8	EPA EERF C-01 Modified
9	DOE RESL Fe-1, Modified
10	DOE RESL Ni-1, Modified
11	DOE EML HASL-300, Tc-02-RC Modified
12	GL-RAD-A-026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243	Alphaspec Am241, Cm, Solid-TR1	107	(15%-125%)

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Company : Connecticut Yankee Atomic Power
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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID: 5502-0002-024-IC-01
Sample ID: 152490020

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
Plutonium-242		Alphaspec Pu, Solid-TRU2,ALL2			101		(15%-125%)				
Carrier/Tracer Recovery		Liquid Scint Pu241, Solid-TRU2,/			55		(25%-125%)				
Carrier/Tracer Recovery		GFPC, Sr90, solid-HTD2,ALL2 ((			98		(25%-125%)				
Carrier/Tracer Recovery		Liquid Scint Fe55, Solid-HTD2,Al			54		(15%-125%)				
Carrier/Tracer Recovery		Liquid Scint Ni63, Solid-HTD2,Al			78		(25%-125%)				
Carrier/Tracer Recovery		Liquid Scint Tc99, Solid-HTD2,A			88		(15%-125%)				

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID:	Sediment	Project:	YANK01204
Sample ID:	152490021	Client ID:	YANK001
Matrix:	Soil	Vol. Recv.:	
Collect Date:	15-DEC-05		
Receive Date:	21-DEC-05		
Collector:	Client		
Moisture:	16.1%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived												
Actinium-228		0.390	+/-0.139	0.0641	+/-0.136	0.137	pCi/g		MJH1 12/28/05	1926	490175	1
Americium-241	U	0.0529	+/-0.121	0.0815	+/-0.119	0.169	pCi/g					
Bismuth-212		0.613	+/-0.233	0.133	+/-0.228	0.283	pCi/g					
Bismuth-214		0.418	+/-0.0702	0.0316	+/-0.0688	0.0671	pCi/g					
Cesium-134	U	0.00576	+/-0.023	0.020	+/-0.0225	0.0426	pCi/g					
Cesium-137	U	0.0208	+/-0.0212	0.0197	+/-0.0208	0.0417	pCi/g					
Cobalt-60	U	0.00849	+/-0.0202	0.0179	+/-0.0198	0.0391	pCi/g					
Europium-152	U	-0.00485	+/-0.0552	0.0479	+/-0.0541	0.101	pCi/g					
Europium-154	U	0.054	+/-0.0628	0.0577	+/-0.0615	0.125	pCi/g					
Europium-155	U	0.00833	+/-0.062	0.0554	+/-0.0607	0.115	pCi/g					
Lead-212		0.466	+/-0.0571	0.0321	+/-0.056	0.0664	pCi/g					
Lead-214		0.413	+/-0.0828	0.0355	+/-0.0811	0.0745	pCi/g					
Manganese-54	U	0.00897	+/-0.0202	0.0178	+/-0.0198	0.038	pCi/g					
Niobium-94	U	-0.0166	+/-0.0187	0.015	+/-0.0183	0.0321	pCi/g					
Potassium-40		14.0	+/-0.920	0.139	+/-0.902	0.312	pCi/g					
Radium-226		0.418	+/-0.0702	0.0316	+/-0.0688	0.0671	pCi/g					
Silver-108m	U	0.0124	+/-0.0171	0.0155	+/-0.0168	0.0328	pCi/g					
Thallium-208		0.155	+/-0.0514	0.0163	+/-0.0504	0.0347	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid - 0.025 pCi/g												
Strontium-90	U	0.00376	+/-0.00493	0.00435	+/-0.00493	0.00922	pCi/g		SXF1 12/30/05	1409	490257	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid - 1 to 2 pCi/g												
Tritium	U	0.519	+/-0.892	0.737	+/-0.892	1.51	pCi/g		MXP1 12/29/05	1631	490362	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	AXP2	12/26/05	1443	489884
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	12/22/05	0759	489883

The following Analytical Methods were performed

Method	Description

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID: Sediment
Sample ID: 152490021

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 906.0 Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid – 0.025 pCi/g	80	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID:	9802-0000-022-RA/IS	Project:	YANK01204
Sample ID:	152490022	Client ID:	YANK001
Matrix:	Soil	Vol. Recv.:	
Collect Date:	03-NOV-05		
Receive Date:	21-DEC-05		
Collector:	Client		
Moisture:	5.46%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Alpha Spec Analysis												
Alphaspec Am241, Cm, Solid ALL FSS												
Americium-241	U	0.0488	+/-0.121	0.094	+/-0.121	0.288	pCi/g		LCW1 01/07/06	0848	491017	1
Curium-242	U	0.0136	+/-0.103	0.0961	+/-0.103	0.324	pCi/g					
Curium-243/244	U	-0.0148	+/-0.117	0.134	+/-0.117	0.368	pCi/g					
Alphaspec Pu, Solid-ALL FSS												
Plutonium-238	U	-0.0498	+/-0.0675	0.105	+/-0.0677	0.281	pCi/g		LCW1 01/07/06	0848	491018	2
Plutonium-239/240	U	-0.0233	+/-0.085	0.104	+/-0.0851	0.280	pCi/g					
Liquid Scint Pu241, Solid-ALL FSS												
Plutonium-241	U	2.32	+/-5.26	4.36	+/-5.27	8.94	pCi/g		LCW1 01/10/06	1520	491019	3
Rad Gamma Spec Analysis												
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived												
Actinium-228		0.677	+/-0.137	0.0431	+/-0.134	0.0921	pCi/g		MJH1 12/28/05	1932	490175	4
Americium-241	U	0.0255	+/-0.0516	0.0486	+/-0.0506	0.100	pCi/g					
Bismuth-212		0.375	+/-0.225	0.102	+/-0.220	0.217	pCi/g					
Bismuth-214		0.527	+/-0.0829	0.0276	+/-0.0812	0.0577	pCi/g					
Cesium-134	U	0.0234	+/-0.0192	0.0172	+/-0.0188	0.0361	pCi/g					
Cesium-137	U	-0.00463	+/-0.0155	0.0129	+/-0.0152	0.0272	pCi/g					
Cobalt-60	U	0.00267	+/-0.0186	0.0155	+/-0.0183	0.0331	pCi/g					
Europium-152	U	-0.0314	+/-0.0402	0.033	+/-0.0394	0.069	pCi/g					
Europium-154	U	-0.0205	+/-0.0633	0.0427	+/-0.062	0.0913	pCi/g					
Europium-155	U	0.0509	+/-0.0614	0.0408	+/-0.0601	0.0843	pCi/g					
Lead-212		0.654	+/-0.074	0.0204	+/-0.0725	0.0423	pCi/g					
Lead-214		0.579	+/-0.0834	0.0253	+/-0.0818	0.0527	pCi/g					
Manganese-54	U	0.017	+/-0.019	0.0165	+/-0.0186	0.0348	pCi/g					
Niobium-94	U	-0.00482	+/-0.0148	0.0122	+/-0.0145	0.0257	pCi/g					
Potassium-40		13.1	+/-1.05	0.102	+/-1.03	0.225	pCi/g					
Radium-226		0.527	+/-0.0829	0.0276	+/-0.0812	0.0577	pCi/g					
Silver-108m	U	-0.0148	+/-0.0142	0.011	+/-0.0139	0.0232	pCi/g					
Thallium-208		0.189	+/-0.0397	0.0137	+/-0.0389	0.0288	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid - 0.025 pCi/g												
Strontium-90	U	0.00731	+/-0.0051	0.00431	+/-0.0051	0.00909	pCi/g		SXF1 12/30/05	1409	490257	5
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid - 1 to 2 pCi/g												
Tritium	U	0.164	+/-0.861	0.719	+/-0.861	1.47	pCi/g		MXP1 12/29/05	1836	490362	6

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID: 9802-0000-022-RA/IS
Sample ID: 152490022

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
Rad Liquid Scintillation Analysis											
Liquid Scint C14, Solid All,FSS											
Carbon-14	U	-0.0271	+/-0.111	0.094	+/-0.111	0.192	pCi/g		SLN1 01/12/06	2055	493626 7
Liquid Scint Fe55, Solid-ALL FSS											
Iron-55	U	22.6	+/-34.7	25.9	+/-34.8	54.4	pCi/g		BXF1 01/11/06	1951	491662 9
Liquid Scint Ni63, Solid-ALL FSS											
Nickel-63	U	3.04	+/-5.29	4.36	+/-5.29	8.95	pCi/g		BXF1 01/09/06	2200	491663 10
Liquid Scint Tc99, Solid-ALL FSS											
Technetium-99	U	0.175	+/-0.211	0.171	+/-0.211	0.354	pCi/g		SLN1 01/11/06	1615	490797 11

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	AXP2	12/26/05	1443	489884
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	12/22/05	0759	489883

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, Pu-11-RC Modified
4	EML HASL 300, 4.5.2.3
5	EPA 905.0 Modified
6	EPA 906.0 Modified
7	EPA EERF C-01 Modified
8	EPA EERF C-01 Modified
9	DOE RESL Fe-1, Modified
10	DOE RESL Ni-1, Modified
11	DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243	Alphaspec Am241, Cm, Solid ALL	73	(15%-125%)
Plutonium-242	Alphaspec Pu, Solid-ALL FSS	83	(15%-125%)
Carrier/Tracer Recovery	Liquid Scint Pu241, Solid-ALL FS	86	(25%-125%)
Carrier/Tracer Recovery	GFPC, Sr90, solid - 0.025 pCi/g	87	(25%-125%)
Carrier/Tracer Recovery	Liquid Scint Fe55, Solid-ALL FS	87	(15%-125%)

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID: 9802-0000-022-RA/IS
Sample ID: 152490022

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
Carrier/Tracer Recovery		Liquid Scint Ni63, Solid-ALL FS			88		(25%-125%)				
Carrier/Tracer Recovery		Liquid Scint Tc99, Solid-ALL FS			80		(15%-125%)				

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID:	9802-0000-025-RA/IS	Project:	YANK01204
Sample ID:	152490023	Client ID:	YANK001
Matrix:	Soil	Vol. Recv.:	
Collect Date:	03-NOV-05		
Receive Date:	21-DEC-05		
Collector:	Client		
Moisture:	8.34%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Alpha Spec Analysis												
Alphaspec Am241, Cm, Solid ALL FSS												
Americium-241	U	0.025	+/-0.0453	0.00	+/-0.0454	0.058	pCi/g		LCW1 01/07/06	0848	491017	1
Curium-242	U	0.00	+/-0.0554	0.00	+/-0.0554	0.0766	pCi/g					
Curium-243/244	U	0.00	+/-0.0422	0.00	+/-0.0422	0.0583	pCi/g					
Alphaspec Pu, Solid-ALL FSS												
Plutonium-238	U	-0.045	+/-0.0556	0.0756	+/-0.0556	0.215	pCi/g		LCW1 01/07/06	0848	491018	2
Plutonium-239/240	U	0.000937	+/-0.0509	0.0534	+/-0.0509	0.170	pCi/g					
Liquid Scint Pu241, Solid-ALL FSS												
Plutonium-241	U	0.936	+/-8.96	7.49	+/-8.96	15.4	pCi/g		LCW1 01/10/06	1607	491019	3
Rad Gamma Spec Analysis												
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived												
Actinium-228		0.604	+/-0.202	0.0696	+/-0.198	0.150	pCi/g		MJH1 12/29/05	1322	490175	4
Americium-241	U	-0.00138	+/-0.0997	0.079	+/-0.0977	0.163	pCi/g					
Bismuth-212		0.528	+/-0.266	0.141	+/-0.261	0.304	pCi/g					
Bismuth-214		0.506	+/-0.102	0.0371	+/-0.0998	0.0787	pCi/g					
Cesium-134	U	0.0093	+/-0.0342	0.0252	+/-0.0335	0.0536	pCi/g					
Cesium-137	U	-0.000603	+/-0.0243	0.0204	+/-0.0238	0.0435	pCi/g					
Cobalt-60	U	0.0148	+/-0.0232	0.0206	+/-0.0227	0.0455	pCi/g					
Europium-152	U	-0.0276	+/-0.0595	0.0487	+/-0.0583	0.102	pCi/g					
Europium-154	UUI	0.00	+/-0.0948	0.0703	+/-0.0929	0.152	pCi/g					
Europium-155	U	0.0333	+/-0.0668	0.0582	+/-0.0654	0.120	pCi/g					
Lead-212		0.704	+/-0.0934	0.0285	+/-0.0915	0.0593	pCi/g					
Lead-214		0.698	+/-0.116	0.0352	+/-0.114	0.074	pCi/g					
Manganese-54	U	0.018	+/-0.0283	0.0245	+/-0.0278	0.0521	pCi/g					
Niobium-94	U	-0.0085	+/-0.0232	0.0161	+/-0.0228	0.0345	pCi/g					
Potassium-40		12.1	+/-1.30	0.162	+/-1.28	0.365	pCi/g					
Radium-226		0.506	+/-0.102	0.0371	+/-0.0998	0.0787	pCi/g					
Silver-108m	U	-0.00123	+/-0.0233	0.0167	+/-0.0229	0.0354	pCi/g					
Thallium-208		0.209	+/-0.052	0.0198	+/-0.0509	0.0422	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid - 0.025 pCi/g												
Strontium-90	U	0.00116	+/-0.00459	0.00422	+/-0.00459	0.00894	pCi/g		SXF1 12/30/05	1409	490257	5
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid - 1 to 2 pCi/g												
Tritium	U	0.468	+/-0.927	0.768	+/-0.927	1.57	pCi/g		MXP1 12/29/05	2040	490362	6

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID: 9802–0000–025–RA/IS
Sample ID: 152490023

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Liquid Scintillation Analysis													
Liquid Scint C14, Solid All,FSS													
Carbon–14	U	0.0587	+/–0.116	0.0962	+/–0.116	0.196	pCi/g		SLN1	01/12/06	2142	493626	7
Liquid Scint Fe55, Solid–ALL FSS													
Iron–55	U	–1.34	+/–33.7	26.2	+/–33.7	55.0	pCi/g		BXF1	01/11/06	2008	491662	9
Liquid Scint Ni63, Solid–ALL FSS													
Nickel–63		10.7	+/–5.42	4.28	+/–5.43	8.78	pCi/g		BXF1	01/09/06	2247	491663	10
Liquid Scint Tc99, Solid–ALL FSS													
Technetium–99	U	0.0496	+/–0.208	0.173	+/–0.208	0.358	pCi/g		SLN1	01/11/06	1631	490797	11

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	AXP2	12/26/05	1443	489884
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	TC1	12/22/05	0759	489883

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL–300, Am–05–RC Modified
2	DOE EML HASL–300, Pu–11–RC Modified
3	DOE EML HASL–300, Pu–11–RC Modified
4	EML HASL 300, 4.5.2.3
5	EPA 905.0 Modified
6	EPA 906.0 Modified
7	EPA EERF C–01 Modified
8	EPA EERF C–01 Modified
9	DOE RESL Fe–1, Modified
10	DOE RESL Ni–1, Modified
11	DOE EML HASL–300, Tc–02–RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium–243	Alphaspec Am241, Cm, Solid ALL	105	(15%–125%)
Plutonium–242	Alphaspec Pu, Solid–ALL FSS	91	(15%–125%)
Carrier/Tracer Recovery	Liquid Scint Pu241, Solid–ALL FS	49	(25%–125%)
Carrier/Tracer Recovery	GFPC, Sr90, solid – 0.025 pCi/g	86	(25%–125%)
Carrier/Tracer Recovery	Liquid Scint Fe55, Solid–ALL FS	84	(15%–125%)

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Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID: 9802-0000-025-RA/IS
Sample ID: 152490023

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
Carrier/Tracer Recovery		Liquid Scint Ni63, Solid-ALL FS			90		(25%-125%)				
Carrier/Tracer Recovery		Liquid Scint Tc99, Solid-ALL FS			81		(15%-125%)				

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID:	Sediment	Project:	YANK01204
Sample ID:	152490024	Client ID:	YANK001
Matrix:	Soil	Vol. Recv.:	
Collect Date:	15-DEC-05		
Receive Date:	21-DEC-05		
Collector:	Client		
Moisture:	12.4%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Alpha Spec Analysis												
Alphaspec Am241, Cm, Solid ALL FSS												
Americium-241	U	0.0053	+/-0.0211	0.00	+/-0.0211	0.059	pCi/g		LCW1 01/07/06	0848	491017	1
Curium-242	U	0.00	+/-0.0471	0.00	+/-0.0471	0.0652	pCi/g					
Curium-243/244	U	0.00	+/-0.0428	0.00	+/-0.0428	0.0591	pCi/g					
Alphaspec Pu, Solid-ALL FSS												
Plutonium-238	U	-0.0733	+/-0.0617	0.107	+/-0.0622	0.273	pCi/g		LCW1 01/07/06	0848	491018	2
Plutonium-239/240	U	-0.00441	+/-0.0491	0.0562	+/-0.0491	0.172	pCi/g					
Liquid Scint Pu241, Solid-ALL FSS												
Plutonium-241	U	2.13	+/-4.97	4.12	+/-4.97	8.44	pCi/g		LCW1 01/10/06	1654	491019	3
Rad Liquid Scintillation Analysis												
Liquid Scint C14, Solid All,FSS												
Carbon-14	U	-0.027	+/-0.111	0.0937	+/-0.111	0.191	pCi/g		SLN1 01/12/06	2228	493626	4
Liquid Scint Fe55, Solid-ALL FSS												
Iron-55	U	-3.42	+/-10.4	8.02	+/-10.4	16.3	pCi/g		BXF1 01/11/06	2027	491662	6
Liquid Scint Ni63, Solid-ALL FSS												
Nickel-63	U	8.91	+/-5.81	4.65	+/-5.82	9.54	pCi/g		BXF1 01/09/06	2333	491663	7
Liquid Scint Tc99, Solid-ALL FSS												
Technetium-99	U	0.158	+/-0.206	0.167	+/-0.206	0.347	pCi/g		SLN1 01/11/06	1647	490797	8

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	AXP2	12/26/05	1443	489884
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	12/22/05	0759	489883

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, Pu-11-RC Modified
4	EPA EERF C-01 Modified
5	EPA EERF C-01 Modified
6	DOE RESL Fe-1, Modified

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: January 18, 2006

Client Sample ID: Sediment
Sample ID: 152490024

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
7	DOE RESL Ni-1, Modified										
8	DOE EML HASL-300, Tc-02-RC Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243	Alphaspec Am241, Cm, Solid ALL	92	(15%-125%)
Plutonium-242	Alphaspec Pu, Solid-ALL FSS	89	(15%-125%)
Carrier/Tracer Recovery	Liquid Scint Pu241, Solid-ALL FS	92	(25%-125%)
Carrier/Tracer Recovery	Liquid Scint Fe55, Solid-ALL FS	82	(15%-125%)
Carrier/Tracer Recovery	Liquid Scint Ni63, Solid-ALL FS	82	(25%-125%)
Carrier/Tracer Recovery	Liquid Scint Tc99, Solid-ALL FS	83	(15%-125%)

Notes:
The Qualifiers in this report are defined as follows :

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

QUALITY CONTROL DATA

GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: January 18, 2006

Client : Connecticut Yankee Atomic Power
Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut

Contact: Mr. Pete Hollenbeck

Workorder: 152490

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Alpha Spec										
Batch 491017										
QC1201003411 152490019 DUP										
Americium-241		0.243		0.170	pCi/g	35		(0% - 100%)	LCW1	01/07/06 08:48
	Uncert:	+/-0.0747		+/-0.0589						
	TPU:	+/-0.0804		+/-0.0633						
Curium-242	U	0.00173	U	0.00	pCi/g	200		(0% - 100%)		
	Uncert:	+/-0.0131		+/-0.0115						
	TPU:	+/-0.0131		+/-0.0115						
Curium-243/244	U	0.0428		0.0318	pCi/g	30		(0% - 100%)		
	Uncert:	+/-0.0394		+/-0.0255						
	TPU:	+/-0.0398		+/-0.0258						
QC1201003413 LCS										
Americium-241	2.48			2.19	pCi/g		88	(75%-125%)		01/07/06 08:48
	Uncert:			+/-0.203						
	TPU:			+/-0.330						
Curium-242			U	-0.00119	pCi/g					
	Uncert:			+/-0.00234						
	TPU:			+/-0.00234						
Curium-243/244	3.01			2.88	pCi/g		96	(75%-125%)		
	Uncert:			+/-0.232						
	TPU:			+/-0.413						
QC1201003410 MB										
Americium-241			U	0.00489	pCi/g					01/07/06 08:48
	Uncert:			+/-0.0113						
	TPU:			+/-0.0113						
Curium-242			U	-0.00252	pCi/g					
	Uncert:			+/-0.0109						
	TPU:			+/-0.0109						
Curium-243/244			U	0.00	pCi/g					
	Uncert:			+/-0.0101						
	TPU:			+/-0.0101						
QC1201003412 152490019 MS										
Americium-241	2.52	0.243		2.40	pCi/g		86	(75%-125%)		01/07/06 08:48
	Uncert:	+/-0.0747		+/-0.219						
	TPU:	+/-0.0804		+/-0.362						
Curium-242	U	0.00173	U	-0.00138	pCi/g					
	Uncert:	+/-0.0131		+/-0.00271						
	TPU:	+/-0.0131		+/-0.00271						
Curium-243/244	3.06 U	0.0428		2.91	pCi/g		95	(75%-125%)		
	Uncert:	+/-0.0394		+/-0.241						
	TPU:	+/-0.0398		+/-0.426						
Batch 491018										
QC1201003415 152490019 DUP										
Plutonium-238	U	-0.00442	U	0.0176	pCi/g	N/A		(0% - 100%)	LCW1	01/07/06 08:48

QC Summary

Workorder: 152490

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Alpha Spec										
Batch 491018										
	Uncert:	+/-0.022		+/-0.0285						
	TPU:	+/-0.022		+/-0.0285						
Plutonium-239/240	U	0.00746	U	-0.0116	pCi/g	N/A		(0% - 100%)		
	Uncert:	+/-0.0252		+/-0.0158						
	TPU:	+/-0.0252		+/-0.0158						
QC1201003417 LCS										
Plutonium-238			U	0.0285	pCi/g			(75%-125%)		01/07/06 08:48
	Uncert:			+/-0.028						
	TPU:			+/-0.0281						
Plutonium-239/240	2.29			2.10	pCi/g		92	(75%-125%)		
	Uncert:			+/-0.226						
	TPU:			+/-0.310						
QC1201003414 MB										
Plutonium-238			U	0.0124	pCi/g					01/07/06 08:48
	Uncert:			+/-0.0295						
	TPU:			+/-0.0295						
Plutonium-239/240			U	-0.0124	pCi/g					
	Uncert:			+/-0.00808						
	TPU:			+/-0.00816						
QC1201003416 152490019 MS										
Plutonium-238	U	-0.00442		0.0457	pCi/g			(75%-125%)		01/07/06 08:48
	Uncert:	+/-0.022		+/-0.0352						
	TPU:	+/-0.022		+/-0.0355						
Plutonium-239/240	2.33 U	0.00746		2.06	pCi/g		88	(75%-125%)		
	Uncert:	+/-0.0252		+/-0.224						
	TPU:	+/-0.0252		+/-0.305						
Batch 491019										
QC1201003419 152490019 DUP										
Plutonium-241	U	0.480	U	0.594	pCi/g	0		(0% - 100%)	LCW1	01/10/06 18:28
	Uncert:	+/-1.20		+/-1.21						
	TPU:	+/-1.20		+/-1.22						
QC1201003421 LCS										
Plutonium-241	35.7			29.1	pCi/g		82	(75%-125%)		01/10/06 19:31
	Uncert:			+/-3.00						
	TPU:			+/-4.00						
QC1201003418 MB										
Plutonium-241			U	0.462	pCi/g					01/10/06 17:41
	Uncert:			+/-1.31						
	TPU:			+/-1.31						
QC1201003420 152490019 MS										
Plutonium-241	36.1 U	0.480		29.2	pCi/g		81	(75%-125%)		01/10/06 19:15
	Uncert:	+/-1.20		+/-3.86						
	TPU:	+/-1.20		+/-4.96						
Rad Gamma Spec										
Batch 490174										
QC1201001565 152490001 DUP										
Actinium-228		0.393		0.427	pCi/g	8		(0% - 100%)	MJH1	01/11/06 22:41
	Uncert:	+/-0.147		+/-0.102						
				+/-0.0998						

QC Summary

Workorder: 152490

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch 490174											
	TPU:	+/-0.144									
Americium-241	U	0.0457	U	0.00668	pCi/g	149		(0% - 100%)			
	Uncert:	+/-0.0447		+/-0.0623							
	TPU:	+/-0.0438		+/-0.061							
Bismuth-212		0.358		0.273	pCi/g	27		(0% - 100%)			
	Uncert:	+/-0.315		+/-0.170							
	TPU:	+/-0.308		+/-0.167							
Bismuth-214		0.791		0.700	pCi/g	12		(0% - 100%)			
	Uncert:	+/-0.103		+/-0.0748							
	TPU:	+/-0.101		+/-0.0733							
Cesium-134	U	0.0202	U	0.00	pCi/g	69		(0% - 100%)			
	Uncert:	+/-0.0243		+/-0.020							
	TPU:	+/-0.0238		+/-0.0196							
Cesium-137		0.936		0.926	pCi/g	1		(0% - 100%)			
	Uncert:	+/-0.0714		+/-0.0735							
	TPU:	+/-0.0699		+/-0.072							
Cobalt-60		0.676		0.664	pCi/g	2		(0% - 100%)			
	Uncert:	+/-0.0624		+/-0.0602							
	TPU:	+/-0.0612		+/-0.059							
Europium-152	U	0.0265	U	0.00391	pCi/g	149		(0% - 100%)			
	Uncert:	+/-0.0543		+/-0.0313							
	TPU:	+/-0.0533		+/-0.0306							
Europium-154	U	-0.0515	U	0.024	pCi/g	N/A		(0% - 100%)			
	Uncert:	+/-0.0597		+/-0.0367							
	TPU:	+/-0.0585		+/-0.0359							
Europium-155	U	0.0399	U	0.0298	pCi/g	29		(0% - 100%)			
	Uncert:	+/-0.0514		+/-0.0332							
	TPU:	+/-0.0503		+/-0.0325							
Lead-212		0.461		0.473	pCi/g	3		(0% - 100%)			
	Uncert:	+/-0.0542		+/-0.0529							
	TPU:	+/-0.0532		+/-0.0519							
Lead-214		0.840		0.721	pCi/g	15		(0% - 20%)			
	Uncert:	+/-0.089		+/-0.085							
	TPU:	+/-0.0872		+/-0.0833							
Manganese-54	U	0.00156	U	-0.00771	pCi/g	N/A		(0% - 100%)			
	Uncert:	+/-0.0233		+/-0.0133							
	TPU:	+/-0.0228		+/-0.013							
Niobium-94	U	-0.0056	U	0.0115	pCi/g	N/A		(0% - 100%)			
	Uncert:	+/-0.0204		+/-0.0106							
	TPU:	+/-0.020		+/-0.0104							
Potassium-40		6.74		7.56	pCi/g	12		(0% - 20%)			
	Uncert:	+/-0.728		+/-0.679							
	TPU:	+/-0.713		+/-0.665							
Radium-226		0.791		0.700	pCi/g	12		(0% - 100%)			
	Uncert:	+/-0.103		+/-0.0748							
	TPU:	+/-0.101		+/-0.0733							
Silver-108m	U	-0.00539	U	0.00197	pCi/g	N/A		(0% - 100%)			
	Uncert:	+/-0.0207		+/-0.011							

QC Summary

Workorder: 152490

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 490174										
	TPU:	+/-0.0203		+/-0.0108						
Thallium-208		0.207		0.174	pCi/g	17		(0% - 100%)		
	Uncert:	+/-0.0377		+/-0.0305						
	TPU:	+/-0.0369		+/-0.0299						
QC1201001566 LCS										
Actinium-228			U	0.262	pCi/g					01/11/06 19:33
	Uncert:			+/-0.510						
	TPU:			+/-0.500						
Americium-241	24.4			25.9	pCi/g		106	(75%-125%)		
	Uncert:			+/-1.14						
	TPU:			+/-1.12						
Bismuth-212			U	0.842	pCi/g					
	Uncert:			+/-0.913						
	TPU:			+/-0.895						
Bismuth-214			U	0.0276	pCi/g					
	Uncert:			+/-0.215						
	TPU:			+/-0.210						
Cesium-134			U	0.0339	pCi/g					
	Uncert:			+/-0.145						
	TPU:			+/-0.142						
Cesium-137	9.33			9.86	pCi/g		106	(75%-125%)		
	Uncert:			+/-0.503						
	TPU:			+/-0.493						
Cobalt-60	13.8			15.2	pCi/g		110	(75%-125%)		
	Uncert:			+/-0.672						
	TPU:			+/-0.659						
Europium-152			U	0.225	pCi/g					
	Uncert:			+/-0.278						
	TPU:			+/-0.273						
Europium-154			U	-0.0224	pCi/g					
	Uncert:			+/-0.259						
	TPU:			+/-0.254						
Europium-155			U	0.386	pCi/g					
	Uncert:			+/-0.346						
	TPU:			+/-0.339						
Lead-212			U	0.0782	pCi/g					
	Uncert:			+/-0.150						
	TPU:			+/-0.147						
Lead-214			U	-0.00822	pCi/g					
	Uncert:			+/-0.214						
	TPU:			+/-0.210						
Manganese-54			U	-0.0572	pCi/g					
	Uncert:			+/-0.134						
	TPU:			+/-0.131						
Niobium-94			U	0.0345	pCi/g					
	Uncert:			+/-0.113						
	TPU:			+/-0.110						
Potassium-40			U	-0.802	pCi/g					

QC Summary

Workorder: 152490

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 490174										
	Uncert:			+/-1.03						
	TPU:			+/-1.01						
Radium-226			U	0.0276	pCi/g			(75%-125%)		
	Uncert:			+/-0.215						
	TPU:			+/-0.210						
Silver-108m			U	-0.0887	pCi/g					
	Uncert:			+/-0.107						
	TPU:			+/-0.104						
Thallium-208			U	0.0061	pCi/g					
	Uncert:			+/-0.105						
	TPU:			+/-0.103						
QC1201001564 MB										
Actinium-228			U	0.0488	pCi/g					01/11/06 22:36
	Uncert:			+/-0.0292						
	TPU:			+/-0.0286						
Americium-241			U	0.0251	pCi/g					
	Uncert:			+/-0.0343						
	TPU:			+/-0.0336						
Bismuth-212			U	-0.0153	pCi/g					
	Uncert:			+/-0.0641						
	TPU:			+/-0.0628						
Bismuth-214			U	0.0211	pCi/g					
	Uncert:			+/-0.0351						
	TPU:			+/-0.0344						
Cesium-134			U	-0.00188	pCi/g					
	Uncert:			+/-0.0102						
	TPU:			+/-0.010						
Cesium-137			U	-0.00665	pCi/g					
	Uncert:			+/-0.0107						
	TPU:			+/-0.0105						
Cobalt-60			U	0.00606	pCi/g					
	Uncert:			+/-0.00882						
	TPU:			+/-0.00864						
Europium-152			U	-0.00914	pCi/g					
	Uncert:			+/-0.0244						
	TPU:			+/-0.0239						
Europium-154			U	0.0147	pCi/g					
	Uncert:			+/-0.0242						
	TPU:			+/-0.0237						
Europium-155			U	0.00387	pCi/g					
	Uncert:			+/-0.0225						
	TPU:			+/-0.0221						
Lead-212			UUI	0.00	pCi/g					
	Uncert:			+/-0.015						
	TPU:			+/-0.0147						
Lead-214			U	0.0161	pCi/g					
	Uncert:			+/-0.0181						
	TPU:			+/-0.0177						

QC Summary

Workorder: 152490

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 490174										
Manganese-54			U	0.00713	pCi/g					
	Uncert:			+/-0.00859						
	TPU:			+/-0.00842						
Niobium-94			U	0.00753	pCi/g					
	Uncert:			+/-0.00835						
	TPU:			+/-0.00819						
Potassium-40			U	0.111	pCi/g					
	Uncert:			+/-0.143						
	TPU:			+/-0.140						
Radium-226			U	0.0211	pCi/g					
	Uncert:			+/-0.0351						
	TPU:			+/-0.0344						
Silver-108m			U	0.00362	pCi/g					
	Uncert:			+/-0.00793						
	TPU:			+/-0.00777						
Thallium-208			U	0.00381	pCi/g					
	Uncert:			+/-0.0164						
	TPU:			+/-0.0161						
Batch 490175										
QC1201001568 152490021 DUP										
Actinium-228		0.390		0.404	pCi/g	3		(0% - 100%)	MJH1	12/29/05 14:07
	Uncert:	+/-0.139		+/-0.133						
	TPU:	+/-0.136		+/-0.131						
Americium-241	U	0.0529	U	-0.0106	pCi/g	N/A		(0% - 100%)		
	Uncert:	+/-0.121		+/-0.0895						
	TPU:	+/-0.119		+/-0.0877						
Bismuth-212		0.613		0.342	pCi/g	57		(0% - 100%)		
	Uncert:	+/-0.233		+/-0.200						
	TPU:	+/-0.228		+/-0.196						
Bismuth-214		0.418		0.391	pCi/g	7		(0% - 100%)		
	Uncert:	+/-0.0702		+/-0.0653						
	TPU:	+/-0.0688		+/-0.064						
Cesium-134	U	0.00576	U	0.023	pCi/g	120		(0% - 100%)		
	Uncert:	+/-0.023		+/-0.0188						
	TPU:	+/-0.0225		+/-0.0184						
Cesium-137	U	0.0208	U	0.0107	pCi/g	65		(0% - 100%)		
	Uncert:	+/-0.0212		+/-0.0212						
	TPU:	+/-0.0208		+/-0.0207						
Cobalt-60	U	0.00849	U	0.00258	pCi/g	107		(0% - 100%)		
	Uncert:	+/-0.0202		+/-0.0148						
	TPU:	+/-0.0198		+/-0.0145						
Europium-152	U	-0.00485	U	-0.00366	pCi/g	N/A		(0% - 100%)		
	Uncert:	+/-0.0552		+/-0.0355						
	TPU:	+/-0.0541		+/-0.0348						
Europium-154	U	0.054	U	-0.00164	pCi/g	N/A		(0% - 100%)		
	Uncert:	+/-0.0628		+/-0.0454						
	TPU:	+/-0.0615		+/-0.0445						
Europium-155	U	0.00833	U	0.0347	pCi/g	123		(0% - 100%)		

QC Summary

Workorder: 152490

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 490175										
	Uncert:	+/-0.062		+/-0.043						
	TPU:	+/-0.0607		+/-0.0421						
Lead-212		0.466		0.443	pCi/g	5		(0% - 100%)		
	Uncert:	+/-0.0571		+/-0.0406						
	TPU:	+/-0.056		+/-0.0398						
Lead-214		0.413		0.418	pCi/g	1		(0% - 100%)		
	Uncert:	+/-0.0828		+/-0.058						
	TPU:	+/-0.0811		+/-0.0568						
Manganese-54	U	0.00897	U	-0.00387	pCi/g	N/A		(0% - 100%)		
	Uncert:	+/-0.0202		+/-0.0142						
	TPU:	+/-0.0198		+/-0.0139						
Niobium-94	U	-0.0166	U	0.00381	pCi/g	N/A		(0% - 100%)		
	Uncert:	+/-0.0187		+/-0.0131						
	TPU:	+/-0.0183		+/-0.0128						
Potassium-40		14.0		14.7	pCi/g	5		(0% - 20%)		
	Uncert:	+/-0.920		+/-0.734						
	TPU:	+/-0.902		+/-0.719						
Radium-226		0.418		0.391	pCi/g	7		(0% - 100%)		
	Uncert:	+/-0.0702		+/-0.0653						
	TPU:	+/-0.0688		+/-0.064						
Silver-108m	U	0.0124	U	-0.00469	pCi/g	N/A		(0% - 100%)		
	Uncert:	+/-0.0171		+/-0.0115						
	TPU:	+/-0.0168		+/-0.0113						
Thallium-208		0.155		0.119	pCi/g	27		(0% - 100%)		
	Uncert:	+/-0.0514		+/-0.028						
	TPU:	+/-0.0504		+/-0.0274						
QC1201001569 LCS										
Actinium-228			U	-1.22	pCi/g					12/29/05 17:27
	Uncert:			+/-1.00						
	TPU:			+/-0.983						
Americium-241	24.4			25.1	pCi/g		103	(75%-125%)		
	Uncert:			+/-1.16						
	TPU:			+/-1.13						
Bismuth-212			U	-0.113	pCi/g					
	Uncert:			+/-1.50						
	TPU:			+/-1.47						
Bismuth-214			U	0.156	pCi/g					
	Uncert:			+/-0.356						
	TPU:			+/-0.349						
Cesium-134			U	-0.0133	pCi/g					
	Uncert:			+/-0.217						
	TPU:			+/-0.213						
Cesium-137	9.33			10.2	pCi/g		109	(75%-125%)		
	Uncert:			+/-0.670						
	TPU:			+/-0.656						
Cobalt-60	13.8			14.1	pCi/g		102	(75%-125%)		
	Uncert:			+/-0.856						
	TPU:			+/-0.839						

QC Summary

Workorder: 152490

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 490175										
Europium-152			U	0.127	pCi/g					
	Uncert:			+/-0.431						
	TPU:			+/-0.423						
Europium-154			U	-0.581	pCi/g					
	Uncert:			+/-0.453						
	TPU:			+/-0.444						
Europium-155			U	0.00583	pCi/g					
	Uncert:			+/-0.416						
	TPU:			+/-0.408						
Lead-212			U	0.0296	pCi/g					
	Uncert:			+/-0.211						
	TPU:			+/-0.207						
Lead-214			U	-0.0496	pCi/g					
	Uncert:			+/-0.312						
	TPU:			+/-0.306						
Manganese-54			U	0.0137	pCi/g					
	Uncert:			+/-0.201						
	TPU:			+/-0.197						
Niobium-94			U	0.0832	pCi/g					
	Uncert:			+/-0.170						
	TPU:			+/-0.166						
Potassium-40			U	1.55	pCi/g					
	Uncert:			+/-1.53						
	TPU:			+/-1.50						
Radium-226			U	0.156	pCi/g			(75%-125%)		
	Uncert:			+/-0.356						
	TPU:			+/-0.349						
Silver-108m			U	0.000526	pCi/g					
	Uncert:			+/-0.191						
	TPU:			+/-0.187						
Thallium-208			U	-0.125	pCi/g					
	Uncert:			+/-0.192						
	TPU:			+/-0.188						
QC1201001567 MB										
Actinium-228			U	0.0448	pCi/g					12/29/05 13:22
	Uncert:			+/-0.0452						
	TPU:			+/-0.0443						
Americium-241			U	-0.00423	pCi/g					
	Uncert:			+/-0.0337						
	TPU:			+/-0.033						
Bismuth-212			U	0.0437	pCi/g					
	Uncert:			+/-0.0952						
	TPU:			+/-0.0933						
Bismuth-214			U	0.011	pCi/g					
	Uncert:			+/-0.0315						
	TPU:			+/-0.0308						
Cesium-134			U	0.00207	pCi/g					
	Uncert:			+/-0.0115						

QC Summary

Workorder: 152490

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 490175										
	TPU:			+/-0.0113						
Cesium-137			U	-0.00725	pCi/g					
	Uncert:			+/-0.0119						
	TPU:			+/-0.0116						
Cobalt-60			UUI	0.00	pCi/g					
	Uncert:			+/-0.0119						
	TPU:			+/-0.0116						
Europium-152			U	-0.00793	pCi/g					
	Uncert:			+/-0.0294						
	TPU:			+/-0.0288						
Europium-154			U	-0.00335	pCi/g					
	Uncert:			+/-0.0325						
	TPU:			+/-0.0318						
Europium-155			U	0.000316	pCi/g					
	Uncert:			+/-0.0266						
	TPU:			+/-0.026						
Lead-212			U	0.0172	pCi/g					
	Uncert:			+/-0.0207						
	TPU:			+/-0.0203						
Lead-214			U	0.0275	pCi/g					
	Uncert:			+/-0.0235						
	TPU:			+/-0.023						
Manganese-54			U	-0.00391	pCi/g					
	Uncert:			+/-0.0114						
	TPU:			+/-0.0112						
Niobium-94			U	0.00294	pCi/g					
	Uncert:			+/-0.0119						
	TPU:			+/-0.0117						
Potassium-40			U	0.233	pCi/g					
	Uncert:			+/-0.146						
	TPU:			+/-0.143						
Radium-226			U	0.011	pCi/g					
	Uncert:			+/-0.0315						
	TPU:			+/-0.0308						
Silver-108m			U	-0.00371	pCi/g					
	Uncert:			+/-0.00888						
	TPU:			+/-0.0087						
Thallium-208			U	0.00686	pCi/g					
	Uncert:			+/-0.020						
	TPU:			+/-0.0196						
Rad Gas Flow										
Batch 490254										
QC1201001682 152553020 DUP										
Strontium-90	U	0.00566	U	-0.00467	pCi/g	N/A		(0% - 100%)	SXF1	12/29/05 16:38
	Uncert:	+/-0.00788		+/-0.00822						
	TPU:	+/-0.00788		+/-0.00822						
QC1201001684 LCS										
Strontium-90	0.280			0.291	pCi/g		104	(75%-125%)		12/29/05 16:38

QC Summary

Workorder: 152490

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gas Flow										
Batch 490254										
	Uncert:			+/-0.0173						
	TPU:			+/-0.0186						
QC1201001681 MB										
Strontium-90			U	-0.000178	pCi/g					12/29/05 16:38
	Uncert:			+/-0.00102						
	TPU:			+/-0.00102						
QC1201001683 152553020 MS										
Strontium-90	2.10 U	0.00566		1.78	pCi/g		85	(75%-125%)		12/29/05 16:38
	Uncert:	+/-0.00788		+/-0.136						
	TPU:	+/-0.00788		+/-0.143						
Batch 490257										
QC1201001686 152490021 DUP										
Strontium-90	U	0.00376	U	0.00551	pCi/g	0		(0% - 100%)	SXF1	12/30/05 14:09
	Uncert:	+/-0.00493		+/-0.00519						
	TPU:	+/-0.00493		+/-0.00519						
QC1201001688 LCS										
Strontium-90	0.301			0.263	pCi/g		87	(75%-125%)		12/30/05 12:45
	Uncert:			+/-0.0166						
	TPU:			+/-0.0178						
QC1201001685 MB										
Strontium-90			U	-0.000106	pCi/g					12/30/05 14:09
	Uncert:			+/-0.00142						
	TPU:			+/-0.00142						
QC1201001687 152490021 MS										
Strontium-90	0.711 U	0.00376		0.599	pCi/g		84	(75%-125%)		12/30/05 11:37
	Uncert:	+/-0.00493		+/-0.0704						
	TPU:	+/-0.00493		+/-0.0722						
Rad Liquid Scintillation										
Batch 490362										
QC1201001995 152490021 DUP										
Tritium	U	0.519	U	-0.141	pCi/g	N/A		(0% - 100%)	MXP1	12/30/05 13:40
	Uncert:	+/-0.892		+/-0.882						
	TPU:	+/-0.892		+/-0.882						
QC1201001997 LCS										
Tritium	11.8			9.23	pCi/g		78	(75%-125%)		12/29/05 05:41
	Uncert:			+/-1.34						
	TPU:			+/-1.35						
QC1201001994 MB										
Tritium			U	0.0426	pCi/g					12/30/05 11:36
	Uncert:			+/-0.445						
	TPU:			+/-0.445						
QC1201001996 152490021 MS										
Tritium	11.7 U	0.519		10.4	pCi/g		89	(75%-125%)		12/29/05 05:09
	Uncert:	+/-0.892		+/-2.38						
	TPU:	+/-0.892		+/-2.38						
Batch 490365										
QC1201002007 152490007 DUP										
Tritium	U	1.47	U	1.56	pCi/g	6		(0% - 100%)	MXP1	01/11/06 23:08

QC Summary

Workorder: 152490

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Liquid Scintillation										
Batch 490365										
	Uncert:	+/-1.46		+/-1.39						
	TPU:	+/-1.46		+/-1.39						
QC1201002009 LCS										
Tritium	11.2			8.90	pCi/g		79	(75%-125%)		01/07/06 00:27
	Uncert:			+/-1.38						
	TPU:			+/-1.39						
QC1201002006 MB										
Tritium			U	-0.51	pCi/g					01/06/06 22:53
	Uncert:			+/-1.01						
	TPU:			+/-1.01						
QC1201002008 152490007 MS										
Tritium	11.8 U	1.47		9.24	pCi/g		79	(75%-125%)		01/06/06 23:56
	Uncert:	+/-1.46		+/-2.53						
	TPU:	+/-1.46		+/-2.54						
Batch 490797										
QC1201002919 152490022 DUP										
Technetium-99	U	0.175	U	0.118	pCi/g	38		(0% - 100%)	SLN1	01/11/06 17:20
	Uncert:	+/-0.211		+/-0.185						
	TPU:	+/-0.211		+/-0.185						
QC1201002921 LCS										
Technetium-99	12.1			10.3	pCi/g		85	(75%-125%)		01/11/06 17:53
	Uncert:			+/-0.411						
	TPU:			+/-0.475						
QC1201002918 MB										
Technetium-99			U	0.00	pCi/g					01/11/06 17:04
	Uncert:			+/-0.165						
	TPU:			+/-0.165						
QC1201002920 152490022 MS										
Technetium-99	12.6 U	0.175		10.9	pCi/g		87	(75%-125%)		01/11/06 17:36
	Uncert:	+/-0.211		+/-0.470						
	TPU:	+/-0.211		+/-0.534						
Batch 491662										
QC1201004972 152490019 DUP										
Iron-55	U	-0.355	U	-0.403	pCi/g	N/A		(0% - 100%)	BXF1	01/12/06 00:36
	Uncert:	+/-1.11		+/-1.18						
	TPU:	+/-1.11		+/-1.18						
QC1201004974 LCS										
Iron-55	61.6			58.9	pCi/g		96	(75%-125%)		01/12/06 08:46
	Uncert:			+/-5.21						
	TPU:			+/-8.24						
QC1201004971 MB										
Iron-55			U	0.142	pCi/g					01/11/06 22:31
	Uncert:			+/-0.867						
	TPU:			+/-0.867						
QC1201004973 152490019 MS										
Iron-55	62.8 U	-0.355		51.1	pCi/g		81	(75%-125%)		01/12/06 08:29
	Uncert:	+/-1.11		+/-5.51						
	TPU:	+/-1.11		+/-9.12						
Batch 491663										

QC Summary

Workorder: 152490

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Liquid Scintillation										
Batch 491663										
QC1201004976 152490019 DUP										
Nickel-63	U	0.444	U	1.72	pCi/g	0		(0% - 100%)	BXF1	01/10/06 01:07
	Uncert:	+/-1.75		+/-1.69						
	TPU:	+/-1.75		+/-1.69						
QC1201004978 LCS										
Nickel-63	181			168	pCi/g		93	(75%-125%)		01/10/06 02:09
	Uncert:			+/-7.89						
	TPU:			+/-8.95						
QC1201004975 MB										
Nickel-63				3.13	pCi/g					01/10/06 00:20
	Uncert:			+/-1.70						
	TPU:			+/-1.70						
QC1201004977 152490019 MS										
Nickel-63	185 U	0.444		168	pCi/g		91	(75%-125%)		01/10/06 01:53
	Uncert:	+/-1.75		+/-8.48						
	TPU:	+/-1.75		+/-9.49						
Batch 493626										
QC1201009270 152490019 DUP										
Carbon-14		1.44		1.89	pCi/g	27		(0% - 100%)	SLN1	01/13/06 00:01
	Uncert:	+/-0.369		+/-0.389						
	TPU:	+/-0.370		+/-0.390						
QC1201009272 LCS										
Carbon-14	6.88			6.51	pCi/g		95	(75%-125%)		01/13/06 01:04
	Uncert:			+/-0.365						
	TPU:			+/-0.379						
QC1201009269 MB										
Carbon-14			U	-0.0376	pCi/g					01/12/06 23:14
	Uncert:			+/-0.112						
	TPU:			+/-0.112						
QC1201009271 152490019 MS										
Carbon-14	21.0	1.44		23.0	pCi/g		102	(75%-125%)		01/13/06 00:48
	Uncert:	+/-0.369		+/-1.18						
	TPU:	+/-0.370		+/-1.24						

Notes:
The Qualifiers in this report are defined as follows:

- B Target analyte was detected in the sample as well as the associated blank.
- BD Results below the MDC or low tracer recovery.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J Indicates an estimated value.
- U Target analyte was analyzed for but not detected above the MDL or LOD.
- UI Uncertain identification for gamma spectroscopy.
- X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
- d The 2:1 depletion requirement was not met for this sample
- h Sample preparation or preservation holding time exceeded.

QC Summary

Workorder: ***152490***

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
** Indicates analyte is a surrogate compound.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptence criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Attachment 2
ISFSI Records Entry Form
(Page 1 of 1)

NUCLEAR PLANT RECORDS TRANSMITTAL		NPR USE ONLY CONTROL NO. m U.N. NO. 2491
DEPARTMENT OF ORIGIN **Site Closure**	RECORDS CLASSIFICATION (SEE INSTRUCTIONS): ☐ CONFIDENTIAL ☐ SAFEGUARDS ☐ QA RECORD	DATE: **6/27/06**
TFI #: **11.10**	TFI TITLE: **50.75g Release Records**	RETENTION (Ref. Attachment 1): **L(+)LP+10**

ISFSI: ☐ **Type 1 (Dual Storage)** ✓ **Type 2** ☐ **Type 3** (Ref. Attachment 1)

DESCRIPTION OF RECORDS (NOTE: USE MORE THAN ONE TRANSMITTAL IF REQUIRED)

Work Plan and Inspection Record, WPIR, 24265-000-GEN-5000-00137-000, Underslab Subsurface Soil Sampling, 2004 and 2005 Radiological Characterization Activity.
This submittal is only the following portion of this WPIR: Screenwell House, Survey / Sampling Work Plan SSWP Number BCY-SSWP-05-05-012.
Search the database using the WPIR number in the title field to find indexing information on all other components of this WPIR.

Special Instructions for OD processing: Optical Character Recognition (OCR) Required? ☐ YES ✓ NO

RECORDS ENTERED BY (PRINT NAME):	SUPERVISOR/PERSON ENTERING RECORDS (Signature):
AR Bejma/J. McCarthy	[signature]

RECEIPT (BY NPR)

DATE: 6/27/06	RECORDS ARE AS DESCRIBED BY ORIGINATOR: ☒ YES ☐ NO
CONDITION OF RECORDS: ☒ GOOD ☐ OTHER (Describe Below)	
RECEIVED AND ACCEPTED BY (SIGNATURE): [signature]	TEMPORARY FILE LOCATION NO.: NAR

PROCESSING (By NPR, Except for Adding 'Alternative Storage Ref.' As Applicable)

DATE PROCESSED	ASSIGNED OD NUMBER	SIGNATURE OF NPR PROCESSING PERSONNEL	ALTERNATIVE STORAGE REFERENCE	
			LOCATION	INDEXING REF. (IF ANY)
6/27/06	CY-034	[signature]	—	—

Survey/Sampling Work Plan – SSWP-05-05-012

GENERAL SECTION

SSWP Number : SSWP-05-05-012

Survey Area: 7000-0000

Type of Survey: Characterization

Area Description: Screenwell House

DATA QUALITY OBJECTIVES (DQO)

1.0 STATE THE PROBLEM

The problem: Obtain the final characterization data in below-grade concrete to meet the volumetric concrete sample requirements of the License Termination Plan (LTP).

Stakeholders: The primary stakeholders interested in the answer to this problem are Connecticut Yankee, the CT Department of Environmental Protection (CTDEP) and the US Nuclear Regulatory Commission (USNRC).

The Planning Team: The planning team consisted of Integrated Site Closure group (ISC) personnel. The primary decision maker for this plan was the Site Closure Technical Support Manager with input from the ISC personnel.

Schedule: This project has an expected duration of 3 working days including drilling and sample collection.

Resources: The primary resources needed to determine the answer to the problem are two divers and two laborers, one health physics technician and one radiological engineer. Ancillary support will be needed from the on-site Count Room and offsite lab for sample preparation, gamma spectroscopy and Hard to Detect (HTD) radionuclide analysis.

2.0 IDENTIFY THE DECISION

The *following* decision needs to be defined to address the stated problem.

Principal Study Question: Is the radiological data obtained from sample analysis sufficient to adequately characterize the below-grade concrete?

Alternate Actions: Alternative actions include obtaining additional samples, performing additional analyses at an off-site facility to confirm gamma spectroscopy results and to identify and quantify hard-to-detect (HTD) radionuclides, and no action.

The Decision (1): Determine that the radiological data adequately characterizes the concrete. Consider additional sampling as necessary under a separate addendum to this sampling plan.

3.0 IDENTIFY THE INPUTS TO THE DECISION

Information Needed: Measurements of sample media are needed to identify and determine the concentration of those radionuclides that could potentially be present in the sub-grade portion of the Screenwell House at the time of final radiological assessment. Information is needed in concrete to establish how much, if any, tritium and Sr-90 contamination of the outside walls has occurred due to groundwater flow and information on sediment contamination that may have occurred due to Discharge Tunnel water recirculating into the Screenwell House.

Source of the Information: The new measurements will include collection and radionuclide-specific analysis of concrete wafers and sediment samples. The collection process will typically use a pneumatic drill for coring. Cores will be sliced into wafers for analysis. Analysis for hard-to-detect (HTD) radionuclides will be performed under this SSWP as an output of the decision process. All samples will be analyzed for

tritium and gamma emitting radionuclides. At a minimum, one sample will be randomly selected for QC analysis.

Table 1 shows the required radionuclides for analysis and the necessary detection sensitivity for the analytical and measurement process. The sensitivity or minimum detectable concentration (MDC) is set at 4% of the base-case DCGL values listed in Table 6-4 and Table 6-1 of the License Termination Plan (LTP). Note, the specified MDC is lower than 10% of the DCGL that is recommended by the Section 5.5 of the LTP for fixed measurements (fixed measurements include samples). However, the MDC is the same as the MDC specified in recent FSS sample plans designed to achieve a 10 mrem/year Total Effective Dose Equivalent (TEDE).

Table 1 – Analytic matrix. Includes radionuclide and Base Case DCGL from Table 6-4 and Table 6-1 of the LTP and the required sensitivity or MDC for analysis.

Nuclide	Concrete $DCGL_{25}$ (pCi/g)	Concrete MDC (pCi/g)	Soil $DCGL_{25}$ (pCi/g)	Soil MDC (pCi/g)
H-3	9.05E+01	3.62E+00	4.12E+02	1.65E+01
C-14	2.05E+01	8.20E-01	5.66E+00	2.26E-01
Mn-54	5.51E+01	2.20E+00	1.74E+01	6.96E-01
Fe-55	8.96E+01	3.58E+00	2.74E+04	1.10E+03
Co-60	9.07E+01	3.63E+00	3.81E+00	1.52E-01
Ni-63	1.29E+02	5.16E+00	7.23E+02	2.89E+01
Sr-90	3.77E-01	1.51E-02	1.55E+00	6.20E-02
Nb-94	7.74E+00	3.10E-01	7.12E+00	2.85E-01
Tc-99	2.85E+01	1.14E+00	1.26E+01	5.04E-01
Ag-108m	2.59E+01	1.04E+00	7.14E+00	2.86E-01
Cs-134	3.21E+02	1.28E+01	4.67E+00	1.87E-01
Cs-137	6.45E+02	2.58E+01	7.91E+00	3.16E-01
Eu-152	2.27E+02	9.08E+00	1.01E+01	4.04E-01
Eu-154	1.94E+02	7.76E+00	9.29E+00	3.72E-01
Eu-155	9.53E+03	3.81E+02	3.92E+02	1.57E+01
Pu-238	1.14E+01	4.56E-01	2.96E+01	1.18E+00
Pu-239/240	1.00E+01	4.00E-01	2.67E+01	1.07E+00
Pu-241	1.49E+02	5.96E+00	8.70E+02	3.48E+01
Am-241	4.42E+00	1.77E-01	2.58E+01	1.03E+00
Cm-243/244	3.83E+00	1.53E-01	2.90E+01	1.16E+00

4.0 DEFINE THE BOUNDARIES OF THE SURVEY.

Boundaries of the survey: The focus of this SSWP will be to collect six (6) concrete samples at predetermined locations in the Screenwell House intake and two (2) sediment samples in the bay. All samples will be identified under a general building designator of 7000.

The general orientation of the sample measurement locations (SML) is shown in Attachment 1. The sample location may be moved depending upon the condition of the location. Additional sampling may be necessary to determine the need and amount of decontamination and remediation efforts.

Temporal boundaries: Sampling will normally be performed during dayshift.

Constraints: Constraints include water, poor lighting, wet surfaces and confined spaces.

5.0 DEVELOP A DECISION RULE

The following decision rules have been developed to define a logical process for choosing among alternative actions for the principal study questions associated with this survey unit.

Decision Rule (1): If obstruction prevents further travel of the coring drill, determine if there is sufficient sample for analysis. Consider moving the SML location to obtain a new sample of sufficient quantity, otherwise stop sampling at this SML and document conclusion of the decision in the Daily Survey Journal sheet.

Decision Rule (2): If all analyses meet the required sensitivity with no anomalous or suspect results (e.g., identification of a gamma-emitting radionuclide not contained in Table 1 and not attributable to natural radioactivity) then no further action is required under this SSWP. Otherwise, reanalyze sample or consider performing additional analyses for other hard-to-detect (HTD) radionuclides.

6.0 SPECIFY TOLERABLE LIMITS ON DECISION ERRORS

There are no limits on decision errors for characterization surveys.

7.0 OPTIMIZE DESIGN

Number of Samples and Locations: There are eight SMLs for sampling under this SSWP. These SMLs were determined by the planning team to provide a broad cross-section of the material surface.

DQO STEPS COMPLETE (signature signifies affirmative response)

6-1-2005

Site Closure Radiological Engineer/Date

GENERAL INSTRUCTIONS

1. Characterization activities will be performed under WP&IR number 2005-0050.
2. Cognizant engineers to review pictures and plant drawings of the area.
3. Sampling equipment and supplies will consist of some or all of the following; concrete coring drill and drill bits, new marinelli containers, tape and tamper-evident tape, trowels, hacksaw, marker and new plastic bags for preparing samples and packaging off-site samples. Other equipment may include utility knifes, poly sheeting, location marking paint and hand augers.
4. Ensure obstructions are removed to provide suitable access for equipment and personnel.
5. Sample locations should be identified or labeled when possible.
6. Samples will be obtained in accordance with RPM 5.1-3, "*Collection of Surface and Subsurface Soil, Shoreline Sediment, Asphalt and Liquid Samples for Scoping, Characterization and Final Status Surveys*" and in accordance with the Work Plan and Inspection Record (WP&IR) and this SSWP.
7. Sample nomenclature will be as suggested by RPM 5.1-2, "*Preparation of Characterization, Remedial Action and Turnover Survey Plans*" with some modification to align the procedural format with the need to obtain multiple samples from the same location. For example, 7000-0000-012-C-1C-01 represents the first concrete core wafer from the first core taken at SML #12. The dashes ("-") shown in the procedure are optional and are not required.
8. The cognizant radiological engineer will determine whether sufficient sample media has been collected for analysis in instances where only a partial core sample was obtained.
9. Samples will be handled in accordance with procedure RPM 5.1-5, "*Chain of Custody for Final Status Survey Samples.*"
10. Sample analyses should meet the sensitivity requirements provided in Table 1 to this SSWP.
11. Documents generated during the performance of this SSWP will be complete and legible. Corrections will be made using a single line-out followed by an initial and date..

SPECIFIC INSTRUCTIONS

1. Initiate and utilize the Daily Survey Journal Sheet in accordance with RPM 5.1-11, "*Preparation of Final Status Survey Plans.*"
2. Sample instructions (Attachment 1 provides location).
   a. Proceed to the selected SML denoted on Attachment 1 and designated by Table 2.

Table 2 – Sample Measurement Location (SML)

[illegible]	[illegible]	[illegible]
12	Concrete/Soil	7000-0000-012
13	Concrete	7000-0000-013
14	Sediment/Concrete/Soil	7000-0000-014
15	Sediment/Concrete/Soil	7000-0000-015

[illegible]	[illegible]	Sample Designation
16	Concrete/Soil	7000-0000-016
17	Concrete/Soil	7000-0000-017
18	Concrete	7000-0000-018

b. Perform concrete coring at the selected location.

(1). Drill all the way through the concrete to the soil (estimated thickness is 30 inches).

(2). Identify the top by placing a "T" or arrow on the core, place into a plastic bag to maintain moisture content.

(3). Label in accordance with designation number provided in Table 2 followed by a "C-1C". Subsequent cores are identified as "C-2C", "C-3C" etc.

(4). Continue sampling until the last sample contains soil or bedrock from beyond the concrete.

c. Perform sediment sampling and concrete coring at the selected location.

(1). At the selected location, collect sediment from on top of the concrete.

(2). Label in accordance with the designation number provided in Table 2 followed by an "S".

(3). Drill all the way through the concrete to the soil (estimated thickness is 30 inches).

(4). Identify the top by placing a "T" or arrow on the core, place into a plastic bag to maintain moisture content.

(5). Label in accordance with designation number provided in Table 2 followed by a "C-1C". Subsequent cores are identified as "C-2C", "C-3C" etc.

(6). Continue sampling until the last sample contains soil or bedrock from beyond the concrete.

d. Generate a Sample Control and Accountability form for the samples.

(1). Record sample information on a Sample Control and Accountability form.

(2). Place a security tamper seal on the container or maintain physical control until sample(s) are transferred to an appropriate locked storage area.

(3). Record sample location information on the Sample Control and Accountability form.

e. Disposition samples for analysis.

(1). Set-up area for sample preparation in the Site Closure Sea/Land container or where directed by health physics.

(2). Obtain two approximately 2 inch wafers from both the outer most core (nearest the soil). Obtain two approximately 2 inch wafers from the inner most core (nearest the river).

(3). Place the wafers into double plastic bags or into a vacuum sealed single bag, apply tamper proof tape and label each sample with "01", "02" etc, after the core designation.

f. Generate a CoC for samples being analyzed offsite.

(1). Record sample IDs, dates, times and codes.

(2). The analysis codes are "CHGAM", "H-3", and "Sr-90" for all samples.

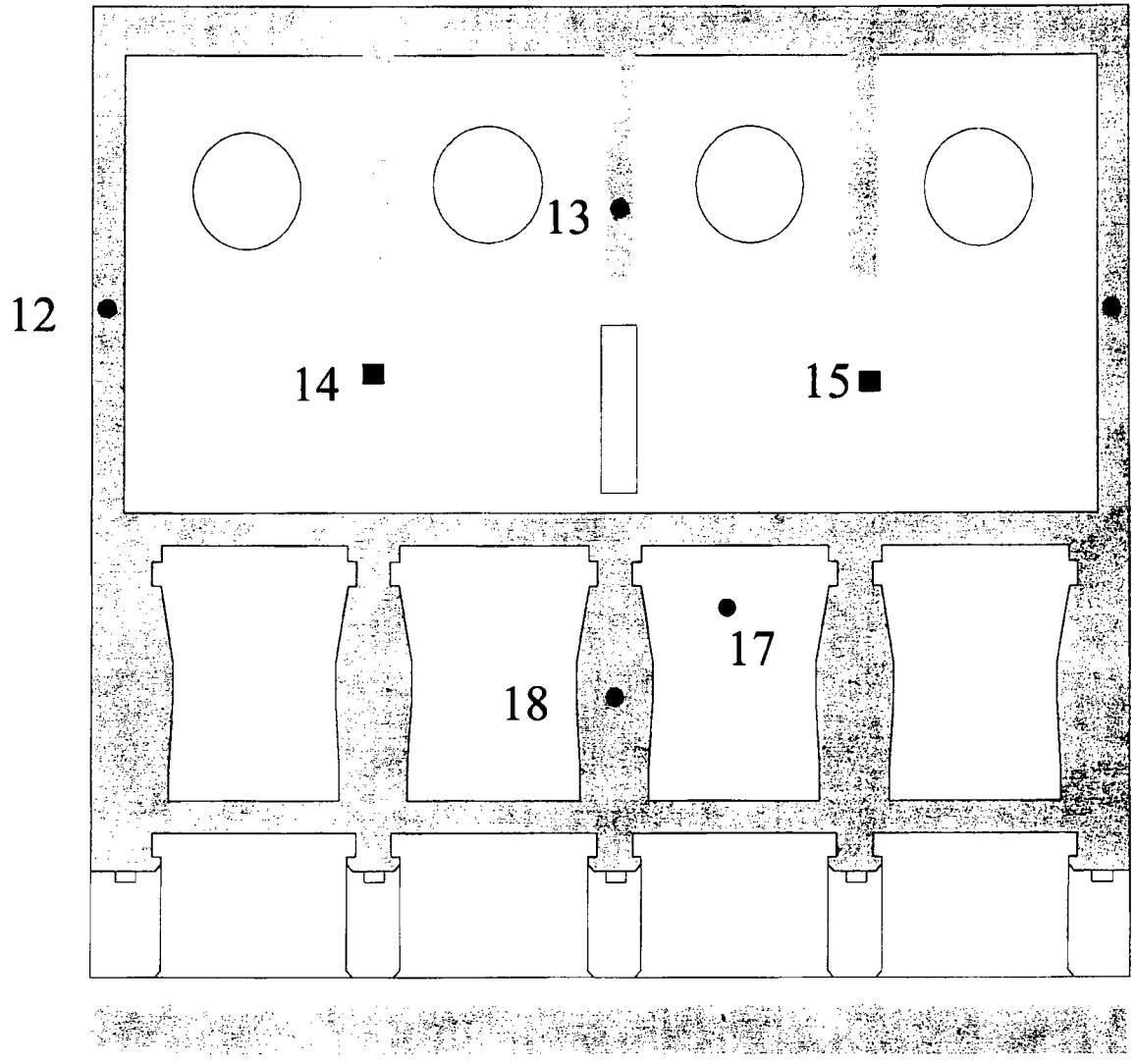
(3). Select one wafer from each sample media type (e.g. concrete, soil, sediment, etc.) for analysis code "CHALL".

g. Evaluate the data and determine appropriate actions based upon the decision rules in Section 5.

Prepared by _____ Date 6-1-2005
Site Closure Radiological Engineer

Reviewed by _____ Date 6/1/05

SSWP 05-05-012
Attachment 1



● = Concrete Core Location

■ = Sediment & Core Location

Plant North

CONNECTICUT YANKEE ATOMIC POWER COMPANY
GENERAL ARRANGEMENT DRAWING

SCREENWELL BUILDING
ELEVATION: -18'

INITIAL CREATION DATE	6/18/97
REVISION DATE	5/24/05
REVISION #	1
MAP #	GAD7000

LEGEND:

FLOOR WALL INTERSECTION
SURVEY AREA BOUNDARY
SURVEY AREA
SURVEY UNIT BOUNDARY
#

RESCUE PLAN FOR UNDERWATER CONSTRUCTION CORPORATION (UCC) OBTAINING SOIL AND CONCRETE CORE SAMPLES AT INTAKE BUILDING

6/06/05 **Rev.2**

This rescue plan is in conjunction with Underwater Construction Corporation (UCC) operations and CY's Decommissioning Procedures. UCC will perform diving activities to obtain samples, following their own detailed Diving Safety Plan and following site procedure where applicable.

Items to be staged w/ Rescue Team:

1. Personal Floatation Device
2. Rescue Harness for each rescuer.
3. Medical Bag including heat packs (Nurse to prepare for cold conditions)
4. Blankets
5. Stokes Basket and Haul Safe kit
6. Wooden Back Board
7. Bag w/ Extra rope and carabineers.
8. Four gas atmospheric Air Monitor w/ batteries
9. Radios/Check channel 10 prior to dive

Coverage

The coverage will be by a "Stand-by" Rescue Team throughout the entire evolution. The following are required prior to any dives:

1. All personnel (including rescue team) involved in tasks are briefed on every detail of work to be performed.
2. The Safety Dept. will be notified @ X-3211 prior to divers entering the water. They will also be notified when divers are clear of the water. The Nurse will also receive the same notifications @ X-3610.

Initiating a Medical/Rescue response:

1. Call the ISFSI Shift Supervisor (ISS) via nearest phone at 860-267-2556 @ X-3911 on cell phone, 3911 on house phone or channel 10 on radio.
2. Inform the ISS of the injury/injuries.
3. Give the number of ill/injured.
4. The cause of for the illness/injury.
5. The status of the ill/injured i.e. bleeding, unconscious, etc....
6. Remain on line until ISS has all info. and releases you.

Responsibilities of the Caller:

1. Secure the scene
2. Ask for assistance in removing people from the area.
3. Clear the area to help aid the rescue team.
4. Provide information to Nurse and the rescue team.

Rescue Details:

In the event of a rescue, the Standby Diver will perform the rescue to the surface of the water; the rescue team will perform the rescue from the water surface and remain in the area to help the ill/injured after retrieval from the water. The Nurse/Rescue Team Leader will notify the Control Room if outside assistance is needed. A copy of this plan should be given to all rescue team members involved, medical dept. and the control room prior to work commencing.

Safety Supervisor_____

Work Supervisor_____

Dive Supervisor_____

This plan was written and prepared by Denise Dudek and Chris Snipes.

Attachment A

SITE EXCAVATION PERMIT (TYPICAL)

Field Engineer: Todd Brautigam X3081	WP&IR No.: 2005-0050	Permit No.: 05-036

Description and Location of Excavation:

Perform concrete coring in (-18' elevation) of the Screenwell House and in the floor and walls of the Discharge Tunnel and Outlet Structure. See attached maps.

Excavation Dimensions:
4 inch diameter cores drilled through walls and floors

Note: If start and finish dates are different from scheduled and expected dates, re-evaluate the adequacy of controls.

Scheduled Start of Excavation: 6/6/05	Expected Finish of Excavation: 6/17/05
Actual Start of Excavation:	Actual Finish of Excavation:

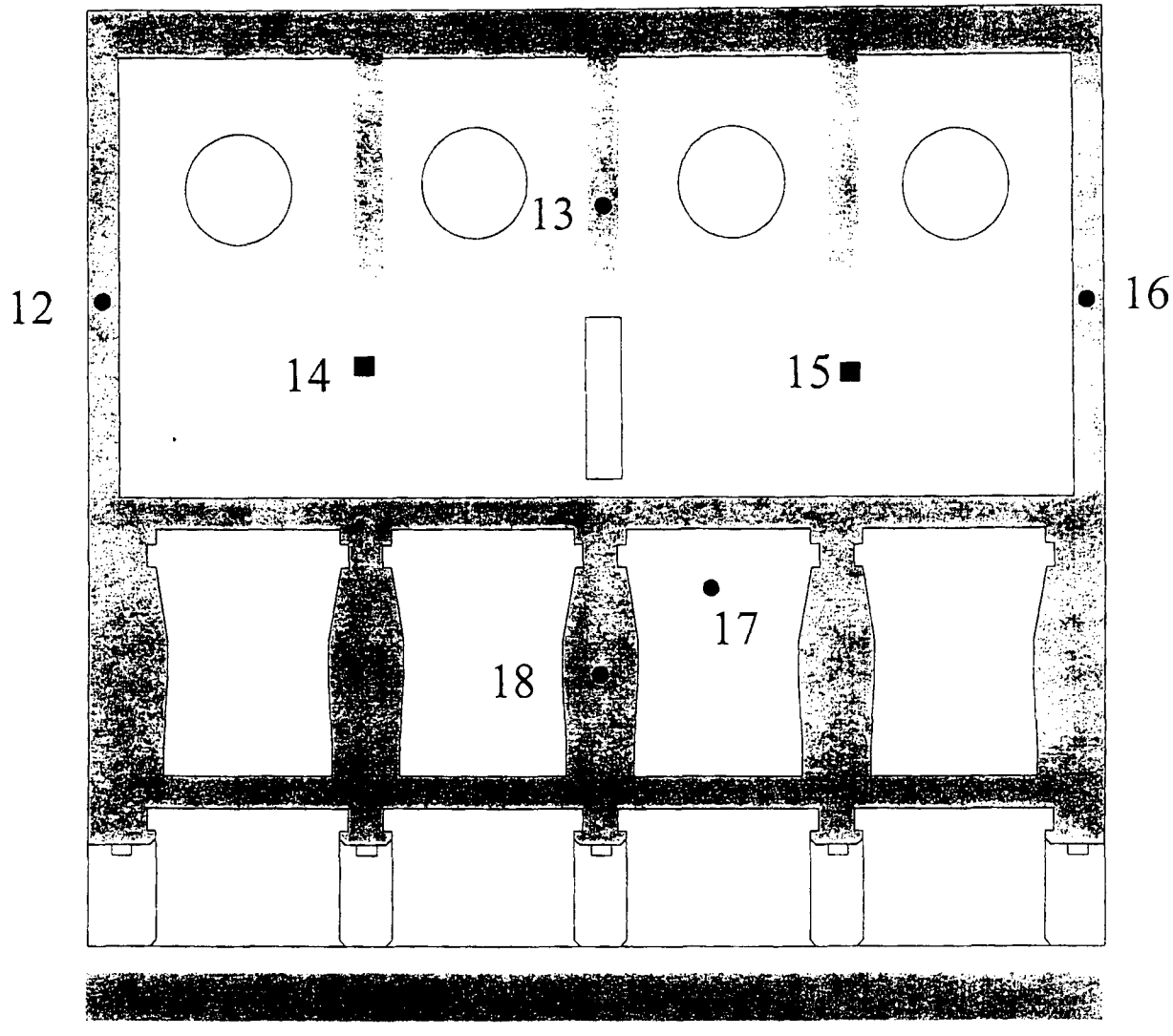
Underground Utilities in Area (Include drawing reference):
Electrical Eng. THERE ARE NO KNOWN U.G. ELEC UTILITIES IN THESE AREAS DWR.
Mechanical Eng. N/A

Special Precautions: **NOTE** - to downgrade or modify excavation safety controls, Engineering and Safety Manager approval is required.

Storm water Pollution Controls:

Approvals: FSS _____ RCRA _____
Health & Safety _____ HP _____
Electrical Engineer _____ 6-2-05 6/2/05 Environmental _____
Mech/Civil Engineer _____ 06-02-05 Field Engineer _____
Job Supervisor Todd Brautigam Engineering Manager _____

SSWP 05-05-012
Attachment 1



● = Concrete Core Location

■ = Sediment & Core Location

Plant North

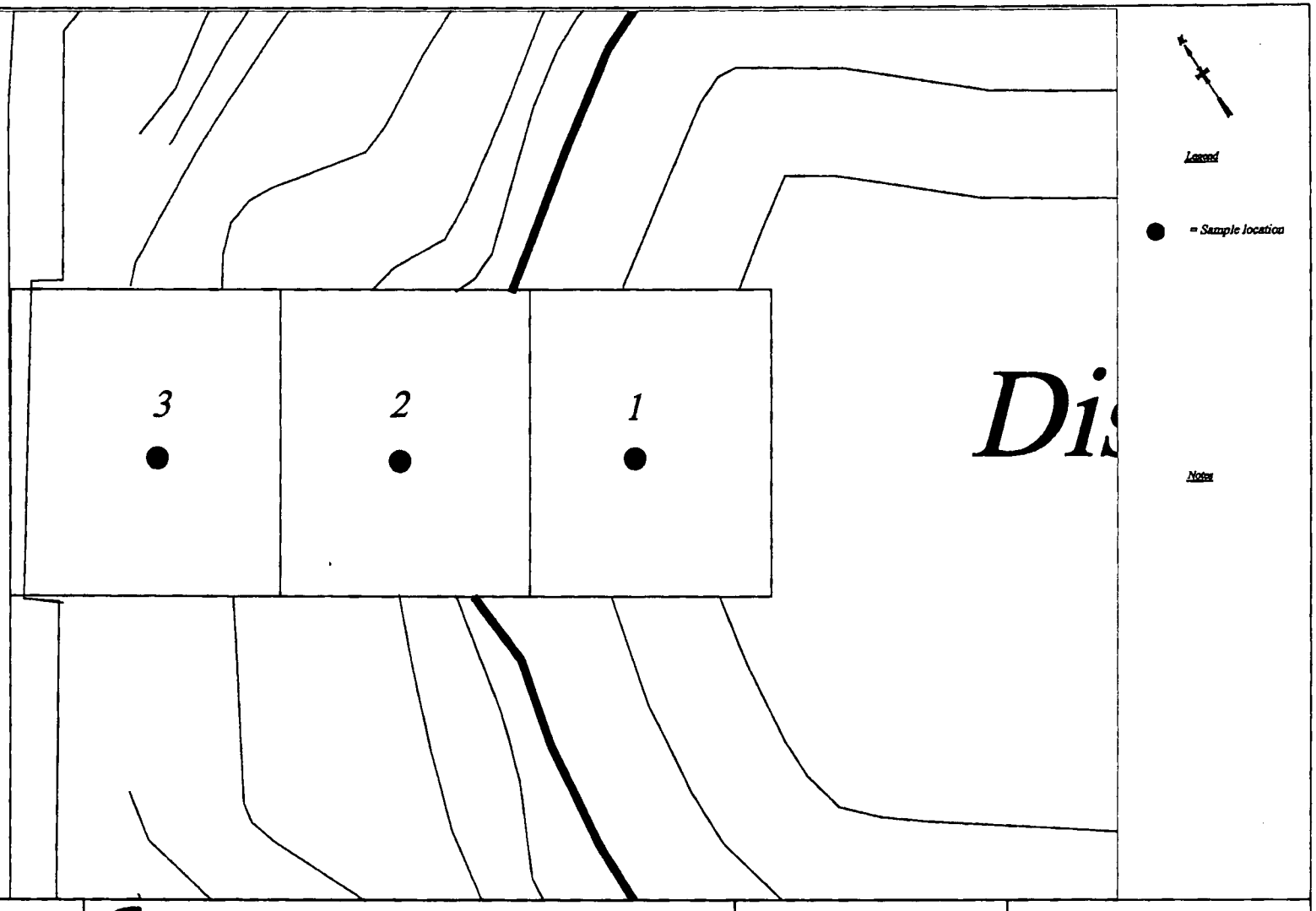
CONNECTICUT YANKEE ATOMIC POWER COMPANY
GENERAL ARRANGEMENT DRAWING

SCREENWELL BUILDING
ELEVATION: -18'

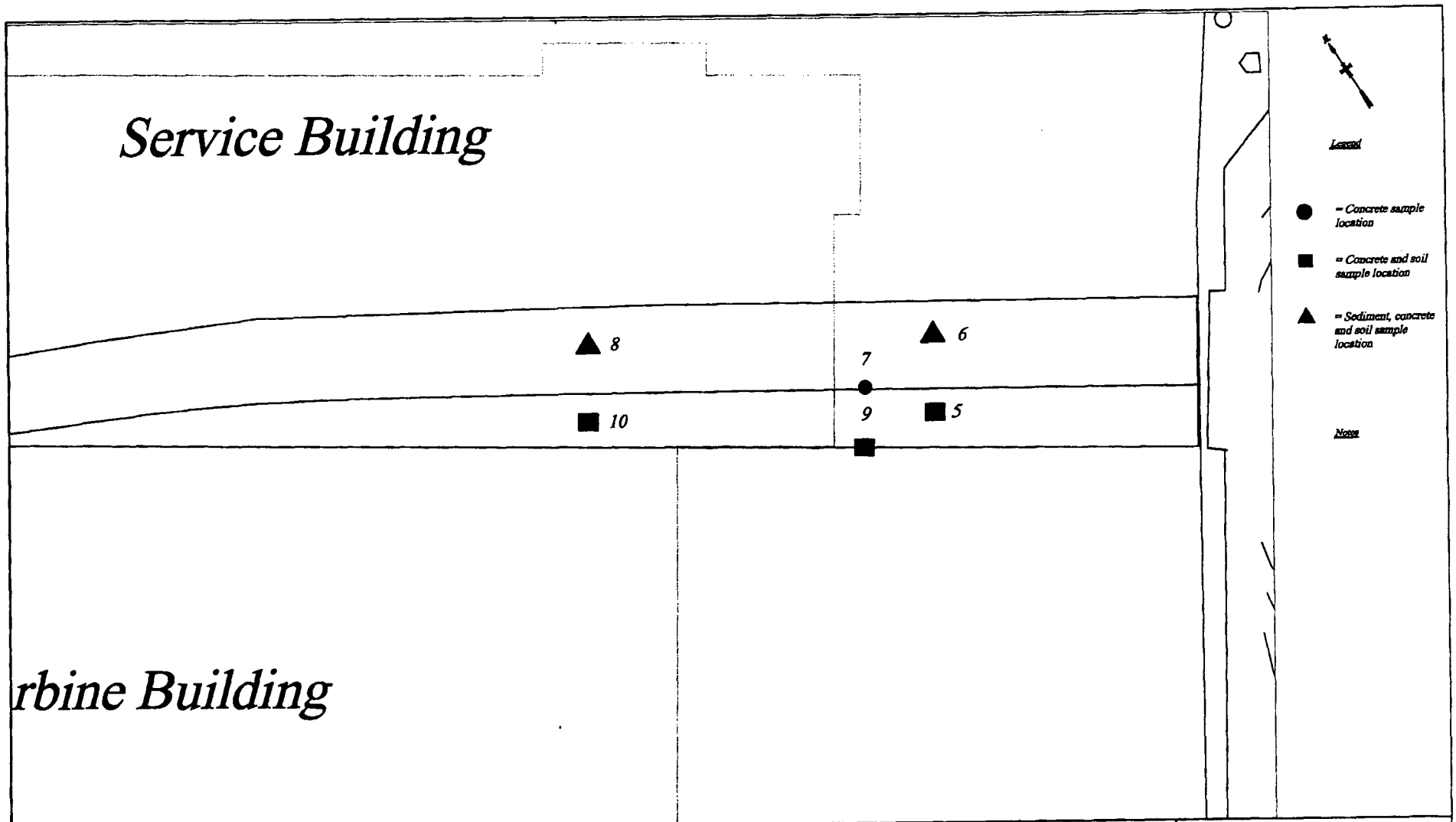
INITIAL CREATION DATE	6/18/97
REVISION DATE	5/24/05
REVISION #	1
MAP #	GAD7000

LEGEND:

FLOOR WALL INTERSECTION
SURVEY AREA BOUNDARY
SURVEY AREA
SURVEY UNIT BOUNDARY
#



SSWP 05-05-013 Attachment 1	Connecticut Yankee Atomic Power Company Discharge Tunnel Outlet Structure	Date: May 2005 Revision: 0	Created by: P Hollenbeck



SSWP 05-05-013 Attachment 2	Connecticut Yankee Atomic Power Company Discharge Tunnel Samples	Date: May 2005 Revision: 0	Created by: P Hollenbeck

GENERAL ENGINEERING LABORATORIES, LLC
a Member of THE GEL GROUP, INC.
Meeting Today's Needs with a Vision for Tomorrow

August 1, 2005

Mr. Pete Hollenbeck
Connecticut Yankee Atomic Power
Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424

Re: Concrete PO# 002332
Work Order: 140051
SDG: MSR#05-1811

Dear Mr. Hollenbeck:

General Engineering Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on July 7, 2005. This data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4243.

Sincerely,

Cheryl Jones
Project Manager

Purchase Order: 002332
Chain of Custody: 2005-00290, 2005-00291, 2005-00292, 2005-00296
Enclosures

P.O. Box 30712 • Charleston, SC 29417 • 2040 Savage Road (29407)
Phone (843) 556-8171 • Fax (843) 766-1178 • www.gel.com

CONNECTICUT YANKEE
RE: Concrete & Sediment
PO# 002332
Work Order: 140051
SDG: MSR#05-1811

140051001	7000-0000-014-C1C-01	140051014	7000-0000-012-C4C-04
140051002	7000-0000-014-C1C-02	140051015	7000-0000-013-C1C-01
140051003	7000-0000-015-C1C-01	140051016	7000-0000-013-C1C-02
140051004	7000-0000-015-C1C-02	140051017	7000-0000-013-C2C-03
140051005	7000-0000-016-C1C-01	140051018	7000-0000-013-C2C-04
140051006	7000-0000-016-C1C-02	140051019	7000-0000-018-C1C-01
140051007	7000-0000-016-C3C-03	140051020	7000-0000-018-C1C-02
140051008	7000-0000-016-C3C-04	140051021	7000-0000-018-C3C-03
140051009	7000-0000-017-C1C-01	140051022	7000-0000-018-C3C-04
140051010	7000-0000-017-C1C-02	140051023	7000-0000-012-1S
140051011	7000-0000-012-C1C-01	140051024	7000-0000-014-1S
140051012	7000-0000-012-C1C-02	140051025	7000-0000-015-01S
140051013	7000-0000-012-C4C-03	140051026	7000-0000-016-01S

CASE NARRATIVE
For
CONNECTICUT YANKEE
RE: Concrete & Sediment
PO# 002332
Work Order: 140051

August 1, 2005

Laboratory Identification:
General Engineering Laboratories, LLC

Mailing Address:
P.O. Box 30712
Charleston, South Carolina 29417

Express Mail Delivery and Shipping Address:
2040 Savage Road
Charleston, South Carolina 29407

Telephone Number:
(843) 556-8171

Summary:

Sample receipt
The samples arrived at General Engineering Laboratories, LLC, (GEL) in Charleston, South Carolina July 7, 2005. All sample containers arrived without any visible signs of tampering or breakage. The chain of custody contained the proper documentation and signatures except in items of note located below.

The laboratory prepared the following sample(s):

Sample ID	Client Sample ID
140051001	7000-0000-014-C1C-01
140051002	7000-0000-014-C1C-02
140051003	7000-0000-015-C1C-01
140051004	7000-0000-015-C1C-02
140051005	7000-0000-016-C1C-01
140051006	7000-0000-016-C1C-02
140051007	7000-0000-016-C3C-03
140051008	7000-0000-016-C3C-04
140051009	7000-0000-017-C1C-01
140051010	7000-0000-017-C1C-02

GENERAL ENGINEERING LABORATORIES, LLC
a Member of THE GEL GROUP, INC.
P.O. Box 30712 • Charleston, SC 29417 • 2040 Savage Road (29407)
Phone (843) 556-8171 • Fax (843) 766-1178 • www.gel.com

Sample ID	Client Sample ID
140051011	7000-0000-012-C1C-01
140051012	7000-0000-012-C1C-02
140051013	7000-0000-012-C4C-03
140051014	7000-0000-012-C4C-04
140051015	7000-0000-013-C1C-01
140051016	7000-0000-013-C1C-02
140051017	7000-0000-013-C2C-03
140051018	7000-0000-013-C2C-04
140051019	7000-0000-018-C1C-01
140051020	7000-0000-018-C1C-02
140051021	7000-0000-018-C3C-03
140051022	7000-0000-018-C3C-04
140051023	7000-0000-012-1S
140051024	7000-0000-014-1S
140051025	7000-0000-015-01S
140051026	7000-0000-016-01S

Items of Note:
There are no items of note.

Case Narrative:

Sample analyses were conducted using methodology as outlined in General Engineering Laboratories (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are listed below by analytical parameter.

Analytical Request:

Twenty-one concrete samples were analyzed for CHGAM, Sr-90, and H_3.
One concrete sample was analyzed for CHALL.
Three sediment samples were analyzed for CHGAM, Sr-90, and H_3.
One sediment sample was analyzed for CHALL.

Internal Chain of Custody:

Custody was maintained for all of these samples.

GENERAL ENGINEERING LABORATORIES, LLC
a Member of THE GEL GROUP, INC.
P.O. Box 30712 • Charleston, SC 29417 • 2040 Savage Road (29407)
Phone (843) 556-8171 • Fax (843) 766-1178 • www.gel.com

Data Package:

The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist and Radiochemistry.

I certify that this data package is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or a designee, as verified by the following signature.

Cheryl Jones
Project Manager

GENERAL ENGINEERING LABORATORIES, LLC
a Member of THE GEL GROUP, INC.
P.O. Box 30712 • Charleston, SC 29417 • 2040 Savage Road (29407)
Phone (843) 556-8171 • Fax (843) 766-1178 • www.gel.com

CHAIN OF CUSTODY

Connecticut Yankee Atomic Power Company
362 Injun Hollow Road, East Hampton, CT 06424
860-267-2556

Chain of Custody Form

No. 2005-00290

140051%

Project Name: Haddam Neck Decommissioning

Contact Name & Phone:
Pete Hollenbeck 860-267-3923

Analytical Lab (Name, City, State):
General Engineering Laboratories
2040 Savage Road
Charleston, SC 29407 ATT: Cheryl Jones

Priority: ☒ 30 D. ☐ 14 D. ☐ 7 D.
Other:

Lab Use Only
Comments:

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	CHGAM	H-3	Sr-90	CHALL			Comment, Preservation	Lab Sample ID
7000-0000-014-C1C-01	6/14/05	1440	CT	CR	BP	X	X	X				2"	
7000-0000-014-C1C-02	6/14/05	1440	CT	CR	BP	X	X	X				2"	
7000-0000-015-C1C-01	6/16/05	1550	CT	CR	BP				X			2"	
7000-0000-015-C1C-02	6/16/05	1550	CT	CR	BP	X	X	X				2"	
7000-0000-016-C1C-01	6/15/05	1015	CT	CR	BP	X	X	X				2"	
7000-0000-016-C1C-02	6/15/05	1015	CT	CR	BP	X	X	X				1.5"	
7000-0000-016-C3C-03	6/15/05	1130	CT	CR	BP	X	X	X				2"	
7000-0000-016-C3C-04	6/15/05	1130	CT	CR	BP	X	X	X				2"	
7000-0000-017-C1C-01	6/16/05	1355	CT	CR	BP	X	X	X				2"	
7000-0000-017-C1C-02	6/16/05	1355	CT	CR	BP	X	X	X				2"	

NOTES: PO # 002332 MSR #: 05-1811 ☒ LTP QA ☐ Radwaste QA ☐ Non QA

Samples Shipped Via:
☒ Fed Ex
☐ UPS
☐ Hand
☐ Other ____
7923 2460 5931
Bill of Lading #

Internal Container Temp.: 24 Deg. C
Custody Sealed? Y ☐ N ☒
Custody Seal Intact? Y ☐ N ☐

1) Relinquished By [signature] Date/Time 7/6/05 1213	2) Received By [signature] Date/Time 7-7-05 0900
3) Relinquished By Date/Time	4) Received By Date/Time
5) Relinquished By Date/Time	6) Received By Date/Time

Chain of Custody Form

Connecticut Yankee Atomic Power Company
362 Injun Hollow Road, East Hampton, CT 06424
860-267-2556

No. 2005-00291

1400511.

Project Name: Haddam Neck Decommissioning

Contact Name & Phone:
Pete Hollenbeck 860-267-3923

Analytical Lab (Name, City, State):
General Engineering Laboratories
2040 Savage Road
Charleston, SC 29407 ATT: Cheryl Jones

Priority: ☒ 30 D. ☐ 14 D. ☐ 7 D.
Other:

Lab Use Only
Comments:

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	CHGAM	H-3	Sr-90				Comment, Preservation	Lab Sample ID
7000-0000-012-C1C-01	6/9/05	1516	CT	CR	BP	X	X	X				2"	
7000-0000-012-C1C-02	6/9/05	1516	CT	CR	BP	X	X	X				2"	
7000-0000-012-C4C-03	6/13/05	1045	CT	CR	BP	X	X	X				2"/ REBAR	
7000-0000-012-C4C-04	6/13/05	1045	CT	CR	BP	X	X	X				2"	
7000-0000-013-C1C-01	6/14/05	1400	CT	CR	BP	X	X	X				2"	
7000-0000-013-C1C-02	6/14/05	1400	CT	CR	BP	X	X	X				2.5" / REBAR	
7000-0000-013-C2C-03	6/14/05	1425	CT	CR	BP	X	X	X				2" / REBAR	
7000-0000-013-C2C-04	6/14/05	1425	CT	CR	BP	X	X	X				2"	

NOTES: PO # 002332 MSR #: 05-1811 ☒ LTP QA ☐ Radwaste QA ☐ Non QA

Samples Shipped Via:
☒ Fed Ex
☐ UPS
☐ Hand
☐ Other ____
7923 2460 5931
Bill of Lading #

Internal Container Temp.: 24 Deg. C

Custody Sealed?
Y ☐ N ☑

Custody Seal Intact?
Y ☐ N ☐

1) Relinquished By [signature] Date/Time 7/6/05 1213	2) Received By [signature] Date/Time 7-7-05 0900
3) Relinquished By Date/Time	4) Received By Date/Time
5) Relinquished By Date/Time	6) Received By Date/Time

Connecticut Yankee Atomic Power Company
362 Injun Hollow Road, East Hampton, CT 06424
860-267-2556

Chain of Custody Form

No. 2005-00292

1400511.

Project Name: Haddam Neck Decommissioning

Contact Name & Phone:
Pete Hollenbeck 860-267-3923

Analytical Lab (Name, City, State):
General Engineering Laboratories
2040 Savage Road
Charleston, SC 29407 ATT: Cheryl Jones

Priority: ☒ 30 D. ☐ 14 D. ☐ 7 D.
Other:

Lab Use Only
Comments:

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	CHGAM	H-3	Sr-90				Comment, Preservation	Lab Sample ID
7000-0000-018-C1C-01	6/15/05	1415	CT	CR	BP	X	X	X				2"	
7000-0000-018-C1C-02	6/15/05	1415	CT	CR	BP	X	X	X				2"	
7000-0000-018-C3C-03	6/15/05	1515	CT	CR	BP	X	X	X				2"	
7000-0000-018-C3C-04	6/15/05	1515	CT	CR	BP	X	X	X				2"	

NOTES: PO # 002332 MSR #: 05-1811 ☒ LTP QA ☐ Radwaste QA ☐ Non QA

Samples Shipped Via:
☒ Fed Ex
☐ UPS
☐ Hand
☐ Other ____
79232460 5931
Bill of Lading #

Internal Container Temp.: 24 Deg. C

Custody Sealed?
Y ☐ . N ☒

Custody Seal Intact?
Y ☐ N ☐

1) Relinquished By [signature] Date/Time 7/6/05 1213	2) Received By [signature] Date/Time 7-7-05 0900
3) Relinquished By Date/Time	4) Received By Date/Time
5) Relinquished By Date/Time	6) Received By Date/Time

Connecticut Yankee Atomic Power Company
362 Injun Hollow Road, East Hampton, CT 06424
860-267-2556

Chain of Custody Form

No. 2005-00296

140051'/.

Project Name: Haddam Neck Decommissioning

Contact Name & Phone:
Pete Hollenbeck 860-267-3923

Analytical Lab (Name, City, State):
General Engineering Laboratories
2040 Savage Road
Charleston, SC 29407 ATT: Cheryl Jones

Priority: ☒ 30 D. ☐ 14 D. ☐ 7 D.
Other:

Lab Use Only
Comments:

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	CHGAM	H-3	Sr-90	CHALL			Comment, Preservation	Lab Sample ID
7000-0000-012-1S	6/13/05	1120	SE	G	1LP	X	X	X					
7000-0000-014-1S	6/13/05	1400	SE	G	1LP	X	X	X					
7000-0000-015-01S	6/16/05	1330	SE	G	1LP				X				
7000-0000-016-01S	6/15/05	1155	SE	G	1LP	X	X	X					

NOTES: PO # 002332 MSR #: 05-1811 ☒ LTP QA ☐ Radwaste QA ☐ Non QA

Sr-90 RDL = 0.025 pCi/g

Samples Shipped Via:
☒ Fed Ex
☐ UPS
☐ Hand
☐ Other ____

7923 2460 5931
Bill of Lading #

Internal Container Temp.: 2 Deg. C

Custody Sealed? Y ☐ N ☒

Custody Seal Intact? Y ☐ N ☐

1) Relinquished By	Date/Time	2) Received By	Date/Time
[signature]	7/6/05 1213	[signature]	7-7-05 0900
3) Relinquished By	Date/Time	4) Received By	Date/Time
5) Relinquished By	Date/Time	6) Received By	Date/Time

COOLER RECEIPT CHECKLIST

Figure 1. Sample Check-in List

Date/Time Received: 7-7-05 0900.

SDG#: MSR#05-1811

Work Order Number: 140051

Shipping Container ID: FED EX 7923 2460 5931 Chain of Custody # 2005-00296, 00290, 00291 + 00292

1. Custody Seals on shipping container intact? Yes [ ] No [ ] NA ✓
2. Custody Seals dated and signed? Yes [ ] No [ ] NA ✓
3. Chain-of-Custody record present? Yes [✓] No [ ]
4. Cooler temperature 24°C
5. Vermiculite/packing materials is: Wet [ ] Dry [ ] NA ✓
6. Number of samples in shipping container: 26
7. Sample holding times exceeded? Yes [ ] No [✓]

8. Samples have:

✓ tape ____ hazard labels

____ custody seals ✓ appropriate sample labels

9. Samples are:

✓ in good condition ____ leaking

____ broken ____ have air bubbles

10. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
11. Description of anomalies (include sample numbers): _____

Sample Custodian/Laboratory: [signature] Date: 7-7-05

Telephoned to: _____ On _____ By _____

SAMPLE RECEIPT & REVIEW FORM

GENERAL ENGINEERING LABORATORIES, LLC

PM use only

Client: Conn Yankee/RAD DATA	SDG/ARCOC/Work Order: 140051
Date Received: 7-7-05	PM(A) Review (ensure non-conforming items are resolved prior to signing):
Received By: MK	

	Sample Receipt Criteria	Conforming	NA	Non-Conforming	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?				Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within (4 +/- 2 C)? Record preservation method.				Circle Temp device serial # ice bags blue ice dry ice none other(describe)
3	Chain of custody documents included with shipment?				
4	Sample containers intact and sealed?				Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?				Sample ID's, containers affected and observed pH:
6	VOA vials free of headspace (defined as < 6mm bubble)?				Sample ID's and containers affected:
7	Samples received within holding time?				Id's and tests affected:
8	Sample ID's on COC match ID's on bottles?				Sample ID's and containers affected:
9	Date & time on COC match date & time on bottles?				Sample ID's affected:
10	Number of containers received match number indicated on COC?				Sample ID's affected:
11	COC form is properly signed in relinquished/received sections?				
12	Air Bill ,Tracking #'s, & Additional Comments				

Radiological Information	Non-RAD	RAD	RSO	RSO/RAD Receipt #
What is the radiological classification of the samples?		✓		Comments
Radioactivity Screening Results (maximum observed CPM)	CPM			If > 2 x background is observed on a non-radioactive sample contact the RSO to investigate

PM (or PMA) review of Receiving Rad classification: _____ Initials 7/7/05 Date

RADIOLOGICAL ANALYSIS

Radiochemistry Case Narrative
Connecticut Yankee Atomic Power Co. (YANK)
SDG MSR#05-1811

Method/Analysis Information

Product:	**Alphaspec Am241, Cm, Solid ALL FSS**
Analytical Method:	DOE EML HASL-300, Am-05-RC Modified
Prep Method:	Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method:	Dry Soil Prep
Analytical Batch Number:	442289
Prep Batch Number:	440785
Dry Soil Prep GL-RAD-A-021 Batch Number:	440783

Sample ID	Client ID
140051003	7000-0000-015-C1C-01
140051025	7000-0000-015-01S
1200887282	Method Blank (MB)
1200887283	140051003(7000-0000-015-C1C-01) Sample Duplicate (DUP)
1200887284	140051003(7000-0000-015-C1C-01) Matrix Spike (MS)
1200887285	Laboratory Control Sample (LCS)

SOP Reference
Procedures for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 14.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 140051003 (7000-0000-015-C1C-01).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Manual Integration
No manual integrations were performed on data in this batch.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Alphaspec Pu, Solid-ALL FSS**
Analytical Method:	DOE EML HASL-300, Pu-11-RC Modified
Prep Method:	Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method:	Dry Soil Prep
Analytical Batch Number:	442290
Prep Batch Number:	440785
Dry Soil Prep GL-RAD-A-021 Batch Number:	440783

Sample ID	Client ID
140051003	7000-0000-015-C1C-01
140051025	7000-0000-015-01S
1200887286	Method Blank (MB)
1200887287	140051003(7000-0000-015-C1C-01) Sample Duplicate (DUP)
1200887288	140051003(7000-0000-015-C1C-01) Matrix Spike (MS)
1200887289	Laboratory Control Sample (LCS)

SOP Reference
Procedures for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 14.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC

The following sample was used for QC: 140051003 (7000-0000-015-C1C-01).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Manual Integration
No manual integrations were performed on data in this batch.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Liquid Scint Pu241, Solid-TRU2,ALL2 (CT)**
Analytical Method:	DOE EML HASL-300, Pu-11-RC Modified
Prep Method:	Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method:	Dry Soil Prep
Analytical Batch Number:	448398
Prep Batch Number:	440782
Dry Soil Prep GL-RAD-A-021 Batch Number:	440781

Sample ID	Client ID
140051003	7000-0000-015-C1C-01
140051025	7000-0000-015-01S
1200901933	Method Blank (MB)
1200901934	140051025(7000-0000-015-01S) Sample Duplicate (DUP)
1200901935	140051025(7000-0000-015-01S) Matrix Spike (MS)
1200901936	Laboratory Control Sample (LCS)

SOP Reference
Procedures for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-035 REV# 7.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 140051025 (7000-0000-015-01S).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
Samples were reprepped due to low/high recovery.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Manual Integration
No manual integrations were performed on data in this batch.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)**
Analytical Method:	EML HASL 300, 4.5.2.3
Prep Method:	Dry Soil Prep
Analytical Batch Number:	441350
Prep Batch Number:	440781

Sample ID	Client ID
140051001	7000-0000-014-C1C-01
140051002	7000-0000-014-C1C-02
140051003	7000-0000-015-C1C-01
140051004	7000-0000-015-C1C-02
140051005	7000-0000-016-C1C-01
140051006	7000-0000-016-C1C-02
140051007	7000-0000-016-C3C-03

140051008	7000-0000-016-C3C-04
140051009	7000-0000-017-C1C-01
140051010	7000-0000-017-C1C-02
140051011	7000-0000-012-C1C-01
140051012	7000-0000-012-C1C-02
140051013	7000-0000-012-C4C-03
140051014	7000-0000-012-C4C-04
140051015	7000-0000-013-C1C-01
140051016	7000-0000-013-C1C-02
140051017	7000-0000-013-C2C-03
140051018	7000-0000-013-C2C-04
140051019	7000-0000-018-C1C-01
140051020	7000-0000-018-C1C-02
1200884848	Method Blank (MB)
1200884849	140051001(7000-0000-014-C1C-01) Sample Duplicate (DUP)
1200884850	Laboratory Control Sample (LCS)

SOP Reference
Procedures for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-013 REV# 10.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 140051001 (7000-0000-014-C1C-01).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
The method blank, sample 1200884848, was recounted due to a peak shift.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information

Qualifier	Reason	Analyte	Sample
UI	Data rejected due to low abundance.	Cesium-134	140051003
			140051011
			140051016
			140051019
		Europium-154	140051012
		Europium-155	140051002
UI	Data rejected due to no valid peak.	Bismuth-212	140051002
			140051005

Method/Analysis Information

Product:	**Gamma,Solid-FSS GAM & ALL FSS**
Analytical Method:	EML HASL 300, 4.5.2.3
Prep Method:	Dry Soil Prep
Analytical Batch Number:	441351
Prep Batch Number:	440783

Sample ID	Client ID
140051021	7000-0000-018-C3C-03
140051022	7000-0000-018-C3C-04
140051023	7000-0000-012-1S
140051024	7000-0000-014-1S
140051025	7000-0000-015-01S
140051026	7000-0000-016-01S
1200884851	Method Blank (MB)
1200884852	140051023(7000-0000-012-1S) Sample Duplicate (DUP)
1200884853	Laboratory Control Sample (LCS)

SOP Reference
Procedures for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-013 REV# 10.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information

The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 140051023 (7000-0000-012-1S).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
Sample 140051023 (7000-0000-012-1S) was recounted due to high relative percent difference/relative error ratio.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Additional Comments
For samples 140051023 (7000-0000-012-1S) and 1200884852 (7000-0000-012-1S) the relative percent difference for Ac-228 and Tl-208 did not meet the duplication criteria. Instead, a relative error ratio is used to show precision.

Qualifier information

Qualifier	Reason	Analyte	Sample
UI	Data rejected due to low abundance.	Cesium-134	140051024
			140051025
UI	Data rejected due to no valid peak.	Bismuth-212	140051024

Method/Analysis Information

Product:	**GFPC, Sr90, solid-HTD2,ALL2 (CT)**
Analytical Method:	EPA 905.0 Modified
Prep Method:	Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method:	Dry Soil Prep
Analytical Batch Number:	443731
Prep Batch Number:	440782
Dry Soil Prep GL-RAD-A-021 Batch Number:	440781

Sample ID	Client ID
140051001	7000-0000-014-C1C-01
140051002	7000-0000-014-C1C-02
140051003	7000-0000-015-C1C-01
140051004	7000-0000-015-C1C-02
140051005	7000-0000-016-C1C-01
140051006	7000-0000-016-C1C-02
140051007	7000-0000-016-C3C-03
140051008	7000-0000-016-C3C-04
140051009	7000-0000-017-C1C-01

1200890599	Method Blank (MB)
1200890600	140081004(ULO concrete A) Sample Duplicate (DUP)
1200890601	140081004(ULO concrete A) Matrix Spike (MS)
1200890602	Laboratory Control Sample (LCS)

SOP Reference
Procedures for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-004 REV# 9.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 140081004 (ULO concrete A).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Chemical Recoveries
All chemical recoveries meet the required acceptance limits for this sample set.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**GFPC, Sr90, solid - 0.025 pCi/g**
Analytical Method:	EPA 905.0 Modified
Prep Method:	Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method:	Dry Soil Prep
Analytical Batch Number:	443733
Prep Batch Number:	440785
Dry Soil Prep GL-RAD-A-021 Batch Number:	440783

Sample ID	Client ID
140051010	7000-0000-017-C1C-02
140051011	7000-0000-012-C1C-01
140051012	7000-0000-012-C1C-02
140051013	7000-0000-012-C4C-03
140051014	7000-0000-012-C4C-04
140051015	7000-0000-013-C1C-01
140051016	7000-0000-013-C1C-02
140051017	7000-0000-013-C2C-03
140051018	7000-0000-013-C2C-04
140051019	7000-0000-018-C1C-01
140051020	7000-0000-018-C1C-02
140051021	7000-0000-018-C3C-03
140051022	7000-0000-018-C3C-04
140051023	7000-0000-012-1S
140051024	7000-0000-014-1S
140051025	7000-0000-015-01S
140051026	7000-0000-016-01S
1200890603	Method Blank (MB)
1200890604	140051024(7000-0000-014-1S) Sample Duplicate (DUP)
1200890605	140051024(7000-0000-014-1S) Matrix Spike (MS)
1200890606	Laboratory Control Sample (LCS)

SOP Reference
Procedures for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-004 REV# 9.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 140051024 (7000-0000-014-1S).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Chemical Recoveries
All chemical recoveries meet the required acceptance limits for this sample set.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Liquid Scint Tc99, Solid-ALL FSS**
Analytical Method:	DOE EML HASL-300, Tc-02-RC Modified
Analytical Batch Number:	441485

Sample ID	Client ID
140051003	7000-0000-015-C1C-01
140051025	7000-0000-015-01S
1200885205	Method Blank (MB)
1200885206	140321001(9801-0000-R111-C1C-01) Sample Duplicate (DUP)
1200885207	140321001(9801-0000-R111-C1C-01) Matrix Spike (MS)
1200885208	Laboratory Control Sample (LCS)

SOP Reference
Procedures for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-005 REV# 12.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 140321001 (9801-0000-R111-C1C-01).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Liquid Scint Fe55, Solid-ALL FSS**
Analytical Method:	DOE RESL Fe-1, Modified
Prep Method:	Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method:	Dry Soil Prep
Analytical Batch Number:	441483
Prep Batch Number:	440785
Dry Soil Prep GL-RAD-A-021 Batch Number:	440783

Sample ID	Client ID
140051003	7000-0000-015-C1C-01
140051025	7000-0000-015-01S
1200885197	Method Blank (MB)
1200885198	140321032(9801-0000-R112-C2C-01) Sample Duplicate (DUP)
1200885199	140321032(9801-0000-R112-C2C-01) Matrix Spike (MS)
1200885200	Laboratory Control Sample (LCS)

SOP Reference
Procedures for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-040 REV# 2.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 140321032 (9801-0000-R112-C2C-01).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
Sample 140051003 (7000-0000-015-C1C-01) was recounted due to high MDA.
Sample 1200885199 (9801-0000-R112-C2C-01) was recounted due to low/high recovery.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following NCR was generated for this SDG:
NCR 222769 was generated due to RDL less than MDA and Container scanning event for custody missed. 1. Samples 140321001 and 140321032 did not meet the detection limit. No more sample can be used due to the elevated quench numbers due to the matrix of the sample. Samples counted for 120 minutes and the project manager was notified. 2. The analyst did not scan the samples 140321 001,032 into the batch prior to analysis, however the samples did remain in their custody at all times. The error has been corrected and the analyst has been instructed on the proper scanning procedures. 1. Reporting results. 2. Reporting results.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Liquid Scint Ni63, Solid-HTD2,ALL2 (CT)**
Analytical Method:	DOE RESL Ni-1, Modified
Prep Method:	Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method:	Dry Soil Prep
Analytical Batch Number:	443492
Prep Batch Number:	440782

Dry Soil Prep GL-RAD-A-021 Batch Number: 440781

Sample ID	Client ID
140051003	7000-0000-015-C1C-01
140051025	7000-0000-015-01S
1200889936	Method Blank (MB)
1200889937	140321001(9801-0000-R111-C1C-01) Sample Duplicate (DUP)
1200889938	140321001(9801-0000-R111-C1C-01) Matrix Spike (MS)
1200889939	Laboratory Control Sample (LCS)

SOP Reference
Procedures for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-022 REV# 7.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 140321001 (9801-0000-R111-C1C-01).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
Sample 1200889939 (LCS) was recounted due to low/high recovery.
Samples were reprepped due to low/high recovery.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

Product:	**LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)**
Analytical Method:	EPA 906.0 Modified
Analytical Batch Number:	441385

Sample ID	**Client ID**
140051001	7000-0000-014-C1C-01
140051002	7000-0000-014-C1C-02
140051003	7000-0000-015-C1C-01
140051004	7000-0000-015-C1C-02
140051005	7000-0000-016-C1C-01
140051006	7000-0000-016-C1C-02
140051007	7000-0000-016-C3C-03
140051008	7000-0000-016-C3C-04
140051009	7000-0000-017-C1C-01
140051010	7000-0000-017-C1C-02
140051011	7000-0000-012-C1C-01
140051012	7000-0000-012-C1C-02
140051013	7000-0000-012-C4C-03
140051014	7000-0000-012-C4C-04
140051015	7000-0000-013-C1C-01
140051016	7000-0000-013-C1C-02
140051017	7000-0000-013-C2C-03
140051018	7000-0000-013-C2C-04
140051019	7000-0000-018-C1C-01
140051020	7000-0000-018-C1C-02
1200884926	Method Blank (MB)
1200884927	140051001(7000-0000-014-C1C-01) Sample Duplicate (DUP)
1200884928	140051001(7000-0000-014-C1C-01) Matrix Spike (MS)
1200884929	Laboratory Control Sample (LCS)

SOP Reference
Procedures for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-002 REV# 10.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC

The following sample was used for QC: 140051001 (7000-0000-014-C1C-01).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**LSC, Tritium Dist, Solid-HTD2,ALL FSS**
Analytical Method:	EPA 906.0 Modified
Analytical Batch Number:	445708

Sample ID	Client ID
140051021	7000-0000-018-C3C-03
140051022	7000-0000-018-C3C-04
140051023	7000-0000-012-1S
140051024	7000-0000-014-1S
140051025	7000-0000-015-01S
140051026	7000-0000-016-01S
1200895269	Method Blank (MB)
1200895270	140051021(7000-0000-018-C3C-03) Sample Duplicate (DUP)
1200895271	140051021(7000-0000-018-C3C-03) Matrix Spike (MS)
1200895272	Laboratory Control Sample (LCS)

SOP Reference
Procedures for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-002 REV# 10.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 140051021 (7000-0000-018-C3C-03).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following NCR was generated for this SDG:
NCR 226985 was generated due to Container scanning event for custody missed. 1. The analyst did not scan samples 140051021, 140051022, 140051023, 140051024, 140051025, 140051026, and 141005001 into the batch prior to analysis, however the samples did remain in their custody at all times. The error has been corrected and the analyst has been instructed on proper scanning procedures. 1. Reporting results.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Liquid Scint C14, Solid All,FSS**
Analytical Method:	EPA EERF C-01 Modified
Analytical Batch Number:	441486

Sample ID	Client ID
140051003	7000-0000-015-C1C-01
140051025	7000-0000-015-01S
1200885209	Method Blank (MB)
1200885210	140321032(9801-0000-R112-C2C-01) Sample Duplicate (DUP)
1200885211	140321032(9801-0000-R112-C2C-01) Matrix Spike (MS)
1200885212	Laboratory Control Sample (LCS)

SOP Reference
Procedures for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in

accordance with GL-RAD-A-003 REV# 8.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 140321032 (9801-0000-R112-C2C-01).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
Sample 1200885209 (MB) was recounted due to a negative result greater than three times the error.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information
Manual qualifiers were not required.

Certification Statement
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:
GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.
The following data validator verified the information presented in this case narrative:

Reviewer: [illegible] 8/5/05

General Engineering Laboratories
Form GEL-NCR
Rev. 06/05

NCR Report No.: 222769
Revision No.:

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
22-JUL-05	Radiochemistry	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
LSC	DOE RESL Fe-1, Modified	Solid	YANK
Batch ID:	**Sample Numbers:**		
441483	See Below		

Potentially affected work order(s)(SDG): 140051(MSR#05-1811),140321(MSR#05-1834)

Application Issues:

RDL less than MDA

Container scanning event for custody missed

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Samples 140321001 and 140321032 did not meet the detection limit. No more sample can be used due to the elevated quench numbers due to the matrix of the sample. Samples were counted for 120 minutes and the project manager was notified.	1. Reporting results.
2. The analyst did not scan the samples 140321 001,032 into the batch prior to analysis, however the samples did remain in their custody at all times. The error has been corrected and the analyst has been instructed on the proper scanning procedures.	2. Reporting results.

Originator's Name:
Melanie Aycock 22-JUL-05

Data Validator/Group Leader:
Heather Anderson 22-JUL-05

Quality Review:

Director:

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
01-AUG-05	Radiochemistry	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
LSC	EPA 906.0 Modified	Solid	YANK
Batch ID:	**Sample Numbers:**		
445708	See Below		

Potentially affected work order(s)(SDG): 140051(MSR#05-1811),141005(MSR#05-1889)

Application Issues:

Container scanning event for custody missed

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. The analyst did not scan samples 140051021, 140051022, 140051023, 140051024, 140051025, 140051026, and 141005001 into the batch prior to analysis, however the samples did remain in their custody at all times. The error has been corrected and the analyst has been instructed on proper scanning procedures.	1. Reporting results.

Originator's Name:
John Parker 01-AUG-05

Data Validator/Group Leader:
Melanie Aycock 02-AUG-05

Quality Review:

Director:

SAMPLE DATA SUMMARY

GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

YANK001 Connecticut Yankee Atomic Power Co.

Client SDG: MSR#05-1811 GEL Work Order: 140051

The Qualifiers in this report are defined as follows:

** Indicates the analyte is a surrogate compound.
< Result is less than amount reported.
> Result is greater than amount reported.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
P The response between the confirmation and the primary columns is >40% Different.
R Sample results are rejected.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
Y QC Samples were not spiked with this compound.
Z Paint Filter qualifier: Particulates passed through the filter. No free liquids were observed.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.
** Indicates the analyte is a surrogate compound.
This data report has been prepared and reviewed in accordance with General Engineering Laboratories, LLC standard operating procedures. Please direct any questions to your Project Manager, Cheryl Jones.

Reviewed by

GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 – (843) 556–8171 – www.gel.com

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID:	7000–0000–014–C1C–01	Project:	YANK01204
Sample ID:	140051001	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	14–JUN–05		
Receive Date:	07–JUL–05		
Collector:	Client		
Moisture:	10.4%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)												
Actinium–228		0.549	+/–0.132	0.0497	+/–0.129	0.107	pCi/g		AKB 08/02/05	0700	441350	1
Americium–241	U	0.0373	+/–0.0702	0.0633	+/–0.0688	0.131	pCi/g					
Bismuth–212		0.338	+/–0.229	0.113	+/–0.225	0.242	pCi/g					
Bismuth–214		0.569	+/–0.0858	0.0258	+/–0.084	0.0549	pCi/g					
Cesium–134	U	0.0273	+/–0.0361	0.0175	+/–0.0354	0.0373	pCi/g					
Cesium–137	U	–0.000874	+/–0.0171	0.0142	+/–0.0168	0.0302	pCi/g					
Cobalt–60	U	0.0046	+/–0.0159	0.0137	+/–0.0156	0.0306	pCi/g					
Europium–152	U	0.00218	+/–0.0428	0.0373	+/–0.0419	0.0781	pCi/g					
Europium–154	U	0.00244	+/–0.0529	0.0444	+/–0.0518	0.0972	pCi/g					
Europium–155	U	0.0127	+/–0.0485	0.0423	+/–0.0475	0.0873	pCi/g					
Lead–212		0.542	+/–0.0683	0.0216	+/–0.0669	0.0449	pCi/g					
Lead–214		0.683	+/–0.0981	0.0261	+/–0.0961	0.0547	pCi/g					
Manganese–54	U	–0.0127	+/–0.019	0.0145	+/–0.0186	0.0312	pCi/g					
Niobium–94	U	0.0115	+/–0.0152	0.0133	+/–0.0148	0.0284	pCi/g					
Potassium–40		7.26	+/–0.809	0.124	+/–0.793	0.279	pCi/g					
Radium–226		0.569	+/–0.0858	0.0258	+/–0.084	0.0549	pCi/g					
Silver–108m	U	–0.00112	+/–0.0144	0.0123	+/–0.0142	0.026	pCi/g					
Thallium–208		0.161	+/–0.0414	0.0146	+/–0.0406	0.0311	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid–HTD2,ALL2 (CT)												
Strontium–90	U	0.00117	+/–0.00697	0.0058	+/–0.00697	0.0121	pCi/g		EXW1 07/30/05	1132	443731	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)												
Tritium	U	0.463	+/–1.60	1.32	+/–1.60	2.74	pCi/g		LAG1 07/29/05	1336	441385	3
Solid Preparation												
Laboratory Composite – CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	B J1	07/11/05	0627	440782
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	DLD1	07/08/05	1921	440781
GL–RAD–A–026	Laboratory sample composite	DLD1	07/08/05	1314	440780

GENERAL ENGINEERING LABORATORIES, LLC
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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID: 7000–0000–014–C1C–01
Sample ID: 140051001

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 906.0 Modified
4	GL–RAD–A–026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	45	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID:	7000-0000-014-C1C-02	Project:	YANK01204
Sample ID:	140051002	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	14-JUN-05		
Receive Date:	07-JUL-05		
Collector:	Client		
Moisture:	8.67%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.451	+/-0.134	0.0426	+/-0.131	0.0928	pCi/g		AKB 08/02/05	0700	441350	1
Americium-241	U	-0.0114	+/-0.0919	0.0724	+/-0.0901	0.151	pCi/g					
Bismuth-212	UUI	0.00	+/-0.199	0.0982	+/-0.195	0.212	pCi/g					
Bismuth-214		0.449	+/-0.0786	0.025	+/-0.077	0.0532	pCi/g					
Cesium-134	U	0.00272	+/-0.0204	0.0171	+/-0.020	0.0364	pCi/g					
Cesium-137	U	0.00754	+/-0.0153	0.0135	+/-0.015	0.0288	pCi/g					
Cobalt-60	U	0.00242	+/-0.0154	0.0131	+/-0.0151	0.0291	pCi/g					
Europium-152	U	-0.00275	+/-0.0403	0.0335	+/-0.0395	0.0706	pCi/g					
Europium-154	U	-0.000418	+/-0.0571	0.0411	+/-0.0559	0.0902	pCi/g					
Europium-155	UUI	0.00	+/-0.0703	0.0416	+/-0.0689	0.0861	pCi/g					
Lead-212		0.486	+/-0.0648	0.0201	+/-0.0635	0.0419	pCi/g					
Lead-214		0.537	+/-0.0842	0.0237	+/-0.0825	0.0499	pCi/g					
Manganese-54	U	0.0067	+/-0.0158	0.0136	+/-0.0154	0.0293	pCi/g					
Niobium-94	U	-0.00232	+/-0.0133	0.011	+/-0.013	0.0236	pCi/g					
Potassium-40		7.93	+/-0.860	0.120	+/-0.842	0.269	pCi/g					
Radium-226		0.449	+/-0.0786	0.025	+/-0.077	0.0532	pCi/g					
Silver-108m	U	-0.00256	+/-0.0136	0.0118	+/-0.0133	0.025	pCi/g					
Thallium-208		0.154	+/-0.0357	0.0129	+/-0.035	0.0275	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	-0.00523	+/-0.00583	0.00515	+/-0.00583	0.0108	pCi/g		EXW1 07/30/05	1132	443731	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	0.153	+/-1.40	1.17	+/-1.40	2.43	pCi/g		LAG1 07/29/05	1408	441385	3
Solid Preparation												
Laboratory Composite – CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	07/11/05	0627	440782
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DLD1	07/08/05	1922	440781
GL-RAD-A-026	Laboratory sample composite	DLD1	07/08/05	1314	440780

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Certificate of Analysis

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID: 7000-0000-014-C1C-02
Sample ID: 140051002

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 906.0 Modified
4	GL-RAD-A-026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	45	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

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362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID:	7000–0000–015–C1C–01	Project:	YANK01204
Sample ID:	140051003	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	16–JUN–05		
Receive Date:	07–JUL–05		
Collector:	Client		
Moisture:	10.5%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Alpha Spec Analysis													
Alphaspec Am241, Cm, Solid–TRU2,ALL2 (CT)													
Americium–241	U	–0.0103	+/–0.0265	0.00	+/–0.0265	0.0366	pCi/g		SCP	07/22/05	1047	442289	1
Curium–242	U	0.00	+/–0.0309	0.00	+/–0.0309	0.0427	pCi/g						
Curium–243/244	U	0.0206	+/–0.0386	0.0218	+/–0.0387	0.0804	pCi/g						
Alphaspec Pu, Solid–TRU2,ALL2 (CT)													
Plutonium–238	U	–0.00569	+/–0.0246	0.0191	+/–0.0246	0.0704	pCi/g		SCP	07/22/05	1047	442290	2
Plutonium–239/240	U	0.00616	+/–0.0245	0.0191	+/–0.0245	0.0703	pCi/g						
Liquid Scint Pu241, Solid–TRU2,ALL2 (CT)													
Plutonium–241	U	1.32	+/–2.24	1.84	+/–2.24	3.78	pCi/g		SCP	08/05/05	1016	448398	3
Rad Gamma Spec Analysis													
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)													
Actinium–228		0.303	+/–0.145	0.0518	+/–0.142	0.112	pCi/g		AKB	08/02/05	0701	441350	6
Americium–241	U	–0.0596	+/–0.0837	0.0647	+/–0.0821	0.134	pCi/g						
Bismuth–212		0.365	+/–0.240	0.104	+/–0.235	0.225	pCi/g						
Bismuth–214		0.717	+/–0.102	0.0261	+/–0.100	0.0556	pCi/g						
Cesium–134	UUI	0.00	+/–0.0311	0.018	+/–0.0305	0.0383	pCi/g						
Cesium–137	U	0.024	+/–0.0226	0.0149	+/–0.0222	0.0317	pCi/g						
Cobalt–60	U	0.0251	+/–0.0201	0.019	+/–0.0197	0.0412	pCi/g						
Europium–152	U	0.00484	+/–0.0484	0.0414	+/–0.0474	0.0865	pCi/g						
Europium–154	U	0.0196	+/–0.0533	0.0468	+/–0.0522	0.102	pCi/g						
Europium–155	U	–0.00852	+/–0.0457	0.0424	+/–0.0448	0.0876	pCi/g						
Lead–212		0.412	+/–0.0586	0.0244	+/–0.0575	0.0505	pCi/g						
Lead–214		0.657	+/–0.108	0.0298	+/–0.106	0.0623	pCi/g						
Manganese–54	U	0.0205	+/–0.0291	0.0181	+/–0.0285	0.0385	pCi/g						
Niobium–94	U	0.00922	+/–0.0123	0.0132	+/–0.0121	0.0281	pCi/g						
Potassium–40		7.58	+/–0.820	0.116	+/–0.804	0.262	pCi/g						
Radium–226		0.717	+/–0.102	0.0261	+/–0.100	0.0556	pCi/g						
Silver–108m	U	–0.0145	+/–0.0168	0.0131	+/–0.0165	0.0276	pCi/g						
Thallium–208		0.155	+/–0.0374	0.0161	+/–0.0367	0.0342	pCi/g						
Rad Gas Flow Proportional Counting													
GFPC, Sr90, solid–HTD2,ALL2 (CT)													
Strontium–90	U	–0.00288	+/–0.00615	0.00528	+/–0.00615	0.011	pCi/g		EXW1	07/30/05	1132	443731	7
Rad Liquid Scintillation Analysis													
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)													
Tritium	U	–0.312	+/–1.51	1.28	+/–1.51	2.65	pCi/g		LAG1	07/29/05	1537	441385	8
Liquid Scint C14, Solid–HTD2,ALL2 (CT)													

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362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID: 7000-0000-015-C1C-01
Sample ID: 140051003

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Liquid Scintillation Analysis													
Liquid Scint C14, Solid-HTD2,ALL2 (CT)													
Carbon-14	U	-0.14	+/-0.378	0.357	+/-0.378	0.754	pCi/g		BXF1	07/13/05	1227	441486	9
Liquid Scint Fe55, Solid-HTD2,ALL2 (CT)													
Iron-55	U	0.486	+/-2.06	1.50	+/-2.06	3.04	pCi/g		BXD1	07/18/05	1443	441483	10
Liquid Scint Ni63, Solid-HTD2,ALL2 (CT)													
Nickel-63	U	-0.357	+/-1.16	0.995	+/-1.16	2.10	pCi/g		AF1	07/19/05	2052	443492	11
Liquid Scint Tc99, Solid-HTD2,ALL2 (CT)													
Technetium-99	U	0.176	+/-0.246	0.203	+/-0.246	0.414	pCi/g		BXD1	07/19/05	0253	441485	13
Solid Preparation													
Laboratory Composite - CONCRETE													

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	07/11/05	0627	440782
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DLD1	07/08/05	1922	440781
GL-RAD-A-026	Laboratory sample composite	DLD1	07/08/05	1314	440780

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, Pu-11-RC Modified
4	DOE EML HASL-300, Pu-11-RC Modified
5	DOE EML HASL-300, Pu-11-RC Modified
6	EML HASL 300, 4.5.2.3
7	EPA 905.0 Modified
8	EPA 906.0 Modified
9	EPA EERF C-01 Modified
10	DOE RESL Fe-1, Modified
11	DOE RESL Ni-1, Modified
12	DOE RESL Ni-1, Modified
13	DOE EML HASL-300, Tc-02-RC Modified
14	GL-RAD-A-026

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID: 7000-0000-015-C1C-01
Sample ID: 140051003

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243	Alphaspec Am241, Cm, Solid-TRI	74	(15%-125%)
Plutonium-242	Alphaspec Pu, Solid-TRU2,ALL2	98	(15%-125%)
Carrier/Tracer Recovery	Liquid Scint Pu241, Solid-TRU2,A	86	(25%-125%)
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	49	(25%-125%)
Carrier/Tracer Recovery	Liquid Scint Fe55, Solid-HTD2,Al	24	(15%-125%)
Carrier/Tracer Recovery	Liquid Scint Ni63, Solid-HTD2,Al	102	(25%-125%)
Carrier/Tracer Recovery	Liquid Scint Tc99, Solid-HTD2,A	70	(15%-125%)

Notes:
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B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID:	7000–0000–015–C1C–02	Project:	YANK01204
Sample ID:	140051004	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	16–JUN–05		
Receive Date:	07–JUL–05		
Collector:	Client		
Moisture:	10.2%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)												
Actinium–228		0.544	+/–0.164	0.0615	+/–0.161	0.132	pCi/g		AKB 08/02/05	0705	441350	1
Americium–241	U	0.00252	+/–0.123	0.112	+/–0.121	0.231	pCi/g					
Bismuth–212		0.374	+/–0.296	0.117	+/–0.290	0.252	pCi/g					
Bismuth–214		0.537	+/–0.0923	0.0303	+/–0.0904	0.0645	pCi/g					
Cesium–134	U	0.0358	+/–0.0227	0.0215	+/–0.0223	0.0458	pCi/g					
Cesium–137	U	0.0103	+/–0.0192	0.0171	+/–0.0189	0.0366	pCi/g					
Cobalt–60	U	0.0157	+/–0.0205	0.0184	+/–0.0201	0.0405	pCi/g					
Europium–152	U	0.0284	+/–0.0557	0.0482	+/–0.0546	0.101	pCi/g					
Europium–154	U	–0.0106	+/–0.0737	0.0508	+/–0.0722	0.111	pCi/g					
Europium–155	U	–0.011	+/–0.0625	0.0552	+/–0.0612	0.114	pCi/g					
Lead–212		0.638	+/–0.0857	0.0262	+/–0.084	0.0545	pCi/g					
Lead–214		0.670	+/–0.104	0.0307	+/–0.102	0.0645	pCi/g					
Manganese–54	U	0.0139	+/–0.0207	0.0185	+/–0.0203	0.0396	pCi/g					
Niobium–94	U	–0.00664	+/–0.0179	0.0148	+/–0.0175	0.0316	pCi/g					
Potassium–40		8.34	+/–0.963	0.184	+/–0.944	0.403	pCi/g					
Radium–226		0.537	+/–0.0923	0.0303	+/–0.0904	0.0645	pCi/g					
Silver–108m	U	0.00234	+/–0.0183	0.0153	+/–0.0179	0.0323	pCi/g					
Thallium–208		0.209	+/–0.0446	0.0166	+/–0.0437	0.0353	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid–HTD2,ALL2 (CT)												
Strontium–90	U	0.00297	+/–0.00587	0.00479	+/–0.00587	0.010	pCi/g		EXW1 07/30/05	1133	443731	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)												
Tritium	U	–0.362	+/–1.54	1.31	+/–1.54	2.71	pCi/g		LAG1 07/29/05	1608	441385	3
Solid Preparation												
Laboratory Composite – CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	B J1	07/11/05	0627	440782
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	DLD1	07/08/05	1922	440781
GL–RAD–A–026	Laboratory sample composite	DLD1	07/08/05	1314	440780

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2040 Savage Road Charleston SC 29407 – (843) 556–8171 – www.gel.com

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID: 7000–0000–015–C1C–02
Sample ID: 140051004

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 906.0 Modified
4	GL–RAD–A–026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	50	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID:	7000-0000-016-C1C-01	Project:	YANK01204
Sample ID:	140051005	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	15-JUN-05		
Receive Date:	07-JUL-05		
Collector:	Client		
Moisture:	8.44%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.601	+/-0.118	0.0373	+/-0.116	0.079	pCi/g		AKB 08/02/05	0708	441350	1
Americium-241	U	-0.00742	+/-0.0466	0.0386	+/-0.0457	0.0794	pCi/g					
Bismuth-212	UUI	0.00	+/-0.185	0.0845	+/-0.181	0.178	pCi/g					
Bismuth-214		0.604	+/-0.0934	0.0209	+/-0.0915	0.0437	pCi/g					
Cesium-134	U	0.0252	+/-0.0171	0.0136	+/-0.0168	0.0286	pCi/g					
Cesium-137	U	-0.00732	+/-0.0128	0.0105	+/-0.0126	0.022	pCi/g					
Cobalt-60	U	0.0015	+/-0.0141	0.0116	+/-0.0138	0.0249	pCi/g					
Europium-152	U	-0.0244	+/-0.0341	0.0282	+/-0.0334	0.0586	pCi/g					
Europium-154	U	-0.0116	+/-0.0407	0.0327	+/-0.0399	0.0698	pCi/g					
Europium-155	U	0.0235	+/-0.038	0.0344	+/-0.0373	0.0708	pCi/g					
Lead-212		0.487	+/-0.0573	0.0174	+/-0.0561	0.036	pCi/g					
Lead-214		0.687	+/-0.0854	0.0212	+/-0.0837	0.044	pCi/g					
Manganese-54	U	-1.370E-05	+/-0.0147	0.0121	+/-0.0144	0.0255	pCi/g					
Niobium-94	U	0.00724	+/-0.0124	0.0107	+/-0.0121	0.0224	pCi/g					
Potassium-40		7.53	+/-0.639	0.0902	+/-0.626	0.197	pCi/g					
Radium-226		0.604	+/-0.0934	0.0209	+/-0.0915	0.0437	pCi/g					
Silver-108m	U	0.00539	+/-0.0107	0.00977	+/-0.0105	0.0204	pCi/g					
Thallium-208		0.173	+/-0.0324	0.0107	+/-0.0318	0.0225	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.000992	+/-0.00587	0.00489	+/-0.00587	0.0102	pCi/g		EXW1 07/30/05	1133	443731	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	-0.967	+/-1.46	1.26	+/-1.46	2.62	pCi/g		LAG1 07/29/05	1640	441385	3
Solid Preparation												
Laboratory Composite - CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	07/11/05	0627	440782
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DLD1	07/08/05	1922	440781
GL-RAD-A-026	Laboratory sample composite	DLD1	07/08/05	1314	440780

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID: 7000–0000–016–C1C–01
Sample ID: 140051005

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 906.0 Modified
4	GL–RAD–A–026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	55	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID:	7000-0000-016-C1C-02	Project:	YANK01204
Sample ID:	140051006	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	15-JUN-05		
Receive Date:	07-JUL-05		
Collector:	Client		
Moisture:	6.71%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.472	+/-0.121	0.043	+/-0.118	0.0929	pCi/g		AKB 08/02/05	0714	441350	1
Americium-241	U	-0.0556	+/-0.0681	0.0539	+/-0.0668	0.111	pCi/g					
Bismuth-212		0.277	+/-0.185	0.108	+/-0.181	0.229	pCi/g					
Bismuth-214		0.549	+/-0.0886	0.023	+/-0.0869	0.0489	pCi/g					
Cesium-134	U	0.0126	+/-0.0179	0.0159	+/-0.0175	0.0337	pCi/g					
Cesium-137	U	-0.0073	+/-0.016	0.0132	+/-0.0157	0.0281	pCi/g					
Cobalt-60	U	0.0175	+/-0.0174	0.0121	+/-0.0171	0.0268	pCi/g					
Europium-152	U	-0.00704	+/-0.0416	0.0356	+/-0.0407	0.0744	pCi/g					
Europium-154	U	-0.0413	+/-0.0611	0.0391	+/-0.0599	0.0853	pCi/g					
Europium-155	U	0.0607	+/-0.0533	0.0384	+/-0.0522	0.0793	pCi/g					
Lead-212		0.446	+/-0.0586	0.0201	+/-0.0574	0.0417	pCi/g					
Lead-214		0.616	+/-0.0855	0.0247	+/-0.0838	0.0516	pCi/g					
Manganese-54	U	-0.0119	+/-0.0175	0.0137	+/-0.0171	0.0294	pCi/g					
Niobium-94	U	0.00579	+/-0.0139	0.0122	+/-0.0137	0.0259	pCi/g					
Potassium-40		7.54	+/-0.793	0.101	+/-0.777	0.227	pCi/g					
Radium-226		0.549	+/-0.0886	0.023	+/-0.0869	0.0489	pCi/g					
Silver-108m	U	-0.00364	+/-0.0144	0.0119	+/-0.0141	0.0251	pCi/g					
Thallium-208		0.161	+/-0.0346	0.0142	+/-0.0339	0.0299	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.00708	+/-0.00598	0.0047	+/-0.00598	0.00984	pCi/g		EXW1 07/30/05	1133	443731	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	-1.19	+/-1.62	1.40	+/-1.62	2.91	pCi/g		LAG1 07/29/05	1712	441385	3
Solid Preparation												
Laboratory Composite - CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	07/11/05	0627	440782
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DLD1	07/08/05	1922	440781
GL-RAD-A-026	Laboratory sample composite	DLD1	07/08/05	1314	440780

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID: 7000-0000-016-C1C-02
Sample ID: 140051006

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 906.0 Modified
4	GL-RAD-A-026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	50	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID:	7000-0000-016-C3C-03	Project:	YANK01204
Sample ID:	140051007	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	15-JUN-05		
Receive Date:	07-JUL-05		
Collector:	Client		
Moisture:	8.03%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.541	+/-0.150	0.0436	+/-0.147	0.0943	pCi/g		AKB 08/02/05	0715	441350	1
Americium-241	U	-0.00463	+/-0.0189	0.0155	+/-0.0186	0.0319	pCi/g					
Bismuth-212		0.405	+/-0.184	0.107	+/-0.180	0.229	pCi/g					
Bismuth-214		0.537	+/-0.0865	0.025	+/-0.0847	0.0529	pCi/g					
Cesium-134	U	0.00747	+/-0.0219	0.0164	+/-0.0215	0.035	pCi/g					
Cesium-137	U	-0.0175	+/-0.0153	0.0116	+/-0.015	0.0249	pCi/g					
Cobalt-60	U	-0.00149	+/-0.0173	0.014	+/-0.0169	0.0308	pCi/g					
Europium-152	U	0.0277	+/-0.0374	0.033	+/-0.0366	0.0691	pCi/g					
Europium-154	U	-0.0114	+/-0.0559	0.0452	+/-0.0548	0.0977	pCi/g					
Europium-155	U	-0.00301	+/-0.0331	0.0258	+/-0.0324	0.0535	pCi/g					
Lead-212		0.492	+/-0.066	0.0194	+/-0.0647	0.0403	pCi/g					
Lead-214		0.597	+/-0.0872	0.022	+/-0.0854	0.0463	pCi/g					
Manganese-54	U	0.0093	+/-0.0175	0.015	+/-0.0172	0.032	pCi/g					
Niobium-94	U	0.00415	+/-0.020	0.011	+/-0.0196	0.0236	pCi/g					
Potassium-40		8.05	+/-0.818	0.0947	+/-0.801	0.217	pCi/g					
Radium-226		0.537	+/-0.0865	0.025	+/-0.0847	0.0529	pCi/g					
Silver-108m	U	0.00309	+/-0.012	0.0108	+/-0.0117	0.0228	pCi/g					
Thallium-208		0.152	+/-0.034	0.0125	+/-0.0333	0.0266	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.00939	+/-0.00637	0.00495	+/-0.00637	0.0103	pCi/g		EXW1 07/30/05	1133	443731	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	0.255	+/-1.63	1.36	+/-1.63	2.82	pCi/g		LAG1 07/29/05	1744	441385	3
Solid Preparation												
Laboratory Composite - CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	07/11/05	0627	440782
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DLD1	07/08/05	1922	440781
GL-RAD-A-026	Laboratory sample composite	DLD1	07/08/05	1314	440780

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Certificate of Analysis

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID: 7000–0000–016–C3C–03
Sample ID: 140051007

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 906.0 Modified
4	GL–RAD–A–026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	52	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID:	7000-0000-016-C3C-04	Project:	YANK01204
Sample ID:	140051008	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	15-JUN-05		
Receive Date:	07-JUL-05		
Collector:	Client		
Moisture:	8.22%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.452	+/-0.120	0.0504	+/-0.118	0.108	pCi/g		AKB 08/02/05	0718	441350	1
Americium-241	U	0.0142	+/-0.0945	0.0765	+/-0.0926	0.158	pCi/g					
Bismuth-212		0.459	+/-0.196	0.112	+/-0.192	0.239	pCi/g					
Bismuth-214		0.628	+/-0.106	0.027	+/-0.104	0.0572	pCi/g					
Cesium-134	U	0.0155	+/-0.0285	0.0185	+/-0.0279	0.0393	pCi/g					
Cesium-137	U	0.00396	+/-0.0174	0.0153	+/-0.0171	0.0324	pCi/g					
Cobalt-60	U	0.0017	+/-0.0241	0.0176	+/-0.0236	0.0379	pCi/g					
Europium-152	U	-0.0285	+/-0.0507	0.0422	+/-0.0497	0.0883	pCi/g					
Europium-154	U	0.019	+/-0.0509	0.0446	+/-0.0499	0.0966	pCi/g					
Europium-155	U	0.0867	+/-0.0573	0.0525	+/-0.0562	0.108	pCi/g					
Lead-212		0.595	+/-0.0741	0.0277	+/-0.0726	0.0573	pCi/g					
Lead-214		0.700	+/-0.107	0.0307	+/-0.105	0.0641	pCi/g					
Manganese-54	U	0.00774	+/-0.0187	0.0163	+/-0.0183	0.0347	pCi/g					
Niobium-94	U	0.0175	+/-0.0195	0.0144	+/-0.0192	0.0304	pCi/g					
Potassium-40		8.72	+/-0.832	0.125	+/-0.815	0.278	pCi/g					
Radium-226		0.628	+/-0.106	0.027	+/-0.104	0.0572	pCi/g					
Silver-108m	U	-0.00688	+/-0.0177	0.0146	+/-0.0174	0.0307	pCi/g					
Thallium-208		0.176	+/-0.0383	0.0165	+/-0.0375	0.0347	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.000277	+/-0.00515	0.00431	+/-0.00515	0.00901	pCi/g		EXW1 07/30/05	1133	443731	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	-1.62	+/-1.57	1.38	+/-1.57	2.86	pCi/g		LAG1 07/29/05	1816	441385	3
Solid Preparation												
Laboratory Composite - CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	07/11/05	0627	440782
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DLD1	07/08/05	1922	440781
GL-RAD-A-026	Laboratory sample composite	DLD1	07/08/05	1314	440780

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Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID: 7000–0000–016–C3C–04
Sample ID: 140051008

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 906.0 Modified
4	GL–RAD–A–026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	57	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID:	7000–0000–017–C1C–01	Project:	YANK01204
Sample ID:	140051009	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	16–JUN–05		
Receive Date:	07–JUL–05		
Collector:	Client		
Moisture:	10.5%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)												
Actinium–228		0.524	+/–0.162	0.0603	+/–0.159	0.129	pCi/g		AKB 08/02/05	0718	441350	1
Americium–241	U	–0.134	+/–0.165	0.127	+/–0.162	0.263	pCi/g					
Bismuth–212		0.368	+/–0.326	0.136	+/–0.320	0.291	pCi/g					
Bismuth–214		0.697	+/–0.128	0.0341	+/–0.125	0.0719	pCi/g					
Cesium–134	U	0.0309	+/–0.0388	0.0208	+/–0.038	0.0442	pCi/g					
Cesium–137	U	0.0247	+/–0.0235	0.0208	+/–0.023	0.0437	pCi/g					
Cobalt–60	U	–0.00289	+/–0.022	0.0177	+/–0.0216	0.0386	pCi/g					
Europium–152	U	0.0367	+/–0.0572	0.0514	+/–0.0561	0.108	pCi/g					
Europium–154	U	–0.045	+/–0.0612	0.0456	+/–0.0599	0.100	pCi/g					
Europium–155	U	0.0717	+/–0.0815	0.0612	+/–0.0799	0.127	pCi/g					
Lead–212		0.660	+/–0.0868	0.0309	+/–0.085	0.0641	pCi/g					
Lead–214		0.843	+/–0.127	0.0358	+/–0.124	0.0751	pCi/g					
Manganese–54	U	–0.00396	+/–0.0189	0.0158	+/–0.0186	0.0341	pCi/g					
Niobium–94	U	0.00667	+/–0.035	0.0165	+/–0.0343	0.035	pCi/g					
Potassium–40		9.02	+/–0.903	0.141	+/–0.885	0.315	pCi/g					
Radium–226		0.697	+/–0.128	0.0341	+/–0.125	0.0719	pCi/g					
Silver–108m	U	–0.000935	+/–0.0181	0.0154	+/–0.0178	0.0326	pCi/g					
Thallium–208		0.198	+/–0.048	0.0167	+/–0.047	0.0355	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid–HTD2,ALL2 (CT)												
Strontium–90	U	0.000931	+/–0.00553	0.0046	+/–0.00553	0.00962	pCi/g		EXW1 07/30/05	1133	443731	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)												
Tritium	U	0.220	+/–1.62	1.35	+/–1.62	2.80	pCi/g		LAG1 07/29/05	1847	441385	3
Solid Preparation												
Laboratory Composite – CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	B J1	07/11/05	0627	440782
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	DLD1	07/08/05	1922	440781
GL–RAD–A–026	Laboratory sample composite	DLD1	07/08/05	1314	440780

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
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362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID: 7000-0000-017-C1C-01
Sample ID: 140051009

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 906.0 Modified
4	GL-RAD-A-026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	52	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID:	7000-0000-017-C1C-02	Project:	YANK01204
Sample ID:	140051010	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	16-JUN-05		
Receive Date:	07-JUL-05		
Collector:	Client		
Moisture:	8.56%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.473	+/-0.146	0.0487	+/-0.143	0.105	pCi/g		AKB 08/02/05	0736	441350	1
Americium-241	U	-0.0448	+/-0.083	0.0734	+/-0.0813	0.152	pCi/g					
Bismuth-212		0.429	+/-0.193	0.0988	+/-0.189	0.212	pCi/g					
Bismuth-214		0.535	+/-0.0911	0.0243	+/-0.0893	0.0516	pCi/g					
Cesium-134	U	0.0298	+/-0.019	0.0175	+/-0.0186	0.0373	pCi/g					
Cesium-137	U	0.00247	+/-0.0163	0.0137	+/-0.0159	0.0292	pCi/g					
Cobalt-60	U	0.00697	+/-0.0158	0.0124	+/-0.0155	0.0278	pCi/g					
Europium-152	U	-0.00975	+/-0.0401	0.0347	+/-0.0393	0.0728	pCi/g					
Europium-154	U	0.0551	+/-0.0906	0.0444	+/-0.0888	0.0968	pCi/g					
Europium-155	U	0.0346	+/-0.0451	0.0409	+/-0.0442	0.0846	pCi/g					
Lead-212		0.404	+/-0.0635	0.0308	+/-0.0622	0.0633	pCi/g					
Lead-214		0.606	+/-0.0921	0.025	+/-0.0903	0.0524	pCi/g					
Manganese-54	U	0.018	+/-0.0203	0.016	+/-0.0199	0.0341	pCi/g					
Niobium-94	U	0.00387	+/-0.0143	0.0121	+/-0.014	0.0258	pCi/g					
Potassium-40		7.61	+/-0.884	0.119	+/-0.866	0.268	pCi/g					
Radium-226		0.535	+/-0.0911	0.0243	+/-0.0893	0.0516	pCi/g					
Silver-108m	U	0.00351	+/-0.0132	0.0116	+/-0.013	0.0245	pCi/g					
Thallium-208		0.150	+/-0.0341	0.0138	+/-0.0335	0.0293	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	4.590E-06	+/-0.00573	0.00481	+/-0.00573	0.010	pCi/g		EXW1 08/01/05	2324	443733	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	-1.3	+/-1.57	1.36	+/-1.57	2.83	pCi/g		LAG1 07/29/05	1919	441385	3
Solid Preparation												
Laboratory Composite - CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	07/11/05	0627	440782
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DLD1	07/08/05	1922	440781
GL-RAD-A-026	Laboratory sample composite	DLD1	07/08/05	1314	440780

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Certificate of Analysis

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID: 7000–0000–017–C1C–02
Sample ID: 140051010

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 906.0 Modified
4	GL–RAD–A–026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	64	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID:	7000-0000-012-C1C-01	Project:	YANK01204
Sample ID:	140051011	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	09-JUN-05		
Receive Date:	07-JUL-05		
Collector:	Client		
Moisture:	6.74%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.620	+/-0.137	0.0552	+/-0.134	0.119	pCi/g		AKB 08/02/05	0741	441350	1
Americium-241	U	0.00886	+/-0.0285	0.023	+/-0.0279	0.0473	pCi/g					
Bismuth-212		0.385	+/-0.228	0.132	+/-0.224	0.281	pCi/g					
Bismuth-214		0.583	+/-0.107	0.031	+/-0.104	0.0655	pCi/g					
Cesium-134	UUI	0.00	+/-0.0296	0.0211	+/-0.029	0.0447	pCi/g					
Cesium-137	U	-0.00459	+/-0.0192	0.0158	+/-0.0188	0.0336	pCi/g					
Cobalt-60	U	-0.0159	+/-0.0184	0.0135	+/-0.018	0.0301	pCi/g					
Europium-152	U	-0.0208	+/-0.0504	0.0433	+/-0.0494	0.0903	pCi/g					
Europium-154	U	0.00623	+/-0.0577	0.0487	+/-0.0565	0.106	pCi/g					
Europium-155	U	0.0469	+/-0.0465	0.0424	+/-0.0456	0.0871	pCi/g					
Lead-212		0.560	+/-0.0791	0.0245	+/-0.0775	0.0507	pCi/g					
Lead-214		0.556	+/-0.101	0.0299	+/-0.0989	0.0626	pCi/g					
Manganese-54	U	0.00628	+/-0.0202	0.0179	+/-0.0198	0.0381	pCi/g					
Niobium-94	U	0.0127	+/-0.018	0.0158	+/-0.0176	0.0333	pCi/g					
Potassium-40		7.56	+/-0.798	0.0945	+/-0.782	0.220	pCi/g					
Radium-226		0.583	+/-0.107	0.031	+/-0.104	0.0655	pCi/g					
Silver-108m	U	0.0023	+/-0.0166	0.0145	+/-0.0163	0.0304	pCi/g					
Thallium-208		0.231	+/-0.0466	0.0151	+/-0.0456	0.0321	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.00625	+/-0.00721	0.00576	+/-0.00721	0.0121	pCi/g		EXW1 08/01/05	2325	443733	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	-0.871	+/-1.56	1.34	+/-1.56	2.78	pCi/g		LAG1 07/29/05	1951	441385	3
Solid Preparation												
Laboratory Composite - CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	07/11/05	0627	440782
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DLD1	07/08/05	1922	440781
GL-RAD-A-026	Laboratory sample composite	DLD1	07/08/05	1314	440780

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Certificate of Analysis

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID: 7000-0000-012-C1C-01
Sample ID: 140051011

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 906.0 Modified
4	GL-RAD-A-026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	50	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID:	7000-0000-012-C1C-02	Project:	YANK01204
Sample ID:	140051012	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	09-JUN-05		
Receive Date:	07-JUL-05		
Collector:	Client		
Moisture:	8%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.459	+/-0.205	0.0623	+/-0.201	0.132	pCi/g		AKB 08/02/05	0919	441350	1
Americium-241	U	0.0013	+/-0.0313	0.0264	+/-0.0307	0.0542	pCi/g					
Bismuth-212		0.373	+/-0.285	0.143	+/-0.279	0.301	pCi/g					
Bismuth-214		0.464	+/-0.106	0.0367	+/-0.104	0.0766	pCi/g					
Cesium-134	U	0.0123	+/-0.0263	0.0231	+/-0.0258	0.0484	pCi/g					
Cesium-137	U	0.0187	+/-0.0233	0.0211	+/-0.0228	0.044	pCi/g					
Cobalt-60	U	0.0138	+/-0.0227	0.0201	+/-0.0223	0.0431	pCi/g					
Europium-152	U	-0.00782	+/-0.0558	0.0487	+/-0.0547	0.101	pCi/g					
Europium-154	UUI	0.00	+/-0.0693	0.0559	+/-0.0679	0.120	pCi/g					
Europium-155	U	0.0298	+/-0.0605	0.0443	+/-0.0593	0.0909	pCi/g					
Lead-212		0.478	+/-0.0676	0.0272	+/-0.0663	0.0561	pCi/g					
Lead-214		0.548	+/-0.0865	0.0366	+/-0.0847	0.0757	pCi/g					
Manganese-54	U	0.0182	+/-0.0277	0.021	+/-0.0271	0.0443	pCi/g					
Niobium-94	U	-0.00958	+/-0.0214	0.018	+/-0.021	0.0377	pCi/g					
Potassium-40		7.74	+/-0.856	0.155	+/-0.839	0.338	pCi/g					
Radium-226		0.464	+/-0.106	0.0367	+/-0.104	0.0766	pCi/g					
Silver-108m	U	0.0108	+/-0.0186	0.0165	+/-0.0182	0.0343	pCi/g					
Thallium-208		0.183	+/-0.0583	0.019	+/-0.0571	0.0399	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	-0.0045	+/-0.00524	0.00462	+/-0.00524	0.00968	pCi/g		EXW1 08/02/05	2214	443733	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	-0.153	+/-1.59	1.34	+/-1.59	2.78	pCi/g		LAG1 07/29/05	2023	441385	3
Solid Preparation												
Laboratory Composite - CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	07/11/05	0627	440782
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DLD1	07/08/05	1922	440781
GL-RAD-A-026	Laboratory sample composite	DLD1	07/08/05	1314	440780

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Certificate of Analysis

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Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID: 7000–0000–012–C1C–02
Sample ID: 140051012

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 906.0 Modified
4	GL–RAD–A–026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	50	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID:	7000-0000-012-C4C-03	Project:	YANK01204
Sample ID:	140051013	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	13-JUN-05		
Receive Date:	07-JUL-05		
Collector:	Client		
Moisture:	6.67%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.498	+/-0.145	0.0629	+/-0.142	0.134	pCi/g		AKB 08/02/05	0920	441350	1
Americium-241	U	-0.0282	+/-0.0952	0.076	+/-0.0933	0.156	pCi/g					
Bismuth-212		0.506	+/-0.270	0.126	+/-0.265	0.268	pCi/g					
Bismuth-214		0.657	+/-0.101	0.0303	+/-0.0986	0.0639	pCi/g					
Cesium-134	U	0.024	+/-0.0231	0.0212	+/-0.0226	0.0447	pCi/g					
Cesium-137	U	-0.0162	+/-0.0192	0.015	+/-0.0188	0.0319	pCi/g					
Cobalt-60	U	0.0213	+/-0.0373	0.0172	+/-0.0366	0.0375	pCi/g					
Europium-152	U	-0.0211	+/-0.0565	0.042	+/-0.0554	0.0877	pCi/g					
Europium-154	U	-0.0315	+/-0.0641	0.0505	+/-0.0628	0.109	pCi/g					
Europium-155	U	0.0169	+/-0.053	0.048	+/-0.0519	0.0986	pCi/g					
Lead-212		0.505	+/-0.078	0.0247	+/-0.0764	0.0511	pCi/g					
Lead-214		0.686	+/-0.105	0.0319	+/-0.102	0.0665	pCi/g					
Manganese-54	U	0.0069	+/-0.0237	0.0181	+/-0.0233	0.0385	pCi/g					
Niobium-94	U	-0.00405	+/-0.0189	0.0155	+/-0.0185	0.0327	pCi/g					
Potassium-40		8.76	+/-0.937	0.170	+/-0.918	0.371	pCi/g					
Radium-226		0.657	+/-0.101	0.0303	+/-0.0986	0.0639	pCi/g					
Silver-108m	U	-0.00247	+/-0.0154	0.0132	+/-0.0151	0.0278	pCi/g					
Thallium-208		0.163	+/-0.0373	0.0153	+/-0.0365	0.0325	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	-0.00516	+/-0.00572	0.00503	+/-0.00572	0.0105	pCi/g		EXW1 08/02/05	2214	443733	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	-0.146	+/-1.52	1.28	+/-1.52	2.66	pCi/g		LAG1 07/29/05	2055	441385	3
Solid Preparation												
Laboratory Composite - CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	07/11/05	0627	440782
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DLD1	07/08/05	1922	440781
GL-RAD-A-026	Laboratory sample composite	DLD1	07/08/05	1314	440780

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID: 7000-0000-012-C4C-03
Sample ID: 140051013

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 906.0 Modified
4	GL-RAD-A-026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	52	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID:	7000-0000-012-C4C-04	Project:	YANK01204
Sample ID:	140051014	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	13-JUN-05		
Receive Date:	07-JUL-05		
Collector:	Client		
Moisture:	6.76%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.595	+/-0.137	0.044	+/-0.134	0.0952	pCi/g		AKB 08/02/05	0954	441350	1
Americium-241	U	0.0429	+/-0.0568	0.0552	+/-0.0557	0.114	pCi/g					
Bismuth-212		0.402	+/-0.247	0.097	+/-0.242	0.208	pCi/g					
Bismuth-214		0.529	+/-0.0874	0.0238	+/-0.0857	0.0506	pCi/g					
Cesium-134	U	0.0193	+/-0.0316	0.0184	+/-0.031	0.0388	pCi/g					
Cesium-137	U	-0.00156	+/-0.0194	0.0145	+/-0.019	0.0307	pCi/g					
Cobalt-60	U	0.00688	+/-0.0181	0.0157	+/-0.0177	0.0343	pCi/g					
Europium-152	U	0.0106	+/-0.0422	0.0376	+/-0.0414	0.0784	pCi/g					
Europium-154	U	-0.0116	+/-0.0639	0.0449	+/-0.0626	0.0974	pCi/g					
Europium-155	U	-0.0195	+/-0.042	0.0375	+/-0.0412	0.0775	pCi/g					
Lead-212		0.497	+/-0.0614	0.0204	+/-0.0601	0.0425	pCi/g					
Lead-214		0.601	+/-0.0907	0.0254	+/-0.0889	0.0532	pCi/g					
Manganese-54	U	-0.00531	+/-0.0175	0.0144	+/-0.0172	0.0309	pCi/g					
Niobium-94	U	0.0121	+/-0.0153	0.0138	+/-0.015	0.0292	pCi/g					
Potassium-40		8.07	+/-0.829	0.103	+/-0.813	0.233	pCi/g					
Radium-226		0.529	+/-0.0874	0.0238	+/-0.0857	0.0506	pCi/g					
Silver-108m	U	0.00718	+/-0.013	0.0116	+/-0.0127	0.0244	pCi/g					
Thallium-208		0.135	+/-0.0396	0.013	+/-0.0388	0.0276	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	-0.000275	+/-0.00652	0.00549	+/-0.00652	0.0115	pCi/g		EXW1 08/02/05	2214	443733	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	1.05	+/-1.70	1.39	+/-1.70	2.88	pCi/g		LAG1 07/29/05	2126	441385	3
Solid Preparation												
Laboratory Composite - CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	07/11/05	0627	440782
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DLD1	07/08/05	1922	440781
GL-RAD-A-026	Laboratory sample composite	DLD1	07/08/05	1314	440780

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Certificate of Analysis

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID: 7000-0000-012-C4C-04
Sample ID: 140051014

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 906.0 Modified
4	GL-RAD-A-026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	44	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID:	7000-0000-013-C1C-01	Project:	YANK01204
Sample ID:	140051015	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	14-JUN-05		
Receive Date:	07-JUL-05		
Collector:	Client		
Moisture:	8.12%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.622	+/-0.152	0.0414	+/-0.149	0.0903	pCi/g		AKB 08/02/05	0954	441350	1
Americium-241	U	0.0708	+/-0.0717	0.0591	+/-0.0703	0.122	pCi/g					
Bismuth-212		0.379	+/-0.257	0.105	+/-0.252	0.224	pCi/g					
Bismuth-214		0.539	+/-0.0887	0.0246	+/-0.0869	0.0523	pCi/g					
Cesium-134	U	0.0124	+/-0.0297	0.0175	+/-0.0291	0.0373	pCi/g					
Cesium-137	U	0.00348	+/-0.0353	0.0128	+/-0.0346	0.0274	pCi/g					
Cobalt-60	U	-0.00944	+/-0.0164	0.0126	+/-0.0161	0.0281	pCi/g					
Europium-152	U	-0.0244	+/-0.0417	0.0334	+/-0.0409	0.0703	pCi/g					
Europium-154	U	0.0186	+/-0.051	0.0444	+/-0.050	0.0966	pCi/g					
Europium-155	U	0.0391	+/-0.0406	0.0383	+/-0.0397	0.0792	pCi/g					
Lead-212		0.568	+/-0.0682	0.0202	+/-0.0668	0.0422	pCi/g					
Lead-214		0.539	+/-0.0821	0.0293	+/-0.0805	0.0611	pCi/g					
Manganese-54	U	0.00353	+/-0.0187	0.0157	+/-0.0183	0.0336	pCi/g					
Niobium-94	U	-0.00142	+/-0.0168	0.0123	+/-0.0165	0.0261	pCi/g					
Potassium-40		7.09	+/-0.767	0.124	+/-0.751	0.276	pCi/g					
Radium-226		0.539	+/-0.0887	0.0246	+/-0.0869	0.0523	pCi/g					
Silver-108m	U	4.150E-05	+/-0.0126	0.011	+/-0.0123	0.0234	pCi/g					
Thallium-208		0.146	+/-0.0383	0.0145	+/-0.0375	0.0307	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.0022	+/-0.00517	0.00425	+/-0.00517	0.00885	pCi/g		EXW1 08/02/05	2214	443733	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	-0.286	+/-1.54	1.30	+/-1.54	2.70	pCi/g		LAG1 07/29/05	2158	441385	3
Solid Preparation												
Laboratory Composite - CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	07/11/05	0627	440782
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DLD1	07/08/05	1922	440781
GL-RAD-A-026	Laboratory sample composite	DLD1	07/08/05	1314	440780

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362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID: 7000-0000-013-C1C-01
Sample ID: 140051015

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 906.0 Modified
4	GL-RAD-A-026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	63	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID:	7000–0000–013–C1C–02	Project:	YANK01204
Sample ID:	140051016	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	14–JUN–05		
Receive Date:	07–JUL–05		
Collector:	Client		
Moisture:	7.83%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)												
Actinium–228		0.546	+/–0.135	0.0426	+/–0.133	0.0927	pCi/g		AKB 08/02/05	0955	441350	1
Americium–241	U	–0.0709	+/–0.0913	0.0541	+/–0.0895	0.112	pCi/g					
Bismuth–212	U	0.187	+/–0.254	0.102	+/–0.249	0.218	pCi/g					
Bismuth–214		0.507	+/–0.0886	0.024	+/–0.0869	0.051	pCi/g					
Cesium–134	UUI	0.00	+/–0.0309	0.0193	+/–0.0303	0.0408	pCi/g					
Cesium–137	U	–0.0017	+/–0.0168	0.0138	+/–0.0164	0.0294	pCi/g					
Cobalt–60	U	0.00486	+/–0.0174	0.0149	+/–0.017	0.0326	pCi/g					
Europium–152	U	–0.00948	+/–0.0436	0.0375	+/–0.0428	0.0787	pCi/g					
Europium–154	U	0.0123	+/–0.0518	0.0441	+/–0.0508	0.0959	pCi/g					
Europium–155	U	0.0389	+/–0.0452	0.0407	+/–0.0443	0.084	pCi/g					
Lead–212		0.482	+/–0.0652	0.021	+/–0.0639	0.0437	pCi/g					
Lead–214		0.569	+/–0.0922	0.0265	+/–0.0903	0.0556	pCi/g					
Manganese–54	U	–0.00526	+/–0.0165	0.013	+/–0.0162	0.028	pCi/g					
Niobium–94	U	–0.00324	+/–0.0165	0.0134	+/–0.0162	0.0284	pCi/g					
Potassium–40		8.16	+/–0.947	0.141	+/–0.928	0.311	pCi/g					
Radium–226		0.507	+/–0.0886	0.024	+/–0.0869	0.051	pCi/g					
Silver–108m	U	–0.00334	+/–0.015	0.0127	+/–0.0147	0.0268	pCi/g					
Thallium–208		0.178	+/–0.0391	0.0121	+/–0.0383	0.0259	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid–HTD2,ALL2 (CT)												
Strontium–90	U	0.00282	+/–0.00401	0.00345	+/–0.00401	0.00728	pCi/g		EXW1 08/02/05	1032	443733	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)												
Tritium	U	–0.868	+/–1.42	1.23	+/–1.42	2.54	pCi/g		LAG1 07/29/05	2230	441385	3
Solid Preparation												
Laboratory Composite – CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	B J1	07/11/05	0627	440782
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	DLD1	07/08/05	1922	440781
GL–RAD–A–026	Laboratory sample composite	DLD1	07/08/05	1314	440780

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Certificate of Analysis

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID: 7000-0000-013-C1C-02
Sample ID: 140051016

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 906.0 Modified
4	GL-RAD-A-026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	91	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID:	7000-0000-013-C2C-03	Project:	YANK01204
Sample ID:	140051017	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	14-JUN-05		
Receive Date:	07-JUL-05		
Collector:	Client		
Moisture:	7.98%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.443	+/-0.231	0.0668	+/-0.227	0.144	pCi/g		AKB 08/02/05	0956	441350	1
Americium-241	U	0.0141	+/-0.0261	0.0234	+/-0.0256	0.0483	pCi/g					
Bismuth-212	U	0.240	+/-0.240	0.167	+/-0.235	0.355	pCi/g					
Bismuth-214		0.566	+/-0.104	0.0301	+/-0.102	0.0644	pCi/g					
Cesium-134	U	0.0229	+/-0.0281	0.0238	+/-0.0275	0.0507	pCi/g					
Cesium-137	U	-0.00767	+/-0.0179	0.0148	+/-0.0175	0.0321	pCi/g					
Cobalt-60	U	-0.0148	+/-0.0227	0.0178	+/-0.0223	0.0395	pCi/g					
Europium-152	U	-0.0451	+/-0.0438	0.0344	+/-0.0429	0.0732	pCi/g					
Europium-154	U	0.0614	+/-0.0492	0.051	+/-0.0482	0.113	pCi/g					
Europium-155	U	0.0702	+/-0.0581	0.0348	+/-0.0569	0.0723	pCi/g					
Lead-212		0.535	+/-0.0676	0.0206	+/-0.0662	0.0432	pCi/g					
Lead-214		0.587	+/-0.0882	0.0278	+/-0.0864	0.0588	pCi/g					
Manganese-54	U	0.0109	+/-0.0226	0.0199	+/-0.0221	0.0426	pCi/g					
Niobium-94	U	0.00687	+/-0.0207	0.0163	+/-0.0203	0.0347	pCi/g					
Potassium-40		9.02	+/-1.06	0.188	+/-1.04	0.415	pCi/g					
Radium-226		0.566	+/-0.104	0.0301	+/-0.102	0.0644	pCi/g					
Silver-108m	U	-0.0102	+/-0.0175	0.014	+/-0.0171	0.0296	pCi/g					
Thallium-208		0.172	+/-0.045	0.0169	+/-0.0441	0.036	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	-0.00155	+/-0.00341	0.00319	+/-0.00341	0.00674	pCi/g		EXW1 08/02/05	1032	443733	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	-1.06	+/-1.50	1.30	+/-1.50	2.70	pCi/g		LAG1 07/29/05	2302	441385	3
Solid Preparation												
Laboratory Composite - CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	07/11/05	0627	440782
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DLD1	07/08/05	1922	440781
GL-RAD-A-026	Laboratory sample composite	DLD1	07/08/05	1314	440780

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID: 7000-0000-013-C2C-03
Sample ID: 140051017

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 906.0 Modified
4	GL-RAD-A-026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	94	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
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362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID:	7000-0000-013-C2C-04	Project:	YANK01204
Sample ID:	140051018	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	14-JUN-05		
Receive Date:	07-JUL-05		
Collector:	Client		
Moisture:	9.21%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.477	+/-0.132	0.0489	+/-0.129	0.106	pCi/g		AKB 08/02/05	1113	441350	1
Americium-241	U	-0.0022	+/-0.0757	0.0599	+/-0.0742	0.124	pCi/g					
Bismuth-212		0.471	+/-0.221	0.109	+/-0.217	0.234	pCi/g					
Bismuth-214		0.426	+/-0.0895	0.0264	+/-0.0877	0.0561	pCi/g					
Cesium-134	U	0.0366	+/-0.0218	0.0172	+/-0.0214	0.0366	pCi/g					
Cesium-137	U	0.0166	+/-0.0198	0.0157	+/-0.0194	0.0333	pCi/g					
Cobalt-60	U	0.0174	+/-0.018	0.0167	+/-0.0177	0.0365	pCi/g					
Europium-152	U	-0.0118	+/-0.0414	0.0354	+/-0.0405	0.0743	pCi/g					
Europium-154	U	0.000723	+/-0.0526	0.044	+/-0.0516	0.0964	pCi/g					
Europium-155	U	0.0523	+/-0.0486	0.0438	+/-0.0477	0.0902	pCi/g					
Lead-212		0.576	+/-0.0682	0.0202	+/-0.0668	0.0421	pCi/g					
Lead-214		0.542	+/-0.0844	0.0275	+/-0.0827	0.0575	pCi/g					
Manganese-54	U	0.0243	+/-0.0262	0.0144	+/-0.0257	0.0311	pCi/g					
Niobium-94	U	0.00252	+/-0.0165	0.0138	+/-0.0162	0.0293	pCi/g					
Potassium-40		7.83	+/-0.806	0.0997	+/-0.790	0.230	pCi/g					
Radium-226		0.426	+/-0.0895	0.0264	+/-0.0877	0.0561	pCi/g					
Silver-108m	U	0.012	+/-0.0136	0.0123	+/-0.0133	0.026	pCi/g					
Thallium-208		0.190	+/-0.0418	0.0122	+/-0.041	0.0262	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.00226	+/-0.00399	0.00349	+/-0.00399	0.00732	pCi/g		EXW1 08/02/05	1032	443733	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	0.0325	+/-1.59	1.33	+/-1.59	2.76	pCi/g		LAG1 07/29/05	2333	441385	3
Solid Preparation												
Laboratory Composite - CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	07/11/05	0627	440782
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DLD1	07/08/05	1922	440781
GL-RAD-A-026	Laboratory sample composite	DLD1	07/08/05	1314	440780

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID: 7000-0000-013-C2C-04
Sample ID: 140051018

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 906.0 Modified
4	GL-RAD-A-026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	100	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID:	7000-0000-018-C1C-01	Project:	YANK01204
Sample ID:	140051019	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	15-JUN-05		
Receive Date:	07-JUL-05		
Collector:	Client		
Moisture:	6.62%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.581	+/-0.175	0.0579	+/-0.171	0.125	pCi/g		AKB 08/02/05	1114	441350	1
Americium-241	U	-0.153	+/-0.203	0.111	+/-0.199	0.230	pCi/g					
Bismuth-212		0.465	+/-0.283	0.118	+/-0.277	0.254	pCi/g					
Bismuth-214		0.631	+/-0.109	0.0284	+/-0.107	0.0605	pCi/g					
Cesium-134	UUI	0.00	+/-0.0323	0.0208	+/-0.0317	0.0443	pCi/g					
Cesium-137	U	0.000648	+/-0.0185	0.016	+/-0.0182	0.0341	pCi/g					
Cobalt-60	U	-5.190E-05	+/-0.019	0.0156	+/-0.0187	0.0346	pCi/g					
Europium-152	U	-0.0159	+/-0.0527	0.0438	+/-0.0517	0.0918	pCi/g					
Europium-154	U	-0.00258	+/-0.0599	0.0489	+/-0.0587	0.107	pCi/g					
Europium-155	U	0.033	+/-0.0597	0.0546	+/-0.0585	0.113	pCi/g					
Lead-212		0.506	+/-0.0745	0.0297	+/-0.073	0.0614	pCi/g					
Lead-214		0.653	+/-0.105	0.0331	+/-0.103	0.0692	pCi/g					
Manganese-54	U	-0.0153	+/-0.0215	0.017	+/-0.021	0.0366	pCi/g					
Niobium-94	U	-0.0124	+/-0.0159	0.0127	+/-0.0156	0.0274	pCi/g					
Potassium-40		7.49	+/-0.925	0.150	+/-0.906	0.334	pCi/g					
Radium-226		0.631	+/-0.109	0.0284	+/-0.107	0.0605	pCi/g					
Silver-108m	U	-0.0156	+/-0.0178	0.0139	+/-0.0174	0.0293	pCi/g					
Thallium-208		0.184	+/-0.0452	0.0164	+/-0.0443	0.0348	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.00564	+/-0.00385	0.00315	+/-0.00386	0.00665	pCi/g		EXW1 08/02/05	1032	443733	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	-0.142	+/-1.48	1.25	+/-1.48	2.59	pCi/g		LAG1 07/30/05	0005	441385	3
Solid Preparation												
Laboratory Composite - CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	07/11/05	0627	440782
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DLD1	07/08/05	1922	440781
GL-RAD-A-026	Laboratory sample composite	DLD1	07/08/05	1314	440780

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID: 7000-0000-018-C1C-01
Sample ID: 140051019

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 906.0 Modified
4	GL-RAD-A-026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	101	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID:	7000–0000–018–C1C–02	Project:	YANK01204
Sample ID:	140051020	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	15–JUN–05		
Receive Date:	07–JUL–05		
Collector:	Client		
Moisture:	6.45%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)												
Actinium–228		0.416	+/–0.106	0.0383	+/–0.104	0.0839	pCi/g		AKB 08/02/05	1115	441350	1
Americium–241	U	0.0669	+/–0.0915	0.0767	+/–0.0897	0.159	pCi/g					
Bismuth–212		0.332	+/–0.219	0.0854	+/–0.214	0.185	pCi/g					
Bismuth–214		0.482	+/–0.076	0.0242	+/–0.0745	0.0514	pCi/g					
Cesium–134	U	0.0101	+/–0.0184	0.016	+/–0.018	0.0342	pCi/g					
Cesium–137	U	–0.00179	+/–0.0147	0.0123	+/–0.0144	0.0264	pCi/g					
Cobalt–60	U	–0.0193	+/–0.0155	0.0104	+/–0.0152	0.0237	pCi/g					
Europium–152	U	0.0199	+/–0.0391	0.0341	+/–0.0383	0.0716	pCi/g					
Europium–154	U	–0.00105	+/–0.0447	0.0372	+/–0.0438	0.0822	pCi/g					
Europium–155	U	0.000544	+/–0.040	0.0372	+/–0.0392	0.0772	pCi/g					
Lead–212		0.426	+/–0.0577	0.0194	+/–0.0565	0.0404	pCi/g					
Lead–214		0.493	+/–0.0824	0.0227	+/–0.0808	0.048	pCi/g					
Manganese–54	U	–0.00622	+/–0.015	0.0119	+/–0.0147	0.0257	pCi/g					
Niobium–94	U	–0.00735	+/–0.0137	0.011	+/–0.0134	0.0236	pCi/g					
Potassium–40		8.48	+/–0.893	0.103	+/–0.875	0.233	pCi/g					
Radium–226		0.482	+/–0.076	0.0242	+/–0.0745	0.0514	pCi/g					
Silver–108m	U	0.000347	+/–0.012	0.0107	+/–0.0118	0.0226	pCi/g					
Thallium–208		0.110	+/–0.0266	0.0109	+/–0.026	0.0235	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid–HTD2,ALL2 (CT)												
Strontium–90	U	–0.00508	+/–0.00361	0.00356	+/–0.00361	0.00747	pCi/g		EXW1 08/02/05	1032	443733	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)												
Tritium	U	–0.372	+/–1.59	1.35	+/–1.59	2.79	pCi/g		LAG1 07/30/05	0037	441385	3
Solid Preparation												
Laboratory Composite – CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	B J1	07/11/05	0627	440782
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	DLD1	07/08/05	1922	440781
GL–RAD–A–026	Laboratory sample composite	DLD1	07/08/05	1315	440780

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID: 7000-0000-018-C1C-02
Sample ID: 140051020

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 906.0 Modified
4	GL-RAD-A-026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	98	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID:	7000-0000-018-C3C-03	Project:	YANK01204
Sample ID:	140051021	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	15-JUN-05		
Receive Date:	07-JUL-05		
Collector:	Client		
Moisture:	6.58%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.557	+/-0.165	0.0588	+/-0.161	0.126	pCi/g		AKB 07/27/05	1609	441351	1
Americium-241	U	-0.0197	+/-0.0352	0.0283	+/-0.0345	0.058	pCi/g					
Bismuth-212	U	0.281	+/-0.213	0.162	+/-0.209	0.340	pCi/g					
Bismuth-214		0.626	+/-0.112	0.0398	+/-0.110	0.0831	pCi/g					
Cesium-134	U	0.0303	+/-0.0342	0.0268	+/-0.0335	0.056	pCi/g					
Cesium-137	U	-0.002	+/-0.024	0.0205	+/-0.0235	0.0431	pCi/g					
Cobalt-60	U	0.00569	+/-0.0246	0.021	+/-0.0241	0.0451	pCi/g					
Europium-152	U	-0.00291	+/-0.0587	0.0506	+/-0.0575	0.105	pCi/g					
Europium-154	U	0.0292	+/-0.0787	0.0596	+/-0.0771	0.128	pCi/g					
Europium-155	U	0.0214	+/-0.0708	0.045	+/-0.0694	0.0926	pCi/g					
Lead-212		0.463	+/-0.0718	0.0275	+/-0.0704	0.0568	pCi/g					
Lead-214		0.545	+/-0.101	0.0365	+/-0.0993	0.0758	pCi/g					
Manganese-54	U	0.000457	+/-0.0252	0.0212	+/-0.0247	0.0447	pCi/g					
Niobium-94	U	0.00727	+/-0.0218	0.019	+/-0.0213	0.0398	pCi/g					
Potassium-40		8.12	+/-0.874	0.145	+/-0.857	0.321	pCi/g					
Radium-226		0.626	+/-0.112	0.0398	+/-0.110	0.0831	pCi/g					
Silver-108m	U	0.00602	+/-0.0207	0.0178	+/-0.0203	0.0372	pCi/g					
Thallium-208		0.135	+/-0.048	0.0205	+/-0.047	0.0428	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	-0.000524	+/-0.00339	0.0031	+/-0.00339	0.00656	pCi/g		EXW1 08/02/05	1032	443733	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	0.322	+/-1.24	1.03	+/-1.24	2.15	pCi/g		LAG1 08/01/05	0820	445708	3
Solid Preparation												
Laboratory Composite - CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	07/11/05	0627	440782
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DLD1	07/08/05	1922	440781
GL-RAD-A-026	Laboratory sample composite	DLD1	07/08/05	1315	440780

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Certificate of Analysis

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Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID: 7000–0000–018–C3C–03
Sample ID: 140051021

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 906.0 Modified
4	GL–RAD–A–026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	99	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID:	7000–0000–018–C3C–04	Project:	YANK01204
Sample ID:	140051022	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	15–JUN–05		
Receive Date:	07–JUL–05		
Collector:	Client		
Moisture:	6.52%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)												
Actinium–228		0.466	+/–0.103	0.0323	+/–0.101	0.069	pCi/g		AKB 07/27/05	1631	441351	1
Americium–241	U	–0.00706	+/–0.0393	0.0363	+/–0.0385	0.0748	pCi/g					
Bismuth–212		0.347	+/–0.214	0.0826	+/–0.210	0.174	pCi/g					
Bismuth–214		0.476	+/–0.0714	0.0206	+/–0.070	0.043	pCi/g					
Cesium–134	U	0.0187	+/–0.0261	0.0116	+/–0.0256	0.0244	pCi/g					
Cesium–137	U	–0.00186	+/–0.0132	0.0111	+/–0.013	0.0233	pCi/g					
Cobalt–60	U	–0.000358	+/–0.0126	0.0103	+/–0.0123	0.0221	pCi/g					
Europium–152	U	–0.00396	+/–0.0327	0.0279	+/–0.0321	0.0581	pCi/g					
Europium–154	U	–0.00142	+/–0.0388	0.0318	+/–0.038	0.068	pCi/g					
Europium–155	U	0.0204	+/–0.0372	0.0337	+/–0.0364	0.0693	pCi/g					
Lead–212		0.427	+/–0.0513	0.0184	+/–0.0503	0.038	pCi/g					
Lead–214		0.541	+/–0.0761	0.0182	+/–0.0746	0.038	pCi/g					
Manganese–54	U	0.0184	+/–0.0158	0.0124	+/–0.0155	0.0261	pCi/g					
Niobium–94	U	0.00355	+/–0.0117	0.010	+/–0.0115	0.021	pCi/g					
Potassium–40		8.33	+/–0.691	0.0971	+/–0.677	0.210	pCi/g					
Radium–226		0.476	+/–0.0714	0.0206	+/–0.070	0.043	pCi/g					
Silver–108m	U	0.00684	+/–0.0112	0.00973	+/–0.011	0.0203	pCi/g					
Thallium–208		0.115	+/–0.0306	0.00997	+/–0.030	0.021	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid–HTD2,ALL2 (CT)												
Strontium–90	U	0.00587	+/–0.00416	0.00344	+/–0.00417	0.00723	pCi/g		EXW1 08/02/05	1032	443733	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)												
Tritium	U	–0.364	+/–1.33	1.13	+/–1.33	2.36	pCi/g		LAG1 08/01/05	0852	445708	3
Solid Preparation												
Laboratory Composite – CONCRETE												

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	B J1	07/11/05	0627	440782
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	DLD1	07/08/05	1922	440781
GL–RAD–A–026	Laboratory sample composite	DLD1	07/08/05	1315	440780

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Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID: 7000-0000-018-C3C-04
Sample ID: 140051022

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified
3	EPA 906.0 Modified
4	GL-RAD-A-026

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	100	(25%-125%)

Notes:
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B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID:	7000–0000–012–1S	Project:	YANK01204
Sample ID:	140051023	Client ID:	YANK001
Matrix:	SE	Vol. Recv.:	
Collect Date:	13–JUN–05		
Receive Date:	07–JUL–05		
Collector:	Client		
Moisture:	12.7%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gamma,Solid–FSS GAM & ALL FSS												
Actinium–228		0.408	+/–0.121	0.0384	+/–0.118	0.0833	pCi/g		AKB 08/05/05	1001	441351	1
Americium–241	U	–0.0214	+/–0.0636	0.0507	+/–0.0624	0.105	pCi/g					
Bismuth–212		0.267	+/–0.153	0.0905	+/–0.150	0.194	pCi/g					
Bismuth–214		0.362	+/–0.0753	0.0222	+/–0.0738	0.0472	pCi/g					
Cesium–134	U	0.0243	+/–0.023	0.016	+/–0.0226	0.0339	pCi/g					
Cesium–137	U	–0.00887	+/–0.0145	0.0119	+/–0.0142	0.0253	pCi/g					
Cobalt–60	U	0.00264	+/–0.0171	0.0146	+/–0.0167	0.0317	pCi/g					
Europium–152	U	–0.00489	+/–0.0377	0.0319	+/–0.0369	0.0669	pCi/g					
Europium–154	U	–0.0122	+/–0.0498	0.0411	+/–0.0488	0.089	pCi/g					
Europium–155	U	0.031	+/–0.0515	0.0369	+/–0.0505	0.076	pCi/g					
Lead–212		0.339	+/–0.0486	0.0201	+/–0.0476	0.0417	pCi/g					
Lead–214		0.360	+/–0.0668	0.023	+/–0.0655	0.0482	pCi/g					
Manganese–54	U	–0.0074	+/–0.0154	0.0123	+/–0.0151	0.0265	pCi/g					
Niobium–94	U	0.0017	+/–0.0132	0.0114	+/–0.013	0.0243	pCi/g					
Potassium–40		16.0	+/–1.34	0.108	+/–1.31	0.241	pCi/g					
Radium–226		0.362	+/–0.0753	0.0222	+/–0.0738	0.0472	pCi/g					
Silver–108m	U	0.00433	+/–0.0117	0.0108	+/–0.0115	0.0227	pCi/g					
Thallium–208		0.125	+/–0.0341	0.0226	+/–0.0335	0.0467	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid – 0.025 pCi/g												
Strontium–90	U	0.00206	+/–0.00561	0.00528	+/–0.00561	0.0113	pCi/g		EXW1 08/02/05	1032	443733	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL FSS												
Tritium	U	0.103	+/–1.30	1.09	+/–1.30	2.26	pCi/g		LAG1 08/01/05	0924	445708	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	B J1	07/11/05	0555	440785
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	TC1	07/08/05	1148	440783

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID: 7000–0000–012–1S
Sample ID: 140051023

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid – 0.025 pCi/g	96	(25%–125%)

Notes:
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B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
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Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID:	7000-0000-014-1S	Project:	YANK01204
Sample ID:	140051024	Client ID:	YANK001
Matrix:	SE	Vol. Recv.:	
Collect Date:	13-JUN-05		
Receive Date:	07-JUL-05		
Collector:	Client		
Moisture:	61.7%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gamma,Solid-FSS GAM & ALL FSS												
Actinium-228		2.53	+/-0.705	0.163	+/-0.690	0.341	pCi/g		AKB 07/28/05	2134	441351	1
Americium-241	U	-0.0887	+/-0.170	0.117	+/-0.167	0.240	pCi/g					
Bismuth-212	UUI	0.00	+/-0.895	0.384	+/-0.877	0.798	pCi/g					
Bismuth-214		0.995	+/-0.246	0.0969	+/-0.241	0.200	pCi/g					
Cesium-134	UUI	0.00	+/-0.122	0.0544	+/-0.120	0.113	pCi/g					
Cesium-137		0.236	+/-0.158	0.0431	+/-0.155	0.0897	pCi/g					
Cobalt-60	U	0.0569	+/-0.0848	0.0601	+/-0.0831	0.127	pCi/g					
Europium-152	U	0.095	+/-0.155	0.104	+/-0.152	0.215	pCi/g					
Europium-154	U	0.0505	+/-0.185	0.147	+/-0.181	0.310	pCi/g					
Europium-155	U	0.0427	+/-0.151	0.107	+/-0.148	0.219	pCi/g					
Lead-212		1.70	+/-0.232	0.0573	+/-0.228	0.118	pCi/g					
Lead-214		1.06	+/-0.251	0.0732	+/-0.246	0.151	pCi/g					
Manganese-54	U	0.0298	+/-0.0665	0.0516	+/-0.0652	0.108	pCi/g					
Niobium-94	U	-0.0109	+/-0.0545	0.0413	+/-0.0535	0.0858	pCi/g					
Potassium-40		27.9	+/-2.97	0.464	+/-2.91	0.990	pCi/g					
Radium-226		0.995	+/-0.246	0.0969	+/-0.241	0.200	pCi/g					
Silver-108m	U	0.00311	+/-0.0482	0.0356	+/-0.0473	0.0738	pCi/g					
Thallium-208		0.557	+/-0.143	0.042	+/-0.140	0.0873	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid - 0.025 pCi/g												
Strontium-90	U	0.00441	+/-0.00694	0.00642	+/-0.00694	0.0136	pCi/g		EXW1 08/02/05	1032	443733	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL FSS												
Tritium	U	0.249	+/-1.22	1.01	+/-1.22	2.11	pCi/g		LAG1 08/01/05	0955	445708	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	B J1	07/11/05	0555	440785
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	07/08/05	1148	440783

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID: 7000-0000-014-1S
Sample ID: 140051024

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid – 0.025 pCi/g	84	(25%–125%)

Notes:
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B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID:	7000–0000–015–01S	Project:	YANK01204
Sample ID:	140051025	Client ID:	YANK001
Matrix:	SE	Vol. Recv.:	
Collect Date:	16–JUN–05		
Receive Date:	07–JUL–05		
Collector:	Client		
Moisture:	52.6%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Alpha Spec Analysis													
Alphaspec Am241, Cm, Solid ALL FSS													
Americium–241	U	0.0176	+/–0.0367	0.0242	+/–0.0367	0.0817	pCi/g		SCP	07/22/05	1047	442289	1
Curium–242	U	–0.00344	+/–0.0289	0.0163	+/–0.0289	0.0715	pCi/g						
Curium–243/244	U	–0.00295	+/–0.0248	0.014	+/–0.0248	0.0614	pCi/g						
Alphaspec Pu, Solid–ALL FSS													
Plutonium–238	U	–0.0115	+/–0.0113	0.0274	+/–0.0114	0.0874	pCi/g		SCP	07/22/05	1047	442290	2
Plutonium–239/240	U	0.00337	+/–0.0255	0.0237	+/–0.0255	0.080	pCi/g						
Liquid Scint Pu241, Solid–ALL FSS													
Plutonium–241	U	0.199	+/–2.08	1.74	+/–2.08	3.59	pCi/g		SCP	08/05/05	1048	448398	3
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL FSS													
Actinium–228		1.43	+/–0.256	0.0766	+/–0.251	0.163	pCi/g		AKB	07/27/05	1709	441351	6
Americium–241	U	–0.00963	+/–0.136	0.110	+/–0.134	0.225	pCi/g						
Bismuth–212		1.15	+/–0.475	0.182	+/–0.466	0.383	pCi/g						
Bismuth–214		1.12	+/–0.159	0.0432	+/–0.156	0.0906	pCi/g						
Cesium–134	UUI	0.00	+/–0.0379	0.0312	+/–0.0372	0.0652	pCi/g						
Cesium–137		0.230	+/–0.0708	0.0237	+/–0.0693	0.0498	pCi/g						
Cobalt–60	U	0.0173	+/–0.0275	0.0239	+/–0.027	0.0514	pCi/g						
Europium–152	U	0.000892	+/–0.0775	0.0627	+/–0.076	0.130	pCi/g						
Europium–154	U	–0.0403	+/–0.0907	0.0721	+/–0.0888	0.154	pCi/g						
Europium–155	U	0.112	+/–0.102	0.0702	+/–0.100	0.144	pCi/g						
Lead–212		1.64	+/–0.161	0.0385	+/–0.158	0.0794	pCi/g						
Lead–214		1.40	+/–0.173	0.0446	+/–0.170	0.0927	pCi/g						
Manganese–54	U	–0.0143	+/–0.032	0.0252	+/–0.0313	0.053	pCi/g						
Niobium–94	U	–0.0241	+/–0.0267	0.0207	+/–0.0261	0.0434	pCi/g						
Potassium–40		19.9	+/–1.69	0.221	+/–1.65	0.477	pCi/g						
Radium–226		1.12	+/–0.159	0.0432	+/–0.156	0.0906	pCi/g						
Silver–108m	U	–0.0296	+/–0.0276	0.0206	+/–0.027	0.0431	pCi/g						
Thallium–208		0.519	+/–0.0845	0.0243	+/–0.0828	0.0509	pCi/g						
Rad Gas Flow Proportional Counting													
GFPC, Sr90, solid – 0.025 pCi/g													
Strontium–90	U	0.0103	+/–0.00796	0.00688	+/–0.00797	0.0147	pCi/g		EXW1	08/02/05	1032	443733	7
Rad Liquid Scintillation Analysis													
LSC, Tritium Dist, Solid–HTD2,ALL FSS													
Tritium	U	1.25	+/–1.37	1.10	+/–1.37	2.29	pCi/g		LAG1	08/01/05	1027	445708	8
Liquid Scint C14, Solid All,FSS													

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Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID: 7000–0000–015–01S
Sample ID: 140051025

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Liquid Scintillation Analysis													
Liquid Scint C14, Solid All,FSS													
Carbon–14	U	–0.11	+/–0.0956	0.0855	+/–0.0956	0.179	pCi/g		BXF1	07/13/05	1300	441486	9
Liquid Scint Fe55, Solid–ALL FSS													
Iron–55	U	–16.5	+/–8.10	5.89	+/–8.14	11.9	pCi/g		BXD1	07/17/05	1454	441483	10
Liquid Scint Ni63, Solid–ALL FSS													
Nickel–63	U	3.97	+/–4.06	3.20	+/–4.07	6.75	pCi/g		AF1	07/19/05	2108	443492	11
Liquid Scint Tc99, Solid–ALL FSS													
Technetium–99	U	0.257	+/–0.234	0.191	+/–0.234	0.390	pCi/g		BXD1	07/19/05	0341	441485	13

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	B J1	07/11/05	0555	440785
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	TC1	07/08/05	1148	440783

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL–300, Am–05–RC Modified
2	DOE EML HASL–300, Pu–11–RC Modified
3	DOE EML HASL–300, Pu–11–RC Modified
4	DOE EML HASL–300, Pu–11–RC Modified
5	DOE EML HASL–300, Pu–11–RC Modified
6	EML HASL 300, 4.5.2.3
7	EPA 905.0 Modified
8	EPA 906.0 Modified
9	EPA EERF C–01 Modified
10	DOE RESL Fe–1, Modified
11	DOE RESL Ni–1, Modified
12	DOE RESL Ni–1, Modified
13	DOE EML HASL–300, Tc–02–RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium–243	Alphaspec Am241, Cm, Solid ALL	87	(15%–125%)
Plutonium–242	Alphaspec Pu, Solid–ALL FSS	89	(15%–125%)
Carrier/Tracer Recovery	Liquid Scint Pu241, Solid–ALL FS	97	(25%–125%)

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Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID: 7000-0000-015-01S
Sample ID: 140051025

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
Carrier/Tracer Recovery		GFPC, Sr90, solid – 0.025 pCi/g			72		(25%–125%)				
Carrier/Tracer Recovery		Liquid Scint Fe55, Solid–ALL FS			63		(15%–125%)				
Carrier/Tracer Recovery		Liquid Scint Ni63, Solid–ALL FS			90		(25%–125%)				
Carrier/Tracer Recovery		Liquid Scint Tc99, Solid–ALL FS			77		(15%–125%)				

Notes:
The Qualifiers in this report are defined as follows :

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B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 – (843) 556–8171 – www.gel.com

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID:	7000–0000–016–01S	Project:	YANK01204
Sample ID:	140051026	Client ID:	YANK001
Matrix:	SE	Vol. Recv.:	
Collect Date:	15–JUN–05		
Receive Date:	07–JUL–05		
Collector:	Client		
Moisture:	16.9%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gamma,Solid–FSS GAM & ALL FSS												
Actinium–228		0.310	+/–0.072	0.0244	+/–0.0705	0.0507	pCi/g		AKB 07/27/05	2034	441351	1
Americium–241	U	–0.00133	+/–0.0276	0.0242	+/–0.0271	0.0493	pCi/g					
Bismuth–212		0.255	+/–0.0881	0.0514	+/–0.0864	0.107	pCi/g					
Bismuth–214		0.271	+/–0.0495	0.013	+/–0.0485	0.0269	pCi/g					
Cesium–134	U	0.0117	+/–0.0131	0.00834	+/–0.0128	0.0172	pCi/g					
Cesium–137	U	–0.002	+/–0.00778	0.00666	+/–0.00763	0.0138	pCi/g					
Cobalt–60	U	0.00744	+/–0.0099	0.00751	+/–0.0097	0.0157	pCi/g					
Europium–152	U	–0.0104	+/–0.0193	0.0167	+/–0.0189	0.0344	pCi/g					
Europium–154	U	–0.034	+/–0.0284	0.022	+/–0.0278	0.0459	pCi/g					
Europium–155	U	0.0216	+/–0.0276	0.0203	+/–0.027	0.0415	pCi/g					
Lead–212		0.316	+/–0.0345	0.0106	+/–0.0338	0.0216	pCi/g					
Lead–214		0.298	+/–0.043	0.0126	+/–0.0421	0.0259	pCi/g					
Manganese–54	U	0.0041	+/–0.0113	0.00689	+/–0.0111	0.0143	pCi/g					
Niobium–94	U	0.00123	+/–0.00706	0.0061	+/–0.00692	0.0126	pCi/g					
Potassium–40		14.7	+/–0.955	0.0558	+/–0.936	0.118	pCi/g					
Radium–226		0.271	+/–0.0495	0.013	+/–0.0485	0.0269	pCi/g					
Silver–108m	U	0.00318	+/–0.00768	0.0059	+/–0.00753	0.0122	pCi/g					
Thallium–208		0.095	+/–0.0215	0.00646	+/–0.0211	0.0134	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid – 0.025 pCi/g												
Strontium–90	U	0.00865	+/–0.00736	0.00648	+/–0.00737	0.0138	pCi/g		EXW1 08/02/05	1032	443733	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL FSS												
Tritium	U	–0.686	+/–1.20	1.03	+/–1.20	2.16	pCi/g		LAG1 08/01/05	1059	445708	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	B J1	07/11/05	0555	440785
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	TC1	07/08/05	1148	440783

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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Certificate of Analysis

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: August 5, 2005

Client Sample ID: 7000–0000–016–01S
Sample ID: 140051026

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid – 0.025 pCi/g	83	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

QUALITY CONTROL DATA

GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: August 5, 2005

Client : Connecticut Yankee Atomic Power
Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut

Contact: Mr. Pete Hollenbeck

Workorder: 140051

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Alpha Spec										
Batch 442289										
QC1200887283 140051003 DUP										
Americium-241	U	-0.0103	U	-0.0185	pCi/g	N/A		(0% - 100%)	SCP	07/22/05 10:47
	Uncert:	+/-0.0265		+/-0.0241						
	TPU:	+/-0.0265		+/-0.0241						
Curium-242	U	0.00	U	0.00	pCi/g	0		(0% - 100%)		
	Uncert:	+/-0.0309		+/-0.026						
	TPU:	+/-0.0309		+/-0.026						
Curium-243/244	U	0.0206	U	0.00319	pCi/g	146		(0% - 100%)		
	Uncert:	+/-0.0386		+/-0.0242						
	TPU:	+/-0.0387		+/-0.0242						
QC1200887285 LCS										
Americium-241	5.29			5.36	pCi/g		101	(75%-125%)		07/22/05 10:47
	Uncert:			+/-0.479						
	TPU:			+/-0.789						
Curium-242			U	-0.00824	pCi/g					
	Uncert:			+/-0.00933						
	TPU:			+/-0.00937						
Curium-243/244	6.52			6.62	pCi/g		102	(75%-125%)		
	Uncert:			+/-0.533						
	TPU:			+/-0.940						
QC1200887282 MB										
Americium-241			U	-0.0162	pCi/g					07/22/05 10:47
	Uncert:			+/-0.0257						
	TPU:			+/-0.0257						
Curium-242			U	0.0128	pCi/g					
	Uncert:			+/-0.0251						
	TPU:			+/-0.0251						
Curium-243/244			U	0.00942	pCi/g					
	Uncert:			+/-0.025						
	TPU:			+/-0.025						
QC1200887284 140051003 MS										
Americium-241	5.29 U	-0.0103		4.82	pCi/g		91	(75%-125%)		07/22/05 10:47
	Uncert:	+/-0.0265		+/-0.507						
	TPU:	+/-0.0265		+/-0.786						
Curium-242	U	0.00	U	-0.0116	pCi/g					
	Uncert:	+/-0.0309		+/-0.0131						
	TPU:	+/-0.0309		+/-0.0132						
Curium-243/244	6.54 U	0.0206		6.46	pCi/g		99	(75%-125%)		
	Uncert:	+/-0.0386		+/-0.589						
	TPU:	+/-0.0387		+/-0.998						
Batch 442290										
QC1200887287 140051003 DUP										
Plutonium-238	U	-0.00569	U	-0.00813	pCi/g	N/A		(0% - 100%)	SCP	07/22/05 10:47

QC Summary

Workorder: 140051

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Alpha Spec										
Batch 442290										
	Uncert:	+/-0.0246		+/-0.0092						
	TPU:	+/-0.0246		+/-0.00923						
Plutonium-239/240	U	0.00616	U	-0.00271	pCi/g	N/A		(0% - 100%)		
	Uncert:	+/-0.0245		+/-0.0227						
	TPU:	+/-0.0245		+/-0.0228						
QC1200887289 LCS										
Plutonium-238			U	0.0335	pCi/g			(75%-125%)		07/22/05 10:47
	Uncert:			+/-0.0444						
	TPU:			+/-0.0445						
Plutonium-239/240	4.64			4.56	pCi/g		98	(75%-125%)		
	Uncert:			+/-0.439						
	TPU:			+/-0.615						
QC1200887286 MB										
Plutonium-238			U	-0.00596	pCi/g					07/22/05 10:47
	Uncert:			+/-0.00827						
	TPU:			+/-0.00829						
Plutonium-239/240			U	0.00944	pCi/g					
	Uncert:			+/-0.025						
	TPU:			+/-0.0251						
QC1200887288 140051003 MS										
Plutonium-238	U	-0.00569	U	0.0441	pCi/g			(75%-125%)		07/22/05 10:47
	Uncert:	+/-0.0246		+/-0.0713						
	TPU:	+/-0.0246		+/-0.0714						
Plutonium-239/240	4.64 U	0.00616		4.34	pCi/g		94	(75%-125%)		
	Uncert:	+/-0.0245		+/-0.466						
	TPU:	+/-0.0245		+/-0.637						
Batch 448398										
QC1200901934 140051025 DUP										
Plutonium-241	U	0.199	U	-0.514	pCi/g	N/A		(0% - 100%)	SCP	08/05/05 11:52
	Uncert:	+/-2.08		+/-2.10						
	TPU:	+/-2.08		+/-2.10						
QC1200901936 LCS										
Plutonium-241	44.1			38.2	pCi/g		87	(75%-125%)		08/05/05 12:55
	Uncert:			+/-4.09						
	TPU:			+/-5.70						
QC1200901933 MB										
Plutonium-241			U	1.32	pCi/g					08/05/05 11:20
	Uncert:			+/-1.99						
	TPU:			+/-2.00						
QC1200901935 140051025 MS										
Plutonium-241	45.9 U	0.199		37.9	pCi/g		83	(75%-125%)		08/05/05 12:24
	Uncert:	+/-2.08		+/-3.31						
	TPU:	+/-2.08		+/-5.16						
Rad Gamma Spec										
Batch 441350										
QC1200884849 140051001 DUP										
Actinium-228		0.549		0.535	pCi/g	3		(0% - 100%)	AKB	08/02/05 11:17
	Uncert:	+/-0.132		+/-0.119						
				+/-0.117						

QC Summary

Workorder: **140051**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch 441350											
	TPU:	+/-0.129									
Americium-241	U	0.0373	U	0.0325	pCi/g	14		(0% - 100%)			
	Uncert:	+/-0.0702		+/-0.0424							
	TPU:	+/-0.0688		+/-0.0415							
Bismuth-212		0.338		0.329	pCi/g	3		(0% - 100%)			
	Uncert:	+/-0.229		+/-0.198							
	TPU:	+/-0.225		+/-0.194							
Bismuth-214		0.569		0.592	pCi/g	4		(0% - 100%)			
	Uncert:	+/-0.0858		+/-0.0833							
	TPU:	+/-0.084		+/-0.0817							
Cesium-134	U	0.0273	U	0.0155	pCi/g	55		(0% - 100%)			
	Uncert:	+/-0.0361		+/-0.0143							
	TPU:	+/-0.0354		+/-0.0141							
Cesium-137	U	-0.000874	U	-0.00166	pCi/g	N/A		(0% - 100%)			
	Uncert:	+/-0.0171		+/-0.0132							
	TPU:	+/-0.0168		+/-0.0129							
Cobalt-60	U	0.0046	U	-0.0088	pCi/g	N/A		(0% - 100%)			
	Uncert:	+/-0.0159		+/-0.0132							
	TPU:	+/-0.0156		+/-0.0129							
Europium-152	U	0.00218	U	0.00169	pCi/g	25		(0% - 100%)			
	Uncert:	+/-0.0428		+/-0.0342							
	TPU:	+/-0.0419		+/-0.0335							
Europium-154	U	0.00244	U	-0.00121	pCi/g	N/A		(0% - 100%)			
	Uncert:	+/-0.0529		+/-0.0418							
	TPU:	+/-0.0518		+/-0.041							
Europium-155	U	0.0127	U	0.0215	pCi/g	52		(0% - 100%)			
	Uncert:	+/-0.0485		+/-0.0391							
	TPU:	+/-0.0475		+/-0.0383							
Lead-212		0.542		0.489	pCi/g	10					
	Uncert:	+/-0.0683		+/-0.0584							
	TPU:	+/-0.0669		+/-0.0573							
Lead-214		0.683		0.678	pCi/g	1		(0% - 20%)			
	Uncert:	+/-0.0981		+/-0.0906							
	TPU:	+/-0.0961		+/-0.0888							
Manganese-54	U	-0.0127	U	0.00768	pCi/g	N/A		(0% - 100%)			
	Uncert:	+/-0.019		+/-0.0149							
	TPU:	+/-0.0186		+/-0.0146							
Niobium-94	U	0.0115	U	0.00151	pCi/g	153		(0% - 100%)			
	Uncert:	+/-0.0152		+/-0.0122							
	TPU:	+/-0.0148		+/-0.012							
Potassium-40		7.26		7.88	pCi/g	8		(0% - 20%)			
	Uncert:	+/-0.809		+/-0.679							
	TPU:	+/-0.793		+/-0.665							
Radium-226		0.569		0.592	pCi/g	4		(0% - 100%)			
	Uncert:	+/-0.0858		+/-0.0833							
	TPU:	+/-0.084		+/-0.0817							
Silver-108m	U	-0.00112	U	-0.00327	pCi/g	N/A		(0% - 100%)			
	Uncert:	+/-0.0144		+/-0.0114							

QC Summary

Workorder: **140051**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 441350										
	TPU:	+/-0.0142		+/-0.0111						
Thallium-208		0.161		0.171	pCi/g	7		(0% - 100%)		
	Uncert:	+/-0.0414		+/-0.0309						
	TPU:	+/-0.0406		+/-0.0303						
QC1200884850 LCS										
Actinium-228			U	0.817	pCi/g					08/02/05 09:21
	Uncert:			+/-1.02						
	TPU:			+/-1.00						
Americium-241	24.4			25.9	pCi/g		106	(75%-125%)		
	Uncert:			+/-2.18						
	TPU:			+/-2.14						
Bismuth-212			U	-0.0349	pCi/g					
	Uncert:			+/-1.77						
	TPU:			+/-1.74						
Bismuth-214			U	-0.0189	pCi/g					
	Uncert:			+/-0.394						
	TPU:			+/-0.386						
Cesium-134			U	-0.0262	pCi/g					
	Uncert:			+/-0.233						
	TPU:			+/-0.228						
Cesium-137	9.43			10.1	pCi/g		107	(75%-125%)		
	Uncert:			+/-1.06						
	TPU:			+/-1.04						
Cobalt-60	14.6			15.1	pCi/g		103	(75%-125%)		
	Uncert:			+/-1.30						
	TPU:			+/-1.28						
Europium-152			U	0.225	pCi/g					
	Uncert:			+/-0.456						
	TPU:			+/-0.447						
Europium-154			U	-0.189	pCi/g					
	Uncert:			+/-0.555						
	TPU:			+/-0.544						
Europium-155			U	-0.492	pCi/g					
	Uncert:			+/-0.524						
	TPU:			+/-0.513						
Lead-212			U	0.199	pCi/g					
	Uncert:			+/-0.255						
	TPU:			+/-0.250						
Lead-214			U	0.360	pCi/g					
	Uncert:			+/-0.333						
	TPU:			+/-0.327						
Manganese-54			U	-0.0295	pCi/g					
	Uncert:			+/-0.225						
	TPU:			+/-0.221						
Niobium-94			U	-0.0169	pCi/g					
	Uncert:			+/-0.208						
	TPU:			+/-0.204						
Potassium-40			U	0.176	pCi/g					

QC Summary

Workorder: 140051

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 441350										
	Uncert:			+/-2.01						
	TPU:			+/-1.97						
Radium-226			U	-0.0189	pCi/g			(75%-125%)		
	Uncert:			+/-0.394						
	TPU:			+/-0.386						
Silver-108m			U	-0.0335	pCi/g					
	Uncert:			+/-0.181						
	TPU:			+/-0.177						
Thallium-208			U	-0.0207	pCi/g					
	Uncert:			+/-0.214						
	TPU:			+/-0.210						
QC1200884848 MB										
Actinium-228			U	0.0736	pCi/g					08/04/05 19:02
	Uncert:			+/-0.0658						
	TPU:			+/-0.0645						
Americium-241			U	0.00336	pCi/g					
	Uncert:			+/-0.0636						
	TPU:			+/-0.0624						
Bismuth-212			U	-0.164	pCi/g					
	Uncert:			+/-0.137						
	TPU:			+/-0.135						
Bismuth-214			U	0.0248	pCi/g					
	Uncert:			+/-0.0333						
	TPU:			+/-0.0327						
Cesium-134			U	0.0142	pCi/g					
	Uncert:			+/-0.018						
	TPU:			+/-0.0177						
Cesium-137			U	0.00597	pCi/g					
	Uncert:			+/-0.0168						
	TPU:			+/-0.0165						
Cobalt-60			U	0.00187	pCi/g					
	Uncert:			+/-0.0165						
	TPU:			+/-0.0161						
Europium-152			U	0.0459	pCi/g					
	Uncert:			+/-0.0459						
	TPU:			+/-0.045						
Europium-154			U	-0.00315	pCi/g					
	Uncert:			+/-0.0446						
	TPU:			+/-0.0437						
Europium-155			U	0.00323	pCi/g					
	Uncert:			+/-0.0407						
	TPU:			+/-0.0399						
Lead-212			U	0.00897	pCi/g					
	Uncert:			+/-0.0462						
	TPU:			+/-0.0452						
Lead-214			U	0.0281	pCi/g					
	Uncert:			+/-0.0367						
	TPU:			+/-0.036						

QC Summary

Workorder: 140051

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 441350										
Manganese-54			U	0.00486	pCi/g					
	Uncert:			+/-0.0193						
	TPU:			+/-0.0189						
Niobium-94			U	-0.0147	pCi/g					
	Uncert:			+/-0.0153						
	TPU:			+/-0.015						
Potassium-40			U	0.244	pCi/g					
	Uncert:			+/-0.232						
	TPU:			+/-0.227						
Radium-226			U	0.0248	pCi/g					
	Uncert:			+/-0.0333						
	TPU:			+/-0.0327						
Silver-108m			U	0.00446	pCi/g					
	Uncert:			+/-0.0161						
	TPU:			+/-0.0158						
Thallium-208			U	0.0117	pCi/g					
	Uncert:			+/-0.0199						
	TPU:			+/-0.0195						
Batch 441351										
QC1200884852 140051023 DUP										
Actinium-228		0.408		0.291	pCi/g	33		(0% - 100%)	AKB	07/27/05 17:08
	Uncert:	+/-0.121		+/-0.105						
	TPU:	+/-0.118		+/-0.124						
Americium-241	U	-0.0214	U	-0.00198	pCi/g	N/A		(0% - 100%)		
	Uncert:	+/-0.0636		+/-0.0171						
	TPU:	+/-0.0624		+/-0.020						
Bismuth-212		0.267		0.203	pCi/g	27		(0% - 100%)		
	Uncert:	+/-0.153		+/-0.197						
	TPU:	+/-0.150		+/-0.184						
Bismuth-214		0.362		0.326	pCi/g	11		(0% - 100%)		
	Uncert:	+/-0.0753		+/-0.0761						
	TPU:	+/-0.0738		+/-0.0755						
Cesium-134	U	0.0243	U	0.00814	pCi/g	100		(0% - 100%)		
	Uncert:	+/-0.023		+/-0.0177						
	TPU:	+/-0.0226		+/-0.0353						
Cesium-137	U	-0.00887	U	-0.00453	pCi/g	N/A		(0% - 100%)		
	Uncert:	+/-0.0145		+/-0.0156						
	TPU:	+/-0.0142		+/-0.0165						
Cobalt-60	U	0.00264	U	0.00663	pCi/g	86		(0% - 100%)		
	Uncert:	+/-0.0171		+/-0.0174						
	TPU:	+/-0.0167		+/-0.0173						
Europium-152	U	-0.00489	U	-0.0108	pCi/g	N/A		(0% - 100%)		
	Uncert:	+/-0.0377		+/-0.0342						
	TPU:	+/-0.0369		+/-0.0355						
Europium-154	U	-0.0122	U	0.0167	pCi/g	N/A		(0% - 100%)		
	Uncert:	+/-0.0498		+/-0.0526						
	TPU:	+/-0.0488		+/-0.0503						
Europium-155	U	0.031	U	0.0214	pCi/g	37		(0% - 100%)		

QC Summary

Workorder: **140051**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 441351										
	Uncert:	+/-0.0515		+/-0.029						
	TPU:	+/-0.0505		+/-0.0432						
Lead-212		0.339		0.354	pCi/g	4		(0% - 100%)		
	Uncert:	+/-0.0486		+/-0.0532						
	TPU:	+/-0.0476		+/-0.0528						
Lead-214		0.360		0.413	pCi/g	14		(0% - 100%)		
	Uncert:	+/-0.0668		+/-0.0694						
	TPU:	+/-0.0655		+/-0.058						
Manganese-54	U	-0.0074	U	0.00259	pCi/g	N/A		(0% - 100%)		
	Uncert:	+/-0.0154		+/-0.0159						
	TPU:	+/-0.0151		+/-0.0169						
Niobium-94	U	0.0017	U	0.00174	pCi/g	2		(0% - 100%)		
	Uncert:	+/-0.0132		+/-0.0133						
	TPU:	+/-0.013		+/-0.0134						
Potassium-40		16.0		16.1	pCi/g	1		(0% - 20%)		
	Uncert:	+/-1.34		+/-1.24						
	TPU:	+/-1.31		+/-1.29						
Radium-226		0.362		0.326	pCi/g	11		(0% - 100%)		
	Uncert:	+/-0.0753		+/-0.0761						
	TPU:	+/-0.0738		+/-0.0755						
Silver-108m	U	0.00433	U	0.0061	pCi/g	34		(0% - 100%)		
	Uncert:	+/-0.0117		+/-0.0118						
	TPU:	+/-0.0115		+/-0.0144						
Thallium-208		0.125		0.0842	pCi/g	39		(0% - 100%)		
	Uncert:	+/-0.0341		+/-0.030						
	TPU:	+/-0.0335		+/-0.0321						
QC1200884853 LCS										
Actinium-228			U	0.830	pCi/g					07/27/05 18:27
	Uncert:			+/-0.856						
	TPU:			+/-0.839						
Americium-241	24.4			25.5	pCi/g		104	(75%-125%)		
	Uncert:			+/-2.24						
	TPU:			+/-2.19						
Bismuth-212			U	0.246	pCi/g					
	Uncert:			+/-1.73						
	TPU:			+/-1.70						
Bismuth-214			U	0.273	pCi/g					
	Uncert:			+/-0.409						
	TPU:			+/-0.401						
Cesium-134			U	0.0316	pCi/g					
	Uncert:			+/-0.241						
	TPU:			+/-0.236						
Cesium-137	9.43			9.48	pCi/g		101	(75%-125%)		
	Uncert:			+/-1.03						
	TPU:			+/-1.01						
Cobalt-60	14.6			14.8	pCi/g		102	(75%-125%)		
	Uncert:			+/-1.25						
	TPU:			+/-1.23						

QC Summary

Workorder: 140051

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch 441351											
Europium-152			U	-0.125	pCi/g						
	Uncert:			+/-0.470							
	TPU:			+/-0.461							
Europium-154			U	-0.424	pCi/g						
	Uncert:			+/-0.556							
	TPU:			+/-0.544							
Europium-155			U	0.211	pCi/g						
	Uncert:			+/-0.534							
	TPU:			+/-0.523							
Lead-212			U	0.0984	pCi/g						
	Uncert:			+/-0.253							
	TPU:			+/-0.248							
Lead-214			U	0.0971	pCi/g						
	Uncert:			+/-0.342							
	TPU:			+/-0.336							
Manganese-54			U	-0.000329	pCi/g						
	Uncert:			+/-0.222							
	TPU:			+/-0.217							
Niobium-94			U	0.206	pCi/g						
	Uncert:			+/-0.206							
	TPU:			+/-0.202							
Potassium-40			U	2.02	pCi/g						
	Uncert:			+/-2.17							
	TPU:			+/-2.12							
Radium-226			U	0.273	pCi/g			(75%-125%)			
	Uncert:			+/-0.409							
	TPU:			+/-0.401							
Silver-108m			U	-0.107	pCi/g						
	Uncert:			+/-0.178							
	TPU:			+/-0.174							
Thallium-208			U	-0.0647	pCi/g						
	Uncert:			+/-0.221							
	TPU:			+/-0.216							
QC1200884851 MB											
Actinium-228			U	0.0114	pCi/g					07/27/05	21:13
	Uncert:			+/-0.0533							
	TPU:			+/-0.0522							
Americium-241			U	-0.0134	pCi/g						
	Uncert:			+/-0.0372							
	TPU:			+/-0.0365							
Bismuth-212			U	-0.0249	pCi/g						
	Uncert:			+/-0.0644							
	TPU:			+/-0.0631							
Bismuth-214			U	0.000879	pCi/g						
	Uncert:			+/-0.0345							
	TPU:			+/-0.0338							
Cesium-134			U	0.00351	pCi/g						
	Uncert:			+/-0.009							

QC Summary

Workorder: 140051

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 441351										
	TPU:			+/-0.00882						
Cesium-137			U	0.00451	pCi/g					
	Uncert:			+/-0.00826						
	TPU:			+/-0.00809						
Cobalt-60			U	0.00431	pCi/g					
	Uncert:			+/-0.00931						
	TPU:			+/-0.00912						
Europium-152			U	0.00147	pCi/g					
	Uncert:			+/-0.0237						
	TPU:			+/-0.0232						
Europium-154			U	0.0109	pCi/g					
	Uncert:			+/-0.0202						
	TPU:			+/-0.0198						
Europium-155			U	-0.002	pCi/g					
	Uncert:			+/-0.0235						
	TPU:			+/-0.023						
Lead-212			U	0.0111	pCi/g					
	Uncert:			+/-0.0242						
	TPU:			+/-0.0237						
Lead-214			U	0.0264	pCi/g					
	Uncert:			+/-0.0171						
	TPU:			+/-0.0167						
Manganese-54			U	0.00132	pCi/g					
	Uncert:			+/-0.00774						
	TPU:			+/-0.00759						
Niobium-94			U	0.00402	pCi/g					
	Uncert:			+/-0.008						
	TPU:			+/-0.00784						
Potassium-40			U	0.0845	pCi/g					
	Uncert:			+/-0.152						
	TPU:			+/-0.149						
Radium-226			U	0.000879	pCi/g					
	Uncert:			+/-0.0345						
	TPU:			+/-0.0338						
Silver-108m			U	-0.00461	pCi/g					
	Uncert:			+/-0.00805						
	TPU:			+/-0.00789						
Thallium-208			U	0.00171	pCi/g					
	Uncert:			+/-0.0176						
	TPU:			+/-0.0172						
Rad Gas Flow										
Batch 443731										
QC1200890600 140081004 DUP										
Strontium-90	U	0.030	U	0.0563	pCi/g	0		(0% - 100%)	EXW1	07/30/05 22:37
	Uncert:	+/-0.0718		+/-0.0739						
	TPU:	+/-0.0718		+/-0.0739						
QC1200890602 LCS										
Strontium-90	0.912			1.03	pCi/g		113	(75%-125%)		07/30/05 22:37

QC Summary

Workorder: 140051

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gas Flow										
Batch 443731										
	Uncert:			+/-0.0569						
	TPU:			+/-0.0616						
QC1200890599 MB										
Strontium-90			U	-0.0011	pCi/g					07/30/05 22:37
	Uncert:			+/-0.00328						
	TPU:			+/-0.00328						
QC1200890601 140081004 MS										
Strontium-90	16.7 U	0.030		15.3	pCi/g		92	(75%-125%)		07/30/05 22:37
	Uncert:	+/-0.0718		+/-0.888						
	TPU:	+/-0.0718		+/-0.944						
Batch 443733										
QC1200890604 140051024 DUP										
Strontium-90	U	0.00441	U	0.00835	pCi/g	0		(0% - 100%)	EXW1	08/02/05 10:32
	Uncert:	+/-0.00694		+/-0.0065						
	TPU:	+/-0.00694		+/-0.0065						
QC1200890606 LCS										
Strontium-90	0.957			0.833	pCi/g		87	(75%-125%)		08/02/05 10:32
	Uncert:			+/-0.0513						
	TPU:			+/-0.0569						
QC1200890603 MB										
Strontium-90			U	-0.0037	pCi/g					08/02/05 10:32
	Uncert:			+/-0.00358						
	TPU:			+/-0.00358						
QC1200890605 140051024 MS										
Strontium-90	2.43 U	0.00441		2.11	pCi/g		87	(75%-125%)		08/02/05 10:32
	Uncert:	+/-0.00694		+/-0.132						
	TPU:	+/-0.00694		+/-0.140						
Rad Liquid Scintillation										
Batch 441385										
QC1200884927 140051001 DUP										
Tritium	U	0.463	U	-1.19	pCi/g	N/A		(0% - 100%)	LAG1	07/30/05 01:41
	Uncert:	+/-1.60		+/-1.58						
	TPU:	+/-1.60		+/-1.58						
QC1200884929 LCS										
Tritium	9.09			8.78	pCi/g		97	(75%-125%)		07/30/05 02:44
	Uncert:			+/-1.04						
	TPU:			+/-1.05						
QC1200884926 MB										
Tritium			U	0.0785	pCi/g					07/30/05 01:09
	Uncert:			+/-0.722						
	TPU:			+/-0.722						
QC1200884928 140051001 MS										
Tritium	9.79 U	0.463		8.79	pCi/g		90	(75%-125%)		07/30/05 02:12
	Uncert:	+/-1.60		+/-1.90						
	TPU:	+/-1.60		+/-1.90						
Batch 441483										
QC1200885198 140321032 DUP										
Iron-55	U	-9.17	U	1.66	pCi/g	N/A		(0% - 100%)	BXD1	07/17/05 19:03

QC Summary

Workorder: 140051

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Liquid Scintillation										
Batch 441483										
	Uncert:	+/-5.38		+/-2.42						
	TPU:	+/-5.40		+/-2.43						
QC1200885200 LCS										
Iron-55	37.7			34.6	pCi/g		92	(75%-125%)		07/17/05 21:08
	Uncert:			+/-1.57						
	TPU:			+/-2.22						
QC1200885197 MB										
Iron-55			U	-0.0896	pCi/g					07/17/05 18:01
	Uncert:			+/-1.16						
	TPU:			+/-1.16						
QC1200885199 140321032 MS										
Iron-55	37.0 U	-9.17		28.4	pCi/g		77	(75%-125%)		07/20/05 10:05
	Uncert:	+/-5.38		+/-5.83						
	TPU:	+/-5.40		+/-6.05						
Batch 441485										
QC1200885206 140321001 DUP										
Technetium-99	U	0.262	U	0.100	pCi/g	0		(0% - 100%)	BXD1	07/19/05 06:51
	Uncert:	+/-0.243		+/-0.236						
	TPU:	+/-0.243		+/-0.236						
QC1200885208 LCS										
Technetium-99	21.8			20.0	pCi/g		92	(75%-125%)		07/19/05 08:27
	Uncert:			+/-0.493						
	TPU:			+/-0.691						
QC1200885205 MB										
Technetium-99			U	0.174	pCi/g					07/19/05 06:04
	Uncert:			+/-0.201						
	TPU:			+/-0.202						
QC1200885207 140321001 MS										
Technetium-99	48.1 U	0.262		42.2	pCi/g		87	(75%-125%)		07/19/05 07:39
	Uncert:	+/-0.243		+/-1.17						
	TPU:	+/-0.243		+/-1.56						
Batch 441486										
QC1200885210 140321032 DUP										
Carbon-14	U	-0.155	U	-0.225	pCi/g	N/A		(0% - 100%)	BXF1	07/13/05 15:55
	Uncert:	+/-0.324		+/-0.321						
	TPU:	+/-0.324		+/-0.321						
QC1200885212 LCS										
Carbon-14	7.15			7.84	pCi/g		110	(75%-125%)		07/13/05 17:15
	Uncert:			+/-0.404						
	TPU:			+/-0.422						
QC1200885209 MB										
Carbon-14			U	0.020	pCi/g					07/15/05 14:52
	Uncert:			+/-0.0966						
	TPU:			+/-0.0966						
QC1200885211 140321032 MS										
Carbon-14	21.5 U	-0.155		23.7	pCi/g		110	(75%-125%)		07/13/05 16:42
	Uncert:	+/-0.324		+/-1.20						
	TPU:	+/-0.324		+/-1.25						
Batch 443492										

QC Summary

Workorder: 140051

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Liquid Scintillation										
Batch 443492										
QC1200889937 140321001 DUP										
Nickel-63	U	1.26	U	0.361	pCi/g	0		(0% - 100%)	AF1	07/19/05 22:14
Uncert:		+/-1.47		+/-1.22						
TPU:		+/-1.47		+/-1.22						
QC1200889939 LCS										
Nickel-63	92.6			70.7	pCi/g		76	(75%-125%)		07/20/05 14:37
Uncert:				+/-4.58						
TPU:				+/-6.07						
QC1200889936 MB										
Nickel-63			U	0.352	pCi/g					07/19/05 21:57
Uncert:				+/-1.19						
TPU:				+/-1.19						
QC1200889938 140321001 MS										
Nickel-63	92.7 U	1.26		72.0	pCi/g		78	(75%-125%)		07/19/05 22:30
Uncert:		+/-1.47		+/-3.86						
TPU:		+/-1.47		+/-5.60						
Batch 445708										
QC1200895270 140051021 DUP										
Tritium	U	0.322	U	0.165	pCi/g	0		(0% - 100%)	LAG1	08/01/05 12:34
Uncert:		+/-1.24		+/-1.31						
TPU:		+/-1.24		+/-1.31						
QC1200895272 LCS										
Tritium	8.74			8.94	pCi/g		102	(75%-125%)		08/01/05 13:38
Uncert:				+/-1.00						
TPU:				+/-1.01						
QC1200895269 MB										
Tritium			U	0.492	pCi/g					08/01/05 12:02
Uncert:				+/-0.608						
TPU:				+/-0.608						
QC1200895271 140051021 MS										
Tritium	9.69 U	0.322		9.44	pCi/g		98	(75%-125%)		08/01/05 13:06
Uncert:		+/-1.24		+/-1.85						
TPU:		+/-1.24		+/-1.86						

Notes:
The Qualifiers in this report are defined as follows:

- ** Indicates the analyte is a surrogate compound.
- B Target analyte was detected in the sample as well as the associated blank.
- BD Results below the MDC or low tracer recovery.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J Indicates an estimated value.
- U Target analyte was analyzed for but not detected above the MDL or LOD.
- UI Uncertain identification for gamma spectroscopy.
- X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
- d The 2:1 depletion requirement was not met for this sample

QC Summary

Workorder: **140051**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

h Sample preparation or preservation holding time exceeded.

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
** Indicates analyte is a surrogate compound.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptence criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

7000-0000-014-C1C-01	MSR#05-1811	140051001	441350	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.549	0.132	PCI/G	0		8/7/2005	38566.75139	7:00	0.107	PCI/G	0.0497	PCI/G	1	10	147	G	PCI/G	PR	
7000-0000-014-C1C-01	MSR#05-1811	140051001	441350	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0373	0.0702	PCI/G	0	U	8/7/2005	38566.75139	7:00	0.131	PCI/G	0.0633	PCI/G	1	10	147	G	PCI/G	PR	
7000-0000-014-C1C-01	MSR#05-1811	140051001	441350	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.338	0.229	PCI/G	0		8/7/2005	38566.75139	7:00	0.242	PCI/G	0.113	PCI/G	1	10	147	G	PCI/G	PR	
7000-0000-014-C1C-01	MSR#05-1811	140051001	441350	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.569	0.0858	PCI/G	0		8/7/2005	38566.75139	7:00	0.0549	PCI/G	0.0258	PCI/G	1	10	147	G	PCI/G	PR	
7000-0000-014-C1C-01	MSR#05-1811	140051001	441350	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0273	0.0361	PCI/G	0	U	8/7/2005	38566.75139	7:00	0.0373	PCI/G	0.0175	PCI/G	1	10	147	G	PCI/G	PR	
7000-0000-014-C1C-01	MSR#05-1811	140051001	441350	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.000874	0.0171	PCI/G	0	U	8/7/2005	38566.75139	7:00	0.0302	PCI/G	0.0142	PCI/G	1	10	147	G	PCI/G	PR	
7000-0000-014-C1C-01	MSR#05-1811	140051001	441350	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0046	0.0159	PCI/G	0	U	8/7/2005	38566.75139	7:00	0.0306	PCI/G	0.0137	PCI/G	1	10	147	G	PCI/G	PR	
7000-0000-014-C1C-01	MSR#05-1811	140051001	441350	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.00218	0.0428	PCI/G	0	U	8/7/2005	38566.75139	7:00	0.0781	PCI/G	0.0373	PCI/G	1	10	147	G	PCI/G	PR	
7000-0000-014-C1C-01	MSR#05-1811	140051001	441350	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.00244	0.0529	PCI/G	0	U	8/7/2005	38566.75139	7:00	0.0972	PCI/G	0.0444	PCI/G	1	10	147	G	PCI/G	PR	
7000-0000-014-C1C-01	MSR#05-1811	140051001	441350	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0127	0.0485	PCI/G	0	U	8/7/2005	38566.75139	7:00	0.0873	PCI/G	0.0423	PCI/G	1	10	147	G	PCI/G	PR	
7000-0000-014-C1C-01	MSR#05-1811	140051001	441350	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.542	0.0683	PCI/G	0		8/7/2005	38566.75139	7:00	0.0449	PCI/G	0.0216	PCI/G	1	10	147	G	PCI/G	PR	
7000-0000-014-C1C-01	MSR#05-1811	140051001	441350	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.683	0.0981	PCI/G	0		8/7/2005	38566.75139	7:00	0.0547	PCI/G	0.0261	PCI/G	1	10	147	G	PCI/G	PR	
7000-0000-014-C1C-01	MSR#05-1811	140051001	441350	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.0127	0.019	PCI/G	0	U	8/7/2005	38566.75139	7:00	0.0312	PCI/G	0.0145	PCI/G	1	10	147	G	PCI/G	PR	
7000-0000-014-C1C-01	MSR#05-1811	140051001	441350	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0115	0.0152	PCI/G	0	U	8/7/2005	38566.75139	7:00	0.0284	PCI/G	0.0133	PCI/G	1	10	147	G	PCI/G	PR	
7000-0000-014-C1C-01	MSR#05-1811	140051001	441350	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.26	0.809	PCI/G	0		8/7/2005	38566.75139	7:00	0.279	PCI/G	0.124	PCI/G	1	10	147	G	PCI/G	PR	
7000-0000-014-C1C-01	MSR#05-1811	140051001	441350	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.569	0.0858	PCI/G	0		8/7/2005	38566.75139	7:00	0.0549	PCI/G	0.0258	PCI/G	1	10	147	G	PCI/G	PR	
7000-0000-014-C1C-01	MSR#05-1811	140051001	441350	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00112	0.0144	PCI/G	0	U	8/7/2005	38566.75139	7:00	0.026	PCI/G	0.0123	PCI/G	1	10	147	G	PCI/G	PR	
7000-0000-014-C1C-01	MSR#05-1811	140051001	443731	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00117	0.00697	PCI/G	0	U	11/7/2005	38536.14583	11:32	0.0121	PCI/G	0.0058	PCI/G	1	10	19.6	G	PCI/G	PR	
7000-0000-014-C1C-01	MSR#05-1811	140051001	441350	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.161	0.0414	PCI/G	0		8/7/2005	38566.75139	7:00	0.0311	PCI/G	0.0146	PCI/G	1	10	147	G	PCI/G	PR	
7000-0000-014-C1C-01	MSR#05-1811	140051001	441385	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	0.463	1.6	PCI/G	0	U		29/07/2005	1:36	2.74	PCI/G	1.32	PCI/G	1	10	15	G	PCI/G	PR	
7000-0000-014-C1C-02	MSR#05-1811	140051002	441350	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.451	0.134	PCI/G	0		8/7/2005	38566.82083	7:00	0.0928	PCI/G	0.0426	PCI/G	1	8.7	153	G	PCI/G	PR	
7000-0000-014-C1C-02	MSR#05-1811	140051002	441350	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0114	0.0919	PCI/G	0	U	8/7/2005	38566.82083	7:00	0.151	PCI/G	0.0724	PCI/G	1	8.7	153	G	PCI/G	PR	
7000-0000-014-C1C-02	MSR#05-1811	140051002	441350	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0	0.199	PCI/G	0	UUI	8/7/2005	38566.82083	7:00	0.212	PCI/G	0.0982	PCI/G	1	8.7	153	G	PCI/G	PR	
7000-0000-014-C1C-02	MSR#05-1811	140051002	441350	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.449	0.0786	PCI/G	0		8/7/2005	38566.82083	7:00	0.0532	PCI/G	0.025	PCI/G	1	8.7	153	G	PCI/G	PR	
7000-0000-014-C1C-02	MSR#05-1811	140051002	441350	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.00272	0.0204	PCI/G	0	U	8/7/2005	38566.82083	7:00	0.0364	PCI/G	0.0171	PCI/G	1	8.7	153	G	PCI/G	PR	
7000-0000-014-C1C-02	MSR#05-1811	140051002	441350	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.00754	0.0153	PCI/G	0	U	8/7/2005	38566.82083	7:00	0.0288	PCI/G	0.0135	PCI/G	1	8.7	153	G	PCI/G	PR	
7000-0000-014-C1C-02	MSR#05-1811	140051002	441350	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.00242	0.0154	PCI/G	0	U	8/7/2005	38566.82083	7:00	0.0291	PCI/G	0.0131	PCI/G	1	8.7	153	G	PCI/G	PR	
7000-0000-014-C1C-02	MSR#05-1811	140051002	441350	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.00275	0.0403	PCI/G	0	U	8/7/2005	38566.82083	7:00	0.0706	PCI/G	0.0335	PCI/G	1	8.7	153	G	PCI/G	PR	
7000-0000-014-C1C-02	MSR#05-1811	140051002	441350	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.000418	0.0571	PCI/G	0	U	8/7/2005	38566.82083	7:00	0.0902	PCI/G	0.0411	PCI/G	1	8.7	153	G	PCI/G	PR	
7000-0000-014-C1C-02	MSR#05-1811	140051002	441350	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0	0.0703	PCI/G	0	UUI	8/7/2005	38566.82083	7:00	0.0861	PCI/G	0.0416	PCI/G	1	8.7	153	G	PCI/G	PR	
7000-0000-014-C1C-02	MSR#05-1811	140051002	441350	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.486	0.0648	PCI/G	0		8/7/2005	38566.82083	7:00	0.0419	PCI/G	0.0201	PCI/G	1	8.7	153	G	PCI/G	PR	
7000-0000-014-C1C-02	MSR#05-1811	140051002	441350	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.537	0.0842	PCI/G	0		8/7/2005	38566.82083	7:00	0.0499	PCI/G	0.0237	PCI/G	1	8.7	153	G	PCI/G	PR	
7000-0000-014-C1C-02	MSR#05-1811	140051002	441350	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0067	0.0158	PCI/G	0	U	8/7/2005	38566.82083	7:00	0.0293	PCI/G	0.0136	PCI/G	1	8.7	153	G	PCI/G	PR	
7000-0000-014-C1C-02	MSR#05-1811	140051002	441350	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.00232	0.0133	PCI/G	0	U	8/7/2005	38566.82083	7:00	0.0236	PCI/G	0.011	PCI/G	1	8.7	153	G	PCI/G	PR	
7000-0000-014-C1C-02	MSR#05-1811	140051002	441350	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.93	0.86	PCI/G	0		8/7/2005	38566.82083	7:00	0.269	PCI/G	0.12	PCI/G	1	8.7	153	G	PCI/G	PR	
7000-0000-014-C1C-02	MSR#05-1811	140051002	441350	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.449	0.0786	PCI/G	0		8/7/2005	38566.82083	7:00	0.0532	PCI/G	0.025	PCI/G	1	8.7	153	G	PCI/G	PR	
7000-0000-014-C1C-02	MSR#05-1811	140051002	441350	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00256	0.0136	PCI/G	0	U	8/7/2005	38566.82083	7:00	0.025	PCI/G	0.0118	PCI/G	1	8.7	153	G	PCI/G	PR	
7000-0000-014-C1C-02	MSR#05-1811	140051002	443731	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.00523	0.00583	PCI/G	0	U	11/7/2005	38536.14583	11:32	0.0108	PCI/G	0.00515	PCI/G	1	8.7	19.6	G	PCI/G	PR	
7000-0000-014-C1C-02	MSR#05-1811	140051002	441350	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.154	0.0357	PCI/G	0		8/7/2005	38566.82083	7:00	0.0275	PCI/G	0.0129	PCI/G	1	8.7	153	G	PCI/G	PR	
7000-0000-014-C1C-02	MSR#05-1811	140051002	441385	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	0.153	1.4	PCI/G	0	U		29/07/2005	2:08	2.43	PCI/G	1.17	PCI/G	1	8.7	15.5	G	PCI/G	PR	
7000-0000-015-C1C-01	MSR#05-1811	140051003	441350	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.303	0.145	PCI/G	0		8/7/2005	38566.82083	7:01	0.112	PCI/G	0.0518	PCI/G	1	11	163	G	PCI/G	PR	
7000-0000-015-C1C-01	MSR#05-1811	140051003	441350	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0596	0.0837	PCI/G	0	U	8/7/2005	38566.82083	7:01	0.134	PCI/G	0.0647	PCI/G	1	11	163	G	PCI/G	PR	
7000-0000-015-C1C-01	MSR#05-1811	140051003	442289	14596-10-2	Americium-241	TRG 1	UAM05RCM	AM05RCM	REG	-0.0103	0.0265	PCI/G	0	U	11/7/2005	38536.14028	10:47	0.0366	PCI/G	0	PCI/G	1	11	0.515	G	PCI/G	PR	
7000-0000-015-C1C-01	MSR#05-1811	140051003	441350	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.365	0.24	PCI/G	0		8/7/2005	38566.82083	7:01	0.225	PCI/G	0.104	PCI/G	1	11	163	G	PCI/G	PR	
7000-0000-015-C1C-01	MSR#05-1811	140051003	441350	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.717	0.102	PCI/G	0		8/7/2005	38566.82083	7:01	0.0556	PCI/G	0.0261	PCI/G	1	11	163	G	PCI/G	PR	
7000-0000-015-C1C-01	MSR#05-1811	140051003	441488	14762-75-5	Carbon-14	TRG 5	ULSC	LSC	REG	-0.14	0.378	PCI/G	0	U		13/07/2005	12:27	0.754	PCI/G	0.357	PCI/G	1	11	3.04	G	PCI/G	PR	
7000-0000-015-C1C-01	MSR#05-1811	140051003	441350	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0	0.0311	PCI/G	0	UUI	8/7/2005	38566.82083	7:01	0.0383	PCI/G	0.018	PCI/G	1	11	163	G	PCI/G	PR	
7000-0000-015-C1C-01	MSR#05-1811	140051003	441350	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.024	0.0226	PCI/G	0	U	8/7/2005	38566.82083	7:01	0.0317	PCI/G	0.0149	PCI/G	1	11	163	G	PCI/G	PR	
7000-0000-015-C1C-01	MSR#05-1811	140051003	441350	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0251	0.0201	PCI/G	0	U	8/7/2005	38566.82083	7:01	0.0412	PCI/G	0.019	PCI/G	1	11	163	G	PCI/G	PR	
7000-0000-015-C1C-01	MSR#05-1811	140051003	442289	OER-100-93	Curium-242	TRG 1	UAM05RCM	AM05RCM	REG	0	0.0309	PCI/G	0	U	11/7/2005	38536.14028	10:47	0.0427	PCI/G	0	PCI/G	1	11	0.515	G	PCI/G	PR	
7000-0000-015-C1C-01	MSR#05-1811	140051003	442289	OER-101-57	Curium-243/244	TRG 1	UAM05RCM	AM05RCM	REG	0.0206	0.0386	PCI/G	0	U	11/7/2005	38536.14028	10:47	0.0804	PCI/G	0.0218	PCI/G	1	11	0.515	G	PCI/G	PR	
7000-0000-015-C1C-01	MSR#05-1811	140051003	441350	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.00484	0.0484	PCI/G	0	U	8/7/2005	38566.82083	7:01	0.0865	PCI/G	0.0414	PCI/G	1	11	163	G	PCI/G	PR	
7000-0000-015-C1C-01	MSR#05-1811	140051003	441350	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0196	0.0533	PCI/G	0	U	8/7/2005	38566.82083	7:01	0.102	PCI/G	0.0468	PCI/G	1	11	163	G	PCI/G	PR	
7000-0000-015-C1C-01	MSR#05-1811	140051003	441350	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	-0.00852	0.0457	PCI/G	0	U	8/7/2005	38566.82083	7:01	0.0876	PCI/G	0.0424	PCI/G	1	11	163	G	PCI/G	PR	
7000-0000-015-C1C-01	MSR#05-1811	140051003	441483	14681-59-5	Iron-55	TRG 26	ULSC	LSC	REG	0.486	2.06	PCI/G	0	U	11/7/2005	38536.1375	2:43	3.04	PCI/G	1.5	PCI/G	1	11	4.3	G	PCI/G	PR	
7000-0000-015-C1C-01	MSR#05-1811	140051003	441350	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.412	0.0586	PCI/G	0		8/7/2005	38566.82083	7:01	0.0505	PCI/G	0.0244	PCI/G	1	11	163	G	PCI/G	PR	
7000-0000-015-C1C-01	MSR#05-1811	140051003	441350	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.657	0.108	PCI/G	0		8/7/2005	38566.82083	7:01	0.0623	PCI/G	0.0298	PCI/G	1	11	163	G	PCI/G	PR	
7000-0000-015-C1C-01	MSR#05-1811	140051003	441350	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0205	0.0291	PCI/G	0	U	8/7/2005	38566.82083	7:01	0.0385	PCI/G	0.0181	PCI/G	1	11	163	G	PCI/G	PR	
7000-0000-015-C1C-01	MSR#05-1811	140051003	443492	13781-37-8	Nickel-63	TRG 30	ULSC	LSC	REG	-0.357	1.16	PCI/G	0	U	11/7/2005	38536.13819	8:52	2.1	PCI/G	0.995	PCI/G	1	11	1.55	G	PCI/G	PR	
7000-0000-015-C1C-01	MSR#05-1811	140051003	441350	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00922	0.0123	PCI/G	0	U	8/7/2005	38566.82083	7:01	0.0281	PCI/G	0.0132	PCI/G	1	11	163	G	PCI/G	PR	
7000-0000-015-C1C-01	MSR#05-1811	140051003	442290	13981-16-3	Plutonium-238	TRG 32	UPU11RCM	PU11RCM	REG	-0.00569	0.0246	PCI/G	0	U	11/7/2005	38536.14028	10:47	0.0704	PCI/G	0.0191	PCI/G	1	11	0.515	G	PCI/G	PR	
7000-0000-015-C1C-01	MSR#05-1811	140051003	442290	OER-100-70	Plutonium-239/240	TRG 32	UPU11RCM	PU11RCM	REG	0.00616	0.0245	PCI/G	0	U	11/7/2005	38536.14028	10:47	0.0703	PCI/G	0.0191	PCI/G	1	11	0.515	G	PCI/G	PR	
7000-0000-015-C1C-01	MSR#05-1811	140051003	448398	14119-32-5	Plutonium-241	TRG 36	UPU11RCM	PU11RCM	REG	1.32	2.24	PCI/G	0	U	11/7/2005	38567.12847	10:16	3.78	PCI/G	1.84	PCI/G	1	11	1.53	G	PCI/G	PR	
7000-0000-015-C1C-01	MSR#05-1811	140051003	441350	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.58	0.82	PCI/G	0		8/7/2005	38566.82083	7:01	0.262	PCI/G	0.116	PCI/G	1	11	163	G	PCI/G	PR	
7000-0000-015-C1C-01	MSR#05-1811	140051003	441350	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.717	0.102	PCI/G	0		8/7/2005	38566.82083	7:01	0.0556	PCI/G	0.0261	PCI/G	1	11	163	G	PCI/G	PR	
7000-0000-015-C1C-01	MSR#05-1811	140051003	441350	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.0145	0.0168	PCI/G	0	U	8/7/2005	38566.82083	7:01	0.0276	PCI/G	0.0131	PCI/G	1	11	163	G	PCI/G	PR	
7000-0000-015-C1C-01	MSR#05-1811	140051003	443731	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.00288	0.00615	PCI/G	0	U	11/7/2005	38536.14583	11:32	0.011	PCI/G	0.00528	PCI/G	1	11	19.3	G	PCI/G	PR	
7000-0000-015-C1C-01	MSR#05-1811	140051003	441485	14133-76-7	Technetium-99	TRG 46	UTC02RCM	TC02RCM	REG	0.176	0.246	PCI/G	0	U		19/07/2005	2:53	0.414	PCI/G	0.203	PCI/G	1	11	5.39	G	PCI/G	PR	
7000-0000-015-C1C-01	MSR#05-1811	140051003	441350	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.155	0.0374	PCI/G	0		8/7/2005	38566.82083	7:01	0.0342	PCI/G	0.0161	PCI/G	1	11	163	G	PCI/G	PR	
7000-0000-015-C1C-01	MSR#05-1811	140051003	441385	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-0.312	1.51	PCI/G	0	U		29/07/2005	3:37	2.65	PCI/G	1.28	PCI/G	1	11	16	G	PCI/G	PR	
7000-0000-015-C1C-02	MSR#05-1811	140051004	441350	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.544	0.164	PCI/G	0		8/7/2005	38566.82083	7:05	0.132	PCI/G	0.0615	PCI/G	1	10	142	G	PCI/G	PR	
7000-0000-015-C1C-02	MSR#05-1811	140051004	441350	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.00252	0.123	PCI/G	0	U	8/7/2005	38566.82083	7:05	0.231	PCI/G	0.112	PCI/G	1	10	142	G	PCI/G	PR	
7000-0000-015-C1C-02	MSR#05-1811	140051004	441350	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.374	0.296	PCI/G	0		8/7/2005	38566.82083	7:05	0.252	PCI/G	0.117	PCI/G	1	10	142	G	PCI/G	PR	
7000-0000-015-C1C-02	MSR#05-1811	140051004	441350	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.537	0.0923	PCI/G	0		8/7/2005	38566.82083	7:05	0.0645	PCI/G	0.0303	PCI/G	1	10	142	G	PCI/G	PR	
7000-0000-015-C1C-02	MSR#05-1811	140051004	441350	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0358	0.0227	PCI/G	0	U	8/7/2005	38566.82083	7:05	0.0458	PCI/G	0.0215	PCI/G	1	10	142	G	PCI/G	PR	
7000-0000-015-C1C-02	MSR#05-1811	140051004	441350	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.0103	0.0192	PCI/G	0	U	8/7/2005	38566.82083	7:05	0.0366	PCI/G	0.0171	PCI/G	1	10	142	G	PCI/G	PR	
7000-0000-015-C1C-02	MSR#05-1811	140051004	441350	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0157	0.0205	PCI/G	0	U	8/7/2005	38566.82083	7:05	0.0405	PCI/G	0.0184	PCI/G	1	10	142	G	PCI/G	PR	
7000-0000-015-C1C-02	MSR#05-1811	140051004	441350	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0284	0.0557	PCI/G	0	U	8/7/2005	38566.82083	7:05	0.101	PCI/G	0.0482	PCI/G	1	10	142	G	PCI/G	PR	
7000-0000-015-C1C-02	MSR#05-1811	140051004	441350	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0106	0.0737	PCI/G	0	U	8/7/2005	38566.82083	7:05	0.111	PCI/G	0.0508	PCI/G	1	10	142	G	PCI/G	PR	
7000-0000-015-C1C-02	MSR#05-1811	140051004	441350	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	-0.011	0.0625	PCI/G	0	U	8/7/2005	38566.82083	7:05	0.114	PCI/G	0.0552	PCI/G	1	10	142	G	PCI/G	PR	
7000-0000-015-C1C-02	MSR#05-1811	140051004	441350	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.638	0.0857	PCI/G	0		8/7/2005	38566.82083	7:05	0.0545	PCI/G	0.0262	PCI/G	1	10	142	G	PCI/G	PR	
7000-0000-015-C1C-02	MSR#05-1811	140051004	441350	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.67	0.104	PCI/G	0		8/7/2005	38566.82083	7:05	0.0645	PCI/G	0.0307	PCI/G	1	10	142	G	PCI/G	PR	
7000-0000-015-C1C-02	MSR#05-1811	140051004	441350	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0139	0.0207	PCI/G	0	U	8/7/2005	38566.82083	7:05	0.0396	PCI/G	0.0185	PCI/G	1	10	142	G	PCI/G	PR	
7000-0000-015-C1C-02	MSR#05-1811	140051004	441350	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.00664	0.0179	PCI/G	0	U	8/7/2005	38566.82083	7:05	0.0316	PCI/G	0.0148	PCI/G	1	10	142	G	PCI/G	PR	
7000-0000-015-C1C-02	MSR#05-1811	140051004	441350	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	8.34	0.963	PCI/G	0		8/7/2005	38566.82083	7:05	0.403	PCI/G	0.184	PCI/G	1	10	142	G	PCI/G	PR	
7000-0000-015-C1C-02	MSR#05-1811	140051004	441350	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.537	0.0923	PCI/G	0		8/7/2005	38566.82083	7:05	0.0645	PCI/G	0.0303	PCI/G	1	10	142	G	PCI/G	PR	
7000-0000-015-C1C-02	MSR#05-1811	140051004	441350	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00234	0.0183	PCI/G	0	U	8/7/2005	38566.82083	7:05	0.0323	PCI/G	0.0153	PCI/G	1	10	142	G	PCI/G	PR	
7000-0000-015-C1C-02	MSR#05-1811	140051004	443731	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00297	0.00587	PCI/G	0	U	11/7/2005	38536.14583	11:33	0.01	PCI/G	0.00479	PCI/G	1	10	19.5	G	PCI/G	PR	
7000-0000-015-C1C-02	MSR#05-1811	140051004	441350	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.209	0.0446	PCI/G	0		8/7/2005	38566.82083	7:05	0.0353	PCI/G	0.0166	PCI/G	1	10	142	G	PCI/G	PR	
7000-0000-015-C1C-02	MSR#05-1811	140051004	441385	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-0.362	1.54	PCI/G	0	U		29/07/2005	4:08	2.71	PCI/G	1.31	PCI/G	1	10	15.6	G	PCI/G	PR	

7000-0000-016-C1C-01	MSR#05-1811	140051005	441350	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.601	0.118	PCI/G	0		8/7/2005	38566.82083	7:08	0.079	PCI/G	0.0373	PCI/G	1	8.4	147	G	PCI/G	PR	
7000-0000-016-C1C-01	MSR#05-1811	140051005	441350	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.00742	0.0466	PCI/G	0	U	8/7/2005	38566.82083	7:08	0.0794	PCI/G	0.0386	PCI/G	1	8.4	147	G	PCI/G	PR	
7000-0000-016-C1C-01	MSR#05-1811	140051005	441350	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0	0.185	PCI/G	0	UUI	8/7/2005	38566.82083	7:08	0.178	PCI/G	0.0845	PCI/G	1	8.4	147	G	PCI/G	PR	
7000-0000-016-C1C-01	MSR#05-1811	140051005	441350	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.604	0.0934	PCI/G	0		8/7/2005	38566.82083	7:08	0.0437	PCI/G	0.0209	PCI/G	1	8.4	147	G	PCI/G	PR	
7000-0000-016-C1C-01	MSR#05-1811	140051005	441350	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0252	0.0171	PCI/G	0	U	8/7/2005	38566.82083	7:08	0.0286	PCI/G	0.0136	PCI/G	1	8.4	147	G	PCI/G	PR	
7000-0000-016-C1C-01	MSR#05-1811	140051005	441350	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.00732	0.0128	PCI/G	0	U	8/7/2005	38566.82083	7:08	0.022	PCI/G	0.0105	PCI/G	1	8.4	147	G	PCI/G	PR	
7000-0000-016-C1C-01	MSR#05-1811	140051005	441350	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0015	0.0141	PCI/G	0	U	8/7/2005	38566.82083	7:08	0.0249	PCI/G	0.0116	PCI/G	1	8.4	147	G	PCI/G	PR	
7000-0000-016-C1C-01	MSR#05-1811	140051005	441350	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0244	0.0341	PCI/G	0	U	8/7/2005	38566.82083	7:08	0.0586	PCI/G	0.0282	PCI/G	1	8.4	147	G	PCI/G	PR	
7000-0000-016-C1C-01	MSR#05-1811	140051005	441350	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0116	0.0407	PCI/G	0	U	8/7/2005	38566.82083	7:08	0.0698	PCI/G	0.0327	PCI/G	1	8.4	147	G	PCI/G	PR	
7000-0000-016-C1C-01	MSR#05-1811	140051005	441350	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0235	0.038	PCI/G	0	U	8/7/2005	38566.82083	7:08	0.0708	PCI/G	0.0344	PCI/G	1	8.4	147	G	PCI/G	PR	
7000-0000-016-C1C-01	MSR#05-1811	140051005	441350	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.487	0.0573	PCI/G	0		8/7/2005	38566.82083	7:08	0.036	PCI/G	0.0174	PCI/G	1	8.4	147	G	PCI/G	PR	
7000-0000-016-C1C-01	MSR#05-1811	140051005	441350	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.687	0.0854	PCI/G	0		8/7/2005	38566.82083	7:08	0.044	PCI/G	0.0212	PCI/G	1	8.4	147	G	PCI/G	PR	
7000-0000-016-C1C-01	MSR#05-1811	140051005	441350	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-1.37E-05	0.0147	PCI/G	0	U	8/7/2005	38566.82083	7:08	0.0255	PCI/G	0.0121	PCI/G	1	8.4	147	G	PCI/G	PR	
7000-0000-016-C1C-01	MSR#05-1811	140051005	441350	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00724	0.0124	PCI/G	0	U	8/7/2005	38566.82083	7:08	0.0224	PCI/G	0.0107	PCI/G	1	8.4	147	G	PCI/G	PR	
7000-0000-016-C1C-01	MSR#05-1811	140051005	441350	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.53	0.639	PCI/G	0		8/7/2005	38566.82083	7:08	0.197	PCI/G	0.0902	PCI/G	1	8.4	147	G	PCI/G	PR	
7000-0000-016-C1C-01	MSR#05-1811	140051005	441350	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.604	0.0934	PCI/G	0		8/7/2005	38566.82083	7:08	0.0437	PCI/G	0.0209	PCI/G	1	8.4	147	G	PCI/G	PR	
7000-0000-016-C1C-01	MSR#05-1811	140051005	441350	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00539	0.0107	PCI/G	0	U	8/7/2005	38566.82083	7:08	0.0204	PCI/G	0.00977	PCI/G	1	8.4	147	G	PCI/G	PR	
7000-0000-016-C1C-01	MSR#05-1811	140051005	443731	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.000992	0.00587	PCI/G	0	U	11/7/2005	38536.14583	11:33	0.0102	PCI/G	0.00489	PCI/G	1	8.4	19.5	G	PCI/G	PR	
7000-0000-016-C1C-01	MSR#05-1811	140051005	441350	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.173	0.0324	PCI/G	0		8/7/2005	38566.82083	7:08	0.0225	PCI/G	0.0107	PCI/G	1	8.4	147	G	PCI/G	PR	
7000-0000-016-C1C-01	MSR#05-1811	140051005	441385	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-0.967	1.46	PCI/G	0	U		29/07/2005	4:40	2.62	PCI/G	1.26	PCI/G	1	8.4	16.1	G	PCI/G	PR	
7000-0000-016-C1C-02	MSR#05-1811	140051006	441350	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.472	0.121	PCI/G	0		8/7/2005	38566.82083	7:14	0.0929	PCI/G	0.043	PCI/G	1	6.7	162	G	PCI/G	PR	
7000-0000-016-C1C-02	MSR#05-1811	140051006	441350	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0556	0.0681	PCI/G	0	U	8/7/2005	38566.82083	7:14	0.111	PCI/G	0.0539	PCI/G	1	6.7	162	G	PCI/G	PR	
7000-0000-016-C1C-02	MSR#05-1811	140051006	441350	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.277	0.185	PCI/G	0		8/7/2005	38566.82083	7:14	0.229	PCI/G	0.108	PCI/G	1	6.7	162	G	PCI/G	PR	
7000-0000-016-C1C-02	MSR#05-1811	140051006	441350	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.549	0.0886	PCI/G	0		8/7/2005	38566.82083	7:14	0.0489	PCI/G	0.023	PCI/G	1	6.7	162	G	PCI/G	PR	
7000-0000-016-C1C-02	MSR#05-1811	140051006	441350	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0126	0.0179	PCI/G	0	U	8/7/2005	38566.82083	7:14	0.0337	PCI/G	0.0159	PCI/G	1	6.7	162	G	PCI/G	PR	
7000-0000-016-C1C-02	MSR#05-1811	140051006	441350	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.0073	0.016	PCI/G	0	U	8/7/2005	38566.82083	7:14	0.0281	PCI/G	0.0132	PCI/G	1	6.7	162	G	PCI/G	PR	
7000-0000-016-C1C-02	MSR#05-1811	140051006	441350	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0175	0.0174	PCI/G	0	U	8/7/2005	38566.82083	7:14	0.0268	PCI/G	0.0121	PCI/G	1	6.7	162	G	PCI/G	PR	
7000-0000-016-C1C-02	MSR#05-1811	140051006	441350	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.00704	0.0416	PCI/G	0	U	8/7/2005	38566.82083	7:14	0.0744	PCI/G	0.0356	PCI/G	1	6.7	162	G	PCI/G	PR	
7000-0000-016-C1C-02	MSR#05-1811	140051006	441350	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0413	0.0611	PCI/G	0	U	8/7/2005	38566.82083	7:14	0.0853	PCI/G	0.0391	PCI/G	1	6.7	162	G	PCI/G	PR	
7000-0000-016-C1C-02	MSR#05-1811	140051006	441350	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0607	0.0533	PCI/G	0	U	8/7/2005	38566.82083	7:14	0.0793	PCI/G	0.0384	PCI/G	1	6.7	162	G	PCI/G	PR	
7000-0000-016-C1C-02	MSR#05-1811	140051006	441350	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.446	0.0586	PCI/G	0		8/7/2005	38566.82083	7:14	0.0417	PCI/G	0.0201	PCI/G	1	6.7	162	G	PCI/G	PR	
7000-0000-016-C1C-02	MSR#05-1811	140051006	441350	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.616	0.0855	PCI/G	0		8/7/2005	38566.82083	7:14	0.0516	PCI/G	0.0247	PCI/G	1	6.7	162	G	PCI/G	PR	
7000-0000-016-C1C-02	MSR#05-1811	140051006	441350	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.0119	0.0175	PCI/G	0	U	8/7/2005	38566.82083	7:14	0.0294	PCI/G	0.0137	PCI/G	1	6.7	162	G	PCI/G	PR	
7000-0000-016-C1C-02	MSR#05-1811	140051006	441350	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00579	0.0139	PCI/G	0	U	8/7/2005	38566.82083	7:14	0.0259	PCI/G	0.0122	PCI/G	1	6.7	162	G	PCI/G	PR	
7000-0000-016-C1C-02	MSR#05-1811	140051006	441350	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.54	0.793	PCI/G	0		8/7/2005	38566.82083	7:14	0.227	PCI/G	0.101	PCI/G	1	6.7	162	G	PCI/G	PR	
7000-0000-016-C1C-02	MSR#05-1811	140051006	441350	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.549	0.0886	PCI/G	0		8/7/2005	38566.82083	7:14	0.0489	PCI/G	0.023	PCI/G	1	6.7	162	G	PCI/G	PR	
7000-0000-016-C1C-02	MSR#05-1811	140051006	441350	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00364	0.0144	PCI/G	0	U	8/7/2005	38566.82083	7:14	0.0251	PCI/G	0.0119	PCI/G	1	6.7	162	G	PCI/G	PR	
7000-0000-016-C1C-02	MSR#05-1811	140051006	443731	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00708	0.00598	PCI/G	0	U	11/7/2005	38536.14583	11:33	0.00984	PCI/G	0.0047	PCI/G	1	6.7	19.5	G	PCI/G	PR	
7000-0000-016-C1C-02	MSR#05-1811	140051006	441350	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.161	0.0346	PCI/G	0		8/7/2005	38566.82083	7:14	0.0299	PCI/G	0.0142	PCI/G	1	6.7	162	G	PCI/G	PR	
7000-0000-016-C1C-02	MSR#05-1811	140051006	441385	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-1.19	1.62	PCI/G	0	U		29/07/2005	5:12	2.91	PCI/G	1.4	PCI/G	1	6.7	15.3	G	PCI/G	PR	
7000-0000-016-C3C-03	MSR#05-1811	140051007	441350	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.541	0.15	PCI/G	0		8/7/2005	38566.82083	7:15	0.0943	PCI/G	0.0436	PCI/G	1	8	158	G	PCI/G	PR	
7000-0000-016-C3C-03	MSR#05-1811	140051007	441350	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.00463	0.0189	PCI/G	0	U	8/7/2005	38566.82083	7:15	0.0319	PCI/G	0.0155	PCI/G	1	8	158	G	PCI/G	PR	
7000-0000-016-C3C-03	MSR#05-1811	140051007	441350	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.405	0.184	PCI/G	0		8/7/2005	38566.82083	7:15	0.229	PCI/G	0.107	PCI/G	1	8	158	G	PCI/G	PR	
7000-0000-016-C3C-03	MSR#05-1811	140051007	441350	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.537	0.0865	PCI/G	0		8/7/2005	38566.82083	7:15	0.0529	PCI/G	0.025	PCI/G	1	8	158	G	PCI/G	PR	
7000-0000-016-C3C-03	MSR#05-1811	140051007	441350	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.00747	0.0219	PCI/G	0	U	8/7/2005	38566.82083	7:15	0.035	PCI/G	0.0164	PCI/G	1	8	158	G	PCI/G	PR	
7000-0000-016-C3C-03	MSR#05-1811	140051007	441350	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.0175	0.0153	PCI/G	0	U	8/7/2005	38566.82083	7:15	0.0249	PCI/G	0.0116	PCI/G	1	8	158	G	PCI/G	PR	
7000-0000-016-C3C-03	MSR#05-1811	140051007	441350	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.00149	0.0173	PCI/G	0	U	8/7/2005	38566.82083	7:15	0.0308	PCI/G	0.014	PCI/G	1	8	158	G	PCI/G	PR	
7000-0000-016-C3C-03	MSR#05-1811	140051007	441350	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0277	0.0374	PCI/G	0	U	8/7/2005	38566.82083	7:15	0.0691	PCI/G	0.033	PCI/G	1	8	158	G	PCI/G	PR	
7000-0000-016-C3C-03	MSR#05-1811	140051007	441350	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0114	0.0559	PCI/G	0	U	8/7/2005	38566.82083	7:15	0.0977	PCI/G	0.0452	PCI/G	1	8	158	G	PCI/G	PR	
7000-0000-016-C3C-03	MSR#05-1811	140051007	441350	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	-0.00301	0.0331	PCI/G	0	U	8/7/2005	38566.82083	7:15	0.0535	PCI/G	0.0258	PCI/G	1	8	158	G	PCI/G	PR	
7000-0000-016-C3C-03	MSR#05-1811	140051007	441350	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.492	0.066	PCI/G	0		8/7/2005	38566.82083	7:15	0.0403	PCI/G	0.0194	PCI/G	1	8	158	G	PCI/G	PR	
7000-0000-016-C3C-03	MSR#05-1811	140051007	441350	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.597	0.0872	PCI/G	0		8/7/2005	38566.82083	7:15	0.0463	PCI/G	0.022	PCI/G	1	8	158	G	PCI/G	PR	
7000-0000-016-C3C-03	MSR#05-1811	140051007	441350	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0093	0.0175	PCI/G	0	U	8/7/2005	38566.82083	7:15	0.032	PCI/G	0.015	PCI/G	1	8	158	G	PCI/G	PR	
7000-0000-016-C3C-03	MSR#05-1811	140051007	441350	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00415	0.02	PCI/G	0	U	8/7/2005	38566.82083	7:15	0.0236	PCI/G	0.011	PCI/G	1	8	158	G	PCI/G	PR	
7000-0000-016-C3C-03	MSR#05-1811	140051007	441350	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	8.05	0.818	PCI/G	0		8/7/2005	38566.82083	7:15	0.217	PCI/G	0.0947	PCI/G	1	8	158	G	PCI/G	PR	
7000-0000-016-C3C-03	MSR#05-1811	140051007	441350	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.537	0.0865	PCI/G	0		8/7/2005	38566.82083	7:15	0.0529	PCI/G	0.025	PCI/G	1	8	158	G	PCI/G	PR	
7000-0000-016-C3C-03	MSR#05-1811	140051007	441350	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00309	0.012	PCI/G	0	U	8/7/2005	38566.82083	7:15	0.0228	PCI/G	0.0108	PCI/G	1	8	158	G	PCI/G	PR	
7000-0000-016-C3C-03	MSR#05-1811	140051007	443731	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00939	0.00637	PCI/G	0	U	11/7/2005	38536.14583	11:33	0.0103	PCI/G	0.00495	PCI/G	1	8	19.5	G	PCI/G	PR	
7000-0000-016-C3C-03	MSR#05-1811	140051007	441350	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.152	0.034	PCI/G	0		8/7/2005	38566.82083	7:15	0.0266	PCI/G	0.0125	PCI/G	1	8	158	G	PCI/G	PR	
7000-0000-016-C3C-03	MSR#05-1811	140051007	441385	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	0.255	1.63	PCI/G	0	U		29/07/2005	5:44	2.82	PCI/G	1.36	PCI/G	1	8	15.2	G	PCI/G	PR	
7000-0000-016-C3C-04	MSR#05-1811	140051008	441350	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.452	0.12	PCI/G	0		8/7/2005	38566.82083	7:18	0.108	PCI/G	0.0504	PCI/G	1	8.2	167	G	PCI/G	PR	
7000-0000-016-C3C-04	MSR#05-1811	140051008	441350	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0142	0.0945	PCI/G	0	U	8/7/2005	38566.82083	7:18	0.158	PCI/G	0.0765	PCI/G	1	8.2	167	G	PCI/G	PR	
7000-0000-016-C3C-04	MSR#05-1811	140051008	441350	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.459	0.196	PCI/G	0		8/7/2005	38566.82083	7:18	0.239	PCI/G	0.112	PCI/G	1	8.2	167	G	PCI/G	PR	
7000-0000-016-C3C-04	MSR#05-1811	140051008	441350	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.628	0.106	PCI/G	0		8/7/2005	38566.82083	7:18	0.0572	PCI/G	0.027	PCI/G	1	8.2	167	G	PCI/G	PR	
7000-0000-016-C3C-04	MSR#05-1811	140051008	441350	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0155	0.0285	PCI/G	0	U	8/7/2005	38566.82083	7:18	0.0393	PCI/G	0.0185	PCI/G	1	8.2	167	G	PCI/G	PR	
7000-0000-016-C3C-04	MSR#05-1811	140051008	441350	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.00396	0.0174	PCI/G	0	U	8/7/2005	38566.82083	7:18	0.0324	PCI/G	0.0153	PCI/G	1	8.2	167	G	PCI/G	PR	
7000-0000-016-C3C-04	MSR#05-1811	140051008	441350	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0017	0.0241	PCI/G	0	U	8/7/2005	38566.82083	7:18	0.0379	PCI/G	0.0176	PCI/G	1	8.2	167	G	PCI/G	PR	
7000-0000-016-C3C-04	MSR#05-1811	140051008	441350	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0285	0.0507	PCI/G	0	U	8/7/2005	38566.82083	7:18	0.0883	PCI/G	0.0422	PCI/G	1	8.2	167	G	PCI/G	PR	
7000-0000-016-C3C-04	MSR#05-1811	140051008	441350	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.019	0.0509	PCI/G	0	U	8/7/2005	38566.82083	7:18	0.0966	PCI/G	0.0446	PCI/G	1	8.2	167	G	PCI/G	PR	
7000-0000-016-C3C-04	MSR#05-1811	140051008	441350	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0867	0.0573	PCI/G	0	U	8/7/2005	38566.82083	7:18	0.108	PCI/G	0.0525	PCI/G	1	8.2	167	G	PCI/G	PR	
7000-0000-016-C3C-04	MSR#05-1811	140051008	441350	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.595	0.0741	PCI/G	0		8/7/2005	38566.82083	7:18	0.0573	PCI/G	0.0277	PCI/G	1	8.2	167	G	PCI/G	PR	
7000-0000-016-C3C-04	MSR#05-1811	140051008	441350	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.7	0.107	PCI/G	0		8/7/2005	38566.82083	7:18	0.0641	PCI/G	0.0307	PCI/G	1	8.2	167	G	PCI/G	PR	
7000-0000-016-C3C-04	MSR#05-1811	140051008	441350	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.00774	0.0187	PCI/G	0	U	8/7/2005	38566.82083	7:18	0.0347	PCI/G	0.0163	PCI/G	1	8.2	167	G	PCI/G	PR	
7000-0000-016-C3C-04	MSR#05-1811	140051008	441350	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0175	0.0195	PCI/G	0	U	8/7/2005	38566.82083	7:18	0.0304	PCI/G	0.0144	PCI/G	1	8.2	167	G	PCI/G	PR	
7000-0000-016-C3C-04	MSR#05-1811	140051008	441350	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	8.72	0.832	PCI/G	0		8/7/2005	38566.82083	7:18	0.278	PCI/G	0.125	PCI/G	1	8.2	167	G	PCI/G	PR	
7000-0000-016-C3C-04	MSR#05-1811	140051008	441350	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.628	0.106	PCI/G	0		8/7/2005	38566.82083	7:18	0.0572	PCI/G	0.027	PCI/G	1	8.2	167	G	PCI/G	PR	
7000-0000-016-C3C-04	MSR#05-1811	140051008	441350	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00688	0.0177	PCI/G	0	U	8/7/2005	38566.82083	7:18	0.0307	PCI/G	0.0146	PCI/G	1	8.2	167	G	PCI/G	PR	
7000-0000-016-C3C-04	MSR#05-1811	140051008	443731	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.000277	0.00515	PCI/G	0	U	11/7/2005	38536.14583	11:33	0.00901	PCI/G	0.00431	PCI/G	1	8.2	19.2	G	PCI/G	PR	
7000-0000-016-C3C-04	MSR#05-1811	140051008	441350	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.176	0.0383	PCI/G	0		8/7/2005	38566.82083	7:18	0.0347	PCI/G	0.0165	PCI/G	1	8.2	167	G	PCI/G	PR	
7000-0000-016-C3C-04	MSR#05-1811	140051008	441385	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-1.62	1.57	PCI/G	0	U		29/07/2005	6:16	2.86	PCI/G	1.38	PCI/G	1	8.2	15.2	G	PCI/G	PR	
7000-0000-017-C1C-01	MSR#05-1811	140051009	441350	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.524	0.162	PCI/G	0		8/7/2005	38566.82083	7:18	0.129	PCI/G	0.0603	PCI/G	1	11	147	G	PCI/G	PR	
7000-0000-017-C1C-01	MSR#05-1811	140051009	441350	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.134	0.165	PCI/G	0	U	8/7/2005	38566.82083	7:18	0.263	PCI/G	0.127	PCI/G	1	11	147	G	PCI/G	PR	
7000-0000-017-C1C-01	MSR#05-1811	140051009	441350	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.368	0.326	PCI/G	0		8/7/2005	38566.82083	7:18	0.291	PCI/G	0.136	PCI/G	1	11	147	G	PCI/G	PR	
7000-0000-017-C1C-01	MSR#05-1811	140051009	441350	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.697	0.128	PCI/G	0		8/7/2005	38566.82083	7:18	0.0719	PCI/G	0.0341	PCI/G	1	11	147	G	PCI/G	PR	
7000-0000-017-C1C-01	MSR#05-1811	140051009	441350	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0309	0.0388	PCI/G	0	U	8/7/2005	38566.82083	7:18	0.0442	PCI/G	0.0208	PCI/G	1	11	147	G	PCI/G	PR	
7000-0000-017-C1C-01	MSR#05-1811	140051009	441350	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.0247	0.0235	PCI/G	0	U	8/7/2005	38566.82083	7:18	0.0437	PCI/G	0.0208	PCI/G	1	11	147	G	PCI/G	PR	
7000-0000-017-C1C-01	MSR#05-1811	140051009	441350	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.00289	0.022	PCI/G	0	U	8/7/2005	38566.82083	7:18	0.0386	PCI/G	0.0177	PCI/G	1	11	147	G	PCI/G	PR	
7000-0000-017-C1C-01	MSR#05-1811	140051009	441350	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0367	0.0572	PCI/G	0	U	8/7/2005	38566.82083	7:18	0.108	PCI/G	0.0514	PCI/G	1	11	147	G	PCI/G	PR	
7000-0000-017-C1C-01	MSR#05-1811	140051009	441350	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.045	0.0612	PCI/G	0	U	8/7/2005	38566.82083	7:18	0.1	PCI/G	0.0456	PCI/G	1	11	147	G	PCI/G	PR	
7000-0000-017-C1C-01	MSR#05-1811	140051009	441350	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0717	0.0815	PCI/G	0	U	8/7/2005	38566.82083	7:18	0.127	PCI/G	0.0612	PCI/G	1	11	147	G	PCI/G	PR	

7000-0000-017-C1C-01	MSR#05-1811	140051009	441350	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.66	0.0868	PCI/G	0		8/7/2005	38566.82083	7:18	0.0641	PCI/G	0.0309	PCI/G	1	11	147	G	PCI/G	PR	
7000-0000-017-C1C-01	MSR#05-1811	140051009	441350	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.843	0.127	PCI/G	0		8/7/2005	38566.82083	7:18	0.0751	PCI/G	0.0358	PCI/G	1	11	147	G	PCI/G	PR	
7000-0000-017-C1C-01	MSR#05-1811	140051009	441350	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.00396	0.0189	PCI/G	0	U	8/7/2005	38566.82083	7:18	0.0341	PCI/G	0.0158	PCI/G	1	11	147	G	PCI/G	PR	
7000-0000-017-C1C-01	MSR#05-1811	140051009	441350	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00667	0.035	PCI/G	0	U	8/7/2005	38566.82083	7:18	0.035	PCI/G	0.0165	PCI/G	1	11	147	G	PCI/G	PR	
7000-0000-017-C1C-01	MSR#05-1811	140051009	441350	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	9.02	0.903	PCI/G	0		8/7/2005	38566.82083	7:18	0.315	PCI/G	0.141	PCI/G	1	11	147	G	PCI/G	PR	
7000-0000-017-C1C-01	MSR#05-1811	140051009	441350	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.697	0.128	PCI/G	0		8/7/2005	38566.82083	7:18	0.0719	PCI/G	0.0341	PCI/G	1	11	147	G	PCI/G	PR	
7000-0000-017-C1C-01	MSR#05-1811	140051009	441350	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.000935	0.0181	PCI/G	0	U	8/7/2005	38566.82083	7:18	0.0326	PCI/G	0.0154	PCI/G	1	11	147	G	PCI/G	PR	
7000-0000-017-C1C-01	MSR#05-1811	140051009	443731	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.000931	0.00553	PCI/G	0	U	11/7/2005	38538.14583	11:33	0.00962	PCI/G	0.0046	PCI/G	1	11	19.5	G	PCI/G	PR	
7000-0000-017-C1C-01	MSR#05-1811	140051009	441350	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.198	0.048	PCI/G	0		8/7/2005	38566.82083	7:18	0.0355	PCI/G	0.0167	PCI/G	1	11	147	G	PCI/G	PR	
7000-0000-017-C1C-01	MSR#05-1811	140051009	441385	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	0.22	1.62	PCI/G	0	U		29/07/2005	6:47	2.8	PCI/G	1.35	PCI/G	1	11	15.4	G	PCI/G	PR	
7000-0000-017-C1C-02	MSR#05-1811	140051010	441350	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.473	0.146	PCI/G	0		8/7/2005	38566.82083	7:36	0.105	PCI/G	0.0487	PCI/G	1	8.6	140	G	PCI/G	PR	
7000-0000-017-C1C-02	MSR#05-1811	140051010	441350	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0448	0.083	PCI/G	0	U	8/7/2005	38566.82083	7:36	0.152	PCI/G	0.0734	PCI/G	1	8.6	140	G	PCI/G	PR	
7000-0000-017-C1C-02	MSR#05-1811	140051010	441350	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.429	0.193	PCI/G	0		8/7/2005	38566.82083	7:36	0.212	PCI/G	0.0988	PCI/G	1	8.6	140	G	PCI/G	PR	
7000-0000-017-C1C-02	MSR#05-1811	140051010	441350	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.535	0.0911	PCI/G	0		8/7/2005	38566.82083	7:36	0.0516	PCI/G	0.0243	PCI/G	1	8.6	140	G	PCI/G	PR	
7000-0000-017-C1C-02	MSR#05-1811	140051010	441350	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0298	0.019	PCI/G	0	U	8/7/2005	38566.82083	7:36	0.0373	PCI/G	0.0175	PCI/G	1	8.6	140	G	PCI/G	PR	
7000-0000-017-C1C-02	MSR#05-1811	140051010	441350	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.00247	0.0163	PCI/G	0	U	8/7/2005	38566.82083	7:36	0.0292	PCI/G	0.0137	PCI/G	1	8.6	140	G	PCI/G	PR	
7000-0000-017-C1C-02	MSR#05-1811	140051010	441350	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.00697	0.0158	PCI/G	0	U	8/7/2005	38566.82083	7:36	0.0278	PCI/G	0.0124	PCI/G	1	8.6	140	G	PCI/G	PR	
7000-0000-017-C1C-02	MSR#05-1811	140051010	441350	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.00975	0.0401	PCI/G	0	U	8/7/2005	38566.82083	7:36	0.0728	PCI/G	0.0347	PCI/G	1	8.6	140	G	PCI/G	PR	
7000-0000-017-C1C-02	MSR#05-1811	140051010	441350	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0551	0.0906	PCI/G	0	U	8/7/2005	38566.82083	7:36	0.0968	PCI/G	0.0444	PCI/G	1	8.6	140	G	PCI/G	PR	
7000-0000-017-C1C-02	MSR#05-1811	140051010	441350	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0346	0.0451	PCI/G	0	U	8/7/2005	38566.82083	7:36	0.0846	PCI/G	0.0409	PCI/G	1	8.6	140	G	PCI/G	PR	
7000-0000-017-C1C-02	MSR#05-1811	140051010	441350	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.404	0.0635	PCI/G	0		8/7/2005	38566.82083	7:36	0.0633	PCI/G	0.0308	PCI/G	1	8.6	140	G	PCI/G	PR	
7000-0000-017-C1C-02	MSR#05-1811	140051010	441350	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.606	0.0921	PCI/G	0		8/7/2005	38566.82083	7:36	0.0524	PCI/G	0.025	PCI/G	1	8.6	140	G	PCI/G	PR	
7000-0000-017-C1C-02	MSR#05-1811	140051010	441350	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.018	0.0203	PCI/G	0	U	8/7/2005	38566.82083	7:36	0.0341	PCI/G	0.016	PCI/G	1	8.6	140	G	PCI/G	PR	
7000-0000-017-C1C-02	MSR#05-1811	140051010	441350	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00387	0.0143	PCI/G	0	U	8/7/2005	38566.82083	7:36	0.0258	PCI/G	0.0121	PCI/G	1	8.6	140	G	PCI/G	PR	
7000-0000-017-C1C-02	MSR#05-1811	140051010	441350	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.61	0.884	PCI/G	0		8/7/2005	38566.82083	7:36	0.268	PCI/G	0.119	PCI/G	1	8.6	140	G	PCI/G	PR	
7000-0000-017-C1C-02	MSR#05-1811	140051010	441350	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.535	0.0911	PCI/G	0		8/7/2005	38566.82083	7:36	0.0516	PCI/G	0.0243	PCI/G	1	8.6	140	G	PCI/G	PR	
7000-0000-017-C1C-02	MSR#05-1811	140051010	441350	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00351	0.0132	PCI/G	0	U	8/7/2005	38566.82083	7:36	0.0245	PCI/G	0.0116	PCI/G	1	8.6	140	G	PCI/G	PR	
7000-0000-017-C1C-02	MSR#05-1811	140051010	443733	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	4.59E-06	0.00573	PCI/G	0	U	11/7/2005	38567.12569	11:24	0.01	PCI/G	0.00481	PCI/G	1	8.6	18.7	G	PCI/G	PR	
7000-0000-017-C1C-02	MSR#05-1811	140051010	441350	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.15	0.0341	PCI/G	0		8/7/2005	38566.82083	7:36	0.0293	PCI/G	0.0138	PCI/G	1	8.6	140	G	PCI/G	PR	
7000-0000-017-C1C-02	MSR#05-1811	140051010	441385	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-1.3	1.57	PCI/G	0	U		29/07/2005	7:19	2.83	PCI/G	1.36	PCI/G	1	8.6	15.4	G	PCI/G	PR	
7000-0000-012-C1C-01	MSR#05-1811	140051011	441350	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.62	0.137	PCI/G	0		8/7/2005	38566.82083	7:41	0.119	PCI/G	0.0552	PCI/G	1	6.7	161	G	PCI/G	PR	
7000-0000-012-C1C-01	MSR#05-1811	140051011	441350	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.00886	0.0285	PCI/G	0	U	8/7/2005	38566.82083	7:41	0.0473	PCI/G	0.023	PCI/G	1	6.7	161	G	PCI/G	PR	
7000-0000-012-C1C-01	MSR#05-1811	140051011	441350	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.385	0.228	PCI/G	0		8/7/2005	38566.82083	7:41	0.281	PCI/G	0.132	PCI/G	1	6.7	161	G	PCI/G	PR	
7000-0000-012-C1C-01	MSR#05-1811	140051011	441350	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.583	0.107	PCI/G	0		8/7/2005	38566.82083	7:41	0.0655	PCI/G	0.031	PCI/G	1	6.7	161	G	PCI/G	PR	
7000-0000-012-C1C-01	MSR#05-1811	140051011	441350	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0	0.0296	PCI/G	0	UUI	8/7/2005	38566.82083	7:41	0.0447	PCI/G	0.0211	PCI/G	1	6.7	161	G	PCI/G	PR	
7000-0000-012-C1C-01	MSR#05-1811	140051011	441350	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.00459	0.0192	PCI/G	0	U	8/7/2005	38566.82083	7:41	0.0336	PCI/G	0.0158	PCI/G	1	6.7	161	G	PCI/G	PR	
7000-0000-012-C1C-01	MSR#05-1811	140051011	441350	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.0159	0.0184	PCI/G	0	U	8/7/2005	38566.82083	7:41	0.0301	PCI/G	0.0135	PCI/G	1	6.7	161	G	PCI/G	PR	
7000-0000-012-C1C-01	MSR#05-1811	140051011	441350	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0208	0.0504	PCI/G	0	U	8/7/2005	38566.82083	7:41	0.0903	PCI/G	0.0433	PCI/G	1	6.7	161	G	PCI/G	PR	
7000-0000-012-C1C-01	MSR#05-1811	140051011	441350	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.00623	0.0577	PCI/G	0	U	8/7/2005	38566.82083	7:41	0.106	PCI/G	0.0487	PCI/G	1	6.7	161	G	PCI/G	PR	
7000-0000-012-C1C-01	MSR#05-1811	140051011	441350	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0469	0.0465	PCI/G	0	U	8/7/2005	38566.82083	7:41	0.0871	PCI/G	0.0424	PCI/G	1	6.7	161	G	PCI/G	PR	
7000-0000-012-C1C-01	MSR#05-1811	140051011	441350	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.56	0.0791	PCI/G	0		8/7/2005	38566.82083	7:41	0.0507	PCI/G	0.0245	PCI/G	1	6.7	161	G	PCI/G	PR	
7000-0000-012-C1C-01	MSR#05-1811	140051011	441350	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.556	0.101	PCI/G	0		8/7/2005	38566.82083	7:41	0.0626	PCI/G	0.0299	PCI/G	1	6.7	161	G	PCI/G	PR	
7000-0000-012-C1C-01	MSR#05-1811	140051011	441350	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.00628	0.0202	PCI/G	0	U	8/7/2005	38566.82083	7:41	0.0381	PCI/G	0.0179	PCI/G	1	6.7	161	G	PCI/G	PR	
7000-0000-012-C1C-01	MSR#05-1811	140051011	441350	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0127	0.018	PCI/G	0	U	8/7/2005	38566.82083	7:41	0.0333	PCI/G	0.0158	PCI/G	1	6.7	161	G	PCI/G	PR	
7000-0000-012-C1C-01	MSR#05-1811	140051011	441350	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.56	0.798	PCI/G	0		8/7/2005	38566.82083	7:41	0.22	PCI/G	0.0945	PCI/G	1	6.7	161	G	PCI/G	PR	
7000-0000-012-C1C-01	MSR#05-1811	140051011	441350	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.583	0.107	PCI/G	0		8/7/2005	38566.82083	7:41	0.0655	PCI/G	0.031	PCI/G	1	6.7	161	G	PCI/G	PR	
7000-0000-012-C1C-01	MSR#05-1811	140051011	441350	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.0023	0.0166	PCI/G	0	U	8/7/2005	38566.82083	7:41	0.0304	PCI/G	0.0145	PCI/G	1	6.7	161	G	PCI/G	PR	
7000-0000-012-C1C-01	MSR#05-1811	140051011	443733	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00625	0.00721	PCI/G	0	U	11/7/2005	38567.12569	11:25	0.0121	PCI/G	0.00576	PCI/G	1	6.7	18.4	G	PCI/G	PR	
7000-0000-012-C1C-01	MSR#05-1811	140051011	441350	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.231	0.0466	PCI/G	0		8/7/2005	38566.82083	7:41	0.0321	PCI/G	0.0151	PCI/G	1	6.7	161	G	PCI/G	PR	
7000-0000-012-C1C-01	MSR#05-1811	140051011	441385	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-0.871	1.56	PCI/G	0	U		29/07/2005	7:51	2.78	PCI/G	1.34	PCI/G	1	6.7	15.3	G	PCI/G	PR	
7000-0000-012-C1C-02	MSR#05-1811	140051012	441350	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.459	0.205	PCI/G	0		8/7/2005	38566.82083	9:19	0.132	PCI/G	0.0623	PCI/G	1	8	169	G	PCI/G	PR	
7000-0000-012-C1C-02	MSR#05-1811	140051012	441350	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0013	0.0313	PCI/G	0	U	8/7/2005	38566.82083	9:19	0.0542	PCI/G	0.0264	PCI/G	1	8	169	G	PCI/G	PR	
7000-0000-012-C1C-02	MSR#05-1811	140051012	441350	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.373	0.285	PCI/G	0		8/7/2005	38566.82083	9:19	0.301	PCI/G	0.143	PCI/G	1	8	169	G	PCI/G	PR	
7000-0000-012-C1C-02	MSR#05-1811	140051012	441350	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.464	0.106	PCI/G	0		8/7/2005	38566.82083	9:19	0.0766	PCI/G	0.0367	PCI/G	1	8	169	G	PCI/G	PR	
7000-0000-012-C1C-02	MSR#05-1811	140051012	441350	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0123	0.0263	PCI/G	0	U	8/7/2005	38566.82083	9:19	0.0484	PCI/G	0.0231	PCI/G	1	8	169	G	PCI/G	PR	
7000-0000-012-C1C-02	MSR#05-1811	140051012	441350	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.0187	0.0233	PCI/G	0	U	8/7/2005	38566.82083	9:19	0.044	PCI/G	0.0211	PCI/G	1	8	169	G	PCI/G	PR	
7000-0000-012-C1C-02	MSR#05-1811	140051012	441350	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0138	0.0227	PCI/G	0	U	8/7/2005	38566.82083	9:19	0.0431	PCI/G	0.0201	PCI/G	1	8	169	G	PCI/G	PR	
7000-0000-012-C1C-02	MSR#05-1811	140051012	441350	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.00782	0.0558	PCI/G	0	U	8/7/2005	38566.82083	9:19	0.101	PCI/G	0.0487	PCI/G	1	8	169	G	PCI/G	PR	
7000-0000-012-C1C-02	MSR#05-1811	140051012	441350	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0	0.0693	PCI/G	0	UUI	8/7/2005	38566.82083	9:19	0.12	PCI/G	0.0559	PCI/G	1	8	169	G	PCI/G	PR	
7000-0000-012-C1C-02	MSR#05-1811	140051012	441350	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0298	0.0605	PCI/G	0	U	8/7/2005	38566.82083	9:19	0.0909	PCI/G	0.0443	PCI/G	1	8	169	G	PCI/G	PR	
7000-0000-012-C1C-02	MSR#05-1811	140051012	441350	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.478	0.0676	PCI/G	0		8/7/2005	38566.82083	9:19	0.0561	PCI/G	0.0272	PCI/G	1	8	169	G	PCI/G	PR	
7000-0000-012-C1C-02	MSR#05-1811	140051012	441350	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.548	0.0865	PCI/G	0		8/7/2005	38566.82083	9:19	0.0757	PCI/G	0.0366	PCI/G	1	8	169	G	PCI/G	PR	
7000-0000-012-C1C-02	MSR#05-1811	140051012	441350	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0182	0.0277	PCI/G	0	U	8/7/2005	38566.82083	9:19	0.0443	PCI/G	0.021	PCI/G	1	8	169	G	PCI/G	PR	
7000-0000-012-C1C-02	MSR#05-1811	140051012	441350	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.00958	0.0214	PCI/G	0	U	8/7/2005	38566.82083	9:19	0.0377	PCI/G	0.018	PCI/G	1	8	169	G	PCI/G	PR	
7000-0000-012-C1C-02	MSR#05-1811	140051012	441350	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.74	0.856	PCI/G	0		8/7/2005	38566.82083	9:19	0.338	PCI/G	0.155	PCI/G	1	8	169	G	PCI/G	PR	
7000-0000-012-C1C-02	MSR#05-1811	140051012	441350	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.464	0.106	PCI/G	0		8/7/2005	38566.82083	9:19	0.0766	PCI/G	0.0367	PCI/G	1	8	169	G	PCI/G	PR	
7000-0000-012-C1C-02	MSR#05-1811	140051012	441350	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.0108	0.0186	PCI/G	0	U	8/7/2005	38566.82083	9:19	0.0343	PCI/G	0.0165	PCI/G	1	8	169	G	PCI/G	PR	
7000-0000-012-C1C-02	MSR#05-1811	140051012	443733	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.0045	0.00524	PCI/G	0	U	11/7/2005	38567.12639	10:14	0.00968	PCI/G	0.00462	PCI/G	1	8	18.2	G	PCI/G	PR	
7000-0000-012-C1C-02	MSR#05-1811	140051012	441350	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.183	0.0583	PCI/G	0		8/7/2005	38566.82083	9:19	0.0399	PCI/G	0.019	PCI/G	1	8	169	G	PCI/G	PR	
7000-0000-012-C1C-02	MSR#05-1811	140051012	441385	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-0.153	1.59	PCI/G	0	U		29/07/2005	8:23	2.78	PCI/G	1.34	PCI/G	1	8	15.4	G	PCI/G	PR	
7000-0000-012-C4C-03	MSR#05-1811	140051013	441350	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.498	0.145	PCI/G	0		8/7/2005	38566.82083	9:20	0.134	PCI/G	0.0629	PCI/G	1	6.7	164	G	PCI/G	PR	
7000-0000-012-C4C-03	MSR#05-1811	140051013	441350	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0282	0.0952	PCI/G	0	U	8/7/2005	38566.82083	9:20	0.156	PCI/G	0.076	PCI/G	1	6.7	164	G	PCI/G	PR	
7000-0000-012-C4C-03	MSR#05-1811	140051013	441350	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.506	0.27	PCI/G	0		8/7/2005	38566.82083	9:20	0.268	PCI/G	0.126	PCI/G	1	6.7	164	G	PCI/G	PR	
7000-0000-012-C4C-03	MSR#05-1811	140051013	441350	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.657	0.101	PCI/G	0		8/7/2005	38566.82083	9:20	0.0639	PCI/G	0.0303	PCI/G	1	6.7	164	G	PCI/G	PR	
7000-0000-012-C4C-03	MSR#05-1811	140051013	441350	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.024	0.0231	PCI/G	0	U	8/7/2005	38566.82083	9:20	0.0447	PCI/G	0.0212	PCI/G	1	6.7	164	G	PCI/G	PR	
7000-0000-012-C4C-03	MSR#05-1811	140051013	441350	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.0162	0.0192	PCI/G	0	U	8/7/2005	38566.82083	9:20	0.0319	PCI/G	0.015	PCI/G	1	6.7	164	G	PCI/G	PR	
7000-0000-012-C4C-03	MSR#05-1811	140051013	441350	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0213	0.0373	PCI/G	0	U	8/7/2005	38566.82083	9:20	0.0375	PCI/G	0.0172	PCI/G	1	6.7	164	G	PCI/G	PR	
7000-0000-012-C4C-03	MSR#05-1811	140051013	441350	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0211	0.0565	PCI/G	0	U	8/7/2005	38566.82083	9:20	0.0877	PCI/G	0.042	PCI/G	1	6.7	164	G	PCI/G	PR	
7000-0000-012-C4C-03	MSR#05-1811	140051013	441350	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0315	0.0641	PCI/G	0	U	8/7/2005	38566.82083	9:20	0.109	PCI/G	0.0505	PCI/G	1	6.7	164	G	PCI/G	PR	
7000-0000-012-C4C-03	MSR#05-1811	140051013	441350	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0169	0.053	PCI/G	0	U	8/7/2005	38566.82083	9:20	0.0986	PCI/G	0.048	PCI/G	1	6.7	164	G	PCI/G	PR	
7000-0000-012-C4C-03	MSR#05-1811	140051013	441350	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.505	0.078	PCI/G	0		8/7/2005	38566.82083	9:20	0.0511	PCI/G	0.0247	PCI/G	1	6.7	164	G	PCI/G	PR	
7000-0000-012-C4C-03	MSR#05-1811	140051013	441350	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.686	0.105	PCI/G	0		8/7/2005	38566.82083	9:20	0.0665	PCI/G	0.0319	PCI/G	1	6.7	164	G	PCI/G	PR	
7000-0000-012-C4C-03	MSR#05-1811	140051013	441350	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0069	0.0237	PCI/G	0	U	8/7/2005	38566.82083	9:20	0.0385	PCI/G	0.0181	PCI/G	1	6.7	164	G	PCI/G	PR	
7000-0000-012-C4C-03	MSR#05-1811	140051013	441350	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.00405	0.0189	PCI/G	0	U	8/7/2005	38566.82083	9:20	0.0327	PCI/G	0.0155	PCI/G	1	6.7	164	G	PCI/G	PR	
7000-0000-012-C4C-03	MSR#05-1811	140051013	441350	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	8.76	0.937	PCI/G	0		8/7/2005	38566.82083	9:20	0.371	PCI/G	0.17	PCI/G	1	6.7	164	G	PCI/G	PR	
7000-0000-012-C4C-03	MSR#05-1811	140051013	441350	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.657	0.101	PCI/G	0		8/7/2005	38566.82083	9:20	0.0639	PCI/G	0.0303	PCI/G	1	6.7	164	G	PCI/G	PR	
7000-0000-012-C4C-03	MSR#05-1811	140051013	441350	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00247	0.0154	PCI/G	0	U	8/7/2005	38566.82083	9:20	0.0278	PCI/G	0.0132	PCI/G	1	6.7	164	G	PCI/G	PR	
7000-0000-012-C4C-03	MSR#05-1811	140051013	443733	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.00516	0.00572	PCI/G	0	U	11/7/2005	38567.12639	10:14	0.0105	PCI/G	0.00503	PCI/G	1	6.7	18.2	G	PCI/G	PR	
7000-0000-012-C4C-03	MSR#05-1811	140051013	441350	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.163	0.0373	PCI/G	0		8/7/2005	38566.82083	9:20	0.0325	PCI/G	0.0153	PCI/G	1	6.7	164	G	PCI/G	PR	
7000-0000-012-C4C-03	MSR#05-1811	140051013	441385	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-0.146	1.52	PCI/G	0	U		29/07/2005	8:55	2.66	PCI/G	1.28	PCI/G	1	6.7	15.4	G	PCI/G	PR	

7000-0000-012-C4C-04	MSR#05-1811	140051014	441350	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.595	0.137	PCI/G	0		8/7/2005	38566.82083	9:54	0.0952	PCI/G	0.044	PCI/G	1	6.8	165	G	PCI/G	PR	
7000-0000-012-C4C-04	MSR#05-1811	140051014	441350	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0429	0.0568	PCI/G	0	U	8/7/2005	38566.82083	9:54	0.114	PCI/G	0.0552	PCI/G	1	6.8	165	G	PCI/G	PR	
7000-0000-012-C4C-04	MSR#05-1811	140051014	441350	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.402	0.247	PCI/G	0		8/7/2005	38566.82083	9:54	0.208	PCI/G	0.097	PCI/G	1	6.8	165	G	PCI/G	PR	
7000-0000-012-C4C-04	MSR#05-1811	140051014	441350	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.529	0.0874	PCI/G	0		8/7/2005	38566.82083	9:54	0.0506	PCI/G	0.0238	PCI/G	1	6.8	165	G	PCI/G	PR	
7000-0000-012-C4C-04	MSR#05-1811	140051014	441350	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0193	0.0316	PCI/G	0	U	8/7/2005	38566.82083	9:54	0.0388	PCI/G	0.0184	PCI/G	1	6.8	165	G	PCI/G	PR	
7000-0000-012-C4C-04	MSR#05-1811	140051014	441350	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.00156	0.0194	PCI/G	0	U	8/7/2005	38566.82083	9:54	0.0307	PCI/G	0.0145	PCI/G	1	6.8	165	G	PCI/G	PR	
7000-0000-012-C4C-04	MSR#05-1811	140051014	441350	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.00688	0.0181	PCI/G	0	U	8/7/2005	38566.82083	9:54	0.0343	PCI/G	0.0157	PCI/G	1	6.8	165	G	PCI/G	PR	
7000-0000-012-C4C-04	MSR#05-1811	140051014	441350	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0106	0.0422	PCI/G	0	U	8/7/2005	38566.82083	9:54	0.0784	PCI/G	0.0376	PCI/G	1	6.8	165	G	PCI/G	PR	
7000-0000-012-C4C-04	MSR#05-1811	140051014	441350	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0116	0.0639	PCI/G	0	U	8/7/2005	38566.82083	9:54	0.0974	PCI/G	0.0449	PCI/G	1	6.8	165	G	PCI/G	PR	
7000-0000-012-C4C-04	MSR#05-1811	140051014	441350	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	-0.0195	0.042	PCI/G	0	U	8/7/2005	38566.82083	9:54	0.0775	PCI/G	0.0375	PCI/G	1	6.8	165	G	PCI/G	PR	
7000-0000-012-C4C-04	MSR#05-1811	140051014	441350	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.497	0.0614	PCI/G	0		8/7/2005	38566.82083	9:54	0.0425	PCI/G	0.0204	PCI/G	1	6.8	165	G	PCI/G	PR	
7000-0000-012-C4C-04	MSR#05-1811	140051014	441350	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.601	0.0907	PCI/G	0		8/7/2005	38566.82083	9:54	0.0532	PCI/G	0.0254	PCI/G	1	6.8	165	G	PCI/G	PR	
7000-0000-012-C4C-04	MSR#05-1811	140051014	441350	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.00531	0.0175	PCI/G	0	U	8/7/2005	38566.82083	9:54	0.0309	PCI/G	0.0144	PCI/G	1	6.8	165	G	PCI/G	PR	
7000-0000-012-C4C-04	MSR#05-1811	140051014	441350	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0121	0.0153	PCI/G	0	U	8/7/2005	38566.82083	9:54	0.0292	PCI/G	0.0138	PCI/G	1	6.8	165	G	PCI/G	PR	
7000-0000-012-C4C-04	MSR#05-1811	140051014	441350	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	8.07	0.829	PCI/G	0		8/7/2005	38566.82083	9:54	0.233	PCI/G	0.103	PCI/G	1	6.8	165	G	PCI/G	PR	
7000-0000-012-C4C-04	MSR#05-1811	140051014	441350	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.529	0.0874	PCI/G	0		8/7/2005	38566.82083	9:54	0.0506	PCI/G	0.0238	PCI/G	1	6.8	165	G	PCI/G	PR	
7000-0000-012-C4C-04	MSR#05-1811	140051014	441350	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00718	0.013	PCI/G	0	U	8/7/2005	38566.82083	9:54	0.0244	PCI/G	0.0116	PCI/G	1	6.8	165	G	PCI/G	PR	
7000-0000-012-C4C-04	MSR#05-1811	140051014	443733	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.000275	0.00652	PCI/G	0	U	11/7/2005	38567.12639	10:14	0.0115	PCI/G	0.00549	PCI/G	1	6.8	18.3	G	PCI/G	PR	
7000-0000-012-C4C-04	MSR#05-1811	140051014	441350	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.135	0.0396	PCI/G	0		8/7/2005	38566.82083	9:54	0.0276	PCI/G	0.013	PCI/G	1	6.8	165	G	PCI/G	PR	
7000-0000-012-C4C-04	MSR#05-1811	140051014	441385	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	1.05	1.7	PCI/G	0	U		29/07/2005	9:26	2.88	PCI/G	1.39	PCI/G	1	6.8	15	G	PCI/G	PR	
7000-0000-013-C1C-01	MSR#05-1811	140051015	441350	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.622	0.152	PCI/G	0		8/7/2005	38566.82083	9:54	0.0903	PCI/G	0.0414	PCI/G	1	8.1	155	G	PCI/G	PR	
7000-0000-013-C1C-01	MSR#05-1811	140051015	441350	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0708	0.0717	PCI/G	0	U	8/7/2005	38566.82083	9:54	0.122	PCI/G	0.0591	PCI/G	1	8.1	155	G	PCI/G	PR	
7000-0000-013-C1C-01	MSR#05-1811	140051015	441350	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.379	0.257	PCI/G	0		8/7/2005	38566.82083	9:54	0.224	PCI/G	0.105	PCI/G	1	8.1	155	G	PCI/G	PR	
7000-0000-013-C1C-01	MSR#05-1811	140051015	441350	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.539	0.0887	PCI/G	0		8/7/2005	38566.82083	9:54	0.0523	PCI/G	0.0246	PCI/G	1	8.1	155	G	PCI/G	PR	
7000-0000-013-C1C-01	MSR#05-1811	140051015	441350	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0124	0.0297	PCI/G	0	U	8/7/2005	38566.82083	9:54	0.0373	PCI/G	0.0175	PCI/G	1	8.1	155	G	PCI/G	PR	
7000-0000-013-C1C-01	MSR#05-1811	140051015	441350	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.00348	0.0353	PCI/G	0	U	8/7/2005	38566.82083	9:54	0.0274	PCI/G	0.0128	PCI/G	1	8.1	155	G	PCI/G	PR	
7000-0000-013-C1C-01	MSR#05-1811	140051015	441350	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.00944	0.0164	PCI/G	0	U	8/7/2005	38566.82083	9:54	0.0281	PCI/G	0.0126	PCI/G	1	8.1	155	G	PCI/G	PR	
7000-0000-013-C1C-01	MSR#05-1811	140051015	441350	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0244	0.0417	PCI/G	0	U	8/7/2005	38566.82083	9:54	0.0703	PCI/G	0.0334	PCI/G	1	8.1	155	G	PCI/G	PR	
7000-0000-013-C1C-01	MSR#05-1811	140051015	441350	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0186	0.051	PCI/G	0	U	8/7/2005	38566.82083	9:54	0.0966	PCI/G	0.0444	PCI/G	1	8.1	155	G	PCI/G	PR	
7000-0000-013-C1C-01	MSR#05-1811	140051015	441350	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0391	0.0406	PCI/G	0	U	8/7/2005	38566.82083	9:54	0.0792	PCI/G	0.0383	PCI/G	1	8.1	155	G	PCI/G	PR	
7000-0000-013-C1C-01	MSR#05-1811	140051015	441350	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.568	0.0682	PCI/G	0		8/7/2005	38566.82083	9:54	0.0422	PCI/G	0.0202	PCI/G	1	8.1	155	G	PCI/G	PR	
7000-0000-013-C1C-01	MSR#05-1811	140051015	441350	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.539	0.0821	PCI/G	0		8/7/2005	38566.82083	9:54	0.0611	PCI/G	0.0293	PCI/G	1	8.1	155	G	PCI/G	PR	
7000-0000-013-C1C-01	MSR#05-1811	140051015	441350	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.00353	0.0187	PCI/G	0	U	8/7/2005	38566.82083	9:54	0.0336	PCI/G	0.0157	PCI/G	1	8.1	155	G	PCI/G	PR	
7000-0000-013-C1C-01	MSR#05-1811	140051015	441350	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.00142	0.0168	PCI/G	0	U	8/7/2005	38566.82083	9:54	0.0261	PCI/G	0.0123	PCI/G	1	8.1	155	G	PCI/G	PR	
7000-0000-013-C1C-01	MSR#05-1811	140051015	441350	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.09	0.767	PCI/G	0		8/7/2005	38566.82083	9:54	0.276	PCI/G	0.124	PCI/G	1	8.1	155	G	PCI/G	PR	
7000-0000-013-C1C-01	MSR#05-1811	140051015	441350	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.539	0.0887	PCI/G	0		8/7/2005	38566.82083	9:54	0.0523	PCI/G	0.0246	PCI/G	1	8.1	155	G	PCI/G	PR	
7000-0000-013-C1C-01	MSR#05-1811	140051015	441350	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	4.15E-05	0.0126	PCI/G	0	U	8/7/2005	38566.82083	9:54	0.0234	PCI/G	0.011	PCI/G	1	8.1	155	G	PCI/G	PR	
7000-0000-013-C1C-01	MSR#05-1811	140051015	443733	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.0022	0.00517	PCI/G	0	U	11/7/2005	38567.12639	10:14	0.00885	PCI/G	0.00425	PCI/G	1	8.1	18.4	G	PCI/G	PR	
7000-0000-013-C1C-01	MSR#05-1811	140051015	441350	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.146	0.0383	PCI/G	0		8/7/2005	38566.82083	9:54	0.0307	PCI/G	0.0145	PCI/G	1	8.1	155	G	PCI/G	PR	
7000-0000-013-C1C-01	MSR#05-1811	140051015	441385	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-0.286	1.54	PCI/G	0	U		29/07/2005	9:58	2.7	PCI/G	1.3	PCI/G	1	8.1	15.6	G	PCI/G	PR	
7000-0000-013-C1C-02	MSR#05-1811	140051016	441350	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.546	0.135	PCI/G	0		8/7/2005	38566.82083	9:55	0.0927	PCI/G	0.0426	PCI/G	1	7.8	145	G	PCI/G	PR	
7000-0000-013-C1C-02	MSR#05-1811	140051016	441350	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0709	0.0913	PCI/G	0	U	8/7/2005	38566.82083	9:55	0.112	PCI/G	0.0541	PCI/G	1	7.8	145	G	PCI/G	PR	
7000-0000-013-C1C-02	MSR#05-1811	140051016	441350	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.187	0.254	PCI/G	0	U	8/7/2005	38566.82083	9:55	0.218	PCI/G	0.102	PCI/G	1	7.8	145	G	PCI/G	PR	
7000-0000-013-C1C-02	MSR#05-1811	140051016	441350	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.507	0.0886	PCI/G	0		8/7/2005	38566.82083	9:55	0.051	PCI/G	0.024	PCI/G	1	7.8	145	G	PCI/G	PR	
7000-0000-013-C1C-02	MSR#05-1811	140051016	441350	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0	0.0309	PCI/G	0	UUI	8/7/2005	38566.82083	9:55	0.0408	PCI/G	0.0193	PCI/G	1	7.8	145	G	PCI/G	PR	
7000-0000-013-C1C-02	MSR#05-1811	140051016	441350	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.0017	0.0168	PCI/G	0	U	8/7/2005	38566.82083	9:55	0.0294	PCI/G	0.0138	PCI/G	1	7.8	145	G	PCI/G	PR	
7000-0000-013-C1C-02	MSR#05-1811	140051016	441350	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.00486	0.0174	PCI/G	0	U	8/7/2005	38566.82083	9:55	0.0326	PCI/G	0.0149	PCI/G	1	7.8	145	G	PCI/G	PR	
7000-0000-013-C1C-02	MSR#05-1811	140051016	441350	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.00948	0.0436	PCI/G	0	U	8/7/2005	38566.82083	9:55	0.0787	PCI/G	0.0375	PCI/G	1	7.8	145	G	PCI/G	PR	
7000-0000-013-C1C-02	MSR#05-1811	140051016	441350	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0123	0.0518	PCI/G	0	U	8/7/2005	38566.82083	9:55	0.0959	PCI/G	0.0441	PCI/G	1	7.8	145	G	PCI/G	PR	
7000-0000-013-C1C-02	MSR#05-1811	140051016	441350	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0389	0.0452	PCI/G	0	U	8/7/2005	38566.82083	9:55	0.084	PCI/G	0.0407	PCI/G	1	7.8	145	G	PCI/G	PR	
7000-0000-013-C1C-02	MSR#05-1811	140051016	441350	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.482	0.0652	PCI/G	0		8/7/2005	38566.82083	9:55	0.0437	PCI/G	0.021	PCI/G	1	7.8	145	G	PCI/G	PR	
7000-0000-013-C1C-02	MSR#05-1811	140051016	441350	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.569	0.0922	PCI/G	0		8/7/2005	38566.82083	9:55	0.0556	PCI/G	0.0265	PCI/G	1	7.8	145	G	PCI/G	PR	
7000-0000-013-C1C-02	MSR#05-1811	140051016	441350	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.00526	0.0165	PCI/G	0	U	8/7/2005	38566.82083	9:55	0.028	PCI/G	0.013	PCI/G	1	7.8	145	G	PCI/G	PR	
7000-0000-013-C1C-02	MSR#05-1811	140051016	441350	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.00324	0.0165	PCI/G	0	U	8/7/2005	38566.82083	9:55	0.0284	PCI/G	0.0134	PCI/G	1	7.8	145	G	PCI/G	PR	
7000-0000-013-C1C-02	MSR#05-1811	140051016	441350	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	8.16	0.947	PCI/G	0		8/7/2005	38566.82083	9:55	0.311	PCI/G	0.141	PCI/G	1	7.8	145	G	PCI/G	PR	
7000-0000-013-C1C-02	MSR#05-1811	140051016	441350	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.507	0.0886	PCI/G	0		8/7/2005	38566.82083	9:55	0.051	PCI/G	0.024	PCI/G	1	7.8	145	G	PCI/G	PR	
7000-0000-013-C1C-02	MSR#05-1811	140051016	441350	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00334	0.015	PCI/G	0	U	8/7/2005	38566.82083	9:55	0.0268	PCI/G	0.0127	PCI/G	1	7.8	145	G	PCI/G	PR	
7000-0000-013-C1C-02	MSR#05-1811	140051016	443733	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00282	0.00401	PCI/G	0	U	11/7/2005	38567.12639	10:32	0.00728	PCI/G	0.00345	PCI/G	1	7.8	18.4	G	PCI/G	PR	
7000-0000-013-C1C-02	MSR#05-1811	140051016	441350	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.178	0.0391	PCI/G	0		8/7/2005	38566.82083	9:55	0.0259	PCI/G	0.0121	PCI/G	1	7.8	145	G	PCI/G	PR	
7000-0000-013-C1C-02	MSR#05-1811	140051016	441385	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-0.868	1.42	PCI/G	0	U		29/07/2005	10:30	2.54	PCI/G	1.23	PCI/G	1	7.8	16.8	G	PCI/G	PR	
7000-0000-013-C2C-03	MSR#05-1811	140051017	441350	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.443	0.231	PCI/G	0		8/7/2005	38566.82083	9:56	0.144	PCI/G	0.0668	PCI/G	1	8	143	G	PCI/G	PR	
7000-0000-013-C2C-03	MSR#05-1811	140051017	441350	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0141	0.0261	PCI/G	0	U	8/7/2005	38566.82083	9:56	0.0483	PCI/G	0.0234	PCI/G	1	8	143	G	PCI/G	PR	
7000-0000-013-C2C-03	MSR#05-1811	140051017	441350	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.24	0.24	PCI/G	0	U	8/7/2005	38566.82083	9:56	0.355	PCI/G	0.167	PCI/G	1	8	143	G	PCI/G	PR	
7000-0000-013-C2C-03	MSR#05-1811	140051017	441350	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.566	0.104	PCI/G	0		8/7/2005	38566.82083	9:56	0.0644	PCI/G	0.0301	PCI/G	1	8	143	G	PCI/G	PR	
7000-0000-013-C2C-03	MSR#05-1811	140051017	441350	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0229	0.0281	PCI/G	0	U	8/7/2005	38566.82083	9:56	0.0507	PCI/G	0.0238	PCI/G	1	8	143	G	PCI/G	PR	
7000-0000-013-C2C-03	MSR#05-1811	140051017	441350	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.00767	0.0179	PCI/G	0	U	8/7/2005	38566.82083	9:56	0.0321	PCI/G	0.0148	PCI/G	1	8	143	G	PCI/G	PR	
7000-0000-013-C2C-03	MSR#05-1811	140051017	441350	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.0148	0.0227	PCI/G	0	U	8/7/2005	38566.82083	9:56	0.0395	PCI/G	0.0178	PCI/G	1	8	143	G	PCI/G	PR	
7000-0000-013-C2C-03	MSR#05-1811	140051017	441350	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0451	0.0438	PCI/G	0	U	8/7/2005	38566.82083	9:56	0.0732	PCI/G	0.0344	PCI/G	1	8	143	G	PCI/G	PR	
7000-0000-013-C2C-03	MSR#05-1811	140051017	441350	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0614	0.0492	PCI/G	0	U	8/7/2005	38566.82083	9:56	0.113	PCI/G	0.051	PCI/G	1	8	143	G	PCI/G	PR	
7000-0000-013-C2C-03	MSR#05-1811	140051017	441350	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0702	0.0581	PCI/G	0	U	8/7/2005	38566.82083	9:56	0.0723	PCI/G	0.0348	PCI/G	1	8	143	G	PCI/G	PR	
7000-0000-013-C2C-03	MSR#05-1811	140051017	441350	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.535	0.0676	PCI/G	0		8/7/2005	38566.82083	9:56	0.0432	PCI/G	0.0206	PCI/G	1	8	143	G	PCI/G	PR	
7000-0000-013-C2C-03	MSR#05-1811	140051017	441350	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.587	0.0882	PCI/G	0		8/7/2005	38566.82083	9:56	0.0588	PCI/G	0.0278	PCI/G	1	8	143	G	PCI/G	PR	
7000-0000-013-C2C-03	MSR#05-1811	140051017	441350	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0109	0.0226	PCI/G	0	U	8/7/2005	38566.82083	9:56	0.0426	PCI/G	0.0199	PCI/G	1	8	143	G	PCI/G	PR	
7000-0000-013-C2C-03	MSR#05-1811	140051017	441350	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00687	0.0207	PCI/G	0	U	8/7/2005	38566.82083	9:56	0.0347	PCI/G	0.0163	PCI/G	1	8	143	G	PCI/G	PR	
7000-0000-013-C2C-03	MSR#05-1811	140051017	441350	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	9.02	1.06	PCI/G	0		8/7/2005	38566.82083	9:56	0.415	PCI/G	0.188	PCI/G	1	8	143	G	PCI/G	PR	
7000-0000-013-C2C-03	MSR#05-1811	140051017	441350	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.566	0.104	PCI/G	0		8/7/2005	38566.82083	9:56	0.0644	PCI/G	0.0301	PCI/G	1	8	143	G	PCI/G	PR	
7000-0000-013-C2C-03	MSR#05-1811	140051017	441350	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.0102	0.0175	PCI/G	0	U	8/7/2005	38566.82083	9:56	0.0296	PCI/G	0.014	PCI/G	1	8	143	G	PCI/G	PR	
7000-0000-013-C2C-03	MSR#05-1811	140051017	443733	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.00155	0.00341	PCI/G	0	U	11/7/2005	38567.12639	10:32	0.00674	PCI/G	0.00319	PCI/G	1	8	18.5	G	PCI/G	PR	
7000-0000-013-C2C-03	MSR#05-1811	140051017	441350	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.172	0.045	PCI/G	0		8/7/2005	38566.82083	9:56	0.036	PCI/G	0.0169	PCI/G	1	8	143	G	PCI/G	PR	
7000-0000-013-C2C-03	MSR#05-1811	140051017	441385	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-1.06	1.5	PCI/G	0	U		29/07/2005	11:02	2.7	PCI/G	1.3	PCI/G	1	8	15.8	G	PCI/G	PR	
7000-0000-013-C2C-04	MSR#05-1811	140051018	441350	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.477	0.132	PCI/G	0		8/7/2005	38566.82083	11:13	0.106	PCI/G	0.0489	PCI/G	1	9.2	149	G	PCI/G	PR	
7000-0000-013-C2C-04	MSR#05-1811	140051018	441350	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0022	0.0757	PCI/G	0	U	8/7/2005	38566.82083	11:13	0.124	PCI/G	0.0599	PCI/G	1	9.2	149	G	PCI/G	PR	
7000-0000-013-C2C-04	MSR#05-1811	140051018	441350	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.471	0.221	PCI/G	0		8/7/2005	38566.82083	11:13	0.234	PCI/G	0.109	PCI/G	1	9.2	149	G	PCI/G	PR	
7000-0000-013-C2C-04	MSR#05-1811	140051018	441350	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.426	0.0895	PCI/G	0		8/7/2005	38566.82083	11:13	0.0561	PCI/G	0.0264	PCI/G	1	9.2	149	G	PCI/G	PR	
7000-0000-013-C2C-04	MSR#05-1811	140051018	441350	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0366	0.0218	PCI/G	0	U	8/7/2005	38566.82083	11:13	0.0366	PCI/G	0.0172	PCI/G	1	9.2	149	G	PCI/G	PR	
7000-0000-013-C2C-04	MSR#05-1811	140051018	441350	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.0166	0.0198	PCI/G	0	U	8/7/2005	38566.82083	11:13	0.0333	PCI/G	0.0157	PCI/G	1	9.2	149	G	PCI/G	PR	
7000-0000-013-C2C-04	MSR#05-1811	140051018	441350	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0174	0.018	PCI/G	0	U	8/7/2005	38566.82083	11:13	0.0365	PCI/G	0.0167	PCI/G	1	9.2	149	G	PCI/G	PR	
7000-0000-013-C2C-04	MSR#05-1811	140051018	441350	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0118	0.0414	PCI/G	0	U	8/7/2005	38566.82083	11:13	0.0743	PCI/G	0.0354	PCI/G	1	9.2	149	G	PCI/G	PR	
7000-0000-013-C2C-04	MSR#05-1811	140051018	441350	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.000723	0.0526	PCI/G	0	U	8/7/2005	38566.82083	11:13	0.0964	PCI/G	0.044	PCI/G	1	9.2	149	G	PCI/G	PR	
7000-0000-013-C2C-04	MSR#05-1811	140051018	441350	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0523	0.0486	PCI/G	0	U	8/7/2005	38566.82083	11:13	0.0902	PCI/G	0.0438	PCI/G	1	9.2	149	G	PCI/G	PR	

7000-0000-013-C2C-04	MSR#05-1811	140051018	441350	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.576	0.0682	PCI/G	0		8/7/2005	38566.82083	11:13	0.0421	PCI/G	0.0202	PCI/G	1	9.2	149	G	PCI/G	PR	
7000-0000-013-C2C-04	MSR#05-1811	140051018	441350	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.542	0.0844	PCI/G	0		8/7/2005	38566.82083	11:13	0.0575	PCI/G	0.0275	PCI/G	1	9.2	149	G	PCI/G	PR	
7000-0000-013-C2C-04	MSR#05-1811	140051018	441350	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0243	0.0262	PCI/G	0	U	8/7/2005	38566.82083	11:13	0.0311	PCI/G	0.0144	PCI/G	1	9.2	149	G	PCI/G	PR	
7000-0000-013-C2C-04	MSR#05-1811	140051018	441350	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00252	0.0165	PCI/G	0	U	8/7/2005	38566.82083	11:13	0.0293	PCI/G	0.0138	PCI/G	1	9.2	149	G	PCI/G	PR	
7000-0000-013-C2C-04	MSR#05-1811	140051018	441350	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.83	0.806	PCI/G	0		8/7/2005	38566.82083	11:13	0.23	PCI/G	0.0997	PCI/G	1	9.2	149	G	PCI/G	PR	
7000-0000-013-C2C-04	MSR#05-1811	140051018	441350	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.426	0.0895	PCI/G	0		8/7/2005	38566.82083	11:13	0.0561	PCI/G	0.0264	PCI/G	1	9.2	149	G	PCI/G	PR	
7000-0000-013-C2C-04	MSR#05-1811	140051018	441350	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.012	0.0136	PCI/G	0	U	8/7/2005	38566.82083	11:13	0.026	PCI/G	0.0123	PCI/G	1	9.2	149	G	PCI/G	PR	
7000-0000-013-C2C-04	MSR#05-1811	140051018	443733	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00226	0.00399	PCI/G	0	U	11/7/2005	38567.12639	10:32	0.00732	PCI/G	0.00349	PCI/G	1	9.2	18.4	G	PCI/G	PR	
7000-0000-013-C2C-04	MSR#05-1811	140051018	441350	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.19	0.0418	PCI/G	0		8/7/2005	38566.82083	11:13	0.0262	PCI/G	0.0122	PCI/G	1	9.2	149	G	PCI/G	PR	
7000-0000-013-C2C-04	MSR#05-1811	140051018	441385	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	0.0325	1.59	PCI/G	0	U		29/07/2005	11:33	2.76	PCI/G	1.33	PCI/G	1	9.2	15.3	G	PCI/G	PR	
7000-0000-018-C1C-01	MSR#05-1811	140051019	441350	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.581	0.175	PCI/G	0		8/7/2005	38566.82083	11:14	0.125	PCI/G	0.0579	PCI/G	1	6.6	149	G	PCI/G	PR	
7000-0000-018-C1C-01	MSR#05-1811	140051019	441350	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.153	0.203	PCI/G	0	U	8/7/2005	38566.82083	11:14	0.23	PCI/G	0.111	PCI/G	1	6.6	149	G	PCI/G	PR	
7000-0000-018-C1C-01	MSR#05-1811	140051019	441350	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.465	0.283	PCI/G	0		8/7/2005	38566.82083	11:14	0.254	PCI/G	0.118	PCI/G	1	6.6	149	G	PCI/G	PR	
7000-0000-018-C1C-01	MSR#05-1811	140051019	441350	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.631	0.109	PCI/G	0		8/7/2005	38566.82083	11:14	0.0605	PCI/G	0.0284	PCI/G	1	6.6	149	G	PCI/G	PR	
7000-0000-018-C1C-01	MSR#05-1811	140051019	441350	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0	0.0323	PCI/G	0	UUI	8/7/2005	38566.82083	11:14	0.0443	PCI/G	0.0208	PCI/G	1	6.6	149	G	PCI/G	PR	
7000-0000-018-C1C-01	MSR#05-1811	140051019	441350	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.000648	0.0185	PCI/G	0	U	8/7/2005	38566.82083	11:14	0.0341	PCI/G	0.016	PCI/G	1	6.6	149	G	PCI/G	PR	
7000-0000-018-C1C-01	MSR#05-1811	140051019	441350	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-5.19E-05	0.019	PCI/G	0	U	8/7/2005	38566.82083	11:14	0.0346	PCI/G	0.0156	PCI/G	1	6.6	149	G	PCI/G	PR	
7000-0000-018-C1C-01	MSR#05-1811	140051019	441350	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0159	0.0527	PCI/G	0	U	8/7/2005	38566.82083	11:14	0.0918	PCI/G	0.0438	PCI/G	1	6.6	149	G	PCI/G	PR	
7000-0000-018-C1C-01	MSR#05-1811	140051019	441350	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.00258	0.0599	PCI/G	0	U	8/7/2005	38566.82083	11:14	0.107	PCI/G	0.0489	PCI/G	1	6.6	149	G	PCI/G	PR	
7000-0000-018-C1C-01	MSR#05-1811	140051019	441350	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.033	0.0597	PCI/G	0	U	8/7/2005	38566.82083	11:14	0.113	PCI/G	0.0546	PCI/G	1	6.6	149	G	PCI/G	PR	
7000-0000-018-C1C-01	MSR#05-1811	140051019	441350	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.506	0.0745	PCI/G	0		8/7/2005	38566.82083	11:14	0.0614	PCI/G	0.0297	PCI/G	1	6.6	149	G	PCI/G	PR	
7000-0000-018-C1C-01	MSR#05-1811	140051019	441350	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.653	0.105	PCI/G	0		8/7/2005	38566.82083	11:14	0.0692	PCI/G	0.0331	PCI/G	1	6.6	149	G	PCI/G	PR	
7000-0000-018-C1C-01	MSR#05-1811	140051019	441350	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.0153	0.0215	PCI/G	0	U	8/7/2005	38566.82083	11:14	0.0366	PCI/G	0.017	PCI/G	1	6.6	149	G	PCI/G	PR	
7000-0000-018-C1C-01	MSR#05-1811	140051019	441350	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.0124	0.0159	PCI/G	0	U	8/7/2005	38566.82083	11:14	0.0274	PCI/G	0.0127	PCI/G	1	6.6	149	G	PCI/G	PR	
7000-0000-018-C1C-01	MSR#05-1811	140051019	441350	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.49	0.925	PCI/G	0		8/7/2005	38566.82083	11:14	0.334	PCI/G	0.15	PCI/G	1	6.6	149	G	PCI/G	PR	
7000-0000-018-C1C-01	MSR#05-1811	140051019	441350	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.631	0.109	PCI/G	0		8/7/2005	38566.82083	11:14	0.0605	PCI/G	0.0284	PCI/G	1	6.6	149	G	PCI/G	PR	
7000-0000-018-C1C-01	MSR#05-1811	140051019	441350	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.0156	0.0178	PCI/G	0	U	8/7/2005	38566.82083	11:14	0.0293	PCI/G	0.0139	PCI/G	1	6.6	149	G	PCI/G	PR	
7000-0000-018-C1C-01	MSR#05-1811	140051019	443733	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00564	0.00385	PCI/G	0	U	11/7/2005	38567.12639	10:32	0.00665	PCI/G	0.00315	PCI/G	1	6.6	18.1	G	PCI/G	PR	
7000-0000-018-C1C-01	MSR#05-1811	140051019	441350	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.184	0.0452	PCI/G	0		8/7/2005	38566.82083	11:14	0.0348	PCI/G	0.0164	PCI/G	1	6.6	149	G	PCI/G	PR	
7000-0000-018-C1C-01	MSR#05-1811	140051019	441385	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-0.142	1.48	PCI/G	0	U		30/07/2005	12:05	2.59	PCI/G	1.25	PCI/G	1	6.6	16	G	PCI/G	PR	
7000-0000-018-C1C-02	MSR#05-1811	140051020	441350	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.416	0.106	PCI/G	0		8/7/2005	38566.82083	11:15	0.0839	PCI/G	0.0383	PCI/G	1	6.5	161	G	PCI/G	PR	
7000-0000-018-C1C-02	MSR#05-1811	140051020	441350	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0669	0.0915	PCI/G	0	U	8/7/2005	38566.82083	11:15	0.159	PCI/G	0.0767	PCI/G	1	6.5	161	G	PCI/G	PR	
7000-0000-018-C1C-02	MSR#05-1811	140051020	441350	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.332	0.219	PCI/G	0		8/7/2005	38566.82083	11:15	0.185	PCI/G	0.0854	PCI/G	1	6.5	161	G	PCI/G	PR	
7000-0000-018-C1C-02	MSR#05-1811	140051020	441350	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.482	0.076	PCI/G	0		8/7/2005	38566.82083	11:15	0.0514	PCI/G	0.0242	PCI/G	1	6.5	161	G	PCI/G	PR	
7000-0000-018-C1C-02	MSR#05-1811	140051020	441350	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0101	0.0184	PCI/G	0	U	8/7/2005	38566.82083	11:15	0.0342	PCI/G	0.016	PCI/G	1	6.5	161	G	PCI/G	PR	
7000-0000-018-C1C-02	MSR#05-1811	140051020	441350	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.00179	0.0147	PCI/G	0	U	8/7/2005	38566.82083	11:15	0.0264	PCI/G	0.0123	PCI/G	1	6.5	161	G	PCI/G	PR	
7000-0000-018-C1C-02	MSR#05-1811	140051020	441350	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.0193	0.0155	PCI/G	0	U	8/7/2005	38566.82083	11:15	0.0237	PCI/G	0.0104	PCI/G	1	6.5	161	G	PCI/G	PR	
7000-0000-018-C1C-02	MSR#05-1811	140051020	441350	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0199	0.0391	PCI/G	0	U	8/7/2005	38566.82083	11:15	0.0716	PCI/G	0.0341	PCI/G	1	6.5	161	G	PCI/G	PR	
7000-0000-018-C1C-02	MSR#05-1811	140051020	441350	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.00105	0.0447	PCI/G	0	U	8/7/2005	38566.82083	11:15	0.0822	PCI/G	0.0372	PCI/G	1	6.5	161	G	PCI/G	PR	
7000-0000-018-C1C-02	MSR#05-1811	140051020	441350	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.000544	0.04	PCI/G	0	U	8/7/2005	38566.82083	11:15	0.0772	PCI/G	0.0372	PCI/G	1	6.5	161	G	PCI/G	PR	
7000-0000-018-C1C-02	MSR#05-1811	140051020	441350	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.426	0.0577	PCI/G	0		8/7/2005	38566.82083	11:15	0.0404	PCI/G	0.0194	PCI/G	1	6.5	161	G	PCI/G	PR	
7000-0000-018-C1C-02	MSR#05-1811	140051020	441350	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.493	0.0824	PCI/G	0		8/7/2005	38566.82083	11:15	0.048	PCI/G	0.0227	PCI/G	1	6.5	161	G	PCI/G	PR	
7000-0000-018-C1C-02	MSR#05-1811	140051020	441350	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.00622	0.015	PCI/G	0	U	8/7/2005	38566.82083	11:15	0.0257	PCI/G	0.0119	PCI/G	1	6.5	161	G	PCI/G	PR	
7000-0000-018-C1C-02	MSR#05-1811	140051020	441350	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.00735	0.0137	PCI/G	0	U	8/7/2005	38566.82083	11:15	0.0236	PCI/G	0.011	PCI/G	1	6.5	161	G	PCI/G	PR	
7000-0000-018-C1C-02	MSR#05-1811	140051020	441350	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	8.48	0.893	PCI/G	0		8/7/2005	38566.82083	11:15	0.233	PCI/G	0.103	PCI/G	1	6.5	161	G	PCI/G	PR	
7000-0000-018-C1C-02	MSR#05-1811	140051020	441350	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.482	0.076	PCI/G	0		8/7/2005	38566.82083	11:15	0.0514	PCI/G	0.0242	PCI/G	1	6.5	161	G	PCI/G	PR	
7000-0000-018-C1C-02	MSR#05-1811	140051020	441350	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.000347	0.012	PCI/G	0	U	8/7/2005	38566.82083	11:15	0.0226	PCI/G	0.0107	PCI/G	1	6.5	161	G	PCI/G	PR	
7000-0000-018-C1C-02	MSR#05-1811	140051020	443733	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.00508	0.00361	PCI/G	0	U	11/7/2005	38567.12639	10:32	0.00747	PCI/G	0.00356	PCI/G	1	6.5	18.2	G	PCI/G	PR	
7000-0000-018-C1C-02	MSR#05-1811	140051020	441350	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.11	0.0266	PCI/G	0		8/7/2005	38566.82083	11:15	0.0235	PCI/G	0.0109	PCI/G	1	6.5	161	G	PCI/G	PR	
7000-0000-018-C1C-02	MSR#05-1811	140051020	441385	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-0.372	1.59	PCI/G	0	U		30/07/2005	12:37	2.79	PCI/G	1.35	PCI/G	1	6.5	15	G	PCI/G	PR	
7000-0000-018-C3C-03	MSR#05-1811	140051021	441351	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.557	0.165	PCI/G	0		8/7/2005	38535.83819	4:09	0.126	PCI/G	0.0588	PCI/G	1	6.6	153	G	PCI/G	PR	
7000-0000-018-C3C-03	MSR#05-1811	140051021	441351	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0197	0.0352	PCI/G	0	U	8/7/2005	38535.83819	4:09	0.058	PCI/G	0.0283	PCI/G	1	6.6	153	G	PCI/G	PR	
7000-0000-018-C3C-03	MSR#05-1811	140051021	441351	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.281	0.213	PCI/G	0	U	8/7/2005	38535.83819	4:09	0.34	PCI/G	0.162	PCI/G	1	6.6	153	G	PCI/G	PR	
7000-0000-018-C3C-03	MSR#05-1811	140051021	441351	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.626	0.112	PCI/G	0		8/7/2005	38535.83819	4:09	0.0831	PCI/G	0.0398	PCI/G	1	6.6	153	G	PCI/G	PR	
7000-0000-018-C3C-03	MSR#05-1811	140051021	441351	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0303	0.0342	PCI/G	0	U	8/7/2005	38535.83819	4:09	0.056	PCI/G	0.0268	PCI/G	1	6.6	153	G	PCI/G	PR	
7000-0000-018-C3C-03	MSR#05-1811	140051021	441351	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.002	0.024	PCI/G	0	U	8/7/2005	38535.83819	4:09	0.0431	PCI/G	0.0205	PCI/G	1	6.6	153	G	PCI/G	PR	
7000-0000-018-C3C-03	MSR#05-1811	140051021	441351	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.00569	0.0246	PCI/G	0	U	8/7/2005	38535.83819	4:09	0.0451	PCI/G	0.021	PCI/G	1	6.6	153	G	PCI/G	PR	
7000-0000-018-C3C-03	MSR#05-1811	140051021	441351	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.00291	0.0587	PCI/G	0	U	8/7/2005	38535.83819	4:09	0.105	PCI/G	0.0506	PCI/G	1	6.6	153	G	PCI/G	PR	
7000-0000-018-C3C-03	MSR#05-1811	140051021	441351	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0292	0.0787	PCI/G	0	U	8/7/2005	38535.83819	4:09	0.128	PCI/G	0.0596	PCI/G	1	6.6	153	G	PCI/G	PR	
7000-0000-018-C3C-03	MSR#05-1811	140051021	441351	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0214	0.0708	PCI/G	0	U	8/7/2005	38535.83819	4:09	0.0926	PCI/G	0.045	PCI/G	1	6.6	153	G	PCI/G	PR	
7000-0000-018-C3C-03	MSR#05-1811	140051021	441351	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.463	0.0718	PCI/G	0		8/7/2005	38535.83819	4:09	0.0568	PCI/G	0.0275	PCI/G	1	6.6	153	G	PCI/G	PR	
7000-0000-018-C3C-03	MSR#05-1811	140051021	441351	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.545	0.101	PCI/G	0		8/7/2005	38535.83819	4:09	0.0758	PCI/G	0.0365	PCI/G	1	6.6	153	G	PCI/G	PR	
7000-0000-018-C3C-03	MSR#05-1811	140051021	441351	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.000457	0.0252	PCI/G	0	U	8/7/2005	38535.83819	4:09	0.0447	PCI/G	0.0212	PCI/G	1	6.6	153	G	PCI/G	PR	
7000-0000-018-C3C-03	MSR#05-1811	140051021	441351	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00727	0.0218	PCI/G	0	U	8/7/2005	38535.83819	4:09	0.0398	PCI/G	0.019	PCI/G	1	6.6	153	G	PCI/G	PR	
7000-0000-018-C3C-03	MSR#05-1811	140051021	441351	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	8.12	0.874	PCI/G	0		8/7/2005	38535.83819	4:09	0.321	PCI/G	0.145	PCI/G	1	6.6	153	G	PCI/G	PR	
7000-0000-018-C3C-03	MSR#05-1811	140051021	441351	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.626	0.112	PCI/G	0		8/7/2005	38535.83819	4:09	0.0831	PCI/G	0.0398	PCI/G	1	6.6	153	G	PCI/G	PR	
7000-0000-018-C3C-03	MSR#05-1811	140051021	441351	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00602	0.0207	PCI/G	0	U	8/7/2005	38535.83819	4:09	0.0372	PCI/G	0.0178	PCI/G	1	6.6	153	G	PCI/G	PR	
7000-0000-018-C3C-03	MSR#05-1811	140051021	443733	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.000524	0.00339	PCI/G	0	U	11/7/2005	38567.12639	10:32	0.00656	PCI/G	0.0031	PCI/G	1	6.6	18.3	G	PCI/G	PR	
7000-0000-018-C3C-03	MSR#05-1811	140051021	441351	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.135	0.048	PCI/G	0		8/7/2005	38535.83819	4:09	0.0428	PCI/G	0.0205	PCI/G	1	6.6	153	G	PCI/G	PR	
7000-0000-018-C3C-03	MSR#05-1811	140051021	445708	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	0.322	1.24	PCI/G	0	U		1/8/2005	8:20	2.15	PCI/G	1.03	PCI/G	1	6.6	17.5	G	PCI/G	PR	
7000-0000-018-C3C-04	MSR#05-1811	140051022	441351	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.466	0.103	PCI/G	0		8/7/2005	38535.83819	4:31	0.069	PCI/G	0.0323	PCI/G	1	6.5	150	G	PCI/G	PR	
7000-0000-018-C3C-04	MSR#05-1811	140051022	441351	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.00706	0.0393	PCI/G	0	U	8/7/2005	38535.83819	4:31	0.0748	PCI/G	0.0363	PCI/G	1	6.5	150	G	PCI/G	PR	
7000-0000-018-C3C-04	MSR#05-1811	140051022	441351	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.347	0.214	PCI/G	0		8/7/2005	38535.83819	4:31	0.174	PCI/G	0.0826	PCI/G	1	6.5	150	G	PCI/G	PR	
7000-0000-018-C3C-04	MSR#05-1811	140051022	441351	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.476	0.0714	PCI/G	0		8/7/2005	38535.83819	4:31	0.043	PCI/G	0.0206	PCI/G	1	6.5	150	G	PCI/G	PR	
7000-0000-018-C3C-04	MSR#05-1811	140051022	441351	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0187	0.0261	PCI/G	0	U	8/7/2005	38535.83819	4:31	0.0244	PCI/G	0.0116	PCI/G	1	6.5	150	G	PCI/G	PR	
7000-0000-018-C3C-04	MSR#05-1811	140051022	441351	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.00186	0.0132	PCI/G	0	U	8/7/2005	38535.83819	4:31	0.0233	PCI/G	0.0111	PCI/G	1	6.5	150	G	PCI/G	PR	
7000-0000-018-C3C-04	MSR#05-1811	140051022	441351	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.000358	0.0126	PCI/G	0	U	8/7/2005	38535.83819	4:31	0.0221	PCI/G	0.0103	PCI/G	1	6.5	150	G	PCI/G	PR	
7000-0000-018-C3C-04	MSR#05-1811	140051022	441351	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.00396	0.0327	PCI/G	0	U	8/7/2005	38535.83819	4:31	0.0581	PCI/G	0.0279	PCI/G	1	6.5	150	G	PCI/G	PR	
7000-0000-018-C3C-04	MSR#05-1811	140051022	441351	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.00142	0.0388	PCI/G	0	U	8/7/2005	38535.83819	4:31	0.068	PCI/G	0.0318	PCI/G	1	6.5	150	G	PCI/G	PR	
7000-0000-018-C3C-04	MSR#05-1811	140051022	441351	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0204	0.0372	PCI/G	0	U	8/7/2005	38535.83819	4:31	0.0693	PCI/G	0.0337	PCI/G	1	6.5	150	G	PCI/G	PR	
7000-0000-018-C3C-04	MSR#05-1811	140051022	441351	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.427	0.0513	PCI/G	0		8/7/2005	38535.83819	4:31	0.038	PCI/G	0.0184	PCI/G	1	6.5	150	G	PCI/G	PR	
7000-0000-018-C3C-04	MSR#05-1811	140051022	441351	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.541	0.0761	PCI/G	0		8/7/2005	38535.83819	4:31	0.038	PCI/G	0.0182	PCI/G	1	6.5	150	G	PCI/G	PR	
7000-0000-018-C3C-04	MSR#05-1811	140051022	441351	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0184	0.0158	PCI/G	0	U	8/7/2005	38535.83819	4:31	0.0261	PCI/G	0.0124	PCI/G	1	6.5	150	G	PCI/G	PR	
7000-0000-018-C3C-04	MSR#05-1811	140051022	441351	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00355	0.0117	PCI/G	0	U	8/7/2005	38535.83819	4:31	0.021	PCI/G	0.01	PCI/G	1	6.5	150	G	PCI/G	PR	
7000-0000-018-C3C-04	MSR#05-1811	140051022	441351	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	8.33	0.691	PCI/G	0		8/7/2005	38535.83819	4:31	0.21	PCI/G	0.0971	PCI/G	1	6.5	150	G	PCI/G	PR	
7000-0000-018-C3C-04	MSR#05-1811	140051022	441351	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.476	0.0714	PCI/G	0		8/7/2005	38535.83819	4:31	0.043	PCI/G	0.0206	PCI/G	1	6.5	150	G	PCI/G	PR	
7000-0000-018-C3C-04	MSR#05-1811	140051022	441351	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00684	0.0112	PCI/G	0	U	8/7/2005	38535.83819	4:31	0.0203	PCI/G	0.00973	PCI/G	1	6.5	150	G	PCI/G	PR	
7000-0000-018-C3C-04	MSR#05-1811	140051022	443733	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00587	0.00416	PCI/G	0	U	11/7/2005	38567.12639	10:32	0.00723	PCI/G	0.00344	PCI/G	1	6.5	18.2	G	PCI/G	PR	
7000-0000-018-C3C-04	MSR#05-1811	140051022	441351	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.115	0.0306	PCI/G	0		8/7/2005	38535.83819	4:31	0.021	PCI/G	0.00997	PCI/G	1	6.5	150	G	PCI/G	PR	
7000-0000-018-C3C-04	MSR#05-1811	140051022	445708	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-0.364	1.33	PCI/G	0	U		1/8/2005	8:52	2.36	PCI/G	1.13	PCI/G	1	6.5	15.3	G	PCI/G	PR	

7000-0000-012-1S	MSR#05-1811	140051023	441351	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.408	0.121	PCI/G	0		8/7/2005	38568.79514	10:01	0.0833	PCI/G	0.0384	PCI/G	1	13	183	G	PCI/G	PR	
7000-0000-012-1S	MSR#05-1811	140051023	441351	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0214	0.0636	PCI/G	0	U	8/7/2005	38568.79514	10:01	0.105	PCI/G	0.0507	PCI/G	1	13	183	G	PCI/G	PR	
7000-0000-012-1S	MSR#05-1811	140051023	441351	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.267	0.153	PCI/G	0		8/7/2005	38568.79514	10:01	0.194	PCI/G	0.0905	PCI/G	1	13	183	G	PCI/G	PR	
7000-0000-012-1S	MSR#05-1811	140051023	441351	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.362	0.0753	PCI/G	0		8/7/2005	38568.79514	10:01	0.0472	PCI/G	0.0222	PCI/G	1	13	183	G	PCI/G	PR	
7000-0000-012-1S	MSR#05-1811	140051023	441351	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0243	0.023	PCI/G	0	U	8/7/2005	38568.79514	10:01	0.0339	PCI/G	0.016	PCI/G	1	13	183	G	PCI/G	PR	
7000-0000-012-1S	MSR#05-1811	140051023	441351	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.00887	0.0145	PCI/G	0	U	8/7/2005	38568.79514	10:01	0.0253	PCI/G	0.0119	PCI/G	1	13	183	G	PCI/G	PR	
7000-0000-012-1S	*MSR#05-1811*	*140051023*	*441351*	*10198-40-0*	*Cobalt-60*	*TRG 8*	*UHASL300*	*HASL300*	*REG*	*0.00264*	*0.0171*	*PCI/G*	*0*	*U*	*8/7/2005*	*38568.79514*	*10:01*	*0.0317*	*PCI/G*	*0.0146*	*PCI/G*	*1*	*13*	*183*	*G*	*PCI/G*	*PR*	
7000-0000-012-1S	MSR#05-1811	140051023	441351	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.00489	0.0377	PCI/G	0	U	8/7/2005	38568.79514	10:01	0.0669	PCI/G	0.0319	PCI/G	1	13	183	G	PCI/G	PR	
7000-0000-012-1S	MSR#05-1811	140051023	441351	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0122	0.0498	PCI/G	0	U	8/7/2005	38568.79514	10:01	0.089	PCI/G	0.0411	PCI/G	1	13	183	G	PCI/G	PR	
7000-0000-012-1S	MSR#05-1811	140051023	441351	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.031	0.0515	PCI/G	0	U	8/7/2005	38568.79514	10:01	0.076	PCI/G	0.0369	PCI/G	1	13	183	G	PCI/G	PR	
7000-0000-012-1S	MSR#05-1811	140051023	441351	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.339	0.0486	PCI/G	0		8/7/2005	38568.79514	10:01	0.0417	PCI/G	0.0201	PCI/G	1	13	183	G	PCI/G	PR	
7000-0000-012-1S	MSR#05-1811	140051023	441351	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.36	0.0668	PCI/G	0		8/7/2005	38568.79514	10:01	0.0482	PCI/G	0.023	PCI/G	1	13	183	G	PCI/G	PR	
7000-0000-012-1S	MSR#05-1811	140051023	441351	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.0074	0.0154	PCI/G	0	U	8/7/2005	38568.79514	10:01	0.0265	PCI/G	0.0123	PCI/G	1	13	183	G	PCI/G	PR	
7000-0000-012-1S	MSR#05-1811	140051023	441351	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0017	0.0132	PCI/G	0	U	8/7/2005	38568.79514	10:01	0.0243	PCI/G	0.0114	PCI/G	1	13	183	G	PCI/G	PR	
7000-0000-012-1S	MSR#05-1811	140051023	441351	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	16	1.34	PCI/G	0		8/7/2005	38568.79514	10:01	0.241	PCI/G	0.108	PCI/G	1	13	183	G	PCI/G	PR	
7000-0000-012-1S	MSR#05-1811	140051023	441351	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.362	0.0753	PCI/G	0		8/7/2005	38568.79514	10:01	0.0472	PCI/G	0.0222	PCI/G	1	13	183	G	PCI/G	PR	
7000-0000-012-1S	MSR#05-1811	140051023	441351	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00433	0.0117	PCI/G	0	U	8/7/2005	38568.79514	10:01	0.0227	PCI/G	0.0108	PCI/G	1	13	183	G	PCI/G	PR	
7000-0000-012-1S	MSR#05-1811	140051023	443733	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00206	0.00561	PCI/G	0	U	11/7/2005	38569.02917	10:32	0.0113	PCI/G	0.00528	PCI/G	1	13	14.1	G	PCI/G	PR	
7000-0000-012-1S	MSR#05-1811	140051023	441351	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.125	0.0341	PCI/G	0		8/7/2005	38568.79514	10:01	0.0467	PCI/G	0.0226	PCI/G	1	13	183	G	PCI/G	PR	
7000-0000-012-1S	MSR#05-1811	140051023	445708	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	0.103	1.3	PCI/G	0	U		1/8/2005	9:24	2.26	PCI/G	1.09	PCI/G	1	13	15.6	G	PCI/G	PR	
7000-0000-014-1S	MSR#05-1811	140051024	441351	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	2.53	0.705	PCI/G	0		8/7/2005	38537.81111	9:34	0.341	PCI/G	0.163	PCI/G	1	62	9.75	G	PCI/G	PR	
7000-0000-014-1S	MSR#05-1811	140051024	441351	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0887	0.17	PCI/G	0	U	8/7/2005	38537.81111	9:34	0.24	PCI/G	0.117	PCI/G	1	62	9.75	G	PCI/G	PR	
7000-0000-014-1S	MSR#05-1811	140051024	441351	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0	0.895	PCI/G	0	UUI	8/7/2005	38537.81111	9:34	0.798	PCI/G	0.384	PCI/G	1	62	9.75	G	PCI/G	PR	
7000-0000-014-1S	MSR#05-1811	140051024	441351	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.995	0.248	PCI/G	0		8/7/2005	38537.81111	9:34	0.2	PCI/G	0.0969	PCI/G	1	62	9.75	G	PCI/G	PR	
7000-0000-014-1S	MSR#05-1811	140051024	441351	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0	0.122	PCI/G	0	UUI	8/7/2005	38537.81111	9:34	0.113	PCI/G	0.0544	PCI/G	1	62	9.75	G	PCI/G	PR	
7000-0000-014-1S	MSR#05-1811	140051024	441351	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.236	0.158	PCI/G	0		8/7/2005	38537.81111	9:34	0.0897	PCI/G	0.0431	PCI/G	1	62	9.75	G	PCI/G	PR	
7000-0000-014-1S	MSR#05-1811	140051024	441351	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0569	0.0848	PCI/G	0	U	8/7/2005	38537.81111	9:34	0.127	PCI/G	0.0601	PCI/G	1	62	9.75	G	PCI/G	PR	
7000-0000-014-1S	MSR#05-1811	140051024	441351	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.095	0.155	PCI/G	0	U	8/7/2005	38537.81111	9:34	0.215	PCI/G	0.104	PCI/G	1	62	9.75	G	PCI/G	PR	
7000-0000-014-1S	MSR#05-1811	140051024	441351	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0505	0.185	PCI/G	0	U	8/7/2005	38537.81111	9:34	0.31	PCI/G	0.147	PCI/G	1	62	9.75	G	PCI/G	PR	
7000-0000-014-1S	*MSR#05-1811*	*140051024*	*441351*	*14391-16-3*	*Europium-155*	*TRG 8*	*UHASL300*	*HASL300*	*REG*	*0.0427*	*0.151*	*PCI/G*	*0*	*U*	*8/7/2005*	*38537.81111*	*9:34*	*0.219*	*PCI/G*	*0.107*	*PCI/G*	*1*	*62*	*9.75*	*G*	*PCI/G*	*PR*	
7000-0000-014-1S	MSR#05-1811	140051024	441351	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	1.7	0.232	PCI/G	0		8/7/2005	38537.81111	9:34	0.118	PCI/G	0.0573	PCI/G	1	62	9.75	G	PCI/G	PR	
7000-0000-014-1S	MSR#05-1811	140051024	441351	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	1.06	0.251	PCI/G	0		8/7/2005	38537.81111	9:34	0.151	PCI/G	0.0732	PCI/G	1	62	9.75	G	PCI/G	PR	
7000-0000-014-1S	MSR#05-1811	140051024	441351	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0298	0.0665	PCI/G	0	U	8/7/2005	38537.81111	9:34	0.108	PCI/G	0.0516	PCI/G	1	62	9.75	G	PCI/G	PR	
7000-0000-014-1S	MSR#05-1811	140051024	441351	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.0109	0.0545	PCI/G	0	U	8/7/2005	38537.81111	9:34	0.0858	PCI/G	0.0413	PCI/G	1	62	9.75	G	PCI/G	PR	
7000-0000-014-1S	MSR#05-1811	140051024	441351	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	27.9	2.97	PCI/G	0		8/7/2005	38537.81111	9:34	0.99	PCI/G	0.464	PCI/G	1	62	9.75	G	PCI/G	PR	
7000-0000-014-1S	MSR#05-1811	140051024	441351	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.995	0.248	PCI/G	0		8/7/2005	38537.81111	9:34	0.2	PCI/G	0.0969	PCI/G	1	62	9.75	G	PCI/G	PR	
7000-0000-014-1S	MSR#05-1811	140051024	441351	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00311	0.0482	PCI/G	0	U	8/7/2005	38537.81111	9:34	0.0738	PCI/G	0.0356	PCI/G	1	62	9.75	G	PCI/G	PR	
7000-0000-014-1S	MSR#05-1811	140051024	443733	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00441	0.00694	PCI/G	0	U	11/7/2005	38569.02917	10:32	0.0136	PCI/G	0.00642	PCI/G	1	62	14.7	G	PCI/G	PR	
7000-0000-014-1S	MSR#05-1811	140051024	441351	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.557	0.143	PCI/G	0		8/7/2005	38537.81111	9:34	0.0873	PCI/G	0.042	PCI/G	1	62	9.75	G	PCI/G	PR	
7000-0000-014-1S	MSR#05-1811	140051024	445708	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	0.249	1.22	PCI/G	0	U		1/8/2005	9:55	2.11	PCI/G	1.01	PCI/G	1	62	17	G	PCI/G	PR	
7000-0000-015-01S	MSR#05-1811	140051025	441351	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	1.43	0.258	PCI/G	0		8/7/2005	38537.81042	5:09	0.163	PCI/G	0.0766	PCI/G	1	53	100	G	PCI/G	PR	
7000-0000-015-01S	MSR#05-1811	140051025	441351	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.00963	0.136	PCI/G	0	U	8/7/2005	38537.81042	5:09	0.225	PCI/G	0.11	PCI/G	1	53	100	G	PCI/G	PR	
7000-0000-015-01S	MSR#05-1811	140051025	442289	14596-10-2	Americium-241	TRG 1	UAM05RCM	AM05RCM	REG	0.0176	0.0367	PCI/G	0	U	11/7/2005	38538.04306	10:47	0.0817	PCI/G	0.0242	PCI/G	1	53	0.51	G	PCI/G	PR	
7000-0000-015-01S	MSR#05-1811	140051025	441351	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	1.15	0.475	PCI/G	0		8/7/2005	38537.81042	5:09	0.383	PCI/G	0.182	PCI/G	1	53	100	G	PCI/G	PR	
7000-0000-015-01S	MSR#05-1811	140051025	441351	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	1.12	0.159	PCI/G	0		8/7/2005	38537.81042	5:09	0.0906	PCI/G	0.0432	PCI/G	1	53	100	G	PCI/G	PR	
7000-0000-015-01S	MSR#05-1811	140051025	441486	14762-75-5	Carbon-14	TRG 5	ULSC	LSC	REG	-0.11	0.0956	PCI/G	0	U		13/07/2005	1:00	0.179	PCI/G	0.0855	PCI/G	1	53	9.09	G	PCI/G	PR	
7000-0000-015-01S	MSR#05-1811	140051025	441351	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0	0.0379	PCI/G	0	UUI	8/7/2005	38537.81042	5:09	0.0652	PCI/G	0.0312	PCI/G	1	53	100	G	PCI/G	PR	
7000-0000-015-01S	MSR#05-1811	140051025	441351	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.23	0.0708	PCI/G	0		8/7/2005	38537.81042	5:09	0.0498	PCI/G	0.0237	PCI/G	1	53	100	G	PCI/G	PR	
7000-0000-015-01S	MSR#05-1811	140051025	441351	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0173	0.0275	PCI/G	0	U	8/7/2005	38537.81042	5:09	0.0514	PCI/G	0.0239	PCI/G	1	53	100	G	PCI/G	PR	
7000-0000-015-01S	MSR#05-1811	140051025	442289	OER-100-93	Curium-242	TRG 1	UAM05RCM	AM05RCM	REG	-0.00344	0.0289	PCI/G	0	U	11/7/2005	38538.04306	10:47	0.0715	PCI/G	0.0163	PCI/G	1	53	0.51	G	PCI/G	PR	
7000-0000-015-01S	MSR#05-1811	140051025	442289	OER-101-57	Curium-243/244	TRG 1	UAM05RCM	AM05RCM	REG	-0.00295	0.0248	PCI/G	0	U	11/7/2005	38538.04306	10:47	0.0614	PCI/G	0.014	PCI/G	1	53	0.51	G	PCI/G	PR	
7000-0000-015-01S	MSR#05-1811	140051025	441351	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.000892	0.0775	PCI/G	0	U	8/7/2005	38537.81042	5:09	0.13	PCI/G	0.0627	PCI/G	1	53	100	G	PCI/G	PR	
7000-0000-015-01S	MSR#05-1811	140051025	441351	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0403	0.0907	PCI/G	0	U	8/7/2005	38537.81042	5:09	0.154	PCI/G	0.0721	PCI/G	1	53	100	G	PCI/G	PR	
7000-0000-015-01S	MSR#05-1811	140051025	441351	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.112	0.102	PCI/G	0	U	8/7/2005	38537.81042	5:09	0.144	PCI/G	0.0702	PCI/G	1	53	100	G	PCI/G	PR	
7000-0000-015-01S	MSR#05-1811	140051025	441483	14681-59-5	Iron-55	TRG 26	ULSC	LSC	REG	-16.5	8.1	PCI/G	0	U	11/7/2005	38538.03958	2:54	11.9	PCI/G	5.89	PCI/G	1	53	4.38	G	PCI/G	PR	
7000-0000-015-01S	MSR#05-1811	140051025	441351	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	1.64	0.161	PCI/G	0		8/7/2005	38537.81042	5:09	0.0794	PCI/G	0.0385	PCI/G	1	53	100	G	PCI/G	PR	
7000-0000-015-01S	MSR#05-1811	140051025	441351	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	1.4	0.173	PCI/G	0		8/7/2005	38537.81042	5:09	0.0927	PCI/G	0.0448	PCI/G	1	53	100	G	PCI/G	PR	
7000-0000-015-01S	MSR#05-1811	140051025	441351	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.0143	0.032	PCI/G	0	U	8/7/2005	38537.81042	5:09	0.053	PCI/G	0.0252	PCI/G	1	53	100	G	PCI/G	PR	
7000-0000-015-01S	MSR#05-1811	140051025	443492	13781-37-8	Nickel-63	TRG 30	ULSC	LSC	REG	3.97	4.06	PCI/G	0	U	11/7/2005	38538.04097	0:08	8.75	PCI/G	3.2	PCI/G	1	53	0.548	G	PCI/G	PR	
7000-0000-015-01S	MSR#05-1811	140051025	441351	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.0241	0.0267	PCI/G	0	U	8/7/2005	38537.81042	5:09	0.0434	PCI/G	0.0207	PCI/G	1	53	100	G	PCI/G	PR	
7000-0000-015-01S	MSR#05-1811	140051025	442290	13981-16-3	Plutonium-238	TRG 32	UPU11RCM	PU11RCM	REG	-0.0115	0.0113	PCI/G	0	U	11/7/2005	38538.04306	10:47	0.0874	PCI/G	0.0274	PCI/G	1	53	0.51	G	PCI/G	PR	
7000-0000-015-01S	MSR#05-1811	140051025	442290	OER-100-70	Plutonium-239/240	TRG 32	UPU11RCM	PU11RCM	REG	0.00337	0.0255	PCI/G	0	U	11/7/2005	38538.04306	10:47	0.08	PCI/G	0.0237	PCI/G	1	53	0.51	G	PCI/G	PR	
7000-0000-015-01S	MSR#05-1811	140051025	448398	14119-32-5	Plutonium-241	TRG 36	UPU11RCM	PU11RCM	REG	0.199	2.08	PCI/G	0	U	11/7/2005	38569.03125	10:48	3.59	PCI/G	1.74	PCI/G	1	53	1.45	G	PCI/G	PR	
7000-0000-015-01S	MSR#05-1811	140051025	441351	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	19.9	1.69	PCI/G	0		8/7/2005	38537.81042	5:09	0.477	PCI/G	0.221	PCI/G	1	53	100	G	PCI/G	PR	
7000-0000-015-01S	MSR#05-1811	140051025	441351	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	1.12	0.159	PCI/G	0		8/7/2005	38537.81042	5:09	0.0906	PCI/G	0.0432	PCI/G	1	53	100	G	PCI/G	PR	
7000-0000-015-01S	MSR#05-1811	140051025	441351	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.0296	0.0276	PCI/G	0	U	8/7/2005	38537.81042	5:09	0.0431	PCI/G	0.0206	PCI/G	1	53	100	G	PCI/G	PR	
7000-0000-015-01S	MSR#05-1811	140051025	443733	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.0103	0.00796	PCI/G	0	U	11/7/2005	38569.02917	10:32	0.0147	PCI/G	0.00688	PCI/G	1	53	14.2	G	PCI/G	PR	
7000-0000-015-01S	MSR#05-1811	140051025	441485	14133-76-7	Technetium-99	TRG 46	UTC02RCM	TC02RCM	REG	0.257	0.234	PCI/G	0	U		19/07/2005	3:41	0.39	PCI/G	0.191	PCI/G	1	53	5.17	G	PCI/G	PR	
7000-0000-015-01S	MSR#05-1811	140051025	441351	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.519	0.0845	PCI/G	0		8/7/2005	38537.81042	5:09	0.0509	PCI/G	0.0243	PCI/G	1	53	100	G	PCI/G	PR	
7000-0000-015-01S	MSR#05-1811	140051025	445708	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	1.25	1.37	PCI/G	0	U		1/8/2005	10:27	2.29	PCI/G	1.1	PCI/G	1	53	15	G	PCI/G	PR	
7000-0000-016-01S	MSR#05-1811	140051026	441351	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.31	0.072	PCI/G	0		8/7/2005	38537.81042	8:34	0.0507	PCI/G	0.0244	PCI/G	1	17	181	G	PCI/G	PR	
7000-0000-016-01S	MSR#05-1811	140051026	441351	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.00133	0.0276	PCI/G	0	U	8/7/2005	38537.81042	8:34	0.0493	PCI/G	0.0242	PCI/G	1	17	181	G	PCI/G	PR	
7000-0000-016-01S	MSR#05-1811	140051026	441351	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.255	0.0881	PCI/G	0		8/7/2005	38537.81042	8:34	0.107	PCI/G	0.0514	PCI/G	1	17	181	G	PCI/G	PR	
7000-0000-016-01S	MSR#05-1811	140051026	441351	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.271	0.0495	PCI/G	0		8/7/2005	38537.81042	8:34	0.0269	PCI/G	0.013	PCI/G	1	17	181	G	PCI/G	PR	
7000-0000-016-01S	MSR#05-1811	140051026	441351	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0117	0.0131	PCI/G	0	U	8/7/2005	38537.81042	8:34	0.0172	PCI/G	0.00834	PCI/G	1	17	181	G	PCI/G	PR	
7000-0000-016-01S	MSR#05-1811	140051026	441351	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.002	0.00778	PCI/G	0	U	8/7/2005	38537.81042	8:34	0.0138	PCI/G	0.0066	PCI/G	1	17	181	G	PCI/G	PR	
7000-0000-016-01S	MSR#05-1811	140051026	441351	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.00744	0.0099	PCI/G	0	U	8/7/2005	38537.81042	8:34	0.0157	PCI/G	0.00751	PCI/G	1	17	181	G	PCI/G	PR	
7000-0000-016-01S	MSR#05-1811	140051026	441351	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0104	0.0193	PCI/G	0	U	8/7/2005	38537.81042	8:34	0.0344	PCI/G	0.0167	PCI/G	1	17	181	G	PCI/G	PR	
7000-0000-016-01S	MSR#05-1811	140051026	441351	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.034	0.0284	PCI/G	0	U	8/7/2005	38537.81042	8:34	0.0459	PCI/G	0.022	PCI/G	1	17	181	G	PCI/G	PR	
7000-0000-016-01S	MSR#05-1811	140051026	441351	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0216	0.0276	PCI/G	0	U	8/7/2005	38537.81042	8:34	0.0415	PCI/G	0.0203	PCI/G	1	17	181	G	PCI/G	PR	
7000-0000-016-01S	MSR#05-1811	140051026	441351	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.316	0.0345	PCI/G	0		8/7/2005	38537.81042	8:34	0.0216	PCI/G	0.0106	PCI/G	1	17	181	G	PCI/G	PR	
7000-0000-016-01S	MSR#05-1811	140051026	441351	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.298	0.043	PCI/G	0		8/7/2005	38537.81042	8:34	0.0259	PCI/G	0.0126	PCI/G	1	17	181	G	PCI/G	PR	
7000-0000-016-01S	MSR#05-1811	140051026	441351	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0041	0.0113	PCI/G	0	U	8/7/2005	38537.81042	8:34	0.0143	PCI/G	0.00689	PCI/G	1	17	181	G	PCI/G	PR	
7000-0000-016-01S	MSR#05-1811	140051026	441351	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00123	0.00706	PCI/G	0	U	8/7/2005	38537.81042	8:34	0.0126	PCI/G	0.0061	PCI/G	1	17	181	G	PCI/G	PR	
7000-0000-016-01S	MSR#05-1811	140051026	441351	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	14.7	0.955	PCI/G	0		8/7/2005	38537.81042	8:34	0.118	PCI/G	0.0558	PCI/G	1	17	181	G	PCI/G	PR	
7000-0000-016-01S	MSR#05-1811	140051026	441351	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.271	0.0495	PCI/G	0		8/7/2005	38537.81042	8:34	0.0269	PCI/G	0.013	PCI/G	1	17	181	G	PCI/G	PR	
7000-0000-016-01S	MSR#05-1811	140051026	441351	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00318	0.00768	PCI/G	0	U	8/7/2005	38537.81042	8:34	0.0122	PCI/G	0.0059	PCI/G	1	17	181	G	PCI/G	PR	
7000-0000-016-01S	MSR#05-1811	140051026	443733	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00865	0.00736	PCI/G	0	U	11/7/2005	38569.02917	10:32	0.0138	PCI/G	0.00648	PCI/G	1	17	14.1	G	PCI/G	PR	
7000-0000-016-01S	MSR#05-1811	140051026	441351	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.095	0.0215	PCI/G	0		8/7/2005	38537.81042	8:34	0.0134	PCI/G	0.00646	PCI/G	1	17	181	G	PCI/G	PR	
7000-0000-016-01S	MSR#05-1811	140051026	445708	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-0.686	1.2	PCI/G	0	U		1/8/2005	10:59	2.16	PCI/G	1.03	PCI/G	1	17	15.9	G	PCI/G	PR	

	MSR#05-1811	1200884848	441350	14331-83-0	Actinium-228	TRG	U	HASL300	LB1	0.0736	0.0658	PCI/G	0	U		4/8/2005	7:02	0.144	PCI/G	0.0645	PCI/G	1	0	180	G	PCI/G		PR	
	MSR#05-1811	1200884848	441350	14596-10-2	Americium-241	TRG	U	HASL300	LB1	0.00336	0.0636	PCI/G	0	U		4/8/2005	7:02	0.114	PCI/G	0.053	PCI/G	1	0	180	G	PCI/G		PR	
	MSR#05-1811	1200884848	441350	14913-49-6	Bismuth-212	TRG	U	HASL300	LB1	-0.164	0.137	PCI/G	0	U		4/8/2005	7:02	0.216	PCI/G	0.0936	PCI/G	1	0	180	G	PCI/G		PR	
	MSR#05-1811	1200884848	441350	14733-03-0	Bismuth-214	TRG	U	HASL300	LB1	0.0248	0.0333	PCI/G	0	U		4/8/2005	7:02	0.0696	PCI/G	0.0317	PCI/G	1	0	180	G	PCI/G		PR	
	MSR#05-1811	1200884848	441350	13967-70-9	Cesium-134	TRG	U	HASL300	LB1	0.0142	0.018	PCI/G	0	U		4/8/2005	7:02	0.0389	PCI/G	0.0173	PCI/G	1	0	180	G	PCI/G		PR	
	MSR#05-1811	1200884848	441350	10045-97-3	Cesium-137	TRG	U	HASL300	LB1	0.00597	0.0168	PCI/G	0	U		4/8/2005	7:02	0.0343	PCI/G	0.0154	PCI/G	1	0	180	G	PCI/G		PR	
	MSR#05-1811	1200884848	441350	10198-40-0	Cobalt-60	TRG	U	HASL300	LB1	0.00187	0.0165	PCI/G	0	U		4/8/2005	7:02	0.0343	PCI/G	0.0143	PCI/G	1	0	180	G	PCI/G		PR	
	MSR#05-1811	1200884848	441350	14683-23-9	Europium-152	TRG	U	HASL300	LB1	0.0459	0.0459	PCI/G	0	U		4/8/2005	7:02	0.0945	PCI/G	0.0438	PCI/G	1	0	180	G	PCI/G		PR	
	MSR#05-1811	1200884848	441350	15585-10-1	Europium-154	TRG	U	HASL300	LB1	-0.00315	0.0446	PCI/G	0	U		4/8/2005	7:02	0.0899	PCI/G	0.0373	PCI/G	1	0	180	G	PCI/G		PR	
	MSR#05-1811	1200884848	441350	14391-16-3	Europium-155	TRG	U	HASL300	LB1	0.00323	0.0407	PCI/G	0	U		4/8/2005	7:02	0.0833	PCI/G	0.039	PCI/G	1	0	180	G	PCI/G		PR	
	MSR#05-1811	1200884848	441350	15092-94-1	Lead-212	TRG	U	HASL300	LB1	0.00897	0.0462	PCI/G	0	U		4/8/2005	7:02	0.0619	PCI/G	0.0294	PCI/G	1	0	180	G	PCI/G		PR	
	MSR#05-1811	1200884848	441350	15067-28-4	Lead-214	TRG	U	HASL300	LB1	0.0281	0.0367	PCI/G	0	U		4/8/2005	7:02	0.0728	PCI/G	0.0339	PCI/G	1	0	180	G	PCI/G		PR	
	MSR#05-1811	1200884848	441350	13966-31-9	Manganese-54	TRG	U	HASL300	LB1	0.00486	0.0193	PCI/G	0	U		4/8/2005	7:02	0.0378	PCI/G	0.0169	PCI/G	1	0	180	G	PCI/G		PR	
	MSR#05-1811	1200884848	441350	14681-63-1	Niobium-94	TRG	U	HASL300	LB1	-0.0147	0.0153	PCI/G	0	U		4/8/2005	7:02	0.0256	PCI/G	0.0112	PCI/G	1	0	180	G	PCI/G		PR	
	MSR#05-1811	1200884848	441350	13966-00-2	Potassium-40	TRG	U	HASL300	LB1	0.244	0.232	PCI/G	0	U		4/8/2005	7:02	0.51	PCI/G	0.227	PCI/G	1	0	180	G	PCI/G		PR	
	MSR#05-1811	1200884848	441350	13982-63-3	Radium-226	TRG	U	HASL300	LB1	0.0248	0.0333	PCI/G	0	U		4/8/2005	7:02	0.0696	PCI/G	0.0317	PCI/G	1	0	180	G	PCI/G		PR	
	MSR#05-1811	1200884848	441350	14391-65-2	Silver-108m	TRG	U	HASL300	LB1	0.00446	0.0161	PCI/G	0	U		4/8/2005	7:02	0.0308	PCI/G	0.0141	PCI/G	1	0	180	G	PCI/G		PR	
	MSR#05-1811	1200884848	441350	14913-50-9	Thallium-208	TRG	U	HASL300	LB1	0.0117	0.0199	PCI/G	0	U		4/8/2005	7:02	0.0406	PCI/G	0.0186	PCI/G	1	0	180	G	PCI/G		PR	
7000-0000-014-C1C-01	MSR#05-1811	1200884849	441350	14331-83-0	Actinium-228	TRG	U	HASL300	LR1	0.535	0.119	PCI/G	0			2/8/2005	11:17	0.0849	PCI/G	0.0402	PCI/G	1	10	147	G	PCI/G	0.54	9	PR
7000-0000-014-C1C-01	MSR#05-1811	1200884849	441350	14596-10-2	Americium-241	TRG	U	HASL300	LR1	0.0325	0.0424	PCI/G	0	U		2/8/2005	11:17	0.0824	PCI/G	0.0401	PCI/G	1	10	147	G	PCI/G	0.03	73	PR
7000-0000-014-C1C-01	MSR#05-1811	1200884849	441350	14913-49-6	Bismuth-212	TRG	U	HASL300	LR1	0.329	0.198	PCI/G	0			2/8/2005	11:17	0.171	PCI/G	0.0812	PCI/G	1	10	147	G	PCI/G	0.33	8	PR
7000-0000-014-C1C-01	MSR#05-1811	1200884849	441350	14733-03-0	Bismuth-214	TRG	U	HASL300	LR1	0.592	0.0833	PCI/G	0			2/8/2005	11:17	0.0452	PCI/G	0.0217	PCI/G	1	10	147	G	PCI/G	0.56	9	PR
7000-0000-014-C1C-01	MSR#05-1811	1200884849	441350	13967-70-9	Cesium-134	TRG	U	HASL300	LR1	0.0155	0.0143	PCI/G	0	U		2/8/2005	11:17	0.0267	PCI/G	0.0127	PCI/G	1	10	147	G	PCI/G	0.02	73	PR
7000-0000-014-C1C-01	MSR#05-1811	1200884849	441350	10045-97-3	Cesium-137	TRG	U	HASL300	LR1	-0.00166	0.0132	PCI/G	0	U		2/8/2005	11:17	0.0232	PCI/G	0.0111	PCI/G	1	10	147	G	PCI/G	-0.0	00874	PR
7000-0000-014-C1C-01	MSR#05-1811	1200884849	441350	10198-40-0	Cobalt-60	TRG	U	HASL300	LR1	-0.0088	0.0132	PCI/G	0	U		2/8/2005	11:17	0.0217	PCI/G	0.01	PCI/G	1	10	147	G	PCI/G	0.00	46	PR
7000-0000-014-C1C-01	MSR#05-1811	1200884849	441350	14683-23-9	Europium-152	TRG	U	HASL300	LR1	0.00169	0.0342	PCI/G	0	U		2/8/2005	11:17	0.061	PCI/G	0.0294	PCI/G	1	10	147	G	PCI/G	0.00	218	PR
7000-0000-014-C1C-01	MSR#05-1811	1200884849	441350	15585-10-1	Europium-154	TRG	U	HASL300	LR1	-0.00121	0.0418	PCI/G	0	U		2/8/2005	11:17	0.073	PCI/G	0.0343	PCI/G	1	10	147	G	PCI/G	0.00	244	PR
7000-0000-014-C1C-01	MSR#05-1811	1200884849	441350	14391-16-3	Europium-155	TRG	U	HASL300	LR1	0.0215	0.0391	PCI/G	0	U		2/8/2005	11:17	0.0726	PCI/G	0.0353	PCI/G	1	10	147	G	PCI/G	0.01	27	PR
7000-0000-014-C1C-01	MSR#05-1811	1200884849	441350	15092-94-1	Lead-212	TRG	U	HASL300	LR1	0.489	0.0584	PCI/G	0			2/8/2005	11:17	0.0375	PCI/G	0.0182	PCI/G	1	10	147	G	PCI/G	0.54	2	PR
7000-0000-014-C1C-01	MSR#05-1811	1200884849	441350	15067-28-4	Lead-214	TRG	U	HASL300	LR1	0.678	0.0906	PCI/G	0			2/8/2005	11:17	0.0403	PCI/G	0.0194	PCI/G	1	10	147	G	PCI/G	0.68	3	PR
7000-0000-014-C1C-01	MSR#05-1811	1200884849	441350	13966-31-9	Manganese-54	TRG	U	HASL300	LR1	0.00768	0.0149	PCI/G	0	U		2/8/2005	11:17	0.0266	PCI/G	0.0127	PCI/G	1	10	147	G	PCI/G	-0.0	127	PR
7000-0000-014-C1C-01	MSR#05-1811	1200884849	441350	14681-63-1	Niobium-94	TRG	U	HASL300	LR1	0.00151	0.0122	PCI/G	0	U		2/8/2005	11:17	0.0217	PCI/G	0.0104	PCI/G	1	10	147	G	PCI/G	0.01	15	PR
7000-0000-014-C1C-01	MSR#05-1811	1200884849	441350	13966-00-2	Potassium-40	TRG	U	HASL300	LR1	7.88	0.679	PCI/G	0			2/8/2005	11:17	0.198	PCI/G	0.0911	PCI/G	1	10	147	G	PCI/G	7.26	PR	
7000-0000-014-C1C-01	MSR#05-1811	1200884849	441350	13982-63-3	Radium-226	TRG	U	HASL300	LR1	0.592	0.0833	PCI/G	0			2/8/2005	11:17	0.0452	PCI/G	0.0217	PCI/G	1	10	147	G	PCI/G	0.56	9	PR
7000-0000-014-C1C-01	MSR#05-1811	1200884849	441350	14391-65-2	Silver-108m	TRG	U	HASL300	LR1	-0.00327	0.0114	PCI/G	0	U		2/8/2005	11:17	0.0195	PCI/G	0.00934	PCI/G	1	10	147	G	PCI/G	-0.0	0112	PR
7000-0000-014-C1C-01	MSR#05-1811	1200884849	441350	14913-50-9	Thallium-208	TRG	U	HASL300	LR1	0.171	0.0309	PCI/G	0			2/8/2005	11:17	0.0231	PCI/G	0.011	PCI/G	1	10	147	G	PCI/G	0.16	1	PR
	MSR#05-1811	1200884850	441350	14331-83-0	Actinium-228	TRG	U	HASL300	BS1	0.817	1.02	PCI/G	0	U		2/8/2005	9:21	1.43	PCI/G	0.677	PCI/G	1	0	100	G	PCI/G		PR	
	MSR#05-1811	1200884850	441350	14596-10-2	Americium-241	TRG	U	HASL300	BS1	25.9	2.18	PCI/G	0			2/8/2005	9:21	0.839	PCI/G	0.413	PCI/G	1	0	100	G	24	.4	PCI/G	PR
	MSR#05-1811	1200884850	441350	14913-49-6	Bismuth-212	TRG	U	HASL300	BS1	-0.0349	1.77	PCI/G	0	U		2/8/2005	9:21	2.94	PCI/G	1.4	PCI/G	1	0	100	G		PCI/G		PR
	MSR#05-1811	1200884850	441350	14733-03-0	Bismuth-214	TRG	U	HASL300	BS1	-0.0189	0.394	PCI/G	0	U		2/8/2005	9:21	0.658	PCI/G	0.315	PCI/G	1	0	100	G		PCI/G		PR
	MSR#05-1811	1200884850	441350	13967-70-9	Cesium-134	TRG	U	HASL300	BS1	-0.0262	0.233	PCI/G	0	U		2/8/2005	9:21	0.406	PCI/G	0.193	PCI/G	1	0	100	G		PCI/G		PR
	MSR#05-1811	1200884850	441350	10045-97-3	Cesium-137	TRG	U	HASL300	BS1	10.1	1.06	PCI/G	0			2/8/2005	9:21	0.394	PCI/G	0.189	PCI/G	1	0	100	G	9.	43	PCI/G	PR
	MSR#05-1811	1200884850	441350	10198-40-0	Cobalt-60	TRG	U	HASL300	BS1	15.1	1.3	PCI/G	0			2/8/2005	9:21	0.476	PCI/G	0.224	PCI/G	1	0	100	G	14	.6	PCI/G	PR
	MSR#05-1811	1200884850	441350	14683-23-9	Europium-152	TRG	U	HASL300	BS1	0.225	0.456	PCI/G	0	U		2/8/2005	9:21	0.797	PCI/G	0.384	PCI/G	1	0	100	G		PCI/G		PR
	MSR#05-1811	1200884850	441350	15585-10-1	Europium-154	TRG	U	HASL300	BS1	-0.189	0.555	PCI/G	0	U		2/8/2005	9:21	0.942	PCI/G	0.433	PCI/G	1	0	100	G		PCI/G		PR
	MSR#05-1811	1200884850	441350	14391-16-3	Europium-155	TRG	U	HASL300	BS1	-0.492	0.524	PCI/G	0	U		2/8/2005	9:21	0.834	PCI/G	0.408	PCI/G	1	0	100	G		PCI/G		PR
	MSR#05-1811	1200884850	441350	15092-94-1	Lead-212	TRG	U	HASL300	BS1	0.199	0.255	PCI/G	0	U		2/8/2005	9:21	0.45	PCI/G	0.219	PCI/G	1	0	100	G		PCI/G		PR
	MSR#05-1811	1200884850	441350	15067-28-4	Lead-214	TRG	U	HASL300	BS1	0.36	0.333	PCI/G	0	U		2/8/2005	9:21	0.594	PCI/G	0.287	PCI/G	1	0	100	G		PCI/G		PR
	MSR#05-1811	1200884850	441350	13966-31-9	Manganese-54	TRG	U	HASL300	BS1	-0.0295	0.225	PCI/G	0	U		2/8/2005	9:21	0.391	PCI/G	0.186	PCI/G	1	0	100	G		PCI/G		PR
	MSR#05-1811	1200884850	441350	14681-63-1	Niobium-94	TRG	U	HASL300	BS1	-0.0169	0.208	PCI/G	0	U		2/8/2005	9:21	0.345	PCI/G	0.165	PCI/G	1	0	100	G		PCI/G		PR
	MSR#05-1811	1200884850	441350	13966-00-2	Potassium-40	TRG	U	HASL300	BS1	0.176	2.01	PCI/G	0	U		2/8/2005	9:21	3.11	PCI/G	1.41	PCI/G	1	0	100	G		PCI/G		PR
	MSR#05-1811	1200884850	441350	13982-63-3	Radium-226	TRG	U	HASL300	BS1	-0.0189	0.394	PCI/G	0	U		2/8/2005	9:21	0.658	PCI/G	0.315	PCI/G	1	0	100	G		PCI/G		PR
	MSR#05-1811	1200884850	441350	14391-65-2	Silver-108m	TRG	U	HASL300	BS1	-0.0335	0.181	PCI/G	0	U		2/8/2005	9:21	0.303	PCI/G	0.146	PCI/G	1	0	100	G		PCI/G		PR
	MSR#05-1811	1200884850	441350	14913-50-9	Thallium-208	TRG	U	HASL300	BS1	-0.0207	0.214	PCI/G	0	U		2/8/2005	9:21	0.358	PCI/G	0.171	PCI/G	1	0	100	G		PCI/G		PR
	MSR#05-1811	1200884851	441351	14331-83-0	Actinium-228	TRG	U	HASL300	LB1	0.0114	0.0533	PCI/G	0	U		27/07/2005	9:13	0.0579	PCI/G	0.0272	PCI/G	1	0	180	G		PCI/G		PR
	MSR#05-1811	1200884851	441351	14596-10-2	Americium-241	TRG	U	HASL300	LB1	-0.0134	0.0372	PCI/G	0	U		27/07/2005	9:13	0.0617	PCI/G	0.0298	PCI/G	1	0	180	G		PCI/G		PR
	MSR#05-1811	1200884851	441351	14913-49-6	Bismuth-212	TRG	U	HASL300	LB1	-0.0249	0.0644	PCI/G	0	U		27/07/2005	9:13	0.114	PCI/G	0.0537	PCI/G	1	0	180	G		PCI/G		PR
	MSR#05-1811	1200884851	441351	14733-03-0	Bismuth-214	TRG	U	HASL300	LB1	0.000879	0.0345	PCI/G	0	U		27/07/2005	9:13	0.0379	PCI/G	0.0182	PCI/G	1	0	180	G		PCI/G		PR
	MSR#05-1811	1200884851	441351	13967-70-9	Cesium-134	TRG	U	HASL300	LB1	0.00351	0.009	PCI/G	0	U		27/07/2005	9:13	0.0183	PCI/G	0.00766	PCI/G	1	0	180	G		PCI/G		PR
	MSR#05-1811	1200884851	441351	10045-97-3	Cesium-137	TRG	U	HASL300	LB1	0.00451	0.00826	PCI/G	0	U		27/07/2005	9:13	0.0158	PCI/G	0.00744	PCI/G	1	0	180	G		PCI/G		PR
	MSR#05-1811	1200884851	441351	10198-40-0	Cobalt-60	TRG	U	HASL300	LB1	0.00431	0.00931	PCI/G	0	U		27/07/2005	9:13	0.0158	PCI/G	0.00726	PCI/G	1	0	180	G		PCI/G		PR
	MSR#05-1811	1200884851	441351	14683-23-9	Europium-152	TRG	U	HASL300	LB1	0.00147	0.0237	PCI/G	0	U		27/07/2005	9:13	0.0432	PCI/G	0.0207	PCI/G	1	0	180	G		PCI/G		PR
	MSR#05-1811	1200884851	441351	15585-10-1	Europium-154	TRG	U	HASL300	LB1	0.0109	0.0202	PCI/G	0	U		27/07/2005	9:13	0.0398	PCI/G	0.0182	PCI/G	1	0	180	G		PCI/G		PR
	MSR#05-1811	1200884851	441351	14391-16-3	Europium-155	TRG	U	HASL300	LB1	-0.002	0.0235	PCI/G	0	U		27/07/2005	9:13	0.0429	PCI/G	0.0207	PCI/G	1	0	180	G		PCI/G		PR
	MSR#05-1811	1200884851	441351	15092-94-1	Lead-212	TRG	U	HASL300	LB1	0.0111	0.0242	PCI/G	0	U		27/07/2005	9:13	0.0244	PCI/G	0.0118	PCI/G	1	0	180	G		PCI/G		PR
	MSR#05-1811	1200884851	441351	15067-28-4	Lead-214	TRG	U	HASL300	LB1	0.0264	0.0171	PCI/G	0	U		27/07/2005	9:13	0.0332	PCI/G	0.016	PCI/G	1	0	180	G		PCI/G		PR
	MSR#05-1811	1200884851	441351	13966-31-9	Manganese-54	TRG	U	HASL300	LB1	0.00132	0.00774	PCI/G	0	U		27/07/2005	9:13	0.0142	PCI/G	0.00666	PCI/G	1	0	180	G		PCI/G		PR
	MSR#05-1811	1200884851	441351	14681-63-1	Niobium-94	TRG	U	HASL300	LB1	0.00402	0.008	PCI/G	0	U		27/07/2005	9:13	0.015	PCI/G	0.00713	PCI/G	1	0	180	G		PCI/G		PR
	MSR#05-1811	1200884851	441351	13966-00-2	Potassium-40	TRG	U	HASL300	LB1	0.0845	0.152	PCI/G	0	U		27/07/2005	9:13	0.106	PCI/G	0.0469	PCI/G	1	0	180	G		PCI/G		PR
	MSR#05-1811	1200884851	441351	13982-63-3	Radium-226	TRG	U	HASL300	LB1	0.000879	0.0345	PCI/G	0	U		27/07/2005	9:13	0.0379	PCI/G	0.0182	PCI/G	1	0	180	G		PCI/G		PR
	MSR#05-1811	1200884851	441351	14391-65-2	Silver-108m	TRG	U	HASL300	LB1	-0.00461	0.00805	PCI/G	0	U		27/07/2005	9:13	0.0139	PCI/G	0.00661	PCI/G	1	0	180	G		PCI/G		PR
	MSR#05-1811	1200884851	441351	14913-50-9	Thallium-208	TRG	U	HASL300	LB1	0.00171	0.0176	PCI/G	0	U		27/07/2005	9:13	0.0143	PCI/G	0.00672	PCI/G	1	0	180	G		PCI/G		PR
7000-0000-012-1S	MSR#05-1811	1200884852	441351	14331-83-0	Actinium-228	TRG	U	HASL300	LR1	0.291	0.105	PCI/G	0			27/07/2005	5:08	0.0479	PCI/G	0.0439	PCI/G	1	13	183	G		PCI/G	0.40	8	PR
7000-0000-012-1S	MSR#05-1811	1200884852	441351	14596-10-2	Americium-241	TRG	U	HASL300	LR1	-0.00198	0.0171	PCI/G	0	U		27/07/2005	5:08	0.0146	PCI/G	0.0197	PCI/G	1	13	183	G		PCI/G	-0.0	214	PR
7000-0000-012-1S	MSR#05-1811	1200884852	441351	14913-49-6	Bismuth-212	TRG	U	HASL300	LR1	0.203	0.197	PCI/G	0			27/07/2005	5:08	0.0918	PCI/G	0.103	PCI/G	1	13	183	G		PCI/G	0.26	7	PR
7000-0000-012-1S	MSR#05-1811	1200884852	441351	14733-03-0	Bismuth-214	TRG	U	HASL300	LR1	0.326	0.0761	PCI/G	0			27/07/2005	5:08	0.0221	PCI/G	0.0231	PCI/G	1	13	183	G		PCI/G	0.36	2	PR
7000-0000-012-1S	MSR#05-1811	1200884852	441351	13967-70-9	Cesium-134	TRG	U	HASL300	LR1	0.00814	0.0177	PCI/G	0	U		27/07/2005	5:08	0.0154	PCI/G	0.016	PCI/G	1	13	183	G		PCI/G	0.02	43	PR
7000-0000-012-1S	MSR#05-1811	1200884852	441351	10045-97-3	Cesium-137	TRG	U	HASL300	LR1	-0.00453	0.0156	PCI/G	0	U		27/07/2005	5:08	0.0131	PCI/G	0.0134	PCI/G	1	13	183	G		PCI/G	-0.0	0887	PR
7000-0000-012-1S	MSR#05-1811	1200884852	441351	10198-40-0	Cobalt-60	TRG	U	HASL300	LR1	0.00663	0.0174	PCI/G	0	U		27/07/2005	5:08	0.0149	PCI/G	0.0135	PCI/G	1	13	183	G		PCI/G	0.00	264	PR
7000-0000-012-1S	MSR#05-1811	1200884852	441351	14683-23-9	Europium-152	TRG	U	HASL300	LR1	-0.0108	0.0342	PCI/G	0	U		27/07/2005	5:08	0.0289	PCI/G	0.0322	PCI/G	1	13	183	G		PCI/G	-0.0	0489	PR
7000-0000-012-1S	MSR#05-1811	1200884852	441351	15585-10-1	Europium-154	TRG	U	HASL300	LR1	0.0167	0.0526	PCI/G	0	U		27/07/2005	5:08	0.045	PCI/G	0.0427	PCI/G	1	13	183	G		PCI/G	-0.0	122	PR
7000-0000-012-1S	MSR#05-1811	1200884852	441351	14391-16-3	Europium-155	TRG	U	HASL300	LR1	0.0214	0.029	PCI/G	0	U		27/07/2005	5:08	0.0263	PCI/G	0.0306	PCI/G	1	13	183	G		PCI/G	0.03	1	PR
7000-0000-012-1S	MSR#05-1811	1200884852	441351	15092-94-1	Lead-212	TRG	U	HASL300	LR1	0.354	0.0532	PCI/G	0			27/07/2005	5:08	0.0164	PCI/G	0.0194	PCI/G	1	13	183	G		PCI/G	0.33	9	PR
7000-0000-012-1S	MSR#05-1811	1200884852	441351	15067-28-4	Lead-214	TRG	U	HASL300	LR1	0.413	0.0694	PCI/G	0			27/07/2005	5:08	0.0221	PCI/G	0.023	PCI/G	1	13	183	G		PCI/G	0.36	0	PR
7000-0000-012-1S	MSR#05-1811	1200884852	441351	13966-31-9	Manganese-54	TRG	U	HASL300	LR1	0.00259	0.0159	PCI/G	0	U		27/07/2005	5:08	0.0134	PCI/G	0.0148	PCI/G	1	13	183	G		PCI/G	-0.0	074	PR
7000-0000-012-1S	MSR#05-1811	1200884852	441351	14681-63-1	Niobium-94	TRG	U	HASL300	LR1	0.00174	0.0133	PCI/G	0	U		27/07/2005	5:08	0.0115	PCI/G	0.0117	PCI/G	1	13	183	G		PCI/G	0.00	17	PR
7000-0000-012-1S	MSR#05-1811	1200884852	441351	13966-00-2	Potassium-40	TRG	U	HASL300	LR1	16.1	1.24	PCI/G	0			27/07/2005	5:08	0.107	PCI/G	0.0919	PCI/G	1	13	183	G		PCI/G	16.0	PR	
7000-0000-012-1S	MSR#05-1811	1200884852	441351	13982-63-3	Radium-226	TRG	U	HASL300	LR1	0.326	0.0761	PCI/G	0			27/07/2005	5:08	0.0221	PCI/G	0.0231	PCI/G	1	13	183	G		PCI/G	0.36	2	PR
7000-0000-012-1S	MSR#05-1811	1200884852	441351	14391-65-2	Silver-108m	TRG	U	HASL300	LR1	0.0061	0.0118	PCI/G	0	U		27/07/2005	5:08	0.011	PCI/G	0.0111	PCI/G	1	13	183	G		PCI/G	0.00	433	PR
7000-0000-012-1S	MSR#05-1811	1200884852	441351	14913-50-9	Thallium-208	TRG	U	HASL300	LR1	0.0842	0.03	PCI/G	0			27/07/2005	5:08	0.0124	PCI/G	0.0128	PCI/G	1	13	183	G		PCI/G	0.12	5	PR

	MSR#05-1811	1200884853	441351	14331-83-0	Actinium-228	TRG	U	HASL300	BS1	0.83	0.856	PCI/G	0	U		27/07/2005	6:27	1.56	PCI/G	0.745	PCI/G	1	0	100	G		PCI/G		PR	
	MSR#05-1811	1200884853	441351	14596-10-2	Americium-241	TRG	U	HASL300	BS1	25.5	2.24	PCI/G	0			27/07/2005	6:27	0.858	PCI/G	0.422	PCI/G	1	0	100	G	24	4 PCI/G		PR	
	MSR#05-1811	1200884853	441351	14913-49-6	Bismuth-212	TRG	U	HASL300	BS1	0.246	1.73	PCI/G	0	U		27/07/2005	6:27	2.91	PCI/G	1.39	PCI/G	1	0	100	G		PCI/G		PR	
	MSR#05-1811	1200884853	441351	14733-03-0	Bismuth-214	TRG	U	HASL300	BS1	0.273	0.409	PCI/G	0	U		27/07/2005	6:27	0.708	PCI/G	0.34	PCI/G	1	0	100	G		PCI/G		PR	
	MSR#05-1811	1200884853	441351	13967-70-9	Cesium-134	TRG	U	HASL300	BS1	0.0316	0.241	PCI/G	0	U		27/07/2005	6:27	0.425	PCI/G	0.202	PCI/G	1	0	100	G		PCI/G		PR	
	MSR#05-1811	1200884853	441351	10045-97-3	Cesium-137	TRG	U	HASL300	BS1	9.48	1.03	PCI/G	0			27/07/2005	6:27	0.425	PCI/G	0.204	PCI/G	1	0	100	G	9.	43 PCI/G		PR	
	MSR#05-1811	1200884853	441351	10198-40-0	Cobalt-60	TRG	U	HASL300	BS1	14.8	1.25	PCI/G	0			27/07/2005	6:27	0.435	PCI/G	0.203	PCI/G	1	0	100	G	14	.6 PCI/G		PR	
	MSR#05-1811	1200884853	441351	14683-23-9	Europium-152	TRG	U	HASL300	BS1	-0.125	0.47	PCI/G	0	U		27/07/2005	6:27	0.795	PCI/G	0.383	PCI/G	1	0	100	G		PCI/G		PR	
	MSR#05-1811	1200884853	441351	15585-10-1	Europium-154	TRG	U	HASL300	BS1	-0.424	0.556	PCI/G	0	U		27/07/2005	6:27	0.899	PCI/G	0.411	PCI/G	1	0	100	G		PCI/G		PR	
	MSR#05-1811	1200884853	441351	14391-16-3	Europium-155	TRG	U	HASL300	BS1	0.211	0.534	PCI/G	0	U		27/07/2005	6:27	0.885	PCI/G	0.433	PCI/G	1	0	100	G		PCI/G		PR	
	MSR#05-1811	1200884853	441351	15092-94-1	Lead-212	TRG	U	HASL300	BS1	0.0984	0.253	PCI/G	0	U		27/07/2005	6:27	0.441	PCI/G	0.214	PCI/G	1	0	100	G		PCI/G		PR	
	MSR#05-1811	1200884853	441351	15067-28-4	Lead-214	TRG	U	HASL300	BS1	0.0971	0.342	PCI/G	0	U		27/07/2005	6:27	0.592	PCI/G	0.286	PCI/G	1	0	100	G		PCI/G		PR	
	MSR#05-1811	1200884853	441351	13966-31-9	Manganese-54	TRG	U	HASL300	BS1	-0.000329	0.222	PCI/G	0	U		27/07/2005	6:27	0.388	PCI/G	0.184	PCI/G	1	0	100	G		PCI/G		PR	
	MSR#05-1811	1200884853	441351	14681-63-1	Niobium-94	TRG	U	HASL300	BS1	0.206	0.206	PCI/G	0	U		27/07/2005	6:27	0.362	PCI/G	0.173	PCI/G	1	0	100	G		PCI/G		PR	
	MSR#05-1811	1200884853	441351	13966-00-2	Potassium-40	TRG	U	HASL300	BS1	2.02	2.17	PCI/G	0	U		27/07/2005	6:27	4.08	PCI/G	1.9	PCI/G	1	0	100	G		PCI/G		PR	
	MSR#05-1811	1200884853	441351	13982-63-3	Radium-226	TRG	U	HASL300	BS1	0.273	0.409	PCI/G	0	U		27/07/2005	6:27	0.708	PCI/G	0.34	PCI/G	1	0	100	G		PCI/G		PR	
	MSR#05-1811	1200884853	441351	14391-65-2	Silver-108m	TRG	U	HASL300	BS1	-0.107	0.178	PCI/G	0	U		27/07/2005	6:27	0.293	PCI/G	0.141	PCI/G	1	0	100	G		PCI/G		PR	
	MSR#05-1811	1200884853	441351	14913-50-9	Thallium-208	TRG	U	HASL300	BS1	-0.0647	0.221	PCI/G	0	U		27/07/2005	6:27	0.364	PCI/G	0.174	PCI/G	1	0	100	G		PCI/G		PR	
	MSR#05-1811	1200884926	441385	10028-17-8	Tritium	TRG	U	E906.0	LB1	0.0785	0.722	PCI/G	0	U		30/07/2005	1:09	1.25	PCI/G	0.603	PCI/G	1	0	16.8	G		PCI/G		PR	
7000-0000-014-C1C-01	MSR#05-1811	1200884927	441385	10028-17-8	Tritium	TRG	U	E906.0	LR1	-1.19	1.58	PCI/G	0	U		30/07/2005	1:41	2.84	PCI/G	1.37	PCI/G	1	10	15	G		PCI/G 0.46		3	PR
7000-0000-014-C1C-01	MSR#05-1811	1200884928	441385	10028-17-8	Tritium	TRG	U	E906.0	MS1	8.79	1.9	PCI/G	0			30/07/2005	2:12	2.7	PCI/G	1.3	PCI/G	1	10	15.7	G	9.	79 PCI/G	10.3	PR	
	MSR#05-1811	1200884929	441385	10028-17-8	Tritium	TRG	U	E906.0	BS1	8.78	1.04	PCI/G	0			30/07/2005	2:44	1.27	PCI/G	0.611	PCI/G	1	0	16.8	G	9.	09 PCI/G		PR	
	MSR#05-1811	1200885197	441483	14681-59-5	Iron-55	TRG	U	LSC	LB1	-0.0896	1.16	PCI/G	0	U		17/07/2005	6:01	1.57	PCI/G	0.772	PCI/G	1	0	4	G		PCI/G		PR	
	MSR#05-1811	1200885200	441483	14681-59-5	Iron-55	TRG	U	LSC	BS1	34.6	1.57	PCI/G	0			17/07/2005	9:08	1.55	PCI/G	0.765	PCI/G	1	0	4	G	37	.7 PCI/G		PR	
	MSR#05-1811	1200885205	441485	14133-76-7	Technetium-99	TRG	U	TC02RCM	LB1	0.174	0.201	PCI/G	0	U		19/07/2005	6:04	0.338	PCI/G	0.166	PCI/G	1	0	5.42	G		PCI/G		PR	
	MSR#05-1811	1200885208	441485	14133-76-7	Technetium-99	TRG	U	TC02RCM	BS1	20	0.493	PCI/G	0			19/07/2005	8:27	0.355	PCI/G	0.174	PCI/G	1	0	5.42	G	21	.8 PCI/G		PR	
	MSR#05-1811	1200885209	441486	14762-75-5	Carbon-14	TRG	U	LSC	LB1	0.02	0.0966	PCI/G	0	U		15/07/2005	2:52	0.169	PCI/G	0.08	PCI/G	1	0	9.09	G		PCI/G		PR	
	MSR#05-1811	1200885212	441486	14762-75-5	Carbon-14	TRG	U	LSC	BS1	7.84	0.404	PCI/G	0			13/07/2005	5:15	0.246	PCI/G	0.116	PCI/G	1	0	9.09	G	7.	15 PCI/G		PR	
	MSR#05-1811	1200887282	442289	14596-10-2	Americium-241	TRG	U	AM05RCM	LB1	-0.0162	0.0257	PCI/G	0	U		22/07/2005	10:47	0.0735	PCI/G	0.02	PCI/G	1	0	0.515	G		PCI/G		PR	
	MSR#05-1811	1200887282	442289	OER-100-93	Curium-242	TRG	U	AM05RCM	LB1	0.0128	0.0251	PCI/G	0	U		22/07/2005	10:47	0.0347	PCI/G	0	PCI/G	1	0	0.515	G		PCI/G		PR	
	MSR#05-1811	1200887282	442289	OER-101-57	Curium-243/244	TRG	U	AM05RCM	LB1	0.00942	0.025	PCI/G	0	U		22/07/2005	10:47	0.0618	PCI/G	0.0141	PCI/G	1	0	0.515	G		PCI/G		PR	
7000-0000-015-C1C-01	MSR#05-1811	1200887283	442289	14596-10-2	Americium-241	TRG	U	AM05RCM	LR1	-0.0185	0.0241	PCI/G	0	U		22/07/2005	10:47	0.0755	PCI/G	0.0224	PCI/G	1	11	0.515	G		PCI/G -0.0		103	PR
7000-0000-015-C1C-01	MSR#05-1811	1200887283	442289	OER-100-93	Curium-242	TRG	U	AM05RCM	LR1	0	0.026	PCI/G	0	U		22/07/2005	10:47	0.0359	PCI/G	0	PCI/G	1	11	0.515	G		PCI/G 0.00		PR	
7000-0000-015-C1C-01	MSR#05-1811	1200887283	442289	OER-101-57	Curium-243/244	TRG	U	AM05RCM	LR1	0.00319	0.0242	PCI/G	0	U		22/07/2005	10:47	0.0757	PCI/G	0.0225	PCI/G	1	11	0.515	G		PCI/G 0.02		06	PR
7000-0000-015-C1C-01	MSR#05-1811	1200887284	442289	14596-10-2	Americium-241	TRG	U	AM05RCM	MS1	4.82	0.507	PCI/G	0			22/07/2005	10:47	0.114	PCI/G	0.0386	PCI/G	1	11	0.515	G	5.	29 PCI/G	5.28	PR	
7000-0000-015-C1C-01	MSR#05-1811	1200887284	442289	OER-100-93	Curium-242	TRG	U	AM05RCM	MS1	-0.0116	0.0131	PCI/G	0	U		22/07/2005	10:47	0.107	PCI/G	0.0318	PCI/G	1	11	0.515	G		PCI/G		PR	
7000-0000-015-C1C-01	MSR#05-1811	1200887284	442289	OER-101-57	Curium-243/244	TRG	U	AM05RCM	MS1	6.48	0.589	PCI/G	0			22/07/2005	10:47	0.16	PCI/G	0.0811	PCI/G	1	11	0.515	G	6.	54 PCI/G	6.56	PR	
	MSR#05-1811	1200887285	442289	14596-10-2	Americium-241	TRG	U	AM05RCM	BS1	5.36	0.479	PCI/G	0			22/07/2005	10:47	0.106	PCI/G	0.0379	PCI/G	1	0	0.515	G	5.	29 PCI/G		PR	
	MSR#05-1811	1200887285	442289	OER-100-93	Curium-242	TRG	U	AM05RCM	BS1	-0.00824	0.00933	PCI/G	0	U		22/07/2005	10:47	0.0762	PCI/G	0.0226	PCI/G	1	0	0.515	G		PCI/G		PR	
	MSR#05-1811	1200887285	442289	OER-101-57	Curium-243/244	TRG	U	AM05RCM	BS1	6.62	0.533	PCI/G	0			22/07/2005	10:47	0.14	PCI/G	0.0551	PCI/G	1	0	0.515	G	6.	52 PCI/G		PR	
	MSR#05-1811	1200887286	442290	13981-16-3	Plutonium-238	TRG	U	PU11RCM	LB1	-0.00596	0.00827	PCI/G	0	U		22/07/2005	10:47	0.0737	PCI/G	0.02	PCI/G	1	0	0.515	G		PCI/G		PR	
	MSR#05-1811	1200887286	442290	OER-100-70	Plutonium-239/240	TRG	U	PU11RCM	LB1	0.00944	0.025	PCI/G	0	U		22/07/2005	10:47	0.062	PCI/G	0.0142	PCI/G	1	0	0.515	G		PCI/G		PR	
7000-0000-015-C1C-01	MSR#05-1811	1200887287	442290	13981-16-3	Plutonium-238	TRG	U	PU11RCM	LR1	-0.00813	0.0092	PCI/G	0	U		22/07/2005	10:47	0.0751	PCI/G	0.0223	PCI/G	1	11	0.515	G		PCI/G -0.0		0569	PR
7000-0000-015-C1C-01	MSR#05-1811	1200887287	442290	OER-100-70	Plutonium-239/240	TRG	U	PU11RCM	LR1	-0.00271	0.0227	PCI/G	0	U		22/07/2005	10:47	0.0563	PCI/G	0.0129	PCI/G	1	11	0.515	G		PCI/G 0.00		616	PR
7000-0000-015-C1C-01	MSR#05-1811	1200887288	442290	13981-16-3	Plutonium-238	TRG	U	PU11RCM	MS1	0.0441	0.0713	PCI/G	0	U		22/07/2005	10:47	0.15	PCI/G	0.0573	PCI/G	1	11	0.515	G		PCI/G		PR	
7000-0000-015-C1C-01	MSR#05-1811	1200887288	442290	OER-100-70	Plutonium-239/240	TRG	U	PU11RCM	MS1	4.34	0.466	PCI/G	0			22/07/2005	10:47	0.101	PCI/G	0.033	PCI/G	1	11	0.515	G	4.	64 PCI/G	4.65	PR	
	MSR#05-1811	1200887289	442290	13981-16-3	Plutonium-238	TRG	U	PU11RCM	BS1	0.0335	0.0444	PCI/G	0	U		22/07/2005	10:47	0.08	PCI/G	0.0251	PCI/G	1	0	0.515	G		PCI/G		PR	
	MSR#05-1811	1200887289	442290	OER-100-70	Plutonium-239/240	TRG	U	PU11RCM	BS1	4.56	0.439	PCI/G	0			22/07/2005	10:47	0.08	PCI/G	0.0251	PCI/G	1	0	0.515	G	4.	64 PCI/G		PR	
	MSR#05-1811	1200889936	443492	13781-37-8	Nickel-63	TRG	U	LSC	LB1	0.352	1.19	PCI/G	0	U		19/07/2005	9:57	2.06	PCI/G	0.978	PCI/G	1	0	1.62	G		PCI/G		PR	
	MSR#05-1811	1200889939	443492	13781-37-8	Nickel-63	TRG	U	LSC	BS1	70.7	4.58	PCI/G	0			20/07/2005	2:37	3.42	PCI/G	1.62	PCI/G	1	0	1.62	G	92	.6 PCI/G		PR	
	MSR#05-1811	1200890599	443731	10098-97-2	Strontium-90	TRG	U	E905M	LB1	-0.0011	0.00328	PCI/G	0	U		30/07/2005	10:37	0.00587	PCI/G	0.0028	PCI/G	1	0	19.6	G		PCI/G		PR	
	MSR#05-1811	1200890602	443731	10098-97-2	Strontium-90	TRG	U	E905M	BS1	1.03	0.0569	PCI/G	0			30/07/2005	10:37	0.0185	PCI/G	0.00816	PCI/G	1	0	19.6	G	0.	912 PCI/G		PR	
	MSR#05-1811	1200890603	443733	10098-97-2	Strontium-90	TRG	U	E905M	LB1	-0.0037	0.00358	PCI/G	0	U		2/8/2005	10:32	0.00655	PCI/G	0.00315	PCI/G	1	0	18.7	G		PCI/G		PR	
7000-0000-014-1S	MSR#05-1811	1200890604	443733	10098-97-2	Strontium-90	TRG	U	E905M	LR1	0.00835	0.0065	PCI/G	0	U		2/8/2005	10:32	0.012	PCI/G	0.00565	PCI/G	1	62	14.7	G		PCI/G 0.00		441	PR
7000-0000-014-1S	MSR#05-1811	1200890605	443733	10098-97-2	Strontium-90	TRG	U	E905M	MS1	2.11	0.132	PCI/G	0			2/8/2005	10:32	0.0484	PCI/G	0.0213	PCI/G	1	62	7.38	G	2.	43 PCI/G	2.43	PR	
	MSR#05-1811	1200890606	443733	10098-97-2	Strontium-90	TRG	U	E905M	BS1	0.833	0.0513	PCI/G	0			2/8/2005	10:32	0.0202	PCI/G	0.00901	PCI/G	1	0	18.7	G	0.	957 PCI/G		PR	
	MSR#05-1811	1200895269	445708	10028-17-8	Tritium	TRG	U	E906.0	LB1	0.492	0.608	PCI/G	0	U		1/8/2005	12:02	1.02	PCI/G	0.49	PCI/G	1	0	17.5	G		PCI/G		PR	
7000-0000-018-C3C-03	MSR#05-1811	1200895270	445708	10028-17-8	Tritium	TRG	U	E906.0	LR1	0.165	1.31	PCI/G	0	U		1/8/2005	12:34	2.27	PCI/G	1.09	PCI/G	1	6.6	17.1	G		PCI/G 0.32		2	PR
7000-0000-018-C3C-03	MSR#05-1811	1200895271	445708	10028-17-8	Tritium	TRG	U	E906.0	MS1	9.44	1.85	PCI/G	0			1/8/2005	1:06	2.5	PCI/G	1.2	PCI/G	1	6.6	15.9	G	9.	69 PCI/G	10.0	PR	
	MSR#05-1811	1200895272	445708	10028-17-8	Tritium	TRG	U	E906.0	BS1	8.94	1	PCI/G	0			1/8/2005	1:38	1.13	PCI/G	0.54	PCI/G	1	0	17.5	G	8.	74 PCI/G		PR	
	MSR#05-1811	1200901933	448398	14119-32-5	Plutonium-241	TRG	U	PU11RCM	LB1	1.32	1.99	PCI/G	0			5/8/2005	11:20	3.37	PCI/G	1.63	PCI/G	1	0	1.53	G		PCI/G		PR	
7000-0000-015-01S	MSR#05-1811	1200901934	448398	14119-32-5	Plutonium-241	TRG	U	PU11RCM	LR3	-0.514	2.1	PCI/G	0	U		5/8/2005	11:52	3.66	PCI/G	1.78	PCI/G	1	53	1.46	G		PCI/G 0.19		9	PR
7000-0000-015-01S	MSR#05-1811	1200901935	448398	14119-32-5	Plutonium-241	TRG	U	PU11RCM	MS3	37.9	3.31	PCI/G	0			5/8/2005	12:24	3.82	PCI/G	1.85	PCI/G	1	53	1.48	G	45	.9 PCI/G	46.1	PR	
	MSR#05-1811	1200901936	448398	14119-32-5	Plutonium-241	TRG	U	PU11RCM	BS1	38.2	4.09	PCI/G	0			5/8/2005	12:55	4.89	PCI/G	2.34	PCI/G	1	0	1.53	G	44	.1 PCI/G		PR	

Attachment 2
ISFSI Records Entry Form
(Page 1 of 1)

NUCLEAR PLANT RECORDS TRANSMITTAL		NPR USE ONLY CONTROL NO. b U.N. NO. 2164
DEPARTMENT OF ORIGIN **Site Closure**	RECORDS CLASSIFICATION (SEE INSTRUCTIONS): ☐ CONFIDENTIAL ☐ SAFEGUARDS ☐ QA RECORD	DATE: **5/10/06**
TFI #: **11.10**	TFI TITLE: **50.75g Release Records**	RETENTION (Ref. Attachment 1): **L(+)LP+10**

ISFSI: ☐ **Type 1 (Dual Storage)** ✓ **Type 2** ☐ **Type 3** (Ref. Attachment 1)

DESCRIPTION OF RECORDS (NOTE: USE MORE THAN ONE TRANSMITTAL IF REQUIRED)

Work Plan and Inspection Record, WPIR, 24265-000-GEN-5000-00137-000, Underslab Subsurface Soil Sampling, 2004 and 2005 Radiological Characterization Activity.

This submittal is only the following portion of this WPIR: Screenwell Building – 18' Elevation, Survey / Sampling Work Plan SSWP Number BCY-SSWP-04-09-004.

Search the database using the WPIR number in the title field to find indexing information on all other components of this WPIR.

Special Instructions for OD processing: Optical Character Recognition (OCR) Required? ☐ YES ✓ NO

RECORDS ENTERED BY (PRINT NAME):	SUPERVISOR/PERSON ENTERING RECORDS (Signature):
AR Bejma/J. McCarthy	

RECEIPT (BY NPR)

DATE: 5/10/06	RECORDS ARE AS DESCRIBED BY ORIGINATOR: ☒ YES ☐ NO
CONDITION OF RECORDS: ☒ GOOD ☐ OTHER (Describe Below)	
RECEIVED AND ACCEPTED BY (SIGNATURE):	TEMPORARY FILE LOCATION NO.: NPR

PROCESSING (By NPR, Except for Adding 'Alternative Storage Ref.' As Applicable)

DATE PROCESSED	ASSIGNED OD NUMBER	SIGNATURE OF NPR PROCESSING PERSONNEL	ALTERNATIVE STORAGE REFERENCE	
			LOCATION	INDEXING REF. (IF ANY)
5/10/06	CY-030			

Survey/Sampling Work Plan – SSWP

GENERAL SECTION

SSWP Number: BCY-SSWP-04-09-004

Survey Unit # : 7000 series

Type of Survey: Characterization

Area Description : Screenwell Building: -18' Elevation

DATA QUALITY OBJECTIVES (DQO)

1.0 STATE THE PROBLEM

The problem: Obtain additional characterization data in sediment and concrete to support final status survey (FSS) planning.

Stakeholders: The primary stakeholders interested in the answer to this problem are Connecticut Yankee, the CT Department of Environmental Protection (CTDEP) and the US Nuclear Regulatory Commission (USNRC).

The Planning Team: The planning team consisted of Site Closure Group (SCG) personnel. The primary decision maker for this plan will be the Site Release /Technical Support Lead with input from the RCRA Group.

Schedule: This project has an expected duration of 3 working days including drilling and sample collection.

Resources: The primary resources needed to determine the answer to the problem are two divers and two laborers, one health physics technician, one RCRA engineer and one radiological engineer. Ancillary support will be needed from the on-site Count Room and offsite lab for sample preparation, gamma spectroscopy and Hard to Detect radionuclide analysis.

2.0 IDENTIFY THE DECISION

The following decision needs to be defined to address the stated problem.

Principal Study Question: Is the radiological data obtained from sample analysis sufficient to adequately characterize the survey area?

Alternate Actions: Alternative actions include obtaining additional samples, performing additional analyses at an off-site facility to confirm gamma spectroscopy results and to identify and quantify hard-to-detect (HTD) radionuclides, and no action.

The Decision: Determine that the radiological data adequately characterizes the survey area. Consider additional sampling as necessary under a separate addendum to this sampling plan.

3.0 IDENTIFY THE INPUTS TO THE DECISION

Information Needed: Measurements of sample media are needed to identify and determine the concentration of those radionuclides that could potentially be present in the sub-grade portion of the Screenwell Building at the time of final status survey. Information is needed in concrete to establish how much, if any, tritium contamination of the outside walls has occurred due to groundwater flow and information on sediment contamination that may have occurred due to Discharge Tunnel water recirculated into the Screenwell Building. The sample media is concrete obtained from two locations on the east wall and sediment from several locations on the floor and in the de-icing line.

Source of the Information: The new measurements will include collection and radionuclide-specific analysis of concrete wafers and sediment samples. The collection process will typically use a pneumatic drill for coring. Cores will be sliced into wafers for analysis. Analysis for hard-to-detect (HTD)

radionuclides will be performed under this SSWP as an output of the decision process. All samples will be analyzed for tritium and gamma emitting radionuclides. No QC measurements are necessary given the limited area of investigation, number of samples and the purpose of the survey (i.e., to collect characterization data).

Table 1 shows the required radionuclides for analysis and the necessary detection sensitivity for the analytical and measurement process. The sensitivity or minimum detectable concentration (MDC) is set at 4% of the base-case DCGL values listed in Table 6-4 and Table 6-1of the License Termination Plan (LTP). Note, the specified MDC is lower than 10% of the DCGL that is recommended by the Section 5.5 of the LTP for fixed measurements (fixed measurements include samples). However, the MDC is the same as the MDC specified in recent FSS sample plans designed to achieve a 10 mrem/year Total Effective Dose Equivalent (TEDE).

Table 1 – Analytic matrix. Includes radionuclide and Base Case DCGL from Table 6-4 and Table 6-1 of the LTP and the required sensitivity or MDC for analysis

Nuclide	Concrete $DCGL_{25}$ (pCi/g)	Concrete MDC (pCi/g)	Soil $DCGL_{25}$ (pCi/g)	Soil MDC (pCi/g)
H-3	9.05E+01	3.62E+00	4.12E+02	1.65E+01
C-14	2.05E+01	8.20E-01	5.66E+00	2.26E-01
Mn-54	5.51E+01	2.20E+00	1.74E+01	6.96E-01
Fe-55	8.96E+01	3.58E+00	2.74E+04	1.10E+03
Co-60	9.07E+01	3.63E+00	3.81E+00	1.52E-01
Ni-63	1.29E+02	5.16E+00	7.23E+02	2.89E+01
Sr-90	3.77E-01	1.51E-02	1.55E+00	6.20E-02
Nb-94	7.74E+00	3.10E-01	7.12E+00	2.85E-01
Tc-99	2.85E+01	1.14E+00	1.26E+01	5.04E-01
Ag-108m	2.59E+01	1.04E+00	7.14E+00	2.86E-01
Cs-134	3.21E+02	1.28E+01	4.67E+00	1.87E-01
Cs-137	6.45E+02	2.58E+01	7.91E+00	3.16E-01
Eu-152	2.27E+02	9.08E+00	1.01E+01	4.04E-01
Eu-154	1.94E+02	7.76E+00	9.29E+00	3.72E-01
Eu-155	9.53E+03	3.81E+02	3.92E+02	1.57E+01
Pu-238	1.14E+01	4.56E-01	2.96E+01	1.18E+00
Pu-239/240	1.00E+01	4.00E-01	2.67E+01	1.07E+00
Pu-241	1.49E+02	5.96E+00	8.70E+02	3.48E+01
Am-241	4.42E+00	1.77E-01	2.58E+01	1.03E+00
Cm-243/244	3.83E+00	1.53E-01	2.90E+01	1.16E+00

4.0 DEFINE THE BOUNDARIES OF THE SURVEY.

Boundaries of the survey: The focus of this SSWP will be to collect two concrete samples at predetermined locations in the east wall of the Screenwell Building and several sediment samples in the gap between the de-icing pipe and the building, in the four bays and inside the de-icing pipe. (floor elevation: -18', refer to Attachment 1). All samples will be identified under a general building designator of 7000.

The general orientation of the sample measurement locations (SML) is shown in Attachment 1. The sample location may be moved slightly depending upon the condition of the location. Additional sampling may be necessary to determine the need and amount of decontamination and remediation efforts.

Temporal boundaries: Sampling will normally be performed during dayshift.

Constraints: Constraints include water, poor lighting, wet surfaces and confined spaces.

5.0 DEVELOP A DECISION RULE

The following decisions rules have been developed to define a logical process for choosing among alternative actions for the principal study questions associated with this survey unit.

Decision Rule (1): If obstruction prevents further travel of the coring drill, determine if there is sufficient sample for analysis. Consider moving the SML location to obtain a new sample of sufficient quantity, otherwise stop sampling at this SML. Document conclusion of the decision in the Daily Survey Journal sheet.

Decision Rule (2): If all analyses meet the required sensitivity with no anomalous or suspect results (e.g., identification of a gamma-emitting radionuclide not contained in Table 1 and not attributable to natural radioactivity) then no further action is required under this SSWP. Otherwise, reanalyze sample or consider performing additional analyses for other hard-to-detect (HTD) radionuclides.

6.0 SPECIFY TOLERABLE LIMITS ON DECISION ERRORS

There are no limits on decision errors for characterization surveys.

7.0 OPTIMIZE DESIGN

Number of biased samples and locations: There are eleven biased SMLs for sampling under this SSWP as shown on Attachment 1. These SMLs were determined by the planning team based on the output of the data quality objectives performed under SSWP 04-09-004 and the Decommissioning Request for Proposal (CY-04-001).

DQO STEPS COMPLETE (signature signifies affirmative response)

R Bollenbeck , 9/28/04

SC Radiological Engineer Date

GENERAL INSTRUCTIONS

1. Characterization activities will be performed under WP&IR number 000-MEC-5000-1088-000.
2. Cognizant engineers to review pictures and plant drawings of the area.
3. Sampling equipment and supplies will consist of some or all of the following; concrete coring drill and drill bits, new marinelli containers, tape and tamper-evident tape, trowels, hacksaw, marker and new plastic bags for preparing samples and packaging off-site samples. Other equipment may include utility knifes, poly sheeting, location marker paint and hand augers.
4. Ensure obstructions are removed to provide suitable access for equipment and personnel.
5. Sample locations should be identified or labeled when possible.
6. Samples will be obtained in accordance with RPM 5.1-3, "*Collection of Surface and Subsurface Soil, Shoreline Sediment, Asphalt and Liquid Samples for Scoping, Characterization and Final Status Surveys*" and in accordance with the Work Plan and Inspection Record (WP&IR) and this SSWP.
7. Sample nomenclature will be as suggested by RPM 5.1-2, "*Preparation of Characterization, Remedial Action and Turnover Survey Plans*" with some modification to align the procedural format with the need to obtain multiple samples from the same location. For example, 7000-0000-011-C-1C-01 represents the first concrete core wafer from the first core taken at SML #11. The dashes ("-") shown in the procedure are optional and are not required.
8. The cognizant radiological engineer will determine whether sufficient sample media has been collected for analysis in instances where only a partial core sample was obtained.
9. Samples will be handled in accordance with procedure RPM 5.1-5, "*Chain of Custody for Final Status Survey Samples.*"
10. Sample analyses should meet the sensitivity requirements provided in Table 1 to this SSWP.
11. Documents generated during the performance of this SSWP will be complete and legible. Corrections will be made using a single line-out followed by an initial and date.

SPECIFIC INSTRUCTIONS

1. Initiate and utilize the Daily Survey Journal Sheet in accordance with RPM 5.1-11, "*Preparation of Final Status Survey Plans.*"
2. Sample instructions (Attachment 1 provides location).
   a. Proceed to the selected SML denoted on Attachment 1 and designated by Table 2.

Table 2 – Sample Measurement Location (SML)

SML	TYPE	Concrete Designation
1	Sediment	7000-0000-001
2	Sediment	7000-0000-002
3	Sediment	7000-0000-003

4	Sediment	7000-0000-004
5	Sediment	7000-0000-005
6	Sediment	7000-0000-006
7	Sediment	7000-0000-007
8	Sediment	7000-0000-008
9	Sediment	7000-0000-009
10	Concrete	7000-0000-010
11	Concrete	7000-0000-011

b. Perform sediment sampling at the selected location.

(1). Drive the core sampler (tube) all the way into the sediment.

(2). Repeat sampling at the current location until enough sample has been obtained or as designated by the cognizant engineer.

(3). Label in accordance with the designation number provided in Table 2 followed by an "S".

c. Perform concrete coring at the selected location.

(1). Drill all the way through the concrete to the soil (estimated thickness is 30 inches).

(2). Identify the top by placing a "T" or arrow on the core, place into a double plastic bag or single vacuum sealed bag to maintain moisture content.

(3). Label in accordance with designation number provided in Table 2 followed by a "C-1C". Subsequent cores are identified as "C-2C", "C-3C" etc.

d. Generate a Sample Control and Accountability form for the samples.

(1). Record sample information on a Sample Control and Accountability form.

(2). Place a security tamper seal on the container or maintain physical control until sample(s) are transferred to an appropriate locked storage area.

(3). Record sample location information on the Sample Control and Accountability form.

e. Disposition samples for analysis.

(1). Set-up area for sample preparation in the Site Closure Sea/Land container or where directed by health physics.

(2). Obtain two approximately 2.5 inch wafers from both the outer most core (nearest the soil) and the center. Obtain two approximately 1 inch wafers from the inner most core (nearest the river).

(3). Place the wafers into double plastic bags or into a vacuum sealed single bag, apply tamper proof tape and label each sample with "01", "02" etc, after the core designation.

f. Generate a COC for samples being analyzed onsite.

(1). Record sample IDs, dates, times and codes.

(2). The analysis code is "CHGAM" for all samples.

g. Generate a COC for samples being analyzed offsite.

(1). Record "General Engineering Laboratories" as the analysis laboratory.

(2). Record sample IDs, dates, times and codes.

(3). The analysis codes are "CHGAM", "H-3", and "Sr-90" for all samples.

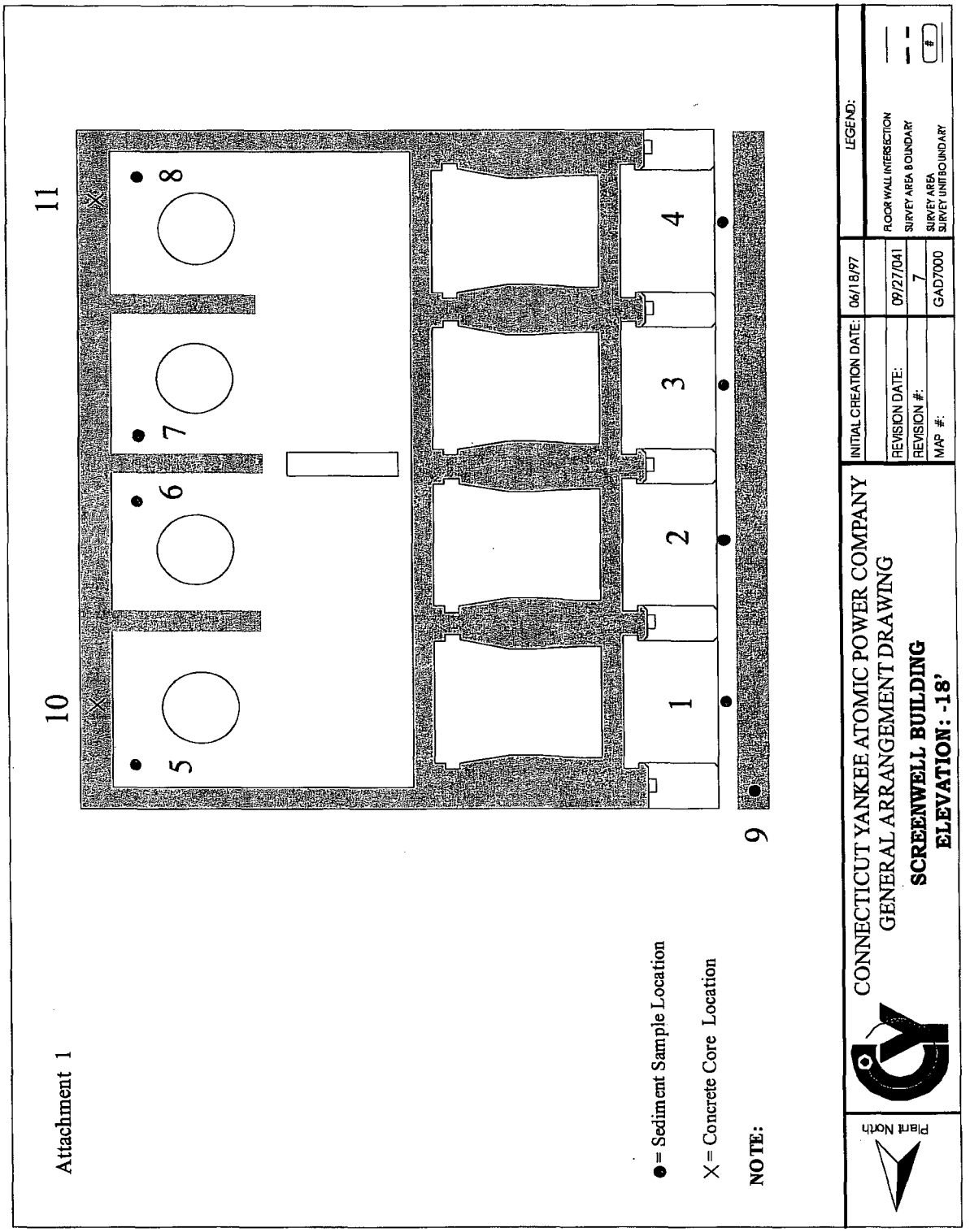
h. Evaluate the data and determine appropriate actions based upon the decision rules in Section 5.

Prepared by P Hollenbeck Date 9/28/04
Radiological Engineer

Reviewed by [illegible] Date 9/28/04

Survey/Sampling Work Plan – SSWP

Attachment 1 – Sample Location Map



GENERAL ENGINEERING LABORATORIES, LLC
a Member of THE GEL GROUP, INC.
Meeting Today's Needs with a Vision for Tomorrow

November 12, 2004

Mr. Pete Hollenbeck
Connecticut Yankee Atomic Power
Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424

Re: Concrete and Sediment PO# 002337
Work Order: 123957
SDG: MSR#04-3637

Dear Mr. Hollenbeck:

General Engineering Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on October 20, 2004. This data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4243.

Sincerely,

Cheryl Jones
Project Manager

Purchase Order: 002337
Chain of Custody: 2004-00243, 2004-00244
Enclosures

P.O. Box 30712 • Charleston, SC 29417 • 2040 Savage Road (29407)
Phone (843) 556-8171 • Fax (843) 766-1178 • www.gel.com

CONNECTICUT YANKEE
RE: CONCRETE AND SEDIMENT
PO# 002337
Work Order: 123957

123957001	7000-0000-001S
123957002	7000-0000-002S
123957003	7000-0000-003S
123957004	7000-0000-004S
123957005	7000-0000-005S
123957006	7000-0000-006S
123957007	7000-0000-007S
123957008	7000-0000-008S
123957009	7000-0000-011C-1C-01
123957010	7000-0000-011C-1C-02
123957011	7000-0000-011C-2C-03
123957012	7000-0000-011C-3C-04
123957013	7000-0000-011C-3C-05
123957014	7000-0000-010C-1C-01
123957015	7000-0000-010C-1C-02
123957016	7000-0000-010C-2C-03
123957017	7000-0000-010C-3C-04
123957018	7000-0000-010C-3C-05

Table of Contents

General Narrative **1**

Chain of Custody **4**

Cooler Receipt Checkilst **7**

Radiological Analysis **9**
Sample Data Summary 16
Quality Control Data 54

GENERAL NARRATIVE

CASE NARRATIVE
For
CONNECTICUT YANKEE
RE: Concrete and Sediment
PO# 002337
Work Order: 123957

November 12, 2004

Laboratory Identification:
General Engineering Laboratories, LLC

Mailing Address:
P.O. Box 30712
Charleston, South Carolina 29417

Express Mail Delivery and Shipping Address:
2040 Savage Road
Charleston, South Carolina 29407

Telephone Number:
(843) 556-8171

Summary:

Sample receipt
The samples arrived at General Engineering Laboratories, LLC, (GEL) in Charleston, South Carolina October 20, 2004. All sample containers arrived without any visible signs of tampering or breakage. The chain of custody contained the proper documentation and signatures except in items of note located below.

The laboratory prepared the following sample(s):

Sample ID	Client Sample ID
123957001	7000-0000-001S
123957002	7000-0000-002S
123957003	7000-0000-003S
123957004	7000-0000-004S
123957005	7000-0000-005S
123957006	7000-0000-006S
123957007	7000-0000-007S
123957008	7000-0000-008S
123957009	7000-0000-011C-1C-01
123957010	7000-0000-011C-1C-02
123957011	7000-0000-011C-2C-03
123957012	7000-0000-011C-3C-04
123957013	7000-0000-011C-3C-05
123957014	7000-0000-010C-1C-01

123957015	7000-0000-010C-1C-02
123957016	7000-0000-010C-2C-03
123957017	7000-0000-010C-3C-04
123957018	7000-0000-010C-3C-05

Items of Note:
Samples 7000-0000-011C-1C-01, 7000-0000-011C-1C-02, 7000-0000-011C-3C-04, 7000-0000-010C-1C-01, and 7000-0000-010C-1C-02 were consumed by analysis before the tritium aliquot was taken from the container.

Case Narrative:

Sample analyses were conducted using methodology as outlined in General Engineering Laboratories (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are listed below by analytical parameter.

Analytical Request:

Five concrete samples were analyzed for CHGAM, H-3, and SR-90. Five concrete samples were analyzed for CHGAM and Sr-90. Eight sediment samples were analyzed for CHGAM and Sr-90.

Internal Chain of Custody:

Custody was maintained for all of these samples.

Data Package:

The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Laboratory Certifications, and Radiochemistry.

I certify that this data package is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or a designee, as verified by the following signature.

Cheryl Jones
Project Manager

CHAIN OF CUSTODY

Chain of Custody Form

No. 2004-00243

Connecticut Yankee Atomic Power Company
362 Injun Hollow Road, East Hampton, CT 06424
860-267-2556

Project Name: Haddam Neck Decommissioning

Contact Name & Phone:
Pete Hollenbeck 860-267-3923

Analytical Lab (Name, City, State):
General Engineering Laboratories
2040 Savage Road
Charleston, SC 29407
Sarah Kozlik

Priority: ☒ 30 D. ☐ 14 D. ☐ 7 D.
Other:

Lab Use Only
Comments:

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	CHGAM	Sr-90					Comment, Preservation	Lab Sample ID
7000-0000-001S	9/29/04	1455	SE	G	PB	X	X						
7000-0000-002S	9/29/04	1510	SE	G	PB	X	X						
7000-0000-003S	9/29/04	1525	SE	G	PB	X	X						
7000-0000-004S	9/29/04	1535	SE	G	PB	X	X						
7000-0000-005S	9/29/04	1710	SE	G	PB	X	X						
7000-0000-006S	9/29/04	1720	SE	G	PB	X	X						
7000-0000-007S	9/29/04	1022	SE	G	PB	X	X						
7000-0000-008S	9/29/04	1000	SE	G	PB	X	X						

NOTES: PO #: 002337 MSR #: 04-3637 ☐ LTP QA ☐ Radwaste QA ☒ Non QA

Samples Shipped Via:
☒ Fed Ex
☐ UPS
☐ Hand
☐ Other ____
7903 0930 5600
Bill of Lading #

Internal Container Temp.: 6 Deg. C

Custody Sealed?
Y ☐ N ☑

Custody Seal Intact?
Y ☐ N ☐

1) Relinquished By: Don Johnson	Date/Time: 10-19-04 / 10:45
2) Received By: [signature]	Date/Time: 10/19/04 10:45
3) Relinquished By	Date/Time
4) Received By: [signature]	Date/Time: 10-20-04 0915
5) Relinquished By	Date/Time
6) Received By	Date/Time

Chain of Custody Form

Connecticut Yankee Atomic Power Company
362 Injun Hollow Road, East Hampton, CT 06424
860-267-2556

No. 2004-00244

Project Name: Haddam Neck Decommissioning

Contact Name & Phone:
Pete Hollenbeck 860-267-3923

Analytical Lab (Name, City, State):
General Engineering Laboratories
2040 Savage Road
Charleston, SC 29407
Sarah Kozlik

Priority: ☒ 30 D. ☐ 14 D. ☐ 7 D.
Other:

Lab Use Only
Comments:

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	CHGAM	Sr-90	H-3				Comment, Preservation	Lab Sample ID
7000-0000-011C-1C-01	10/4/04	0930	CT	CR	PB	X	X	X					
7000-0000-011C-1C-02	10/4/04	0930	CT	CR	PB	X	X	X					
7000-0000-011C-2C-03	10/4/04	1015	CT	CR	PB	X	X	X					
7000-0000-011C-3C-04	10/4/04	1050	CT	CR	PB	X	X	X					
7000-0000-011C-3C-05	10/4/04	1050	CT	CR	PB	X	X	X					
7000-0000-010C-1C-01	10/4/04	1350	CT	CR	PB	X	X	X					
7000-0000-010C-1C-02	10/4/04	1350	CT	CR	PB	X	X	X					
7000-0000-010C-2C-03	10/4/04	1455	CT	CR	PB	X	X	X					
7000-0000-010C-3C-04	10/4/04	1650	CT	CR	PB	X	X	X					
7000-0000-010C-3C-05	10/4/04	1650	CT	CR	PB	X	X	X					

NOTES: PO #: 002337 MSR #: 04-3637 ☐ LTP QA ☐ Radwaste QA ☒ Non QA

Samples Shipped Via:
☒ Fed Ex
☐ UPS
☐ Hand
☐ Other ____
7903 0930 5600
Bill of Lading #

Internal Container Temp.: 18 Deg. C

Custody Sealed? Y ☐ N ☑

Custody Seal Intact? Y ☐ N ☐

1) Relinquished By	Date/Time	2) Received By	Date/Time
Don Johnson	10-14-04 / 10:45	[illegible]	10/14/04 10:45
3) Relinquished By	Date/Time	4) Received By	Date/Time
		[illegible]	10-20-04 0915
5) Relinquished By	Date/Time	6) Received By	Date/Time

COOLER RECEIPT CHECKLIST

Figure 1. Sample Check-in List

Date/Time Received: 10-20-04 0915

SDG#: ~~123957~~ csy MSR# 04-3637

Work Order Number: 123957

Shipping Container ID: FED EX 7903 0930 5800 Chain of Custody # 2004-00245

1. Custody Seals on shipping container intact? Yes [ ] No [ ] NA ✓
2. Custody Seals dated and signed? Yes [ ] No [ ] NA ✓
3. Chain-of-Custody record present? Yes [✓] No [ ]
4. Cooler temperature 18°C
5. Vermiculite/packing materials is: Wet [ ] Dry [ ] NA ✓
6. Number of samples in shipping container: 22
7. Sample holding times exceeded? Yes [ ] No [✓]

8. Samples have:

✓ tape ____ hazard labels

✓ custody seals ____ appropriate sample labels

9. Samples are:

✓ in good condition ____ leaking

____ broken ____ have air bubbles

10. Were any anomalies identified in sample receipt? Yes [✓] No [ ]
11. Description of anomalies (include sample numbers): _____

Sample Custodian/Laboratory: [signature] Date: 10-20-04

Telephoned to: _____ On _____ By _____

RADIOLOGICAL ANALYSIS

Radiochemistry Case Narrative
Connecticut Yankee Atomic Power Co. (YANK)
SDG MSR#04-3637

Method/Analysis Information

Product:	**Gammaspec, Gamma, Solid-FSS GAM & ALL FSS**
Analytical Method:	EML HASL 300, 4.5.2.3
Prep Method:	Dry Soil Prep
Analytical Batch Number:	375469
Prep Batch Number:	375419

Sample ID	Client ID
123957001	7000-0000-001S
123957002	7000-0000-002S
123957003	7000-0000-003S
123957004	7000-0000-004S
123957005	7000-0000-005S
123957006	7000-0000-006S
123957007	7000-0000-007S
123957008	7000-0000-008S
123957009	7000-0000-011C-1C-01
123957010	7000-0000-011C-1C-02
123957011	7000-0000-011C-2C-03
123957012	7000-0000-011C-3C-04
123957013	7000-0000-011C-3C-05
123957014	7000-0000-010C-1C-01
123957015	7000-0000-010C-1C-02
123957016	7000-0000-010C-2C-03
123957017	7000-0000-010C-3C-04
123957018	7000-0000-010C-3C-05
1200726188	Method Blank (MB)
1200726190	Laboratory Control Sample (LCS)
1200726189	123957001(7000-0000-001S) Sample Duplicate (DUP)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-013 REV# 10.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 123957001 (7000-0000-001S).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information

Qualifier	Reason	Analyte	Sample
UI	Data rejected due to interference.	Cesium-134	1200726189
UI	Data rejected due to low abundance.		123957003
			123957007
			123957009
			123957014
		Cobalt-60	1200726189
		Europium-154	123957005
		Silver-108m	123957008
UI	Data rejected due to no valid peak.	Bismuth-212	123957017

Method/Analysis Information

Product:	**GFPC, Sr90, solid-ALL FSS**
Analytical Method:	EPA 905.0 Modified
Prep Method:	Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method:	Dry Soil Prep
Analytical Batch Number:	376218
Prep Batch Number:	375206
Dry Soil Prep GL-RAD-A-021 Batch Number:	375203

Sample ID	Client ID
123957001	7000-0000-001S
123957002	7000-0000-002S
123957003	7000-0000-003S
123957004	7000-0000-004S
123957005	7000-0000-005S

123957006	7000-0000-006S
123957007	7000-0000-007S
123957008	7000-0000-008S
123957009	7000-0000-011C-1C-01
123957010	7000-0000-011C-1C-02
123957011	7000-0000-011C-2C-03
123957012	7000-0000-011C-3C-04
123957013	7000-0000-011C-3C-05
123957014	7000-0000-010C-1C-01
123957015	7000-0000-010C-1C-02
123957016	7000-0000-010C-2C-03
123957017	7000-0000-010C-3C-04
123957018	7000-0000-010C-3C-05
1200728039	Method Blank (MB)
1200728042	Laboratory Control Sample (LCS)
1200728040	123957001(7000-0000-001S) Sample Duplicate (DUP)
1200728041	123957001(7000-0000-001S) Matrix Spike (MS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-004 REV# 9.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 123957001 (7000-0000-001S).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
Sample 1200728041 (7000-0000-001S) was recounted due to low/high recovery.

Chemical Recoveries
All chemical recoveries meet the required acceptance limits for this sample set.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following NCR was generated for this SDG:
NCR 155294 was generated due to RDL less than MDA and Other. 1. Samples 123957009, 123957010, 123957011 and 123957012 MDAs are greater than the required detection limit. The samples were counted for five hundred minutes. 2. The Matrix Spike (1200728041) was recounted after the one year calibration date. However, the efficiencies were verified using a new standard. 1. Reporting results. 2. Reporting results.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)**
Analytical Method:	EPA 906.0 Modified
Analytical Batch Number:	376190

Sample ID	Client ID
123957011	7000-0000-011C-2C-03
123957013	7000-0000-011C-3C-05
123957016	7000-0000-010C-2C-03
123957017	7000-0000-010C-3C-04
123957018	7000-0000-010C-3C-05
1200727972	Method Blank (MB)
1200727975	Laboratory Control Sample (LCS)
1200727973	123957018(7000-0000-010C-3C-05) Sample Duplicate (DUP)
1200727974	123957018(7000-0000-010C-3C-05) Matrix Spike (MS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-002 REV# 9.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC

The following sample was used for QC: 123957018 (7000-0000-010C-3C-05).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information
Manual qualifiers were not required.

Certification Statement
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:
GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.
The following data validator verified the information presented in this case narrative:

Airalin G Chow 11/15/04

Reviewer:_____

General Engineering Laboratories
Form GEL-XXX
Rev. 06/02

NCR Report No.: 155294
Revision No.: 1

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr. 02-NOV-04	**Division:** Radiochemistry		**Type:** Process
Instrument Type: GFPC	**Quality Criteria:** Specifications		**Client Code:** YANK
Test / Method: EPA 905.0 Modified	**Matrix Type:** Solid	**Batch ID:** 376218	**Sample Numbers:** See Below

Potentially affected work order(s)(SDG): 123903(MSR#04-3637),123957(MSR#04-3637)

Application Issues:

RDL less than MDA

Other

Specification and Requirements Nonconformance Description:	**NRG Disposition:**
1. Samples 123957009, 123957010, 123957011 and 123957012 MDAs are greater than the required detection limit. The samples were counted for five hundred minutes. 2. The Matrix Spike (1200728041)was recounted after the one year calibration date. However, the efficiencies were verified using a new standard.	1. Reporting results. 2. Reporting results.

Originator's Name:
Jimmy Hartley 02-NOV-04

Data Validator/Group Leader:
Scott Moreland 02-NOV-04

Quality Review:

Corrective Action:

Director:

Corrective Action ID and Complete Date:

SAMPLE DATA SUMMARY

GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report for
for

YANK001 Connecticut Yankee Atomic Power Co.

Client SDG: MSR#04-3637 GEL Work Order: 123957

The Qualifiers in this report are defined as follows:

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
** Indicates the analyte is a surrogate compound.
< Result is less than amount reported.
> Result is greater than amount reported.
B Target analyte was detected in the sample as well as the associated blank.
BD Flag for results below the MDC or a flag for low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
P The response between the confirmation column and the primary column is >40%D.
U Indicates the target analyte was analyzed for but not detected above the detection limit.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
Y QC Samples were not spiked with this compound.
h Sample preparation or preservation holding time exceeded.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.
** Indicates the analyte is a surrogate compound.
This data report has been prepared and reviewed in accordance with General Engineering Laboratories, LLC standard operating procedures. Please direct any questions to your Project Manager, Cheryl Jones.

Reviewed by

GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 15, 2004

Client Sample ID:	7000-0000-001S	Project:	YANK01304
Sample ID:	123957001	Client ID:	YANK001
Matrix:	SE	Vol. Recv.:	
Collect Date:	29-SEP-04		
Receive Date:	20-OCT-04		
Collector:	Client		
Moisture:	.398%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-FSS GAM & ALL FSS												
Actinium-228		1.33	+/-0.306	0.0862	+/-0.300	0.185	pCi/g		MJH1 10/29/04	0806	375469	1
Americium-241	U	-0.055	+/-0.220	0.157	+/-0.215	0.325	pCi/g					
Bismuth-212		0.890	+/-0.365	0.173	+/-0.358	0.372	pCi/g					
Bismuth-214		0.860	+/-0.133	0.0412	+/-0.131	0.0877	pCi/g					
Cesium-134	U	0.0676	+/-0.0517	0.0329	+/-0.0507	0.0695	pCi/g					
Cesium-137		0.192	+/-0.0535	0.0232	+/-0.0524	0.0496	pCi/g					
Cobalt-60	U	0.0271	+/-0.0301	0.0271	+/-0.0295	0.0593	pCi/g					
Europium-152	U	-0.0817	+/-0.0901	0.0606	+/-0.0883	0.127	pCi/g					
Europium-154	U	-0.0138	+/-0.0972	0.0669	+/-0.0953	0.148	pCi/g					
Europium-155	U	-0.0387	+/-0.0948	0.0746	+/-0.0929	0.154	pCi/g					
Lead-212		1.24	+/-0.143	0.0381	+/-0.140	0.0789	pCi/g					
Lead-214		0.945	+/-0.148	0.0441	+/-0.145	0.0924	pCi/g					
Manganese-54	U	0.0375	+/-0.0437	0.0224	+/-0.0428	0.0482	pCi/g					
Niobium-94	U	0.0182	+/-0.0271	0.0228	+/-0.0265	0.0483	pCi/g					
Potassium-40		15.8	+/-1.72	0.226	+/-1.69	0.503	pCi/g					
Radium-226		0.860	+/-0.133	0.0412	+/-0.131	0.0877	pCi/g					
Silver-108m	U	0.0414	+/-0.0283	0.022	+/-0.0278	0.0463	pCi/g					
Thallium-208		0.449	+/-0.0779	0.0222	+/-0.0764	0.0472	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-ALL FSS												
Strontium-90	U	0.014	+/-0.0129	0.0122	+/-0.0133	0.0261	pCi/g		JMB1 10/29/04	1516	376218	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	BSW1	10/22/04	0826	375420
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	10/21/04	1517	375419

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified

GENERAL ENGINEERING LABORATORIES, LLC
2040 Savage Road Charleston SC 29407 – (843) 556–8171 – www.gel.com

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 15, 2004

Client Sample ID: 7000–0000–001S
Sample ID: 123957001

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	91	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Flag for results below the MDC or a flag for low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
U Indicates the target analyte was analyzed for but not detected above the detection limit.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

GENERAL ENGINEERING LABORATORIES, LLC
2040 Savage Road Charleston SC 29407 – (843) 556-8171 – www.gel.com

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 15, 2004

Client Sample ID:	7000-0000-002S	Project:	YANK01304
Sample ID:	123957002	Client ID:	YANK001
Matrix:	SE	Vol. Recv.:	
Collect Date:	29-SEP-04		
Receive Date:	20-OCT-04		
Collector:	Client		
Moisture:	.412%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-FSS GAM & ALL FSS												
Actinium-228		1.36	+/-0.360	0.137	+/-0.353	0.300	pCi/g		MJH1 10/29/04	0801	375469	1
Americium-241	U	-0.00787	+/-0.0649	0.0508	+/-0.0636	0.105	pCi/g					
Bismuth-212		1.36	+/-0.534	0.254	+/-0.524	0.560	pCi/g					
Bismuth-214		0.787	+/-0.213	0.0722	+/-0.209	0.155	pCi/g					
Cesium-134	U	0.077	+/-0.0507	0.0474	+/-0.0496	0.103	pCi/g					
Cesium-137		0.191	+/-0.0855	0.0352	+/-0.0837	0.0767	pCi/g					
Cobalt-60	U	0.0507	+/-0.0486	0.0457	+/-0.0476	0.102	pCi/g					
Europium-152	U	0.117	+/-0.117	0.101	+/-0.115	0.213	pCi/g					
Europium-154	U	0.0337	+/-0.129	0.111	+/-0.126	0.248	pCi/g					
Europium-155	U	0.0785	+/-0.108	0.0925	+/-0.105	0.192	pCi/g					
Lead-212		1.23	+/-0.172	0.0526	+/-0.169	0.110	pCi/g					
Lead-214		1.03	+/-0.245	0.060	+/-0.240	0.128	pCi/g					
Manganese-54	U	0.0362	+/-0.0503	0.0437	+/-0.0493	0.0945	pCi/g					
Niobium-94	U	0.00335	+/-0.0392	0.0323	+/-0.0384	0.0704	pCi/g					
Potassium-40		16.6	+/-2.01	0.271	+/-1.97	0.643	pCi/g					
Radium-226		0.787	+/-0.213	0.0722	+/-0.209	0.155	pCi/g					
Silver-108m	U	-0.00697	+/-0.0359	0.0296	+/-0.0352	0.0637	pCi/g					
Thallium-208		0.301	+/-0.112	0.0433	+/-0.110	0.0925	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-ALL FSS												
Strontium-90	U	0.00268	+/-0.0105	0.0108	+/-0.0105	0.0235	pCi/g		JMB1 10/29/04	1516	376218	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	BSW1	10/22/04	0826	375420
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	10/21/04	1518	375419

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 15, 2004

Client Sample ID: 7000–0000–002S
Sample ID: 123957002

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
Carrier/Tracer Recovery		GFPC, Sr90, solid–ALL FSS			82		(25%–125%)				

Notes:
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B Target analyte was detected in the sample as well as the associated blank.
BD Flag for results below the MDC or a flag for low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
U Indicates the target analyte was analyzed for but not detected above the detection limit.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 15, 2004

Client Sample ID:	7000-0000-003S	Project:	YANK01304
Sample ID:	123957003	Client ID:	YANK001
Matrix:	SE	Vol. Recv.:	
Collect Date:	29-SEP-04		
Receive Date:	20-OCT-04		
Collector:	Client		
Moisture:	3.53%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-FSS GAM & ALL FSS												
Actinium-228		1.24	+/-0.283	0.0748	+/-0.277	0.162	pCi/g		MJH1 10/29/04	0931	375469	1
Americium-241	U	0.0926	+/-0.116	0.088	+/-0.114	0.181	pCi/g					
Bismuth-212		0.734	+/-0.356	0.181	+/-0.348	0.385	pCi/g					
Bismuth-214		0.621	+/-0.138	0.0434	+/-0.136	0.0916	pCi/g					
Cesium-134	U	0.00	+/-0.054	0.0286	+/-0.0529	0.0607	pCi/g					
	UI											
Cesium-137		0.229	+/-0.0697	0.0213	+/-0.0683	0.0454	pCi/g					
Cobalt-60	U	0.016	+/-0.0341	0.0292	+/-0.0334	0.0631	pCi/g					
Europium-152	U	0.0119	+/-0.0734	0.0601	+/-0.072	0.126	pCi/g					
Europium-154	U	0.044	+/-0.100	0.0855	+/-0.0982	0.184	pCi/g					
Europium-155	U	0.0393	+/-0.0812	0.066	+/-0.0796	0.136	pCi/g					
Lead-212		1.09	+/-0.124	0.0321	+/-0.122	0.0668	pCi/g					
Lead-214		0.896	+/-0.144	0.0432	+/-0.141	0.0902	pCi/g					
Manganese-54	U	0.0166	+/-0.0312	0.0263	+/-0.0306	0.0558	pCi/g					
Niobium-94	U	-0.00245	+/-0.0271	0.022	+/-0.0265	0.0466	pCi/g					
Potassium-40		14.8	+/-1.56	0.188	+/-1.53	0.424	pCi/g					
Radium-226		0.621	+/-0.138	0.0434	+/-0.136	0.0916	pCi/g					
Silver-108m	U	0.000539	+/-0.0248	0.0198	+/-0.0243	0.0418	pCi/g					
Thallium-208		0.314	+/-0.0637	0.0217	+/-0.0624	0.0461	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-ALL FSS												
Strontium-90	U	0.0161	+/-0.00963	0.00804	+/-0.0103	0.0176	pCi/g		JMB1 10/29/04	1516	376218	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	BSW1	10/22/04	0826	375420
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	10/21/04	1518	375419

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 15, 2004

Client Sample ID: 7000-0000-003S
Sample ID: 123957003

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-ALL FSS	98	(25%-125%)

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UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
h Sample preparation or preservation holding time exceeded.
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Project: Soils and Concrete PO# 002337

Report Date: November 15, 2004

Client Sample ID:	7000-0000-004S	Project:	YANK01304
Sample ID:	123957004	Client ID:	YANK001
Matrix:	SE	Vol. Recv.:	
Collect Date:	29-SEP-04		
Receive Date:	20-OCT-04		
Collector:	Client		
Moisture:	1.07%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-FSS GAM & ALL FSS												
Actinium-228		0.904	+/-0.198	0.0662	+/-0.194	0.143	pCi/g		MJH1 10/29/04	0933	375469	1
Americium-241	U	0.0224	+/-0.156	0.0948	+/-0.153	0.197	pCi/g					
Bismuth-212	U	0.288	+/-0.308	0.148	+/-0.302	0.316	pCi/g					
Bismuth-214		0.527	+/-0.103	0.0374	+/-0.101	0.0789	pCi/g					
Cesium-134	U	0.0338	+/-0.0358	0.0255	+/-0.0351	0.054	pCi/g					
Cesium-137		0.162	+/-0.0566	0.0194	+/-0.0555	0.0413	pCi/g					
Cobalt-60	U	0.0348	+/-0.0397	0.0229	+/-0.0389	0.0499	pCi/g					
Europium-152	U	0.0369	+/-0.0576	0.050	+/-0.0565	0.105	pCi/g					
Europium-154	U	-0.0433	+/-0.0784	0.0601	+/-0.0768	0.131	pCi/g					
Europium-155	U	0.014	+/-0.0734	0.0526	+/-0.072	0.109	pCi/g					
Lead-212		0.933	+/-0.110	0.0285	+/-0.108	0.0592	pCi/g					
Lead-214		0.643	+/-0.0974	0.0348	+/-0.0954	0.0729	pCi/g					
Manganese-54	U	0.0174	+/-0.0283	0.0222	+/-0.0277	0.0472	pCi/g					
Niobium-94	U	-0.0165	+/-0.0204	0.0152	+/-0.020	0.0326	pCi/g					
Potassium-40		14.2	+/-1.50	0.170	+/-1.47	0.382	pCi/g					
Radium-226		0.527	+/-0.103	0.0374	+/-0.101	0.0789	pCi/g					
Silver-108m	U	0.00664	+/-0.0188	0.016	+/-0.0185	0.0338	pCi/g					
Thallium-208		0.319	+/-0.0547	0.018	+/-0.0536	0.0383	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-ALL FSS												
Strontium-90	U	0.00563	+/-0.00858	0.00843	+/-0.00866	0.0182	pCi/g		JMB1 10/29/04	1516	376218	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	BSW1	10/22/04	0826	375420
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	10/21/04	1518	375419

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits

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Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 15, 2004

Client Sample ID: 7000–0000–004S
Sample ID: 123957004

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
Carrier/Tracer Recovery		GFPC, Sr90, solid–ALL FSS			114		(25%–125%)				

Notes:
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UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 15, 2004

Client Sample ID:	7000–0000–005S	Project:	YANK01304
Sample ID:	123957005	Client ID:	YANK001
Matrix:	SE	Vol. Recv.:	
Collect Date:	29–SEP–04		
Receive Date:	20–OCT–04		
Collector:	Client		
Moisture:	4.03%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–FSS GAM & ALL FSS												
Actinium–228		1.52	+/–0.449	0.130	+/–0.440	0.284	pCi/g		MJH1 10/29/04	1027	375469	1
Americium–241	U	0.0535	+/–0.186	0.133	+/–0.183	0.278	pCi/g					
Bismuth–212		0.833	+/–0.463	0.306	+/–0.454	0.659	pCi/g					
Bismuth–214		1.05	+/–0.230	0.0646	+/–0.225	0.139	pCi/g					
Cesium–134	U	0.0585	+/–0.0982	0.0475	+/–0.0962	0.102	pCi/g					
Cesium–137		0.175	+/–0.0961	0.0336	+/–0.0942	0.0731	pCi/g					
Cobalt–60	U	–0.0249	+/–0.0466	0.0339	+/–0.0457	0.0776	pCi/g					
Europium–152	U	–0.0518	+/–0.107	0.0794	+/–0.105	0.170	pCi/g					
Europium–154	U	0.00	+/–0.193	0.126	+/–0.190	0.279	pCi/g					
	UI											
Europium–155	U	0.0779	+/–0.101	0.0862	+/–0.0985	0.180	pCi/g					
Lead–212		1.68	+/–0.196	0.0484	+/–0.192	0.102	pCi/g					
Lead–214		1.15	+/–0.210	0.0594	+/–0.206	0.127	pCi/g					
Manganese–54	U	0.0341	+/–0.0433	0.0372	+/–0.0424	0.0811	pCi/g					
Niobium–94	U	0.0118	+/–0.0386	0.0318	+/–0.0378	0.0687	pCi/g					
Potassium–40		18.7	+/–2.60	0.316	+/–2.54	0.731	pCi/g					
Radium–226		1.05	+/–0.230	0.0646	+/–0.225	0.139	pCi/g					
Silver–108m	U	0.0288	+/–0.0337	0.0297	+/–0.0331	0.0636	pCi/g					
Thallium–208		0.416	+/–0.109	0.0388	+/–0.107	0.0829	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid–ALL FSS												
Strontium–90	U	0.0109	+/–0.0121	0.0116	+/–0.0124	0.0249	pCi/g		JMB1 10/29/04	1516	376218	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	BSW1	10/22/04	0826	375420
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	TC1	10/21/04	1519	375419

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified

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Project: Soils and Concrete PO# 002337

Report Date: November 15, 2004

Client Sample ID: 7000–0000–005S
Sample ID: 123957005

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	92	(25%–125%)

Notes:
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E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
U Indicates the target analyte was analyzed for but not detected above the detection limit.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
h Sample preparation or preservation holding time exceeded.
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Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 15, 2004

Client Sample ID:	7000-0000-006S	Project:	YANK01304
Sample ID:	123957006	Client ID:	YANK001
Matrix:	SE	Vol. Recv.:	
Collect Date:	29-SEP-04		
Receive Date:	20-OCT-04		
Collector:	Client		
Moisture:	.284%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-FSS GAM & ALL FSS												
Actinium-228		1.51	+/-0.436	0.137	+/-0.427	0.305	pCi/g		MJH1 10/29/04	1028	375469	1
Americium-241	U	-0.0488	+/-0.0635	0.0495	+/-0.0623	0.103	pCi/g					
Bismuth-212		1.32	+/-0.721	0.303	+/-0.707	0.665	pCi/g					
Bismuth-214		1.14	+/-0.232	0.0655	+/-0.227	0.143	pCi/g					
Cesium-134	U	0.109	+/-0.074	0.0598	+/-0.0725	0.129	pCi/g					
Cesium-137		0.216	+/-0.0729	0.0373	+/-0.0715	0.0818	pCi/g					
Cobalt-60		0.167	+/-0.0853	0.0421	+/-0.0836	0.0961	pCi/g					
Europium-152	U	-0.0207	+/-0.108	0.0865	+/-0.106	0.186	pCi/g					
Europium-154	U	-0.01	+/-0.175	0.144	+/-0.171	0.321	pCi/g					
Europium-155	U	0.124	+/-0.162	0.079	+/-0.159	0.166	pCi/g					
Lead-212		1.69	+/-0.141	0.0472	+/-0.138	0.100	pCi/g					
Lead-214		1.10	+/-0.185	0.0664	+/-0.181	0.142	pCi/g					
Manganese-54	U	-0.0162	+/-0.0578	0.0459	+/-0.0567	0.100	pCi/g					
Niobium-94	U	0.0135	+/-0.0501	0.038	+/-0.0491	0.0826	pCi/g					
Potassium-40		20.8	+/-2.10	0.413	+/-2.06	0.944	pCi/g					
Radium-226		1.14	+/-0.232	0.0655	+/-0.227	0.143	pCi/g					
Silver-108m	U	0.00451	+/-0.0403	0.0326	+/-0.0395	0.0703	pCi/g					
Thallium-208		0.598	+/-0.104	0.0398	+/-0.102	0.0863	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-ALL FSS												
Strontium-90	U	0.00184	+/-0.0103	0.0107	+/-0.0103	0.0234	pCi/g		JMB1 10/29/04	1722	376218	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	BSW1	10/22/04	0826	375420
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	10/21/04	1519	375419

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 15, 2004

Client Sample ID: 7000–0000–006S
Sample ID: 123957006

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS				78		(25%–125%)				

Notes:
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X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
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Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 15, 2004

Client Sample ID:	7000–0000–007S	Project:	YANK01304
Sample ID:	123957007	Client ID:	YANK001
Matrix:	SE	Vol. Recv.:	
Collect Date:	29–SEP–04		
Receive Date:	20–OCT–04		
Collector:	Client		
Moisture:	1.74%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–FSS GAM & ALL FSS												
Actinium–228		1.51	+/–0.245	0.0886	+/–0.240	0.192	pCi/g		MJH1 10/29/04	1030	375469	1
Americium–241	U	–0.0467	+/–0.262	0.143	+/–0.257	0.297	pCi/g					
Bismuth–212		1.27	+/–0.504	0.178	+/–0.494	0.386	pCi/g					
Bismuth–214		0.933	+/–0.133	0.0526	+/–0.130	0.111	pCi/g					
Cesium–134	U UI	0.00	+/–0.0471	0.0363	+/–0.0461	0.0769	pCi/g					
Cesium–137		0.269	+/–0.0723	0.023	+/–0.0708	0.0495	pCi/g					
Cobalt–60	U	0.0127	+/–0.037	0.0314	+/–0.0363	0.0684	pCi/g					
Europium–152	U	0.0351	+/–0.0921	0.0754	+/–0.0903	0.158	pCi/g					
Europium–154	U	–0.026	+/–0.117	0.0794	+/–0.114	0.174	pCi/g					
Europium–155	U	0.0785	+/–0.112	0.0822	+/–0.110	0.171	pCi/g					
Lead–212		1.64	+/–0.121	0.0412	+/–0.118	0.0861	pCi/g					
Lead–214		1.06	+/–0.154	0.0478	+/–0.151	0.101	pCi/g					
Manganese–54	U	0.00551	+/–0.0336	0.0275	+/–0.033	0.059	pCi/g					
Niobium–94	U	0.018	+/–0.032	0.0271	+/–0.0314	0.0575	pCi/g					
Potassium–40		21.2	+/–1.48	0.240	+/–1.45	0.535	pCi/g					
Radium–226		0.933	+/–0.133	0.0526	+/–0.130	0.111	pCi/g					
Silver–108m	U	–0.000605	+/–0.0296	0.0234	+/–0.029	0.0495	pCi/g					
Thallium–208		0.479	+/–0.0829	0.0263	+/–0.0812	0.0561	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid–ALL FSS												
Strontium–90	U	8.950E–05	+/–0.00977	0.0104	+/–0.00977	0.0223	pCi/g		JMB1 10/29/04	1722	376218	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	BSW1	10/22/04	0826	375420
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	TC1	10/21/04	1519	375419

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 15, 2004

Client Sample ID: 7000-0000-007S
Sample ID: 123957007

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-ALL FSS	105	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Flag for results below the MDC or a flag for low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
U Indicates the target analyte was analyzed for but not detected above the detection limit.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 15, 2004

Client Sample ID:	7000–0000–008S	Project:	YANK01304
Sample ID:	123957008	Client ID:	YANK001
Matrix:	SE	Vol. Recv.:	
Collect Date:	29–SEP–04		
Receive Date:	20–OCT–04		
Collector:	Client		
Moisture:	.383%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–FSS GAM & ALL FSS												
Actinium–228		1.47	+/–0.356	0.116	+/–0.349	0.250	pCi/g		MJH1 10/29/04	1032	375469	1
Americium–241	U	–0.00348	+/–0.143	0.103	+/–0.140	0.215	pCi/g					
Bismuth–212		1.23	+/–0.718	0.215	+/–0.703	0.464	pCi/g					
Bismuth–214		0.859	+/–0.217	0.0543	+/–0.213	0.116	pCi/g					
Cesium–134	U	0.075	+/–0.0586	0.0375	+/–0.0574	0.0802	pCi/g					
Cesium–137		0.319	+/–0.0844	0.0298	+/–0.0828	0.0639	pCi/g					
Cobalt–60	U	0.0443	+/–0.044	0.0393	+/–0.0431	0.0854	pCi/g					
Europium–152	U	–0.0347	+/–0.101	0.0788	+/–0.099	0.167	pCi/g					
Europium–154	U	0.0309	+/–0.129	0.0934	+/–0.127	0.205	pCi/g					
Europium–155	U	–0.00548	+/–0.112	0.0881	+/–0.110	0.184	pCi/g					
Lead–212		1.58	+/–0.178	0.0505	+/–0.175	0.105	pCi/g					
Lead–214		1.15	+/–0.192	0.059	+/–0.188	0.124	pCi/g					
Manganese–54	U	0.0591	+/–0.0519	0.0311	+/–0.0508	0.067	pCi/g					
Niobium–94	U	0.035	+/–0.0364	0.0314	+/–0.0356	0.0666	pCi/g					
Potassium–40		21.6	+/–2.25	0.277	+/–2.21	0.621	pCi/g					
Radium–226		0.859	+/–0.217	0.0543	+/–0.213	0.116	pCi/g					
Silver–108m	U UI	0.00	+/–0.0479	0.0288	+/–0.047	0.0609	pCi/g					
Thallium–208		0.486	+/–0.105	0.0263	+/–0.103	0.0566	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid–ALL FSS												
Strontium–90	U	0.013	+/–0.0133	0.0125	+/–0.014	0.0272	pCi/g		JMB1 10/29/04	1722	376218	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	BSW1	10/22/04	0826	375420
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	TC1	10/21/04	1519	375419

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified

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Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 15, 2004

Client Sample ID: 7000–0000–008S
Sample ID: 123957008

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	71	(25%–125%)

Notes:
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E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
U Indicates the target analyte was analyzed for but not detected above the detection limit.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Project: Soils and Concrete PO# 002337

Report Date: November 15, 2004

Client Sample ID:	7000-0000-011C-1C-01	Project:	YANK01304
Sample ID:	123957009	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	04-OCT-04		
Receive Date:	20-OCT-04		
Collector:	Client		
Moisture:	6.85%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.479	+/-0.189	0.082	+/-0.185	0.184	pCi/g		MJH1 10/29/04	1033	375469	1
Americium-241	U	-0.0111	+/-0.090	0.0588	+/-0.0882	0.122	pCi/g					
Bismuth-212		0.433	+/-0.392	0.187	+/-0.384	0.413	pCi/g					
Bismuth-214		0.548	+/-0.126	0.0454	+/-0.123	0.0992	pCi/g					
Cesium-134	U UI	0.00	+/-0.0396	0.0323	+/-0.0388	0.0706	pCi/g					
Cesium-137	U	0.00131	+/-0.0796	0.0247	+/-0.078	0.0544	pCi/g					
Cobalt-60	U	-0.0154	+/-0.0287	0.0211	+/-0.0281	0.0498	pCi/g					
Europium-152	U	-0.0227	+/-0.0701	0.0609	+/-0.0687	0.130	pCi/g					
Europium-154	U	0.0677	+/-0.101	0.0923	+/-0.0987	0.205	pCi/g					
Europium-155	U	0.0332	+/-0.076	0.0704	+/-0.0745	0.147	pCi/g					
Lead-212		0.425	+/-0.0878	0.0359	+/-0.086	0.0755	pCi/g					
Lead-214		0.552	+/-0.119	0.0469	+/-0.117	0.100	pCi/g					
Manganese-54	U	0.013	+/-0.0274	0.0253	+/-0.0268	0.056	pCi/g					
Niobium-94	U	-0.00265	+/-0.0285	0.0236	+/-0.0279	0.0516	pCi/g					
Potassium-40		6.84	+/-1.17	0.237	+/-1.14	0.550	pCi/g					
Radium-226		0.548	+/-0.126	0.0454	+/-0.123	0.0992	pCi/g					
Silver-108m	U	0.0227	+/-0.0265	0.0249	+/-0.026	0.0533	pCi/g					
Thallium-208		0.182	+/-0.0699	0.0242	+/-0.0685	0.0529	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.00281	+/-0.00925	0.00765	+/-0.00934	0.0159	pCi/g		JMB1 10/30/04	0048	376218	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	BSW1	10/22/04	1516	375422
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	10/21/04	1223	375421

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified

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Report Date: November 15, 2004

Client Sample ID: 7000-0000-011C-1C-01
Sample ID: 123957009

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	49	(25%-125%)

Notes:
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H Analytical holding time exceeded.
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U Indicates the target analyte was analyzed for but not detected above the detection limit.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 15, 2004

Client Sample ID:	7000-0000-011C-1C-02	Project:	YANK01304
Sample ID:	123957010	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	04-OCT-04		
Receive Date:	20-OCT-04		
Collector:	Client		
Moisture:	5.05%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.467	+/-0.198	0.0927	+/-0.194	0.205	pCi/g		MJH1 10/29/04	1300	375469	1
Americium-241	U	-0.0175	+/-0.0817	0.0537	+/-0.0801	0.112	pCi/g					
Bismuth-212	U	0.127	+/-0.225	0.211	+/-0.221	0.460	pCi/g					
Bismuth-214		0.426	+/-0.123	0.0449	+/-0.121	0.0977	pCi/g					
Cesium-134	U	0.0268	+/-0.0301	0.0292	+/-0.0295	0.0639	pCi/g					
Cesium-137	U	0.0105	+/-0.0475	0.0192	+/-0.0466	0.043	pCi/g					
Cobalt-60	U	0.00113	+/-0.0267	0.0225	+/-0.0262	0.0522	pCi/g					
Europium-152	U	0.0443	+/-0.067	0.0636	+/-0.0657	0.135	pCi/g					
Europium-154	U	0.024	+/-0.100	0.0768	+/-0.0983	0.173	pCi/g					
Europium-155	U	0.0602	+/-0.0665	0.0642	+/-0.0652	0.134	pCi/g					
Lead-212		0.319	+/-0.0776	0.0357	+/-0.076	0.0749	pCi/g					
Lead-214		0.415	+/-0.103	0.042	+/-0.100	0.0898	pCi/g					
Manganese-54	U	0.0224	+/-0.0267	0.0258	+/-0.0262	0.0567	pCi/g					
Niobium-94	U	0.022	+/-0.0291	0.0265	+/-0.0285	0.0571	pCi/g					
Potassium-40		7.60	+/-1.11	0.250	+/-1.09	0.572	pCi/g					
Radium-226		0.426	+/-0.123	0.0449	+/-0.121	0.0977	pCi/g					
Silver-108m	U	0.00399	+/-0.0212	0.0191	+/-0.0208	0.0415	pCi/g					
Thallium-208		0.102	+/-0.0533	0.0242	+/-0.0522	0.0526	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.00315	+/-0.0122	0.0101	+/-0.0123	0.0209	pCi/g		JMB1 10/30/04	0048	376218	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	BSW1	10/22/04	0826	375420
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	10/21/04	1519	375419

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits

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Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 15, 2004

Client Sample ID: 7000–0000–011C–1C–02
Sample ID: 123957010

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
Carrier/Tracer Recovery		GFPC, Sr90, solid–HTD2,ALL2 ((			40		(25%–125%)				

Notes:
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** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Flag for results below the MDC or a flag for low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
U Indicates the target analyte was analyzed for but not detected above the detection limit.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

Certificate of Analysis

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Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 15, 2004

Client Sample ID:	7000-0000-011C-2C-03	Project:	YANK01304
Sample ID:	123957011	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	04-OCT-04		
Receive Date:	20-OCT-04		
Collector:	Client		
Moisture:	6.28%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.383	+/-0.153	0.0604	+/-0.150	0.133	pCi/g		MJH1 10/29/04	1354	375469	1
Americium-241	U	-0.0292	+/-0.0801	0.0671	+/-0.0785	0.140	pCi/g					
Bismuth-212		0.441	+/-0.229	0.124	+/-0.225	0.271	pCi/g					
Bismuth-214		0.370	+/-0.081	0.0284	+/-0.0793	0.0617	pCi/g					
Cesium-134	U	0.0352	+/-0.0327	0.0215	+/-0.0321	0.0463	pCi/g					
Cesium-137	U	-0.0123	+/-0.0197	0.0162	+/-0.0193	0.0353	pCi/g					
Cobalt-60	U	0.00155	+/-0.018	0.0155	+/-0.0176	0.0355	pCi/g					
Europium-152	U	0.0237	+/-0.0507	0.0418	+/-0.0497	0.0891	pCi/g					
Europium-154	U	-0.0421	+/-0.0633	0.0488	+/-0.062	0.110	pCi/g					
Europium-155	U	0.0476	+/-0.0561	0.0538	+/-0.055	0.112	pCi/g					
Lead-212		0.394	+/-0.0621	0.0255	+/-0.0609	0.0536	pCi/g					
Lead-214		0.473	+/-0.0862	0.0338	+/-0.0845	0.0716	pCi/g					
Manganese-54	U	0.00547	+/-0.0206	0.0181	+/-0.0202	0.0394	pCi/g					
Niobium-94	U	0.0137	+/-0.0177	0.0166	+/-0.0174	0.0357	pCi/g					
Potassium-40		7.19	+/-0.923	0.147	+/-0.904	0.339	pCi/g					
Radium-226		0.370	+/-0.081	0.0284	+/-0.0793	0.0617	pCi/g					
Silver-108m	U	0.00353	+/-0.0173	0.0153	+/-0.0169	0.0328	pCi/g					
Thallium-208		0.146	+/-0.0368	0.0152	+/-0.0361	0.0331	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	-0.0112	+/-0.0109	0.00968	+/-0.0131	0.0202	pCi/g		JMB1 10/30/04	0308	376218	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	0.383	+/-1.39	1.15	+/-1.39	2.31	pCi/g		DAJ1 11/12/04	1302	376190	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	BSW1	10/22/04	1516	375422
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	10/21/04	1223	375421

The following Analytical Methods were performed

Method	Description

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Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 15, 2004

Client Sample ID: 7000-0000-011C-2C-03
Sample ID: 123957011

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
1	EML HASL 300, 4.5.2.3										
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	35	(25%-125%)

Notes:
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BD Flag for results below the MDC or a flag for low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
U Indicates the target analyte was analyzed for but not detected above the detection limit.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 15, 2004

Client Sample ID:	7000–0000–011C–3C–04	Project:	YANK01304
Sample ID:	123957012	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	04–OCT–04		
Receive Date:	20–OCT–04		
Collector:	Client		
Moisture:	5.38%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)												
Actinium–228		0.501	+/–0.159	0.0454	+/–0.156	0.103	pCi/g		MJH1 10/29/04	1354	375469	1
Americium–241	U	–0.0175	+/–0.104	0.0986	+/–0.102	0.206	pCi/g					
Bismuth–212		0.313	+/–0.192	0.124	+/–0.188	0.272	pCi/g					
Bismuth–214		0.388	+/–0.0898	0.029	+/–0.088	0.063	pCi/g					
Cesium–134	U	0.0456	+/–0.0415	0.0219	+/–0.0407	0.0473	pCi/g					
Cesium–137	U	–0.00889	+/–0.0192	0.0155	+/–0.0188	0.0338	pCi/g					
Cobalt–60	U	0.00342	+/–0.0169	0.0147	+/–0.0165	0.0341	pCi/g					
Europium–152	U	–0.00123	+/–0.0473	0.0427	+/–0.0464	0.091	pCi/g					
Europium–154	U	–0.00252	+/–0.0592	0.0494	+/–0.058	0.112	pCi/g					
Europium–155	U	0.032	+/–0.0527	0.0502	+/–0.0517	0.105	pCi/g					
Lead–212		0.390	+/–0.062	0.0244	+/–0.0607	0.0515	pCi/g					
Lead–214		0.422	+/–0.0795	0.0269	+/–0.0779	0.0578	pCi/g					
Manganese–54	U	0.0137	+/–0.0135	0.0159	+/–0.0132	0.035	pCi/g					
Niobium–94	U	0.0128	+/–0.019	0.0171	+/–0.0186	0.0367	pCi/g					
Potassium–40		8.07	+/–1.05	0.160	+/–1.03	0.368	pCi/g					
Radium–226		0.388	+/–0.0898	0.029	+/–0.088	0.063	pCi/g					
Silver–108m	U	–0.00506	+/–0.0154	0.0132	+/–0.0151	0.0285	pCi/g					
Thallium–208		0.159	+/–0.0391	0.0143	+/–0.0384	0.0312	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid–HTD2,ALL2 (CT)												
Strontium–90	U	–0.00733	+/–0.0129	0.0111	+/–0.0136	0.0229	pCi/g		JMB1 10/30/04	0308	376218	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	BSW1	10/22/04	1516	375422
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	TC1	10/21/04	1223	375421

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 15, 2004

Client Sample ID: 7000-0000-011C-3C-04
Sample ID: 123957012

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
Carrier/Tracer Recovery		GFPC, Sr90, solid-HTD2,ALL2 ((			38		(25%-125%)				

Notes:
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UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
h Sample preparation or preservation holding time exceeded.
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Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 15, 2004

Client Sample ID:	7000-0000-011C-3C-05	Project:	YANK01304
Sample ID:	123957013	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	04-OCT-04		
Receive Date:	20-OCT-04		
Collector:	Client		
Moisture:	5.62%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.493	+/-0.122	0.043	+/-0.119	0.0932	pCi/g		MJH1 10/31/04	1208	375469	1
Americium-241	U	-0.0924	+/-0.139	0.0849	+/-0.136	0.176	pCi/g					
Bismuth-212		0.323	+/-0.156	0.0989	+/-0.153	0.212	pCi/g					
Bismuth-214		0.441	+/-0.0784	0.0244	+/-0.0768	0.0518	pCi/g					
Cesium-134	U	0.0113	+/-0.028	0.0153	+/-0.0275	0.0328	pCi/g					
Cesium-137	U	-0.00714	+/-0.0147	0.0118	+/-0.0144	0.0254	pCi/g					
Cobalt-60	U	0.00111	+/-0.017	0.0143	+/-0.0166	0.0315	pCi/g					
Europium-152	U	-0.00138	+/-0.0402	0.0358	+/-0.0394	0.075	pCi/g					
Europium-154	U	0.032	+/-0.0429	0.0391	+/-0.0421	0.0859	pCi/g					
Europium-155	U	0.0717	+/-0.0512	0.0484	+/-0.0502	0.0996	pCi/g					
Lead-212		0.481	+/-0.062	0.0211	+/-0.0608	0.0439	pCi/g					
Lead-214		0.457	+/-0.0755	0.0243	+/-0.074	0.0512	pCi/g					
Manganese-54	U	-0.00304	+/-0.0153	0.0132	+/-0.015	0.0283	pCi/g					
Niobium-94	U	-0.00962	+/-0.0141	0.0111	+/-0.0138	0.0238	pCi/g					
Potassium-40		6.97	+/-0.775	0.102	+/-0.759	0.232	pCi/g					
Radium-226		0.441	+/-0.0784	0.0244	+/-0.0768	0.0518	pCi/g					
Silver-108m	U	0.000548	+/-0.0133	0.0117	+/-0.0131	0.0248	pCi/g					
Thallium-208		0.139	+/-0.0375	0.0122	+/-0.0367	0.0261	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.0017	+/-0.00341	0.00279	+/-0.00343	0.00583	pCi/g		JMB1 10/30/04	0308	376218	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	-0.684	+/-1.32	1.14	+/-1.33	2.28	pCi/g		DAJ1 11/12/04	1334	376190	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	BSW1	10/22/04	1516	375422
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	10/21/04	1223	375421

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 15, 2004

Client Sample ID: 7000–0000–011C–3C–05
Sample ID: 123957013

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	124	(25%–125%)

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E Concentration of the target analyte exceeds the instrument calibration range.
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UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
h Sample preparation or preservation holding time exceeded.
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Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 15, 2004

Client Sample ID:	7000-0000-010C-1C-01	Project:	YANK01304
Sample ID:	123957014	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	04-OCT-04		
Receive Date:	20-OCT-04		
Collector:	Client		
Moisture:	7.49%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.434	+/-0.145	0.0509	+/-0.142	0.109	pCi/g		MJH1 10/31/04	1209	375469	1
Americium-241	U	0.0547	+/-0.0637	0.0543	+/-0.0625	0.112	pCi/g					
Bismuth-212	U	0.176	+/-0.176	0.101	+/-0.172	0.215	pCi/g					
Bismuth-214		0.457	+/-0.0842	0.0231	+/-0.0825	0.0491	pCi/g					
Cesium-134	U	0.00	+/-0.0238	0.0172	+/-0.0233	0.0364	pCi/g					
	UI											
Cesium-137	U	-0.0175	+/-0.0161	0.0127	+/-0.0158	0.0272	pCi/g					
Cobalt-60	U	0.00408	+/-0.0204	0.0152	+/-0.020	0.0332	pCi/g					
Europium-152	U	-0.0164	+/-0.0406	0.0343	+/-0.0398	0.0718	pCi/g					
Europium-154	U	0.0329	+/-0.064	0.0436	+/-0.0627	0.0947	pCi/g					
Europium-155	U	0.027	+/-0.0554	0.041	+/-0.0543	0.0846	pCi/g					
Lead-212		0.454	+/-0.0594	0.0206	+/-0.0582	0.0427	pCi/g					
Lead-214		0.604	+/-0.0894	0.0238	+/-0.0876	0.050	pCi/g					
Manganese-54	U	-0.000237	+/-0.0183	0.0154	+/-0.0179	0.0326	pCi/g					
Niobium-94	U	-0.00433	+/-0.0142	0.0119	+/-0.0139	0.0252	pCi/g					
Potassium-40		8.87	+/-0.923	0.119	+/-0.905	0.266	pCi/g					
Radium-226		0.457	+/-0.0842	0.0231	+/-0.0825	0.0491	pCi/g					
Silver-108m	U	-0.0044	+/-0.0135	0.0112	+/-0.0132	0.0236	pCi/g					
Thallium-208		0.112	+/-0.0333	0.0122	+/-0.0326	0.0259	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.00742	+/-0.00857	0.00693	+/-0.00899	0.0144	pCi/g		JMB1 10/30/04	0308	376218	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	BSW1	10/22/04	1516	375422
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	10/21/04	1223	375421

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified

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Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 15, 2004

Client Sample ID: 7000-0000-010C-1C-01
Sample ID: 123957014

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	62	(25%-125%)

Notes:
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X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
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Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 15, 2004

Client Sample ID:	7000-0000-010C-1C-02	Project:	YANK01304
Sample ID:	123957015	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	04-OCT-04		
Receive Date:	20-OCT-04		
Collector:	Client		
Moisture:	5.78%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.391	+/-0.115	0.0524	+/-0.112	0.112	pCi/g		MJH1 10/31/04	1209	375469	1
Americium-241	U	0.00795	+/-0.028	0.0205	+/-0.0275	0.042	pCi/g					
Bismuth-212		0.264	+/-0.135	0.092	+/-0.132	0.198	pCi/g					
Bismuth-214		0.463	+/-0.0999	0.0241	+/-0.0979	0.0513	pCi/g					
Cesium-134	U	0.0157	+/-0.0176	0.0161	+/-0.0172	0.0343	pCi/g					
Cesium-137	U	-0.00937	+/-0.0155	0.0128	+/-0.0152	0.0274	pCi/g					
Cobalt-60	U	-0.00586	+/-0.0161	0.0131	+/-0.0158	0.0289	pCi/g					
Europium-152	U	-0.00242	+/-0.0397	0.0345	+/-0.0389	0.0721	pCi/g					
Europium-154	U	0.00493	+/-0.0493	0.0426	+/-0.0483	0.0923	pCi/g					
Europium-155	U	0.00304	+/-0.0363	0.0345	+/-0.0355	0.071	pCi/g					
Lead-212		0.418	+/-0.0574	0.0194	+/-0.0563	0.0403	pCi/g					
Lead-214		0.539	+/-0.0852	0.0257	+/-0.0835	0.0538	pCi/g					
Manganese-54	U	0.0132	+/-0.0256	0.0125	+/-0.0251	0.0268	pCi/g					
Niobium-94	U	0.00446	+/-0.0145	0.0129	+/-0.0142	0.0272	pCi/g					
Potassium-40		8.72	+/-0.850	0.129	+/-0.833	0.284	pCi/g					
Radium-226		0.463	+/-0.0999	0.0241	+/-0.0979	0.0513	pCi/g					
Silver-108m	U	0.00824	+/-0.0131	0.0123	+/-0.0128	0.0258	pCi/g					
Thallium-208		0.129	+/-0.0331	0.0129	+/-0.0324	0.0275	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.000663	+/-0.00703	0.00588	+/-0.00704	0.0122	pCi/g		JMB1 10/30/04	0308	376218	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	BSW1	10/22/04	1516	375422
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	10/21/04	1223	375421

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	EPA 905.0 Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits

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Report Date: November 15, 2004

Client Sample ID: 7000–0000–010C–1C–02
Sample ID: 123957015

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
Carrier/Tracer Recovery		GFPC, Sr90, solid–HTD2,ALL2 ((			60		(25%–125%)				

Notes:
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X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
h Sample preparation or preservation holding time exceeded.
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Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 15, 2004

Client Sample ID:	7000–0000–010C–2C–03	Project:	YANK01304
Sample ID:	123957016	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	04–OCT–04		
Receive Date:	20–OCT–04		
Collector:	Client		
Moisture:	6.73%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid–GAM2,ALL2 (CT)												
Actinium–228		0.621	+/–0.129	0.0389	+/–0.127	0.0839	pCi/g		MJH1 10/31/04	1210	375469	1
Americium–241	U	0.00227	+/–0.0807	0.0689	+/–0.0791	0.142	pCi/g					
Bismuth–212		0.384	+/–0.151	0.0818	+/–0.148	0.175	pCi/g					
Bismuth–214		0.453	+/–0.0704	0.021	+/–0.0689	0.0445	pCi/g					
Cesium–134	U	0.00766	+/–0.0199	0.0136	+/–0.0195	0.0289	pCi/g					
Cesium–137	U	0.00787	+/–0.0132	0.0117	+/–0.0129	0.0249	pCi/g					
Cobalt–60	U	0.00259	+/–0.015	0.0128	+/–0.0147	0.028	pCi/g					
Europium–152	U	–0.000349	+/–0.0332	0.0298	+/–0.0325	0.0625	pCi/g					
Europium–154	U	0.00428	+/–0.0424	0.036	+/–0.0415	0.0785	pCi/g					
Europium–155	U	0.0177	+/–0.0393	0.0366	+/–0.0385	0.0755	pCi/g					
Lead–212		0.470	+/–0.0576	0.0168	+/–0.0564	0.035	pCi/g					
Lead–214		0.502	+/–0.0773	0.0211	+/–0.0758	0.0442	pCi/g					
Manganese–54	U	0.0019	+/–0.0143	0.012	+/–0.014	0.0257	pCi/g					
Niobium–94	U	0.00882	+/–0.0121	0.0108	+/–0.0119	0.0229	pCi/g					
Potassium–40		7.67	+/–0.821	0.107	+/–0.805	0.237	pCi/g					
Radium–226		0.453	+/–0.0704	0.021	+/–0.0689	0.0445	pCi/g					
Silver–108m	U	0.00402	+/–0.0106	0.0096	+/–0.0104	0.0203	pCi/g					
Thallium–208		0.137	+/–0.0296	0.0113	+/–0.029	0.0239	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid–HTD2,ALL2 (CT)												
Strontium–90	U	0.00884	+/–0.0061	0.00471	+/–0.0068	0.00987	pCi/g		JMB1 10/30/04	0308	376218	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL2 (CT)												
Tritium	U	0.0302	+/–1.34	1.12	+/–1.34	2.25	pCi/g		DAJ1 11/12/04	1406	376190	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	BSW1	10/22/04	1516	375422
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	TC1	10/21/04	1223	375421

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 15, 2004

Client Sample ID: 7000–0000–010C–2C–03
Sample ID: 123957016

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	67	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Flag for results below the MDC or a flag for low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
U Indicates the target analyte was analyzed for but not detected above the detection limit.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 15, 2004

Client Sample ID:	7000-0000-010C-3C-04	Project:	YANK01304
Sample ID:	123957017	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	04-OCT-04		
Receive Date:	20-OCT-04		
Collector:	Client		
Moisture:	5.37%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.363	+/-0.105	0.0406	+/-0.103	0.0871	pCi/g		MJH1 10/31/04	1210	375469	1
Americium-241	U	0.00819	+/-0.0526	0.0473	+/-0.0516	0.0977	pCi/g					
Bismuth-212	U	0.00	+/-0.283	0.083	+/-0.278	0.178	pCi/g					
	UI											
Bismuth-214		0.409	+/-0.0689	0.0214	+/-0.0676	0.0453	pCi/g					
Cesium-134	U	0.0148	+/-0.0155	0.014	+/-0.0152	0.0297	pCi/g					
Cesium-137	U	-0.011	+/-0.014	0.00934	+/-0.0137	0.0201	pCi/g					
Cobalt-60	U	-0.0135	+/-0.0137	0.00978	+/-0.0134	0.0219	pCi/g					
Europium-152	U	0.00281	+/-0.0325	0.0279	+/-0.0319	0.0584	pCi/g					
Europium-154	U	0.0118	+/-0.0461	0.0395	+/-0.0452	0.0854	pCi/g					
Europium-155	U	0.0423	+/-0.0341	0.0337	+/-0.0335	0.0694	pCi/g					
Lead-212		0.361	+/-0.0494	0.0165	+/-0.0484	0.0343	pCi/g					
Lead-214		0.517	+/-0.0814	0.019	+/-0.0797	0.0401	pCi/g					
Manganese-54	U	0.0182	+/-0.0145	0.0133	+/-0.0142	0.0281	pCi/g					
Niobium-94	U	-0.00514	+/-0.0121	0.00987	+/-0.0118	0.0211	pCi/g					
Potassium-40		7.62	+/-0.804	0.106	+/-0.788	0.236	pCi/g					
Radium-226		0.409	+/-0.0689	0.0214	+/-0.0676	0.0453	pCi/g					
Silver-108m	U	0.00731	+/-0.00989	0.00927	+/-0.00969	0.0196	pCi/g					
Thallium-208		0.121	+/-0.0256	0.0117	+/-0.0251	0.0247	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	-0.00155	+/-0.0051	0.00434	+/-0.00512	0.00905	pCi/g		JMB1 10/31/04	0632	376218	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	-0.603	+/-1.31	1.12	+/-1.31	2.24	pCi/g		DAJ1 11/12/04	1438	376190	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	BSW1	10/22/04	1516	375422
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	10/21/04	1223	375421

The following Analytical Methods were performed

Method	Description

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 15, 2004

Client Sample ID: 7000–0000–010C–3C–04
Sample ID: 123957017

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
1	EML HASL 300, 4.5.2.3										
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–HTD2,ALL2 ((	67	(25%–125%)

Notes:
The Qualifiers in this report are defined as follows :

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
** Indicates the analyte is a surrogate compound.
B Target analyte was detected in the sample as well as the associated blank.
BD Flag for results below the MDC or a flag for low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
U Indicates the target analyte was analyzed for but not detected above the detection limit.
UI Uncertain identification for gamma spectroscopy.
X Lab–specific qualifier–please see case narrative, data summary package or contact your project manager for details.
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 15, 2004

Client Sample ID:	7000-0000-010C-3C-05	Project:	YANK01304
Sample ID:	123957018	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	04-OCT-04		
Receive Date:	20-OCT-04		
Collector:	Client		
Moisture:	7.05%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch	M
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Solid-GAM2,ALL2 (CT)												
Actinium-228		0.450	+/-0.166	0.0609	+/-0.163	0.132	pCi/g		MJH1 10/31/04	1211	375469	1
Americium-241	U	-0.00172	+/-0.0467	0.0388	+/-0.0458	0.0798	pCi/g					
Bismuth-212		0.332	+/-0.323	0.147	+/-0.316	0.314	pCi/g					
Bismuth-214		0.481	+/-0.101	0.0323	+/-0.0994	0.0688	pCi/g					
Cesium-134	U	0.00811	+/-0.023	0.0207	+/-0.0225	0.0444	pCi/g					
Cesium-137	U	0.0111	+/-0.0477	0.0196	+/-0.0468	0.0416	pCi/g					
Cobalt-60	U	-0.000819	+/-0.019	0.0157	+/-0.0186	0.0353	pCi/g					
Europium-152	U	-0.00719	+/-0.0508	0.0448	+/-0.0498	0.094	pCi/g					
Europium-154	U	0.0276	+/-0.0628	0.0551	+/-0.0615	0.121	pCi/g					
Europium-155	U	0.0299	+/-0.0534	0.0491	+/-0.0523	0.101	pCi/g					
Lead-212		0.432	+/-0.0661	0.0254	+/-0.0647	0.0527	pCi/g					
Lead-214		0.450	+/-0.0838	0.0333	+/-0.0821	0.0697	pCi/g					
Manganese-54	U	-0.00337	+/-0.0224	0.0193	+/-0.022	0.0413	pCi/g					
Niobium-94	U	0.0131	+/-0.0203	0.0179	+/-0.0199	0.038	pCi/g					
Potassium-40		6.80	+/-0.892	0.153	+/-0.874	0.345	pCi/g					
Radium-226		0.481	+/-0.101	0.0323	+/-0.0994	0.0688	pCi/g					
Silver-108m	U	0.00125	+/-0.0181	0.0159	+/-0.0177	0.0335	pCi/g					
Thallium-208		0.138	+/-0.0488	0.0188	+/-0.0479	0.040	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-HTD2,ALL2 (CT)												
Strontium-90	U	0.00946	+/-0.00612	0.0047	+/-0.0073	0.00985	pCi/g		JMB1 10/31/04	0632	376218	2
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL2 (CT)												
Tritium	U	-0.0297	+/-1.31	1.10	+/-1.31	2.21	pCi/g		DAJ1 11/12/04	1509	376190	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	BSW1	10/22/04	1516	375422
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TC1	10/21/04	1223	375421

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils and Concrete PO# 002337

Report Date: November 15, 2004

Client Sample ID: 7000-0000-010C-3C-05
Sample ID: 123957018

Project: YANK01304
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch M
2	EPA 905.0 Modified										
3	EPA 906.0 Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-HTD2,ALL2 ((	54	(25%-125%)

Notes:
The Qualifiers in this report are defined as follows :

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H Analytical holding time exceeded.
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U Indicates the target analyte was analyzed for but not detected above the detection limit.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
h Sample preparation or preservation holding time exceeded.
The above sample is reported on a dry weight basis.

QUALITY CONTROL DATA

GENERAL ENGINEERING LABORATORIES, LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: November 15, 2004

Client : **Connecticut Yankee Atomic Power**
Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut

Contact: **Mr. Pete Hollenbeck**

Workorder: **123957**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 375469										
QC1200726189 123957001 DUP										
Actinium-228		1.33		1.18	pCi/g	11		(0% - 100%)	MJH1	10/31/04 12:11
	Uncert:	+/-0.306		+/-0.150						
	TPU:	+/-0.300		+/-0.147						
Americium-241	U	-0.055	U	0.042	pCi/g	N/A		(0% - 100%)		
	Uncert:	+/-0.220		+/-0.136						
	TPU:	+/-0.215		+/-0.133						
Bismuth-212		0.890		0.721	pCi/g	21		(0% - 100%)		
	Uncert:	+/-0.365		+/-0.244						
	TPU:	+/-0.358		+/-0.239						
Bismuth-214		0.860		0.927	pCi/g	7		(0% - 100%)		
	Uncert:	+/-0.133		+/-0.0986						
	TPU:	+/-0.131		+/-0.0966						
Cesium-134	U	0.0676	UUI	0.00	pCi/g	33		(0% - 100%)		
	Uncert:	+/-0.0517		+/-0.0276						
	TPU:	+/-0.0507		+/-0.027						
Cesium-137		0.192		0.137	pCi/g	34		(0% - 100%)		
	Uncert:	+/-0.0535		+/-0.036						
	TPU:	+/-0.0524		+/-0.0353						
Cobalt-60	U	0.0271	UUI	0.00	pCi/g	75		(0% - 100%)		
	Uncert:	+/-0.0301		+/-0.0392						
	TPU:	+/-0.0295		+/-0.0384						
Europium-152	U	-0.0817	U	0.0256	pCi/g	N/A		(0% - 100%)		
	Uncert:	+/-0.0901		+/-0.0577						
	TPU:	+/-0.0883		+/-0.0566						
Europium-154	U	-0.0138	U	0.0219	pCi/g	N/A		(0% - 100%)		
	Uncert:	+/-0.0972		+/-0.0664						
	TPU:	+/-0.0953		+/-0.0651						
Europium-155	U	-0.0387	U	0.0417	pCi/g	N/A		(0% - 100%)		
	Uncert:	+/-0.0948		+/-0.0745						
	TPU:	+/-0.0929		+/-0.0731						
Lead-212		1.24		1.18	pCi/g	5		(0% - 20%)		
	Uncert:	+/-0.143		+/-0.0736						
	TPU:	+/-0.140		+/-0.0721						
Lead-214		0.945		0.982	pCi/g	4		(0% - 20%)		
	Uncert:	+/-0.148		+/-0.0985						
	TPU:	+/-0.145		+/-0.0965						
Manganese-54	U	0.0375	U	-0.00327	pCi/g	N/A		(0% - 100%)		
	Uncert:	+/-0.0437		+/-0.0224						
	TPU:	+/-0.0428		+/-0.022						
Niobium-94	U	0.0182	U	0.00126	pCi/g	174		(0% - 100%)		
	Uncert:	+/-0.0271		+/-0.0192						
	TPU:	+/-0.0265		+/-0.0188						

QC Summary

Workorder: 123957

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 375469										
Potassium-40		15.8		16.5	pCi/g	4		(0% - 20%)		
	Uncert:	+/-1.72		+/-0.884						
	TPU:	+/-1.69		+/-0.866						
Radium-226		0.860		0.927	pCi/g	7		(0% - 100%)		
	Uncert:	+/-0.133		+/-0.0986						
	TPU:	+/-0.131		+/-0.0966						
Silver-108m	U	0.0414	U	-0.000899	pCi/g	N/A		(0% - 100%)		
	Uncert:	+/-0.0283		+/-0.0178						
	TPU:	+/-0.0278		+/-0.0174						
Thallium-208		0.449		0.318	pCi/g	34*				
	Uncert:	+/-0.0779		+/-0.0497						
	TPU:	+/-0.0764		+/-0.0487						
QC1200726190 LCS										
Actinium-228			U	0.398	pCi/g					11/01/04 07:28
	Uncert:			+/-0.492						
	TPU:			+/-0.483						
Americium-241	23.4			24.3	pCi/g		104	(75%-125%)		
	Uncert:			+/-1.89						
	TPU:			+/-1.85						
Bismuth-212			U	0.113	pCi/g					
	Uncert:			+/-0.842						
	TPU:			+/-0.825						
Bismuth-214			U	0.0858	pCi/g					
	Uncert:			+/-0.212						
	TPU:			+/-0.208						
Cesium-134			U	-0.0659	pCi/g					
	Uncert:			+/-0.129						
	TPU:			+/-0.126						
Cesium-137	9.17			9.62	pCi/g		105	(75%-125%)		
	Uncert:			+/-0.465						
	TPU:			+/-0.456						
Cobalt-60	13.7			15.0	pCi/g		109	(75%-125%)		
	Uncert:			+/-0.676						
	TPU:			+/-0.662						
Europium-152			U	-0.0547	pCi/g					
	Uncert:			+/-0.276						
	TPU:			+/-0.270						
Europium-154			U	-0.0823	pCi/g					
	Uncert:			+/-0.237						
	TPU:			+/-0.232						
Europium-155			U	-0.232	pCi/g					
	Uncert:			+/-0.285						
	TPU:			+/-0.280						
Lead-212			U	0.123	pCi/g					
	Uncert:			+/-0.144						
	TPU:			+/-0.141						
Lead-214			U	0.152	pCi/g					
	Uncert:			+/-0.199						

QC Summary

Workorder: 123957

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 375469										
	TPU:			+/-0.196						
Manganese-54			U	-0.0158	pCi/g					
	Uncert:			+/-0.143						
	TPU:			+/-0.140						
Niobium-94			U	0.0665	pCi/g					
	Uncert:			+/-0.095						
	TPU:			+/-0.0931						
Potassium-40			U	0.811	pCi/g					
	Uncert:			+/-1.91						
	TPU:			+/-1.87						
Radium-226			U	0.0858	pCi/g			(75%-125%)		
	Uncert:			+/-0.212						
	TPU:			+/-0.208						
Silver-108m			U	-0.0248	pCi/g					
	Uncert:			+/-0.0971						
	TPU:			+/-0.0952						
Thallium-208			U	0.0289	pCi/g					
	Uncert:			+/-0.108						
	TPU:			+/-0.106						
QC1200726188 MB										
Actinium-228			U	0.0463	pCi/g					10/31/04 12:11
	Uncert:			+/-0.0358						
	TPU:			+/-0.0351						
Americium-241			U	-0.0119	pCi/g					
	Uncert:			+/-0.0265						
	TPU:			+/-0.026						
Bismuth-212			U	0.0487	pCi/g					
	Uncert:			+/-0.0637						
	TPU:			+/-0.0624						
Bismuth-214			U	0.0215	pCi/g					
	Uncert:			+/-0.0305						
	TPU:			+/-0.0299						
Cesium-134			U	-0.00166	pCi/g					
	Uncert:			+/-0.00937						
	TPU:			+/-0.00918						
Cesium-137			U	0.0086	pCi/g					
	Uncert:			+/-0.00859						
	TPU:			+/-0.00842						
Cobalt-60			U	0.00354	pCi/g					
	Uncert:			+/-0.00957						
	TPU:			+/-0.00937						
Europium-152			U	0.0084	pCi/g					
	Uncert:			+/-0.0238						
	TPU:			+/-0.0233						
Europium-154			U	0.0345	pCi/g					
	Uncert:			+/-0.0301						
	TPU:			+/-0.0294						
Europium-155			U	-0.0218	pCi/g					

QC Summary

Workorder: 123957

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 375469										
	Uncert:			+/-0.0251						
	TPU:			+/-0.0246						
Lead-212			U	0.0183	pCi/g					
	Uncert:			+/-0.0282						
	TPU:			+/-0.0277						
Lead-214			U	0.0072	pCi/g					
	Uncert:			+/-0.0253						
	TPU:			+/-0.0248						
Manganese-54			U	0.00579	pCi/g					
	Uncert:			+/-0.00966						
	TPU:			+/-0.00947						
Niobium-94			U	-0.00158	pCi/g					
	Uncert:			+/-0.00909						
	TPU:			+/-0.0089						
Potassium-40			U	0.0419	pCi/g					
	Uncert:			+/-0.104						
	TPU:			+/-0.102						
Radium-226			U	0.0215	pCi/g					
	Uncert:			+/-0.0305						
	TPU:			+/-0.0299						
Silver-108m			U	-0.00459	pCi/g					
	Uncert:			+/-0.00876						
	TPU:			+/-0.00859						
Thallium-208			U	0.00188	pCi/g					
	Uncert:			+/-0.013						
	TPU:			+/-0.0127						
Rad Gas Flow										
Batch 376218										
QC1200728040 123957001 DUP										
Strontium-90	U	0.014	U	0.0266	pCi/g	0		(0% - 100%)	JMB1	10/29/04 16:22
	Uncert:	+/-0.0129		+/-0.0171						
	TPU:	+/-0.0133		+/-0.0188						
QC1200728042 LCS										
Strontium-90	1.28			0.989	pCi/g		77	(75%-125%)		
	Uncert:			+/-0.0673						
	TPU:			+/-0.269						
QC1200728039 MB										
Strontium-90			U	0.000222	pCi/g					10/31/04 06:32
	Uncert:			+/-0.00374						
	TPU:			+/-0.00374						
QC1200728041 123957001 MS										
Strontium-90	2.90 U	0.014		2.26	pCi/g		78	(75%-125%)		11/01/04 08:51
	Uncert:	+/-0.0129		+/-0.121						
	TPU:	+/-0.0133		+/-0.585						
Rad Liquid Scintillation										
Batch 376190										
QC1200727973 123957018 DUP										
Tritium	U	-0.0297	U	0.0687	pCi/g	N/A		(0% - 100%)	DAJ1	11/12/04 16:13

QC Summary

Workorder: 123957

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Liquid Scintillation										
Batch 376190										
	Uncert:	+/-1.31		+/-1.31						
	TPU:	+/-1.31		+/-1.31						
QC1200727975 LCS										
Tritium	7.97			7.94	pCi/g		100	(75%-125%)		11/12/04 17:17
	Uncert:			+/-0.976						
	TPU:			+/-1.12						
QC1200727972 MB										
Tritium			U	-0.0153	pCi/g					11/12/04 15:41
	Uncert:			+/-0.676						
	TPU:			+/-0.676						
QC1200727974 123957018 MS										
Tritium	8.04 U	-0.0297		7.58	pCi/g		94	(75%-125%)		11/12/04 16:45
	Uncert:	+/-1.31		+/-1.67						
	TPU:	+/-1.31		+/-1.75						

Notes:
The Qualifiers in this report are defined as follows:

- * Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- ** Indicates the analyte is a surrogate compound.
- B Target analyte was detected in the sample as well as the associated blank.
- BD Flag for results below the MDC or a flag for low tracer recovery.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
- U Indicates the target analyte was analyzed for but not detected above the detection limit.
- UI Uncertain identification for gamma spectroscopy.
- X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
- h Sample preparation or preservation holding time exceeded.

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
** Indicates analyte is a surrogate compound.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptence criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

7000-0000-001S	MSR#04-3637	123957001	375469	14331-83-0	Actinium 228	TRG	8	UHASL300	HASL300	REG	1.33	0.306	PCI/G	0		21/10/2004	38262.32569	8.06	0.165	PCI/G	0.0862	PCI/G	1	0.4	98.6	G	PCI/G	PR
7000-0000-001S	MSR#04-3637	123957001	375469	14596-10-2	Americium 241	TRG	8	UHASL300	HASL300	REG	0.055	0.22	PCI/G	0	U	21/10/2004	38262.32569	8.06	0.325	PCI/G	0.157	PCI/G	1	0.4	98.6	G	PCI/G	PR
7000-0000-001S	MSR#04-3637	123957001	375469	14913-49-6	Bismuth 212	TRG	8	UHASL300	HASL300	REG	0.89	0.366	PCI/G	0		21/10/2004	38262.32569	8.06	0.372	PCI/G	0.173	PCI/G	1	0.4	98.6	G	PCI/G	PR
7000-0000-001S	MSR#04-3637	123957001	375469	14733-03-0	Bismuth 214	TRG	8	UHASL300	HASL300	REG	0.86	0.133	PCI/G	0		21/10/2004	38262.32569	8.06	0.0877	PCI/G	0.0412	PCI/G	1	0.4	98.6	G	PCI/G	PR
7000-0000-001S	MSR#04-3637	123957001	375469	13967-70-9	Cesium 134	TRG	8	UHASL300	HASL300	REG	0.0676	0.0517	PCI/G	0	U	21/10/2004	38262.32569	8.06	0.0695	PCI/G	0.0329	PCI/G	1	0.4	98.6	G	PCI/G	PR
7000-0000-001S	MSR#04-3637	123957001	375469	10045-97-3	Cesium-137	TRG	8	UHASL300	HASL300	REG	0.192	0.0535	PCI/G	0		21/10/2004	38262.32569	8.06	0.0496	PCI/G	0.0232	PCI/G	1	0.4	98.6	G	PCI/G	PR
7000-0000-001S	MSR#04-3637	123957001	375469	10198-40-0	Cobalt 60	TRG	8	UHASL300	HASL300	REG	0.0271	0.0301	PCI/G	0	U	21/10/2004	38262.32569	8.06	0.0593	PCI/G	0.0271	PCI/G	1	0.4	98.6	G	PCI/G	PR
7000-0000-001S	MSR#04-3637	123957001	375469	14683-23-9	Europium 152	TRG	8	UHASL300	HASL300	REG	-0.0617	0.0901	PCI/G	0	U	21/10/2004	38262.32569	8.06	0.127	PCI/G	0.0606	PCI/G	1	0.4	98.6	G	PCI/G	PR
7000-0000-001S	MSR#04-3637	123957001	375469	15585-10-1	Europium 154	TRG	8	UHASL300	HASL300	REG	-0.0138	0.0972	PCI/G	0	U	21/10/2004	38262.32569	8.06	0.148	PCI/G	0.0669	PCI/G	1	0.4	98.6	G	PCI/G	PR
7000-0000-001S	MSR#04-3637	123957001	375469	14391-16-3	Europium 155	TRG	8	UHASL300	HASL300	REG	-0.0387	0.0946	PCI/G	0	U	21/10/2004	38262.32569	8.06	0.154	PCI/G	0.0748	PCI/G	1	0.4	98.6	G	PCI/G	PR
7000-0000-001S	MSR#04-3637	123957001	375469	15092-94-1	Lead 212	TRG	8	UHASL300	HASL300	REG	1.24	0.143	PCI/G	0		21/10/2004	38262.32569	8.06	0.0789	PCI/G	0.0381	PCI/G	1	0.4	98.6	G	PCI/G	PR
7000-0000-001S	MSR#04-3637	123957001	375469	15067-28-4	Lead 214	TRG	8	UHASL300	HASL300	REG	0.945	0.148	PCI/G	0		21/10/2004	38262.32569	8.06	0.0924	PCI/G	0.0441	PCI/G	1	0.4	98.6	G	PCI/G	PR
7000-0000-001S	MSR#04-3637	123957001	375469	13966-31-9	Manganese 54	TRG	8	UHASL300	HASL300	REG	0.0375	0.0437	PCI/G	0	U	21/10/2004	38262.32569	8.06	0.0482	PCI/G	0.0224	PCI/G	1	0.4	98.6	G	PCI/G	PR
7000-0000-001S	MSR#04-3637	123957001	375469	14681-63-1	Niobium 94	TRG	8	UHASL300	HASL300	REG	0.0182	0.0271	PCI/G	0	U	21/10/2004	38262.32569	8.06	0.0483	PCI/G	0.0228	PCI/G	1	0.4	98.6	G	PCI/G	PR
7000-0000-001S	MSR#04-3637	123957001	375469	13966-00-2	Potassium-40	TRG	8	UHASL300	HASL300	REG	15.6	1.72	PCI/G	0		21/10/2004	38262.32569	8.06	0.603	PCI/G	0.226	PCI/G	1	0.4	98.6	G	PCI/G	PR
7000-0000-001S	MSR#04-3637	123957001	375469	13982-63-3	Radium 226	TRG	8	UHASL300	HASL300	REG	0.86	0.133	PCI/G	0		21/10/2004	38262.32569	8.06	0.0877	PCI/G	0.0412	PCI/G	1	0.4	98.6	G	PCI/G	PR
7000-0000-001S	MSR#04-3637	123957001	375469	14391-65-2	Silver-108m	TRG	8	UHASL300	HASL300	REG	0.0414	0.0283	PCI/G	0	U	21/10/2004	38262.32569	8.06	0.0463	PCI/G	0.022	PCI/G	1	0.4	98.6	G	PCI/G	PR
7000-0000-001S	MSR#04-3637	123957001	376218	10098-97-2	Strontium-90	TRG	45	UE905M	E905M	REG	0.014	0.0129	PCI/G	0	U	22/10/2004	38263.15903	3.16	0.0261	PCI/G	0.0122	PCI/G	1	0.4	12.5	G	PCI/G	PR
7000-0000-001S	MSR#04-3637	123957001	375469	14913-50-9	Thallium 208	TRG	8	UHASL300	HASL300	REG	0.449	0.0779	PCI/G	0		21/10/2004	38262.32569	8.06	0.0472	PCI/G	0.0222	PCI/G	1	0.4	98.6	G	PCI/G	PR
7000-0000-002S	MSR#04-3637	123957002	375469	14331-83-0	Actinium 228	TRG	8	UHASL300	HASL300	REG	1.36	0.36	PCI/G	0		21/10/2004	38262.39514	8.01	0.3	PCI/G	0.137	PCI/G	1	0.41	97.4	G	PCI/G	PR
7000-0000-002S	MSR#04-3637	123957002	375469	14596-10-2	Americium 241	TRG	8	UHASL300	HASL300	REG	-0.00787	0.0649	PCI/G	0	U	21/10/2004	38262.39514	8.01	0.105	PCI/G	0.0508	PCI/G	1	0.41	97.4	G	PCI/G	PR
7000-0000-002S	MSR#04-3637	123957002	375469	14913-49-6	Bismuth 212	TRG	8	UHASL300	HASL300	REG	1.36	0.534	PCI/G	0		21/10/2004	38262.39514	8.01	0.56	PCI/G	0.254	PCI/G	1	0.41	97.4	G	PCI/G	PR
7000-0000-002S	MSR#04-3637	123957002	375469	14733-03-0	Bismuth 214	TRG	8	UHASL300	HASL300	REG	0.787	0.213	PCI/G	0		21/10/2004	38262.39514	8.01	0.156	PCI/G	0.0722	PCI/G	1	0.41	97.4	G	PCI/G	PR
7000-0000-002S	MSR#04-3637	123957002	375469	13967-70-9	Cesium 134	TRG	8	UHASL300	HASL300	REG	0.077	0.0507	PCI/G	0	U	21/10/2004	38262.39514	8.01	0.103	PCI/G	0.0474	PCI/G	1	0.41	97.4	G	PCI/G	PR
7000-0000-002S	MSR#04-3637	123957002	375469	10045-97-3	Cesium 137	TRG	8	UHASL300	HASL300	REG	0.191	0.0656	PCI/G	0		21/10/2004	38262.39514	8.01	0.0767	PCI/G	0.0352	PCI/G	1	0.41	97.4	G	PCI/G	PR
7000-0000-002S	MSR#04-3637	123957002	375469	10198-40-0	Cobalt-60	TRG	8	UHASL300	HASL300	REG	0.0607	0.0486	PCI/G	0	U	21/10/2004	38262.39514	8.01	0.102	PCI/G	0.0457	PCI/G	1	0.41	97.4	G	PCI/G	PR
7000-0000-002S	MSR#04-3637	123957002	375469	14683-23-9	Europium-152	TRG	8	UHASL300	HASL300	REG	0.117	0.117	PCI/G	0	U	21/10/2004	38262.39514	8.01	0.213	PCI/G	0.101	PCI/G	1	0.41	97.4	G	PCI/G	PR
7000-0000-002S	MSR#04-3637	123957002	375469	15585-10-1	Europium-154	TRG	8	UHASL300	HASL300	REG	0.0337	0.129	PCI/G	0	U	21/10/2004	38262.39514	8.01	0.248	PCI/G	0.111	PCI/G	1	0.41	97.4	G	PCI/G	PR
7000-0000-002S	MSR#04-3637	123957002	375469	14391-16-3	Europium-155	TRG	8	UHASL300	HASL300	REG	0.0785	0.106	PCI/G	0	U	21/10/2004	38262.39514	8.01	0.192	PCI/G	0.0925	PCI/G	1	0.41	97.4	G	PCI/G	PR
7000-0000-002S	MSR#04-3637	123957002	375469	15092-94-1	Lead 212	TRG	8	UHASL300	HASL300	REG	1.23	0.172	PCI/G	0		21/10/2004	38262.39514	8.01	0.11	PCI/G	0.0526	PCI/G	1	0.41	97.4	G	PCI/G	PR
7000-0000-002S	MSR#04-3637	123957002	375469	15067-28-4	Lead 214	TRG	8	UHASL300	HASL300	REG	1.03	0.245	PCI/G	0		21/10/2004	38262.39514	8.01	0.128	PCI/G	0.06	PCI/G	1	0.41	97.4	G	PCI/G	PR
7000-0000-002S	MSR#04-3637	123957002	375469	13966-31-9	Manganese-54	TRG	8	UHASL300	HASL300	REG	0.0362	0.0503	PCI/G	0	U	21/10/2004	38262.39514	8.01	0.0945	PCI/G	0.0437	PCI/G	1	0.41	97.4	G	PCI/G	PR
7000-0000-002S	MSR#04-3637	123957002	375469	14681-63-1	Niobium-94	TRG	8	UHASL300	HASL300	REG	0.00335	0.0392	PCI/G	0	U	21/10/2004	38262.39514	8.01	0.0704	PCI/G	0.0323	PCI/G	1	0.41	97.4	G	PCI/G	PR
7000-0000-002S	MSR#04-3637	123957002	375469	13966-00-2	Potassium-40	TRG	8	UHASL300	HASL300	REG	18.6	2.01	PCI/G	0		21/10/2004	38262.39514	8.01	0.643	PCI/G	0.271	PCI/G	1	0.41	97.4	G	PCI/G	PR
7000-0000-002S	MSR#04-3637	123957002	375469	13982-63-3	Radium 226	TRG	8	UHASL300	HASL300	REG	0.787	0.213	PCI/G	0		21/10/2004	38262.39514	8.01	0.155	PCI/G	0.0722	PCI/G	1	0.41	97.4	G	PCI/G	PR
7000-0000-002S	MSR#04-3637	123957002	375469	14391-65-2	Silver 108m	TRG	8	UHASL300	HASL300	REG	-0.00697	0.0369	PCI/G	0	U	21/10/2004	38262.39514	8.01	0.0637	PCI/G	0.0296	PCI/G	1	0.41	97.4	G	PCI/G	PR
7000-0000-002S	MSR#04-3637	123957002	376218	10098-97-2	Strontium 90	TRG	45	UE905M	E905M	REG	0.00268	0.0105	PCI/G	0	U	22/10/2004	38263.15903	3.16	0.0235	PCI/G	0.0106	PCI/G	1	0.41	12.6	G	PCI/G	PR
7000-0000-002S	MSR#04-3637	123957002	375469	14913-50-9	Thallium-208	TRG	8	UHASL300	HASL300	REG	0.301	0.112	PCI/G	0		21/10/2004	38262.39514	8.01	0.0925	PCI/G	0.0433	PCI/G	1	0.41	97.4	G	PCI/G	PR
7000-0000-003S	MSR#04-3637	123957003	375469	14331-83-0	Actinium 228	TRG	8	UHASL300	HASL300	REG	1.24	0.283	PCI/G	0		21/10/2004	38262.39514	9.31	0.162	PCI/G	0.0748	PCI/G	1	3.5	87.7	G	PCI/G	PR
7000-0000-003S	MSR#04-3637	123957003	375469	14596-10-2	Americium 241	TRG	8	UHASL300	HASL300	REG	0.0926	0.118	PCI/G	0	U	21/10/2004	38262.39514	9.31	0.181	PCI/G	0.068	PCI/G	1	3.5	87.7	G	PCI/G	PR
7000-0000-003S	MSR#04-3637	123957003	375469	14913-49-6	Bismuth 212	TRG	8	UHASL300	HASL300	REG	0.734	0.358	PCI/G	0		21/10/2004	38262.39514	9.31	0.386	PCI/G	0.181	PCI/G	1	3.5	87.7	G	PCI/G	PR
7000-0000-003S	MSR#04-3637	123957003	375469	14733-03-0	Bismuth 214	TRG	8	UHASL300	HASL300	REG	0.821	0.138	PCI/G	0		21/10/2004	38262.39514	9.31	0.0916	PCI/G	0.0434	PCI/G	1	3.5	87.7	G	PCI/G	PR
7000-0000-003S	MSR#04-3637	123957003	375469	13967-70-9	Cesium 134	TRG	8	UHASL300	HASL300	REG	0	0.054	PCI/G	0	UUI	21/10/2004	38262.39514	9.31	0.0607	PCI/G	0.0286	PCI/G	1	3.5	87.7	G	PCI/G	PR
7000-0000-003S	MSR#04-3637	123957003	375469	10045-97-3	Cesium 137	TRG	8	UHASL300	HASL300	REG	0.229	0.0697	PCI/G	0		21/10/2004	38262.39514	9.31	0.0454	PCI/G	0.0213	PCI/G	1	3.5	87.7	G	PCI/G	PR
7000-0000-003S	MSR#04-3637	123957003	375469	10198-40-0	Cobalt-60	TRG	8	UHASL300	HASL300	REG	0.016	0.0341	PCI/G	0	U	21/10/2004	38262.39514	9.31	0.0631	PCI/G	0.0292	PCI/G	1	3.5	87.7	G	PCI/G	PR
7000-0000-003S	MSR#04-3637	123957003	375469	14683-23-9	Europium 152	TRG	8	UHASL300	HASL300	REG	0.0119	0.0734	PCI/G	0	U	21/10/2004	38262.39514	9.31	0.126	PCI/G	0.0601	PCI/G	1	3.5	87.7	G	PCI/G	PR
7000-0000-003S	MSR#04-3637	123957003	375469	15585-10-1	Europium 154	TRG	8	UHASL300	HASL300	REG	0.044	0.1	PCI/G	0	U	21/10/2004	38262.39514	9.31	0.184	PCI/G	0.0855	PCI/G	1	3.5	87.7	G	PCI/G	PR
7000-0000-003S	MSR#04-3637	123957003	375469	14391-16-3	Europium 155	TRG	8	UHASL300	HASL300	REG	0.0393	0.0612	PCI/G	0	U	21/10/2004	38262.39514	9.31	0.136	PCI/G	0.066	PCI/G	1	3.5	87.7	G	PCI/G	PR
7000-0000-003S	MSR#04-3637	123957003	375469	15092-94-1	Lead 212	TRG	8	UHASL300	HASL300	REG	1.09	0.124	PCI/G	0		21/10/2004	38262.39514	9.31	0.0668	PCI/G	0.0321	PCI/G	1	3.5	87.7	G	PCI/G	PR
7000-0000-003S	MSR#04-3637	123957003	375469	15067-28-4	Lead 214	TRG	8	UHASL300	HASL300	REG	0.896	0.144	PCI/G	0		21/10/2004	38262.39514	9.31	0.0902	PCI/G	0.0432	PCI/G	1	3.5	87.7	G	PCI/G	PR
7000-0000-003S	MSR#04-3637	123957003	375469	13966-31-9	Manganese 54	TRG	8	UHASL300	HASL300	REG	0.0186	0.0312	PCI/G	0	U	21/10/2004	38262.39514	9.31	0.0558	PCI/G	0.0263	PCI/G	1	3.5	87.7	G	PCI/G	PR
7000-0000-003S	MSR#04-3637	123957003	375469	14681-63-1	Niobium-94	TRG	8	UHASL300	HASL300	REG	-0.00245	0.0271	PCI/G	0	U	21/10/2004	38262.39514	9.31	0.0466	PCI/G	0.022	PCI/G	1	3.5	87.7	G	PCI/G	PR
7000-0000-003S	MSR#04-3637	123957003	375469	13966-00-2	Potassium-40	TRG	8	UHASL300	HASL300	REG	14.8	1.56	PCI/G	0		21/10/2004	38262.39514	9.31	0.424	PCI/G	0.186	PCI/G	1	3.5	87.7	G	PCI/G	PR
7000-0000-003S	MSR#04-3637	123957003	375469	13982-63-3	Radium 226	TRG	8	UHASL300	HASL300	REG	0.621	0.138	PCI/G	0		21/10/2004	38262.39514	9.31	0.0916	PCI/G	0.0434	PCI/G	1	3.5	87.7	G	PCI/G	PR
7000-0000-003S	MSR#04-3637	123957003	375469	14391-65-2	Silver 108m	TRG	8	UHASL300	HASL300	REG	0.000539	0.0248	PCI/G	0	U	21/10/2004	38262.39514	9.31	0.0418	PCI/G	0.0196	PCI/G	1	3.5	87.7	G	PCI/G	PR
7000-0000-003S	MSR#04-3637	123957003	376218	10098-97-2	Strontium-90	TRG	45	UE905M	E905M	REG	0.0181	0.00963	PCI/G	0	U	22/10/2004	38263.15903	3.16	0.0176	PCI/G	0.00804	PCI/G	1	3.5	12.8	G	PCI/G	PR
7000-0000-003S	MSR#04-3637	123957003	375469	14913-50-9	Thallium 208	TRG	8	UHASL300	HASL300	REG	0.314	0.0637	PCI/G	0		21/10/2004	38262.39514	9.31	0.0461	PCI/G	0.0217	PCI/G	1	3.5	87.7	G	PCI/G	PR
7000-0000-004S	MSR#04-3637	123957004	375469	14331-83-0	Actinium-228	TRG	8	UHASL300	HASL300	REG	0.904	0.198	PCI/G	0		21/10/2004	38262.39514	9.33	0.143	PCI/G	0.0662	PCI/G	1	1.1	99.6	G	PCI/G	PR
7000-0000-004S	MSR#04-3637	123957004	375469	14596-10-2	Americium 241	TRG	8	UHASL300	HASL300	REG	0.0224	0.156	PCI/G	0	U	21/10/2004	38262.39514	9.33	0.197	PCI/G	0.0948	PCI/G	1	1.1	99.6	G	PCI/G	PR
7000-0000-004S	MSR#04-3637	123957004	375469	14913-49-6	Bismuth 212	TRG	8	UHASL300	HASL300	REG	0.286	0.306	PCI/G	0	U	21/10/2004	38262.39514	9.33	0.316	PCI/G	0.148	PCI/G	1	1.1	99.6	G	PCI/G	PR
7000-0000-004S	MSR#04-3637	123957004	375469	14733-03-0	Bismuth-214	TRG	8	UHASL300	HASL300	REG	0.527	0.103	PCI/G	0		21/10/2004	38262.39514	9.33	0.0789	PCI/G	0.0374	PCI/G	1	1.1	99.6	G	PCI/G	PR
7000-0000-004S	MSR#04-3637	123957004	375469	13967-70-9	Cesium-134	TRG	8	UHASL300	HASL300	REG	0.0338	0.0358	PCI/G	0	U	21/10/2004	38262.39514	9.33	0.054	PCI/G	0.0255	PCI/G	1	1.1	99.6	G	PCI/G	PR
7000-0000-004S	MSR#04-3637	123957004	375469	10045-97-3	Cesium 137	TRG	8	UHASL300	HASL300	REG	0.162	0.0586	PCI/G	0		21/10/2004	38262.39514	9.33	0.0413	PCI/G	0.0194	PCI/G	1	1.1	99.6	G	PCI/G	PR
7000-0000-004S	MSR#04-3637	123957004	375469	10198-40-0	Cobalt 60	TRG	8	UHASL300	HASL300	REG	0.0348	0.0397	PCI/G	0	U	21/10/2004	38262.39514	9.33	0.0499	PCI/G	0.0229	PCI/G	1	1.1	99.6	G	PCI/G	PR

7000-0000-004S	MSR#04 3637	123957004	375469	14683-23-9	Europium-152	TRG		8	UHASL300	HASL300	REG	0.0369	0.0578	PCI/G		0	U	21/10/2004	38262.39514	9.33	0.105	PCI/G	0.05	PCI/G		1	1.1	99.6	G	PCI/G	PR
7000-0000-004S	MSR#04 3637	123957004	375469	15585-10-1	Europium-154	TRG		8	UHASL300	HASL300	REG	-0.0433	0.0784	PCI/G		0	U	21/10/2004	38262.39514	9.33	0.131	PCI/G	0.0601	PCI/G		1	1.1	99.6	G	PCI/G	PR
7000-0000-004S	MSR#04 3637	123957004	375469	14391-16-3	Europium-155	TRG		8	UHASL300	HASL300	REG	0.014	0.0734	PCI/G		0	U	21/10/2004	38262.39514	9.33	0.109	PCI/G	0.0526	PCI/G		1	1.1	99.6	G	PCI/G	PR
7000-0000-004S	MSR#04 3637	123957004	375469	15092-94-1	Lead-212	TRG		8	UHASL300	HASL300	REG	0.933	0.11	PCI/G		0		21/10/2004	38262.39514	9.33	0.0592	PCI/G	0.0285	PCI/G		1	1.1	99.6	G	PCI/G	PR
7000-0000-004S	MSR#04 3637	123957004	375469	15067-28-4	Lead-214	TRG		8	UHASL300	HASL300	REG	0.643	0.0974	PCI/G		0		21/10/2004	38262.39514	9.33	0.0729	PCI/G	0.0348	PCI/G		1	1.1	99.6	G	PCI/G	PR
7000-0000-004S	MSR#04 3637	123957004	375469	13966-31-9	Manganese-54	TRG		8	UHASL300	HASL300	REG	0.0174	0.0283	PCI/G		0	U	21/10/2004	38262.39514	9.33	0.0472	PCI/G	0.0222	PCI/G		1	1.1	99.6	G	PCI/G	PR
7000-0000-004S	MSR#04 3637	123957004	375469	14681-63-1	Niobium-94	TRG		8	UHASL300	HASL300	REG	-0.0165	0.0204	PCI/G		0	U	21/10/2004	38262.39514	9.33	0.0326	PCI/G	0.0152	PCI/G		1	1.1	99.6	G	PCI/G	PR
7000-0000-004S	MSR#04 3637	123957004	375469	13966-00-2	Potassium-40	TRG		8	UHASL300	HASL300	REG	14.2	1.5	PCI/G		0		21/10/2004	38262.39514	9.33	0.382	PCI/G	0.17	PCI/G		1	1.1	99.6	G	PCI/G	PR
7000-0000-004S	MSR#04 3637	123957004	375469	13982-63-3	Radium-226	TRG		8	UHASL300	HASL300	REG	0.527	0.103	PCI/G		0		21/10/2004	38262.39514	9.33	0.0789	PCI/G	0.0374	PCI/G		1	1.1	99.6	G	PCI/G	PR
7000-0000-004S	MSR#04 3637	123957004	375469	14391-65-2	Silver-108m	TRG		8	UHASL300	HASL300	REG	0.00664	0.0188	PCI/G		0	U	21/10/2004	38262.39514	9.33	0.0338	PCI/G	0.016	PCI/G		1	1.1	99.6	G	PCI/G	PR
7000-0000-004S	MSR#04 3637	123957004	376218	10098-97-2	Strontium-90	TRG		45	UE905M	E905M	REG	0.00563	0.00658	PCI/G		0	U	22/10/2004	38263.15903	3.16	0.0182	PCI/G	0.00843	PCI/G		1	1.1	12.6	G	PCI/G	PR
7000-0000-004S	MSR#04 3637	123957004	375469	14913-50-9	Thallium-208	TRG		8	UHASL300	HASL300	REG	0.319	0.0547	PCI/G		0		21/10/2004	38262.39514	9.33	0.0383	PCI/G	0.018	PCI/G		1	1.1	99.6	G	PCI/G	PR
7000-0000-005S	MSR#04 3637	123957005	375469	14331-83-0	Actinium-228	TRG		8	UHASL300	HASL300	REG	1.52	0.449	PCI/G		0		21/10/2004	38262.46458	10.27	0.284	PCI/G	0.13	PCI/G		1	4	86.2	G	PCI/G	PR
7000-0000-005S	MSR#04 3637	123957005	375469	14596-10-2	Americium-241	TRG		8	UHASL300	HASL300	REG	0.0535	0.186	PCI/G		0	U	21/10/2004	38262.46458	10.27	0.278	PCI/G	0.133	PCI/G		1	4	86.2	G	PCI/G	PR
7000-0000-005S	MSR#04 3637	123957005	375469	14913-49-6	Bismuth-212	TRG		8	UHASL300	HASL300	REG	0.833	0.463	PCI/G		0		21/10/2004	38262.46458	10.27	0.659	PCI/G	0.306	PCI/G		1	4	86.2	G	PCI/G	PR
7000-0000-005S	MSR#04 3637	123957005	375469	14733-03-0	Bismuth-214	TRG		8	UHASL300	HASL300	REG	1.06	0.23	PCI/G		0		21/10/2004	38262.46458	10.27	0.139	PCI/G	0.0646	PCI/G		1	4	86.2	G	PCI/G	PR
7000-0000-005S	MSR#04 3637	123957005	375469	13967-70-9	Cesium-134	TRG		8	UHASL300	HASL300	REG	0.0585	0.0962	PCI/G		0	U	21/10/2004	38262.46458	10.27	0.102	PCI/G	0.0475	PCI/G		1	4	86.2	G	PCI/G	PR
7000-0000-005S	MSR#04 3637	123957005	375469	10045-97-3	Cesium-137	TRG		8	UHASL300	HASL300	REG	0.175	0.0961	PCI/G		0		21/10/2004	38262.46458	10.27	0.0731	PCI/G	0.0336	PCI/G		1	4	86.2	G	PCI/G	PR
7000-0000-005S	MSR#04 3637	123957005	375469	10198-40-0	Cobalt-60	TRG		8	UHASL300	HASL300	REG	-0.0249	0.0486	PCI/G		0	U	21/10/2004	38262.46458	10.27	0.0776	PCI/G	0.0339	PCI/G		1	4	86.2	G	PCI/G	PR
7000-0000-005S	MSR#04 3637	123957005	375469	14683-23-9	Europium-152	TRG		8	UHASL300	HASL300	REG	0.0518	0.107	PCI/G		0	U	21/10/2004	38262.46458	10.27	0.17	PCI/G	0.0794	PCI/G		1	4	86.2	G	PCI/G	PR
7000-0000-005S	MSR#04 3637	123957005	375469	15585-10-1	Europium-154	TRG		8	UHASL300	HASL300	REG	0	0.193	PCI/G		0	UUI	21/10/2004	38262.46458	10.27	0.279	PCI/G	0.128	PCI/G		1	4	86.2	G	PCI/G	PR
7000-0000-005S	MSR#04 3637	123957005	375469	14391-16-3	Europium-155	TRG		8	UHASL300	HASL300	REG	0.0779	0.101	PCI/G		0	U	21/10/2004	38262.46458	10.27	0.18	PCI/G	0.0862	PCI/G		1	4	86.2	G	PCI/G	PR
7000-0000-005S	MSR#04 3637	123957005	375469	15092-94-1	Lead-212	TRG		8	UHASL300	HASL300	REG	1.68	0.196	PCI/G		0		21/10/2004	38262.46458	10.27	0.102	PCI/G	0.0484	PCI/G		1	4	86.2	G	PCI/G	PR
7000-0000-005S	MSR#04 3637	123957005	375469	15067-28-4	Lead-214	TRG		8	UHASL300	HASL300	REG	1.15	0.21	PCI/G		0		21/10/2004	38262.46458	10.27	0.127	PCI/G	0.0594	PCI/G		1	4	86.2	G	PCI/G	PR
7000-0000-005S	MSR#04 3637	123957005	375469	13966-31-9	Manganese-54	TRG		8	UHASL300	HASL300	REG	0.0341	0.0433	PCI/G		0	U	21/10/2004	38262.46458	10.27	0.0811	PCI/G	0.0372	PCI/G		1	4	86.2	G	PCI/G	PR
7000-0000-005S	MSR#04 3637	123957005	375469	14681-63-1	Niobium-94	TRG		8	UHASL300	HASL300	REG	0.0118	0.0386	PCI/G		0	U	21/10/2004	38262.46458	10.27	0.0687	PCI/G	0.0318	PCI/G		1	4	86.2	G	PCI/G	PR
7000-0000-005S	MSR#04 3637	123957005	375469	13966-00-2	Potassium-40	TRG		8	UHASL300	HASL300	REG	16.7	2.6	PCI/G		0		21/10/2004	38262.46458	10.27	0.731	PCI/G	0.316	PCI/G		1	4	86.2	G	PCI/G	PR
7000-0000-005S	MSR#04 3637	123957005	375469	13982-63-3	Radium-226	TRG		8	UHASL300	HASL300	REG	1.06	0.23	PCI/G		0		21/10/2004	38262.46458	10.27	0.139	PCI/G	0.0646	PCI/G		1	4	86.2	G	PCI/G	PR
7000-0000-005S	MSR#04 3637	123957005	375469	14391-65-2	Silver-108m	TRG		8	UHASL300	HASL300	REG	0.0288	0.0337	PCI/G		0	U	21/10/2004	38262.46458	10.27	0.0636	PCI/G	0.0297	PCI/G		1	4	86.2	G	PCI/G	PR
7000-0000-005S	MSR#04 3637	123957005	376218	10098-97-2	Strontium-90	TRG		45	UE905M	E905M	REG	0.0109	0.0121	PCI/G		0	U	22/10/2004	38263.15903	3.16	0.0249	PCI/G	0.0116	PCI/G		1	4	12	G	PCI/G	PR
7000-0000-005S	MSR#04 3637	123957005	375469	14913-50-9	Thallium-208	TRG		8	UHASL300	HASL300	REG	0.416	0.109	PCI/G		0		21/10/2004	38262.46458	10.27	0.0829	PCI/G	0.0388	PCI/G		1	4	86.2	G	PCI/G	PR
7000-0000-006S	MSR#04 3637	123957006	375469	14331-83-0	Actinium-228	TRG		8	UHASL300	HASL300	REG	1.51	0.436	PCI/G		0		21/10/2004	38262.46458	10.28	0.305	PCI/G	0.137	PCI/G		1	0.28	91.8	G	PCI/G	PR
7000-0000-006S	MSR#04 3637	123957006	375469	14596-10-2	Americium-241	TRG		8	UHASL300	HASL300	REG	-0.0486	0.0635	PCI/G		0	U	21/10/2004	38262.46458	10.28	0.103	PCI/G	0.0495	PCI/G		1	0.28	91.8	G	PCI/G	PR
7000-0000-006S	MSR#04 3637	123957006	375469	14913-49-6	Bismuth-212	TRG		8	UHASL300	HASL300	REG	1.32	0.721	PCI/G		0		21/10/2004	38262.46458	10.28	0.665	PCI/G	0.303	PCI/G		1	0.28	91.8	G	PCI/G	PR
7000-0000-006S	MSR#04 3637	123957006	375469	14733-03-0	Bismuth-214	TRG		8	UHASL300	HASL300	REG	1.14	0.232	PCI/G		0		21/10/2004	38262.46458	10.28	0.143	PCI/G	0.0655	PCI/G		1	0.28	91.8	G	PCI/G	PR
7000-0000-006S	MSR#04 3637	123957006	375469	13967-70-9	Cesium-134	TRG		8	UHASL300	HASL300	REG	0.109	0.074	PCI/G		0	U	21/10/2004	38262.46458	10.28	0.129	PCI/G	0.0598	PCI/G		1	0.28	91.8	G	PCI/G	PR
7000-0000-006S	MSR#04 3637	123957006	375469	10045-97-3	Cesium-137	TRG		8	UHASL300	HASL300	REG	0.216	0.0729	PCI/G		0		21/10/2004	38262.46458	10.28	0.0818	PCI/G	0.0373	PCI/G		1	0.28	91.8	G	PCI/G	PR
7000-0000-006S	MSR#04 3637	123957006	375469	10198-40-0	Cobalt-60	TRG		8	UHASL300	HASL300	REG	0.167	0.0653	PCI/G		0		21/10/2004	38262.46458	10.28	0.0961	PCI/G	0.0421	PCI/G		1	0.28	91.8	G	PCI/G	PR
7000-0000-006S	MSR#04 3637	123957006	375469	14683-23-9	Europium-152	TRG		8	UHASL300	HASL300	REG	-0.0207	0.108	PCI/G		0	U	21/10/2004	38262.46458	10.28	0.166	PCI/G	0.0665	PCI/G		1	0.28	91.8	G	PCI/G	PR
7000-0000-006S	MSR#04 3637	123957006	375469	15585-10-1	Europium-154	TRG		8	UHASL300	HASL300	REG	0.01	0.175	PCI/G		0	U	21/10/2004	38262.46458	10.28	0.321	PCI/G	0.144	PCI/G		1	0.28	91.8	G	PCI/G	PR
7000-0000-006S	MSR#04 3637	123957006	375469	14391-16-3	Europium-155	TRG		8	UHASL300	HASL300	REG	0.124	0.182	PCI/G		0	U	21/10/2004	38262.46458	10.28	0.166	PCI/G	0.079	PCI/G		1	0.28	91.8	G	PCI/G	PR
7000-0000-006S	MSR#04 3637	123957006	375469	15092-94-1	Lead-212	TRG		8	UHASL300	HASL300	REG	1.69	0.141	PCI/G		0		21/10/2004	38262.46458	10.28	0.1	PCI/G	0.0472	PCI/G		1	0.28	91.8	G	PCI/G	PR
7000-0000-006S	MSR#04 3637	123957006	375469	15067-28-4	Lead-214	TRG		8	UHASL300	HASL300	REG	1.1	0.185	PCI/G		0		21/10/2004	38262.46458	10.28	0.142	PCI/G	0.0664	PCI/G		1	0.28	91.8	G	PCI/G	PR
7000-0000-006S	MSR#04 3637	123957006	375469	13966-31-9	Manganese-54	TRG		8	UHASL300	HASL300	REG	0.0162	0.0678	PCI/G		0	U	21/10/2004	38262.46458	10.28	0.1	PCI/G	0.0459	PCI/G		1	0.28	91.8	G	PCI/G	PR
7000-0000-006S	MSR#04 3637	123957006	375469	14681-63-1	Niobium-94	TRG		8	UHASL300	HASL300	REG	0.0135	0.0501	PCI/G		0	U	21/10/2004	38262.46458	10.28	0.0826	PCI/G	0.038	PCI/G		1	0.28	91.8	G	PCI/G	PR
7000-0000-006S	MSR#04 3637	123957006	375469	13966-00-2	Potassium-40	TRG		8	UHASL300	HASL300	REG	20.8	2.1	PCI/G		0		21/10/2004	38262.46458	10.28	0.944	PCI/G	0.413	PCI/G		1	0.28	91.8	G	PCI/G	PR
7000-0000-006S	MSR#04 3637	123957006	375469	13982-63-3	Radium-226	TRG		8	UHASL300	HASL300	REG	1.14	0.232	PCI/G		0		21/10/2004	38262.46458	10.28	0.143	PCI/G	0.0655	PCI/G		1	0.28	91.8	G	PCI/G	PR
7000-0000-006S	MSR#04 3637	123957006	375469	14391-65-2	Silver-108m	TRG		8	UHASL300	HASL300	REG	0.00451	0.0403	PCI/G		0	U	21/10/2004	38262.46458	10.28	0.0703	PCI/G	0.0326	PCI/G		1	0.28	91.8	G	PCI/G	PR
7000-0000-006S	MSR#04 3637	123957006	376218	10098-97-2	Strontium-90	TRG		45	UE905M	E905M	REG	0.00184	0.0103	PCI/G		0	U	22/10/2004	38263.15903	5.22	0.0234	PCI/G	0.0107	PCI/G		1	0.28	12.4	G	PCI/G	PR
7000-0000-006S	MSR#04 3637	123957006	375469	14913-50-9	Thallium-208	TRG		8	UHASL300	HASL300	REG	0.596	0.104	PCI/G		0		21/10/2004	38262.46458	10.28	0.0863	PCI/G	0.0396	PCI/G		1	0.28	91.8	G	PCI/G	PR
7000-0000-007S	MSR#04 3637	123957007	375469	14331-83-0	Actinium-228	TRG		8	UHASL300	HASL300	REG	1.51	0.245	PCI/G		0		21/10/2004	38262.46458	10.30	0.192	PCI/G	0.0888	PCI/G		1	1.7	88.3	G	PCI/G	PR
7000-0000-007S	MSR#04 3637	123957007	375469	14596-10-2	Americium-241	TRG		8	UHASL300	HASL300	REG	-0.0467	0.262	PCI/G		0	U	21/10/2004	38262.46458	10.30	0.297	PCI/G	0.143	PCI/G		1	1.7	88.3	G	PCI/G	PR
7000-0000-007S	MSR#04 3637	123957007	375469	14913-49-6	Bismuth-212	TRG		8	UHASL300	HASL300	REG	1.27	0.504	PCI/G		0		21/10/2004	38262.46458	10.30	0.388	PCI/G	0.178	PCI/G		1	1.7	88.3	G	PCI/G	PR
7000-0000-007S	MSR#04 3637	123957007	375469	14733-03-0	Bismuth-214	TRG		8	UHASL300	HASL300	REG	0.933	0.133	PCI/G		0		21/10/2004	38262.46458	10.30	0.111	PCI/G	0.0528	PCI/G		1	1.7	88.3	G	PCI/G	PR
7000-0000-007S	MSR#04 3637	123957007	375469	13967-70-9	Cesium-134	TRG		8	UHASL300	HASL300	REG	0	0.0471	PCI/G		0	UUI	21/10/2004	38262.46458	10.30	0.0789	PCI/G	0.0363	PCI/G		1	1.7	88.3	G	PCI/G	PR
7000-0000-007S	MSR#04 3637	123957007	375469	10045-97-3	Cesium-137	TRG		8	UHASL300	HASL300	REG	0.269	0.0723	PCI/G		0		21/10/2004	38262.46458	10.30	0.0495	PCI/G	0.023	PCI/G		1	1.7	88.3	G	PCI/G	PR
7000-0000-007S	MSR#04 3637	123957007	375469	10198-40-0	Cobalt-60	TRG		8	UHASL300	HASL300	REG	0.0127	0.037	PCI/G		0	U	21/10/2004	38262.46458	10.30	0.0684	PCI/G	0.0314	PCI/G		1	1.7	88.3	G	PCI/G	PR
7000-0000-007S	MSR#04 3637	123957007	375469	14683-23-9	Europium-152	TRG		8	UHASL300	HASL300	REG	0.0351	0.0921	PCI/G		0	U	21/10/2004	38262.46458	10.30	0.158	PCI/G	0.0754	PCI/G		1	1.7	88.3	G	PCI/G	PR
7000-0000-007S	MSR#04 3637	123957007	375469	15585-10-1	Europium-154	TRG		8	UHASL300	HASL300	REG	-0.026	0.117	PCI/G		0	U	21/10/2004	38262.46458	10.30	0.174	PCI/G	0.0794	PCI/G		1	1.7	88.3	G	PCI/G	PR
7000-0000-007S	MSR#04 3637	123957007	375469	14391-16-3	Europium-155	TRG		8	UHASL300	HASL300	REG	0.0785	0.112	PCI/G		0	U	21/10/2004	38262.46458	10.30	0.171	PCI/G	0.0822	PCI/G		1	1.7	88.3	G	PCI/G	PR
7000-0000-007S	MSR#04 3637	123957007	375469	15092-94-1	Lead-212	TRG		8	UHASL300	HASL300	REG	1.84	0.121	PCI/G		0		21/10/2004	38262.46458	10.30	0.0881	PCI/G	0.0412	PCI/G		1	1.7	88.3	G	PCI/G	PR
7000-0000-007S	MSR#04 3637	123957007	375469	15067-28-4	Lead-214	TRG		8	UHASL300	HASL300	REG	1.08	0.154	PCI/G		0		21/10/2004	38262.46458	10.30	0.101	PCI/G	0.0478	PCI/G		1	1.7	88.3	G	PCI/G	PR
7000-0000-007S	MSR#04 3637	123957007	375469	13966-31-9	Manganese-54	TRG		8	UHASL300	HASL300	REG	0.00661	0.0336	PCI/G		0	U	21/10/2004	38262.46458	10.30	0.059	PCI/G	0.0275	PCI/G		1	1.7	88.3	G	PCI/G	PR
7000-0000-007S	MSR#04 3637	123957007	375469	14681-63-1	Niobium-94	TRG		8	UHASL300	HASL300	REG	0.018	0.032	PCI/G		0	U	21/10/2004	38262.46458	10.30	0.0575	PCI/G	0.0271	PCI/G		1	1.7	88.3	G	PCI/G	PR

7000-0000-007S	MSR#04-3637	123957007	375469	13966-00-2	Potassium-40	TRG	8	UHASL300	HASL300	REG	21.2	1.48	PCI/G	0		21/10/2004	38262.46458	10:30	0.535	PCI/G	0.24	PCI/G	1	1.7	88.3	G	PCI/G	PR
7000-0000-007S	MSR#04-3637	123957007	375469	13982-63-3	Radium-226	TRG	8	UHASL300	HASL300	REG	0.933	0.133	PCI/G	0		21/10/2004	38262.46458	10:30	0.111	PCI/G	0.0526	PCI/G	1	1.7	88.3	G	PCI/G	PR
7000-0000-007S	MSR#04-3637	123957007	375469	14391-65-2	Silver-108m	TRG	8	UHASL300	HASL300	REG	0.000605	0.0296	PCI/G	0	U	21/10/2004	38262.46458	10:30	0.0495	PCI/G	0.0234	PCI/G	1	1.7	88.3	G	PCI/G	PR
7000-0000-007S	MSR#04-3637	123957007	376218	10098-97-2	Strontium-90	TRG	45	UE905M	E905M	REG	8.95E-05	0.00977	PCI/G	0	U	22/10/2004	38263.15903	5:22	0.0223	PCI/G	0.0104	PCI/G	1	1.7	12.8	G	PCI/G	PR
7000-0000-007S	MSR#04-3637	123957007	375469	14913-50-8	Thallium-208	TRG	8	UHASL300	HASL300	REG	0.479	0.0629	PCI/G	0		21/10/2004	38262.46458	10:30	0.0561	PCI/G	0.0263	PCI/G	1	1.7	88.3	G	PCI/G	PR
7000-0000-008S	MSR#04-3637	123957008	375469	14331-83-0	Actinium-228	TRG	8	UHASL300	HASL300	REG	1.47	0.356	PCI/G	0		21/10/2004	38262.46458	10:32	0.25	PCI/G	0.116	PCI/G	1	0.38	69.3	G	PCI/G	PR
7000-0000-008S	MSR#04-3637	123957008	375469	14596-10-2	Americium-241	TRG	8	UHASL300	HASL300	REG	-0.00348	0.143	PCI/G	0	U	21/10/2004	38262.46458	10:32	0.215	PCI/G	0.103	PCI/G	1	0.38	69.3	G	PCI/G	PR
7000-0000-008S	MSR#04-3637	123957008	375469	14913-49-6	Bismuth-212	TRG	8	UHASL300	HASL300	REG	1.23	0.718	PCI/G	0		21/10/2004	38262.46458	10:32	0.484	PCI/G	0.215	PCI/G	1	0.38	69.3	G	PCI/G	PR
7000-0000-008S	MSR#04-3637	123957008	375469	14733-03-0	Bismuth-214	TRG	8	UHASL300	HASL300	REG	0.859	0.217	PCI/G	0		21/10/2004	38262.46458	10:32	0.118	PCI/G	0.0543	PCI/G	1	0.38	69.3	G	PCI/G	PR
7000-0000-008S	MSR#04-3637	123957008	375469	13967-70-9	Cesium-134	TRG	8	UHASL300	HASL300	REG	0.075	0.0586	PCI/G	0	U	21/10/2004	38262.46458	10:32	0.0802	PCI/G	0.0375	PCI/G	1	0.38	69.3	G	PCI/G	PR
7000-0000-008S	MSR#04-3637	123957008	375469	10045-97-3	Cesium-137	TRG	8	UHASL300	HASL300	REG	0.319	0.0844	PCI/G	0		21/10/2004	38262.46458	10:32	0.0639	PCI/G	0.0296	PCI/G	1	0.38	69.3	G	PCI/G	PR
7000-0000-008S	MSR#04-3637	123957008	375469	10198-40-0	Cobalt-60	TRG	8	UHASL300	HASL300	REG	0.0443	0.044	PCI/G	0	U	21/10/2004	38262.46458	10:32	0.0854	PCI/G	0.0393	PCI/G	1	0.38	69.3	G	PCI/G	PR
7000-0000-008S	MSR#04-3637	123957008	375469	14683-23-9	Europium-152	TRG	8	UHASL300	HASL300	REG	-0.0347	0.101	PCI/G	0	U	21/10/2004	38262.46458	10:32	0.167	PCI/G	0.0788	PCI/G	1	0.38	69.3	G	PCI/G	PR
7000-0000-008S	MSR#04-3637	123957008	375469	15585-10-1	Europium-154	TRG	8	UHASL300	HASL300	REG	0.0309	0.129	PCI/G	0	U	21/10/2004	38262.46458	10:32	0.205	PCI/G	0.0934	PCI/G	1	0.38	69.3	G	PCI/G	PR
7000-0000-008S	MSR#04-3637	123957008	375469	14391-16-3	Europium-155	TRG	8	UHASL300	HASL300	REG	-0.00548	0.112	PCI/G	0	U	21/10/2004	38262.46458	10:32	0.184	PCI/G	0.0881	PCI/G	1	0.38	69.3	G	PCI/G	PR
7000-0000-008S	MSR#04-3637	123957008	375469	15092-94-1	Lead-212	TRG	8	UHASL300	HASL300	REG	1.58	0.178	PCI/G	0		21/10/2004	38262.46458	10:32	0.105	PCI/G	0.0505	PCI/G	1	0.38	69.3	G	PCI/G	PR
7000-0000-008S	MSR#04-3637	123957008	375469	15067-28-4	Lead-214	TRG	8	UHASL300	HASL300	REG	1.15	0.192	PCI/G	0		21/10/2004	38262.46458	10:32	0.124	PCI/G	0.059	PCI/G	1	0.38	69.3	G	PCI/G	PR
7000-0000-008S	MSR#04-3637	123957008	375469	13966-31-9	Manganese-54	TRG	8	UHASL300	HASL300	REG	0.0591	0.0519	PCI/G	0	U	21/10/2004	38262.46458	10:32	0.067	PCI/G	0.0311	PCI/G	1	0.38	69.3	G	PCI/G	PR
7000-0000-008S	MSR#04-3637	123957008	375469	14681-63-1	Niobium-94	TRG	8	UHASL300	HASL300	REG	0.035	0.0364	PCI/G	0	U	21/10/2004	38262.46458	10:32	0.0666	PCI/G	0.0314	PCI/G	1	0.38	69.3	G	PCI/G	PR
7000-0000-008S	MSR#04-3637	123957008	375469	13966-00-2	Potassium-40	TRG	8	UHASL300	HASL300	REG	21.6	2.25	PCI/G	0		21/10/2004	38262.46458	10:32	0.621	PCI/G	0.277	PCI/G	1	0.38	69.3	G	PCI/G	PR
7000-0000-008S	MSR#04-3637	123957008	375469	13982-63-3	Radium-226	TRG	8	UHASL300	HASL300	REG	0.658	0.217	PCI/G	0		21/10/2004	38262.46458	10:32	0.118	PCI/G	0.0543	PCI/G	1	0.38	69.3	G	PCI/G	PR
7000-0000-008S	MSR#04-3637	123957008	375469	14391-65-2	Silver-108m	TRG	8	UHASL300	HASL300	REG	0	0.0479	PCI/G	0	UUI	21/10/2004	38262.46458	10:32	0.0609	PCI/G	0.0288	PCI/G	1	0.38	69.3	G	PCI/G	PR
7000-0000-008S	MSR#04-3637	123957008	376218	10098-97-2	Strontium-90	TRG	45	UE905M	E905M	REG	0.013	0.0133	PCI/G	0	U	22/10/2004	38263.15903	5:22	0.0272	PCI/G	0.0125	PCI/G	1	0.38	12.4	G	PCI/G	PR
7000-0000-008S	MSR#04-3637	123957008	375469	14913-50-8	Thallium-208	TRG	8	UHASL300	HASL300	REG	0.486	0.105	PCI/G	0		21/10/2004	38262.46458	10:32	0.0566	PCI/G	0.0263	PCI/G	1	0.38	69.3	G	PCI/G	PR
7000-0000-011C-1C-0	1 MSR#04-3637	123957009	375469	14331-83-0	Actinium-228	TRG	8	UHASL300	HASL300	REG	0.479	0.189	PCI/G	0		21/10/2004	38263.11736	10:33	0.184	PCI/G	0.082	PCI/G	1	6.9	188	G	PCI/G	PR
7000-0000-011C-1C-0	1 MSR#04-3637	123957009	375469	14596-10-2	Americium-241	TRG	8	UHASL300	HASL300	REG	-0.0111	0.09	PCI/G	0	U	21/10/2004	38263.11736	10:33	0.122	PCI/G	0.0588	PCI/G	1	6.9	188	G	PCI/G	PR
7000-0000-011C-1C-0	1 MSR#04-3637	123957009	375469	14913-49-6	Bismuth-212	TRG	8	UHASL300	HASL300	REG	0.433	0.392	PCI/G	0		21/10/2004	38263.11736	10:33	0.413	PCI/G	0.187	PCI/G	1	6.9	188	G	PCI/G	PR
7000-0000-011C-1C-0	1 MSR#04-3637	123957009	375469	14733-03-0	Bismuth-214	TRG	8	UHASL300	HASL300	REG	0.546	0.126	PCI/G	0		21/10/2004	38263.11736	10:33	0.0992	PCI/G	0.0454	PCI/G	1	6.9	188	G	PCI/G	PR
7000-0000-011C-1C-0	1 MSR#04-3637	123957009	375469	13967-70-9	Cesium-134	TRG	8	UHASL300	HASL300	REG	0	0.0396	PCI/G	0	UUI	21/10/2004	38263.11736	10:33	0.0706	PCI/G	0.0323	PCI/G	1	6.9	188	G	PCI/G	PR
7000-0000-011C-1C-0	1 MSR#04-3637	123957009	375469	10045-97-3	Cesium-137	TRG	8	UHASL300	HASL300	REG	0.00131	0.0796	PCI/G	0	U	21/10/2004	38263.11736	10:33	0.0544	PCI/G	0.0247	PCI/G	1	6.9	188	G	PCI/G	PR
7000-0000-011C-1C-0	1 MSR#04-3637	123957009	375469	10198-40-0	Cobalt-60	TRG	8	UHASL300	HASL300	REG	-0.0154	0.0287	PCI/G	0	U	21/10/2004	38263.11736	10:33	0.0498	PCI/G	0.0211	PCI/G	1	6.9	188	G	PCI/G	PR
7000-0000-011C-1C-0	1 MSR#04-3637	123957009	375469	14683-23-9	Europium-152	TRG	8	UHASL300	HASL300	REG	-0.0227	0.0701	PCI/G	0	U	21/10/2004	38263.11736	10:33	0.13	PCI/G	0.0609	PCI/G	1	6.9	188	G	PCI/G	PR
7000-0000-011C-1C-0	1 MSR#04-3637	123957009	375469	15585-10-1	Europium-154	TRG	8	UHASL300	HASL300	REG	0.0677	0.101	PCI/G	0	U	21/10/2004	38263.11736	10:33	0.206	PCI/G	0.0923	PCI/G	1	6.9	188	G	PCI/G	PR
7000-0000-011C-1C-0	1 MSR#04-3637	123957009	375469	14391-16-3	Europium-155	TRG	8	UHASL300	HASL300	REG	0.0332	0.076	PCI/G	0	U	21/10/2004	38263.11736	10:33	0.147	PCI/G	0.0704	PCI/G	1	6.9	188	G	PCI/G	PR
7000-0000-011C-1C-0	1 MSR#04-3637	123957009	375469	15092-94-1	Lead-212	TRG	8	UHASL300	HASL300	REG	0.425	0.0878	PCI/G	0		21/10/2004	38263.11736	10:33	0.0755	PCI/G	0.0356	PCI/G	1	6.9	188	G	PCI/G	PR
7000-0000-011C-1C-0	1 MSR#04-3637	123957009	375469	15067-28-4	Lead-214	TRG	8	UHASL300	HASL300	REG	0.552	0.119	PCI/G	0		21/10/2004	38263.11736	10:33	0.1	PCI/G	0.0469	PCI/G	1	6.9	188	G	PCI/G	PR
7000-0000-011C-1C-0	1 MSR#04-3637	123957009	375469	13966-31-9	Manganese-54	TRG	8	UHASL300	HASL300	REG	0.013	0.0274	PCI/G	0	U	21/10/2004	38263.11736	10:33	0.058	PCI/G	0.0253	PCI/G	1	6.9	188	G	PCI/G	PR
7000-0000-011C-1C-0	1 MSR#04-3637	123957009	375469	14681-63-1	Niobium-94	TRG	8	UHASL300	HASL300	REG	-0.00265	0.0285	PCI/G	0	U	21/10/2004	38263.11736	10:33	0.0516	PCI/G	0.0236	PCI/G	1	6.9	188	G	PCI/G	PR
7000-0000-011C-1C-0	1 MSR#04-3637	123957009	375469	13966-00-2	Potassium-40	TRG	8	UHASL300	HASL300	REG	6.84	1.17	PCI/G	0		21/10/2004	38263.11736	10:33	0.55	PCI/G	0.237	PCI/G	1	6.9	188	G	PCI/G	PR
7000-0000-011C-1C-0	1 MSR#04-3637	123957009	375469	13982-63-3	Radium-226	TRG	8	UHASL300	HASL300	REG	0.548	0.126	PCI/G	0		21/10/2004	38263.11736	10:33	0.0992	PCI/G	0.0454	PCI/G	1	6.9	188	G	PCI/G	PR
7000-0000-011C-1C-0	1 MSR#04-3637	123957009	375469	14391-65-2	Silver-108m	TRG	8	UHASL300	HASL300	REG	0.0227	0.0265	PCI/G	0	U	21/10/2004	38263.11736	10:33	0.0533	PCI/G	0.0249	PCI/G	1	6.9	188	G	PCI/G	PR
7000-0000-011C-1C-0	1 MSR#04-3637	123957009	376218	10098-97-2	Strontium-90	TRG	45	UE905M	E905M	REG	0.00281	0.00925	PCI/G	0	U	22/10/2004	38262.25694	12:48	0.0159	PCI/G	0.00785	PCI/G	1	6.9	14.2	G	PCI/G	PR
7000-0000-011C-1C-0	1 MSR#04-3637	123957009	375469	14913-50-8	Thallium-208	TRG	8	UHASL300	HASL300	REG	0.182	0.0698	PCI/G	0		21/10/2004	38263.11736	10:33	0.0529	PCI/G	0.0242	PCI/G	1	6.9	188	G	PCI/G	PR
7000-0000-011C-1C-0	2 MSR#04-3637	123957010	375469	14331-83-0	Actinium-228	TRG	8	UHASL300	HASL300	REG	0.467	0.198	PCI/G	0		21/10/2004	38262.46458	1:00	0.205	PCI/G	0.0927	PCI/G	1	5.1	199	G	PCI/G	PR
7000-0000-011C-1C-0	2 MSR#04-3637	123957010	375469	14596-10-2	Americium-241	TRG	8	UHASL300	HASL300	REG	-0.0175	0.0817	PCI/G	0	U	21/10/2004	38262.46458	1:00	0.112	PCI/G	0.0537	PCI/G	1	5.1	199	G	PCI/G	PR
7000-0000-011C-1C-0	2 MSR#04-3637	123957010	375469	14913-49-6	Bismuth-212	TRG	8	UHASL300	HASL300	REG	0.127	0.225	PCI/G	0	U	21/10/2004	38262.46458	1:00	0.46	PCI/G	0.211	PCI/G	1	5.1	199	G	PCI/G	PR
7000-0000-011C-1C-0	2 MSR#04-3637	123957010	375469	14733-03-0	Bismuth-214	TRG	8	UHASL300	HASL300	REG	0.426	0.123	PCI/G	0		21/10/2004	38262.46458	1:00	0.0977	PCI/G	0.0449	PCI/G	1	5.1	199	G	PCI/G	PR
7000-0000-011C-1C-0	2 MSR#04-3637	123957010	375469	13967-70-9	Cesium-134	TRG	8	UHASL300	HASL300	REG	0.0268	0.0301	PCI/G	0	U	21/10/2004	38262.46458	1:00	0.0639	PCI/G	0.0292	PCI/G	1	5.1	199	G	PCI/G	PR
7000-0000-011C-1C-0	2 MSR#04-3637	123957010	375469	10045-97-3	Cesium-137	TRG	8	UHASL300	HASL300	REG	0.0105	0.0475	PCI/G	0	U	21/10/2004	38262.46458	1:00	0.043	PCI/G	0.0192	PCI/G	1	5.1	199	G	PCI/G	PR
7000-0000-011C-1C-0	2 MSR#04-3637	123957010	375469	10198-40-0	Cobalt-60	TRG	8	UHASL300	HASL300	REG	0.00113	0.0257	PCI/G	0	U	21/10/2004	38262.46458	1:00	0.0522	PCI/G	0.0225	PCI/G	1	5.1	199	G	PCI/G	PR
7000-0000-011C-1C-0	2 MSR#04-3637	123957010	375469	14683-23-9	Europium-152	TRG	8	UHASL300	HASL300	REG	0.0443	0.067	PCI/G	0	U	21/10/2004	38262.46458	1:00	0.135	PCI/G	0.0636	PCI/G	1	5.1	199	G	PCI/G	PR
7000-0000-011C-1C-0	2 MSR#04-3637	123957010	375469	15585-10-1	Europium-154	TRG	8	UHASL300	HASL300	REG	0.024	0.1	PCI/G	0	U	21/10/2004	38262.46458	1:00	0.173	PCI/G	0.0768	PCI/G	1	5.1	199	G	PCI/G	PR
7000-0000-011C-1C-0	2 MSR#04-3637	123957010	375469	14391-16-3	Europium-155	TRG	8	UHASL300	HASL300	REG	0.0602	0.0665	PCI/G	0	U	21/10/2004	38262.46458	1:00	0.134	PCI/G	0.0642	PCI/G	1	5.1	199	G	PCI/G	PR
7000-0000-011C-1C-0	2 MSR#04-3637	123957010	375469	15092-94-1	Lead-212	TRG	8	UHASL300	HASL300	REG	0.319	0.0776	PCI/G	0		21/10/2004	38262.46458	1:00	0.0749	PCI/G	0.0357	PCI/G	1	5.1	199	G	PCI/G	PR

7000-0000-011C-1C-0	2	MSR#04-3637	123957010	375459	15067-28-4	Lead 214	TRG		8	UHASL300	HASL300	REG	0.415	0.103	PCI/G		0		21/10/2004	38262.46458	1.00	0.0896	PCI/G	0.042	PCI/G		1	5.1	199	G	PCI/G		PR
7000-0000-011C-1C-0	2	MSR#04-3637	123957010	375459	13966-31-9	Manganese 54	TRG		8	UHASL300	HASL300	REG	0.0224	0.0287	PCI/G		0	U	21/10/2004	38262.46458	1.00	0.0587	PCI/G	0.0258	PCI/G		1	5.1	199	G	PCI/G		PR
7000-0000-011C-1C-0	2	MSR#04-3637	123957010	375459	14681-63-1	Niobium 94	TRG		8	UHASL300	HASL300	REG	0.022	0.0291	PCI/G		0	U	21/10/2004	38262.46458	1.00	0.0571	PCI/G	0.0265	PCI/G		1	5.1	199	G	PCI/G		PR
7000-0000-011C-1C-0	2	MSR#04-3637	123957010	375459	13966-00-2	Potassium 40	TRG		8	UHASL300	HASL300	REG	7.6	1.11	PCI/G		0		21/10/2004	38262.46458	1.00	0.672	PCI/G	0.25	PCI/G		1	5.1	199	G	PCI/G		PR
7000-0000-011C-1C-0	2	MSR#04-3637	123957010	375459	13982-63-3	Radium 226	TRG		8	UHASL300	HASL300	REG	0.426	0.123	PCI/G		0		21/10/2004	38262.46458	1.00	0.0877	PCI/G	0.0449	PCI/G		1	5.1	199	G	PCI/G		PR
7000-0000-011C-1C-0	2	MSR#04-3637	123957010	375459	14361-65-2	Silver 108m	TRG		8	UHASL300	HASL300	REG	0.00396	0.0212	PCI/G		0	U	21/10/2004	38262.46458	1.00	0.0415	PCI/G	0.0191	PCI/G		1	5.1	199	G	PCI/G		PR
7000-0000-011C-1C-0	2	MSR#04-3637	123957010	376218	10098-97-2	Strontium 90	TRG		45	UE905M	E905M	REG	0.00315	0.0122	PCI/G		0	U	22/10/2004	38263.13972	12.48	0.0206	PCI/G	0.0101	PCI/G		1	5.1	14.2	G	PCI/G		PR
7000-0000-011C-1C-0	2	MSR#04-3637	123957010	375459	14913-50-9	Thallium 208	TRG		8	UHASL300	HASL300	REG	0.103	0.0533	PCI/G		0		21/10/2004	38262.46458	1.00	0.0526	PCI/G	0.0242	PCI/G		1	5.1	199	G	PCI/G		PR
7000-0000-011C-2C-0	3	MSR#04-3637	123957011	375459	14331-83-0	Actinium 228	TRG		8	UHASL300	HASL300	REG	0.383	0.153	PCI/G		0		21/10/2004	38263.11736	1.54	0.133	PCI/G	0.0604	PCI/G		1	6.3	189	G	PCI/G		PR
7000-0000-011C-2C-0	3	MSR#04-3637	123957011	375459	14596-10-2	Americium 241	TRG		8	UHASL300	HASL300	REG	-0.0282	0.0801	PCI/G		0	U	21/10/2004	38263.11736	1.54	0.14	PCI/G	0.0871	PCI/G		1	6.3	189	G	PCI/G		PR
7000-0000-011C-2C-0	3	MSR#04-3637	123957011	375459	14913-49-6	Bismuth 212	TRG		8	UHASL300	HASL300	REG	0.441	0.229	PCI/G		0		21/10/2004	38263.11736	1.54	0.271	PCI/G	0.124	PCI/G		1	6.3	189	G	PCI/G		PR
7000-0000-011C-2C-0	3	MSR#04-3637	123957011	375459	14733-03-0	Bismuth 214	TRG		8	UHASL300	HASL300	REG	0.37	0.081	PCI/G		0		21/10/2004	38263.11736	1.54	0.0617	PCI/G	0.0284	PCI/G		1	6.3	189	G	PCI/G		PR
7000-0000-011C-2C-0	3	MSR#04-3637	123957011	375459	13967-70-9	Cesium 134	TRG		8	UHASL300	HASL300	REG	0.0352	0.0327	PCI/G		0	U	21/10/2004	38263.11736	1.54	0.0403	PCI/G	0.0215	PCI/G		1	6.3	189	G	PCI/G		PR
7000-0000-011C-2C-0	3	MSR#04-3637	123957011	375459	10045-97-3	Cesium 137	TRG		8	UHASL300	HASL300	REG	-0.0123	0.0197	PCI/G		0	U	21/10/2004	38263.11736	1.54	0.0353	PCI/G	0.0162	PCI/G		1	6.3	189	G	PCI/G		PR
7000-0000-011C-2C-0	3	MSR#04-3637	123957011	375459	10198-40-0	Cobalt 60	TRG		8	UHASL300	HASL300	REG	0.00155	0.018	PCI/G		0	U	21/10/2004	38263.11736	1.54	0.0355	PCI/G	0.0155	PCI/G		1	6.3	189	G	PCI/G		PR
7000-0000-011C-2C-0	3	MSR#04-3637	123957011	375459	14683-23-9	Europium 152	TRG		8	UHASL300	HASL300	REG	0.0237	0.0507	PCI/G		0	U	21/10/2004	38263.11736	1.54	0.0891	PCI/G	0.0418	PCI/G		1	6.3	189	G	PCI/G		PR
7000-0000-011C-2C-0	3	MSR#04-3637	123957011	375459	15585-10-1	Europium 154	TRG		8	UHASL300	HASL300	REG	-0.0421	0.0633	PCI/G		0	U	21/10/2004	38263.11736	1.54	0.11	PCI/G	0.0488	PCI/G		1	6.3	189	G	PCI/G		PR
7000-0000-011C-2C-0	3	MSR#04-3637	123957011	375459	14391-16-3	Europium 155	TRG		8	UHASL300	HASL300	REG	0.0478	0.0561	PCI/G		0	U	21/10/2004	38263.11736	1.54	0.112	PCI/G	0.0538	PCI/G		1	6.3	189	G	PCI/G		PR
7000-0000-011C-2C-0	3	MSR#04-3637	123957011	375459	15092-94-1	Lead 212	TRG		8	UHASL300	HASL300	REG	0.394	0.0921	PCI/G		0		21/10/2004	38263.11736	1.54	0.0536	PCI/G	0.0255	PCI/G		1	6.3	189	G	PCI/G		PR
7000-0000-011C-2C-0	3	MSR#04-3637	123957011	375459	15067-28-4	Lead 214	TRG		8	UHASL300	HASL300	REG	0.473	0.0862	PCI/G		0		21/10/2004	38263.11736	1.54	0.0716	PCI/G	0.0338	PCI/G		1	6.3	189	G	PCI/G		PR
7000-0000-011C-2C-0	3	MSR#04-3637	123957011	375459	13966-31-9	Manganese 54	TRG		8	UHASL300	HASL300	REG	0.00547	0.0205	PCI/G		0	U	21/10/2004	38263.11736	1.54	0.0394	PCI/G	0.0181	PCI/G		1	6.3	189	G	PCI/G		PR
7000-0000-011C-2C-0	3	MSR#04-3637	123957011	375459	14681-63-1	Niobium 94	TRG		8	UHASL300	HASL300	REG	0.0137	0.0177	PCI/G		0	U	21/10/2004	38263.11736	1.54	0.0357	PCI/G	0.0168	PCI/G		1	6.3	189	G	PCI/G		PR
7000-0000-011C-2C-0	3	MSR#04-3637	123957011	375459	13966-00-2	Potassium 40	TRG		8	UHASL300	HASL300	REG	7.19	0.923	PCI/G		0		21/10/2004	38263.11736	1.54	0.336	PCI/G	0.147	PCI/G		1	6.3	189	G	PCI/G		PR
7000-0000-011C-2C-0	3	MSR#04-3637	123957011	375459	13982-63-3	Radium 226	TRG		8	UHASL300	HASL300	REG	0.37	0.081	PCI/G		0		21/10/2004	38263.11736	1.54	0.0617	PCI/G	0.0284	PCI/G		1	6.3	189	G	PCI/G		PR
7000-0000-011C-2C-0	3	MSR#04-3637	123957011	375459	14361-65-2	Silver 108m	TRG		8	UHASL300	HASL300	REG	0.00353	0.0173	PCI/G		0	U	21/10/2004	38263.11736	1.54	0.0328	PCI/G	0.0153	PCI/G		1	6.3	189	G	PCI/G		PR
7000-0000-011C-2C-0	3	MSR#04-3637	123957011	376218	10098-97-2	Strontium 90	TRG		45	UE905M	E905M	REG	-0.0112	0.0109	PCI/G		0	U	22/10/2004	38262.25984	3.08	0.0202	PCI/G	0.00968	PCI/G		1	6.3	14.1	G	PCI/G		PR
7000-0000-011C-2C-0	3	MSR#04-3637	123957011	375459	14913-50-9	Thallium 208	TRG		8	UHASL300	HASL300	REG	0.145	0.0358	PCI/G		0		21/10/2004	38263.11736	1.54	0.0331	PCI/G	0.0152	PCI/G		1	6.3	189	G	PCI/G		PR
7000-0000-011C-2C-0	3	MSR#04-3637	123957011	376199	10028-17-8	Tritium	TRG		20	UE908.0	E908.0	REG	0.383	1.39	PCI/G		0	U		38263.11736	1.02	2.31	PCI/G	1.15	PCI/G		1	6.3			PCI/G		PR
7000-0000-011C-3C-0	4	MSR#04-3637	123957012	375459	14331-83-0	Actinium 228	TRG		8	UHASL300	HASL300	REG	0.501	0.158	PCI/G		0		21/10/2004	38263.11736	1.54	0.103	PCI/G	0.0454	PCI/G		1	5.4	179	G	PCI/G		PR
7000-0000-011C-3C-0	4	MSR#04-3637	123957012	375459	14596-10-2	Americium 241	TRG		8	UHASL300	HASL300	REG	-0.0175	0.104	PCI/G		0	U	21/10/2004	38263.11736	1.54	0.205	PCI/G	0.0966	PCI/G		1	5.4	179	G	PCI/G		PR
7000-0000-011C-3C-0	4	MSR#04-3637	123957012	375459	14913-49-6	Bismuth 212	TRG		8	UHASL300	HASL300	REG	0.319	0.192	PCI/G		0		21/10/2004	38263.11736	1.54	0.272	PCI/G	0.124	PCI/G		1	5.4	179	G	PCI/G		PR
7000-0000-011C-3C-0	4	MSR#04-3637	123957012	375459	14733-03-0	Bismuth 214	TRG		8	UHASL300	HASL300	REG	0.388	0.0898	PCI/G		0		21/10/2004	38263.11736	1.54	0.063	PCI/G	0.029	PCI/G		1	5.4	179	G	PCI/G		PR
7000-0000-011C-3C-0	4	MSR#04-3637	123957012	375459	13967-70-9	Cesium 134	TRG		8	UHASL300	HASL300	REG	0.0456	0.0415	PCI/G		0	U	21/10/2004	38263.11736	1.54	0.0473	PCI/G	0.0216	PCI/G		1	5.4	179	G	PCI/G		PR
7000-0000-011C-3C-0	4	MSR#04-3637	123957012	375459	10045-97-3	Cesium 137	TRG		8	UHASL300	HASL300	REG	0.00886	0.0192	PCI/G		0	U	21/10/2004	38263.11736	1.54	0.0338	PCI/G	0.0155	PCI/G		1	5.4	179	G	PCI/G		PR
7000-0000-011C-3C-0	4	MSR#04-3637	123957012	375459	10198-40-0	Cobalt 60	TRG		8	UHASL300	HASL300	REG	0.00342	0.0186	PCI/G		0	U	21/10/2004	38263.11736	1.54	0.0341	PCI/G	0.0147	PCI/G		1	5.4	179	G	PCI/G		PR
7000-0000-011C-3C-0	4	MSR#04-3637	123957012	375459	14683-23-9	Europium 152	TRG		8	UHASL300	HASL300	REG	0.00123	0.0473	PCI/G		0	U	21/10/2004	38263.11736	1.54	0.091	PCI/G	0.0427	PCI/G		1	5.4	179	G	PCI/G		PR
7000-0000-011C-3C-0	4	MSR#04-3637	123957012	375459	15585-10-1	Europium 154	TRG		8	UHASL300	HASL300	REG	0.00252	0.0592	PCI/G		0	U	21/10/2004	38263.11736	1.54	0.112	PCI/G	0.0494	PCI/G		1	5.4	179	G	PCI/G		PR
7000-0000-011C-3C-0	4	MSR#04-3637	123957012	375459	14391-16-3	Europium 155	TRG		8	UHASL300	HASL300	REG	0.032	0.0527	PCI/G		0	U	21/10/2004	38263.11736	1.54	0.105	PCI/G	0.0502	PCI/G		1	5.4	179	G	PCI/G		PR
7000-0000-011C-3C-0	4	MSR#04-3637	123957012	375459	15092-94-1	Lead 212	TRG		8	UHASL300	HASL300	REG	0.36	0.0872	PCI/G		0		21/10/2004	38263.11736	1.54	0.0515	PCI/G	0.0244	PCI/G		1	5.4	179	G	PCI/G		PR
7000-0000-011C-3C-0	4	MSR#04-3637	123957012	375459	15067-28-4	Lead 214	TRG		8	UHASL300	HASL300	REG	0.422	0.0795	PCI/G		0		21/10/2004	38263.11736	1.54	0.0578	PCI/G	0.0276	PCI/G		1	5.4	179	G	PCI/G		PR
7000-0000-011C-3C-0	4	MSR#04-3637	123957012	375459	13966-31-9	Manganese 54	TRG		8	UHASL300	HASL300	REG	0.0137	0.0135	PCI/G		0	U	21/10/2004	38263.11736	1.54	0.036	PCI/G	0.0158	PCI/G		1	5.4	179	G	PCI/G		PR
7000-0000-011C-3C-0	4	MSR#04-3637	123957012	375459	14681-63-1	Niobium 94	TRG		8	UHASL300	HASL300	REG	0.0128	0.018	PCI/G		0	U	21/10/2004	38263.11736	1.54	0.0367	PCI/G	0.0171	PCI/G		1	5.4	179	G	PCI/G		PR
7000-0000-011C-3C-0	4	MSR#04-3637	123957012	375459	13966-00-2	Potassium 40	TRG		8	UHASL300	HASL300	REG	8.07	1.05	PCI/G		0		21/10/2004	38263.11736	1.54	0.368	PCI/G	0.16	PCI/G		1	5.4	179	G	PCI/G		PR
7000-0000-011C-3C-0	4	MSR#04-3637	123957012	375459	13982-63-3	Radium 226	TRG		8	UHASL300	HASL300	REG	0.388	0.0898	PCI/G		0		21/10/2004	38263.11736	1.54	0.063	PCI/G	0.029	PCI/G		1	5.4	179	G	PCI/G		PR
7000-0000-011C-3C-0	4	MSR#04-3637	123957012	375459	14361-65-2	Silver 108m	TRG		8	UHASL300	HASL300	REG	0.00528	0.0154	PCI/G		0	U	21/10/2004	38263.11736	1.54	0.0285	PCI/G	0.0132	PCI/G		1	5.4	179	G	PCI/G		PR
7000-0000-011C-3C-0	4	MSR#04-3637	123957012	376218	10098-97-2	Strontium 90	TRG		45	UE905M	E905M	REG	-0.00733	0.0128	PCI/G		0	U	22/10/2004	38262.25984	3.08	0.0226	PCI/G	0.0111	PCI/G		1	5.4	14.2	G	PCI/G		PR
7000-0000-011C-3C-0	4	MSR#04-3637	123957012	375459	14913-50-9	Thallium 208	TRG		8	UHASL300	HASL300	REG	0.159	0.0391	PCI/G		0		21/10/2004	38263.11736	1.54	0.0312	PCI/G	0.0143	PCI/G		1	5.4	179	G	PCI/G		PR
7000-0000-011C-3C-0	5	MSR#04-3637	123957013	375459	14331-83-0	Actinium 228	TRG		8	UHASL300	HASL300	REG	0.493	0.122	PCI/G		0		21/10/2004	38263.11875	12.08	0.0932	PCI/G	0.043	PCI/G		1	5.8	181	G	PCI/G		PR

7000-0000-011C-3C-0	5	MSR#04-3637	123957013	375469	14596-10-2	Americium-241	TRG	8	UHASL300	HASL300	REG	-0.0924	0.138	PCi/G	0	U	21/10/2004	38263.11875	12.08	0.176	PCi/G	0.0849	PCi/G	1	5.8	181	G	PCi/G	PR
7000-0000-011C-3C-0	5	MSR#04-3637	123957013	375469	14913-49-6	Bismuth-212	TRG	8	UHASL300	HASL300	REG	0.323	0.198	PCi/G	0		21/10/2004	38263.11875	12.08	0.212	PCi/G	0.0868	PCi/G	1	5.8	181	G	PCi/G	PR
7000-0000-011C-3C-0	5	MSR#04-3637	123957013	375469	14733-03-0	Bismuth-214	TRG	8	UHASL300	HASL300	REG	0.441	0.0784	PCi/G	0		21/10/2004	38263.11875	12.08	0.0518	PCi/G	0.0244	PCi/G	1	5.8	181	G	PCi/G	PR
7000-0000-011C-3C-0	5	MSR#04-3637	123957013	375469	13967-70-9	Cesium-134	TRG	8	UHASL300	HASL300	REG	0.0113	0.028	PCi/G	0	U	21/10/2004	38263.11875	12.08	0.0328	PCi/G	0.0153	PCi/G	1	5.8	181	G	PCi/G	PR
7000-0000-011C-3C-0	5	MSR#04-3637	123957013	375469	10045-97-3	Cesium-137	TRG	8	UHASL300	HASL300	REG	-0.00716	0.0147	PCi/G	0	U	21/10/2004	38263.11875	12.08	0.0254	PCi/G	0.0118	PCi/G	1	5.8	181	G	PCi/G	PR
7000-0000-011C-3C-0	5	MSR#04-3637	123957013	375469	10198-40-0	Cobalt-60	TRG	8	UHASL300	HASL300	REG	0.00111	0.017	PCi/G	0	U	21/10/2004	38263.11875	12.08	0.0315	PCi/G	0.0143	PCi/G	1	5.8	181	G	PCi/G	PR
7000-0000-011C-3C-0	5	MSR#04-3637	123957013	375469	14683-23-9	Europium-152	TRG	8	UHASL300	HASL300	REG	-0.00138	0.0402	PCi/G	0	U	21/10/2004	38263.11875	12.08	0.075	PCi/G	0.0358	PCi/G	1	5.8	181	G	PCi/G	PR
7000-0000-011C-3C-0	5	MSR#04-3637	123957013	375469	15585-10-1	Europium-154	TRG	8	UHASL300	HASL300	REG	0.032	0.0428	PCi/G	0	U	21/10/2004	38263.11875	12.08	0.0858	PCi/G	0.0391	PCi/G	1	5.8	181	G	PCi/G	PR
7000-0000-011C-3C-0	5	MSR#04-3637	123957013	375469	14391-16-3	Europium-155	TRG	8	UHASL300	HASL300	REG	0.0717	0.0512	PCi/G	0	U	21/10/2004	38263.11875	12.08	0.0995	PCi/G	0.0484	PCi/G	1	5.8	181	G	PCi/G	PR
7000-0000-011C-3C-0	5	MSR#04-3637	123957013	375469	15092-94-1	Lead-212	TRG	8	UHASL300	HASL300	REG	0.481	0.062	PCi/G	0		21/10/2004	38263.11875	12.08	0.0436	PCi/G	0.0211	PCi/G	1	5.8	181	G	PCi/G	PR
7000-0000-011C-3C-0	5	MSR#04-3637	123957013	375469	15087-28-4	Lead-214	TRG	8	UHASL300	HASL300	REG	0.457	0.0755	PCi/G	0		21/10/2004	38263.11875	12.08	0.0512	PCi/G	0.0243	PCi/G	1	5.8	181	G	PCi/G	PR
7000-0000-011C-3C-0	5	MSR#04-3637	123957013	375469	13966-31-9	Manganese-54	TRG	8	UHASL300	HASL300	REG	-0.00304	0.0153	PCi/G	0	U	21/10/2004	38263.11875	12.08	0.0283	PCi/G	0.0132	PCi/G	1	5.8	181	G	PCi/G	PR
7000-0000-011C-3C-0	5	MSR#04-3637	123957013	375469	14681-83-1	Niobium-94	TRG	8	UHASL300	HASL300	REG	-0.00952	0.0141	PCi/G	0	U	21/10/2004	38263.11875	12.08	0.0238	PCi/G	0.0111	PCi/G	1	5.8	181	G	PCi/G	PR
7000-0000-011C-3C-0	5	MSR#04-3637	123957013	375469	13966-00-2	Potassium-40	TRG	8	UHASL300	HASL300	REG	6.97	0.775	PCi/G	0		21/10/2004	38263.11875	12.08	0.232	PCi/G	0.102	PCi/G	1	5.8	181	G	PCi/G	PR
7000-0000-011C-3C-0	5	MSR#04-3637	123957013	375469	13982-63-3	Radium-226	TRG	8	UHASL300	HASL300	REG	0.441	0.0784	PCi/G	0		21/10/2004	38263.11875	12.08	0.0518	PCi/G	0.0244	PCi/G	1	5.8	181	G	PCi/G	PR
7000-0000-011C-3C-0	5	MSR#04-3637	123957013	375469	14391-65-2	Silver-108m	TRG	8	UHASL300	HASL300	REG	0.000548	0.0133	PCi/G	0	U	21/10/2004	38263.11875	12.08	0.0248	PCi/G	0.0117	PCi/G	1	5.8	181	G	PCi/G	PR
7000-0000-011C-3C-0	5	MSR#04-3637	123957013	378218	10098-97-2	Strontium-90	TRG	45	UE905M	E905M	REG	0.0017	0.00341	PCi/G	0	U	22/10/2004	38262.25694	3.08	0.00583	PCi/G	0.00278	PCi/G	1	5.8	14.1	G	PCi/G	PR
7000-0000-011C-3C-0	5	MSR#04-3637	123957013	375469	14913-50-9	Thallium-208	TRG	8	UHASL300	HASL300	REG	0.138	0.0375	PCi/G	0		21/10/2004	38263.11875	12.08	0.0261	PCi/G	0.0122	PCi/G	1	5.8	181	G	PCi/G	PR
7000-0000-011C-3C-0	5	MSR#04-3637	123957013	378190	10028-17-8	Tritium	TRG	20	UE906.0	E906.0	REG	-0.884	1.32	PCi/G	0	U		12/11/2004	1.34	2.28	PCi/G	1.14	PCi/G	1	5.8			PCi/G	PR
7000-0000-010C-1C-0	1	MSR#04-3637	123957014	375469	14331-83-0	Actinium-228	TRG	8	UHASL300	HASL300	REG	0.434	0.145	PCi/G	0		21/10/2004	38263.11875	12.09	0.109	PCi/G	0.0509	PCi/G	1	7.5	154	G	PCi/G	PR
7000-0000-010C-1C-0	1	MSR#04-3637	123957014	375469	14596-10-2	Americium-241	TRG	8	UHASL300	HASL300	REG	0.0547	0.0637	PCi/G	0	U	21/10/2004	38263.11875	12.09	0.112	PCi/G	0.0543	PCi/G	1	7.5	154	G	PCi/G	PR
7000-0000-010C-1C-0	1	MSR#04-3637	123957014	375469	14913-49-6	Bismuth-212	TRG	8	UHASL300	HASL300	REG	0.176	0.176	PCi/G	0	U	21/10/2004	38263.11875	12.09	0.215	PCi/G	0.101	PCi/G	1	7.5	154	G	PCi/G	PR
7000-0000-010C-1C-0	1	MSR#04-3637	123957014	375469	14733-03-0	Bismuth-214	TRG	8	UHASL300	HASL300	REG	0.457	0.0842	PCi/G	0		21/10/2004	38263.11875	12.09	0.0491	PCi/G	0.0231	PCi/G	1	7.5	154	G	PCi/G	PR
7000-0000-010C-1C-0	1	MSR#04-3637	123957014	375469	13967-70-9	Cesium-134	TRG	8	UHASL300	HASL300	REG	0	0.0238	PCi/G	0	UJR	21/10/2004	38263.11875	12.09	0.0364	PCi/G	0.0172	PCi/G	1	7.5	154	G	PCi/G	PR
7000-0000-010C-1C-0	1	MSR#04-3637	123957014	375469	10045-97-3	Cesium-137	TRG	8	UHASL300	HASL300	REG	-0.0175	0.0161	PCi/G	0	U	21/10/2004	38263.11875	12.09	0.0272	PCi/G	0.0127	PCi/G	1	7.5	154	G	PCi/G	PR
7000-0000-010C-1C-0	1	MSR#04-3637	123957014	375469	10198-40-0	Cobalt-60	TRG	8	UHASL300	HASL300	REG	0.00408	0.0204	PCi/G	0	U	21/10/2004	38263.11875	12.09	0.0332	PCi/G	0.0152	PCi/G	1	7.5	154	G	PCi/G	PR
7000-0000-010C-1C-0	1	MSR#04-3637	123957014	375469	14683-23-9	Europium-152	TRG	8	UHASL300	HASL300	REG	-0.0164	0.0406	PCi/G	0	U	21/10/2004	38263.11875	12.09	0.0715	PCi/G	0.0343	PCi/G	1	7.5	154	G	PCi/G	PR
7000-0000-010C-1C-0	1	MSR#04-3637	123957014	375469	15585-10-1	Europium-154	TRG	8	UHASL300	HASL300	REG	0.0329	0.054	PCi/G	0	U	21/10/2004	38263.11875	12.09	0.0947	PCi/G	0.0436	PCi/G	1	7.5	154	G	PCi/G	PR
7000-0000-010C-1C-0	1	MSR#04-3637	123957014	375469	14391-16-3	Europium-155	TRG	8	UHASL300	HASL300	REG	0.027	0.0554	PCi/G	0	U	21/10/2004	38263.11875	12.09	0.0848	PCi/G	0.041	PCi/G	1	7.5	154	G	PCi/G	PR
7000-0000-010C-1C-0	1	MSR#04-3637	123957014	375469	15092-94-1	Lead-212	TRG	8	UHASL300	HASL300	REG	0.434	0.0594	PCi/G	0		21/10/2004	38263.11875	12.09	0.0427	PCi/G	0.0206	PCi/G	1	7.5	154	G	PCi/G	PR
7000-0000-010C-1C-0	1	MSR#04-3637	123957014	375469	15087-28-4	Lead-214	TRG	8	UHASL300	HASL300	REG	0.604	0.0884	PCi/G	0		21/10/2004	38263.11875	12.09	0.06	PCi/G	0.0238	PCi/G	1	7.5	154	G	PCi/G	PR
7000-0000-010C-1C-0	1	MSR#04-3637	123957014	375469	13966-31-9	Manganese-54	TRG	8	UHASL300	HASL300	REG	-0.000237	0.0183	PCi/G	0	U	21/10/2004	38263.11875	12.09	0.0326	PCi/G	0.0154	PCi/G	1	7.5	154	G	PCi/G	PR
7000-0000-010C-1C-0	1	MSR#04-3637	123957014	375469	14681-83-1	Niobium-94	TRG	8	UHASL300	HASL300	REG	0.00433	0.0142	PCi/G	0	U	21/10/2004	38263.11875	12.09	0.0252	PCi/G	0.0119	PCi/G	1	7.5	154	G	PCi/G	PR
7000-0000-010C-1C-0	1	MSR#04-3637	123957014	375469	13966-00-2	Potassium-40	TRG	8	UHASL300	HASL300	REG	8.87	0.923	PCi/G	0		21/10/2004	38263.11875	12.09	0.266	PCi/G	0.119	PCi/G	1	7.5	154	G	PCi/G	PR
7000-0000-010C-1C-0	1	MSR#04-3637	123957014	375469	13982-63-3	Radium-226	TRG	8	UHASL300	HASL300	REG	0.457	0.0842	PCi/G	0		21/10/2004	38263.11875	12.09	0.0491	PCi/G	0.0231	PCi/G	1	7.5	154	G	PCi/G	PR
7000-0000-010C-1C-0	1	MSR#04-3637	123957014	375469	14391-65-2	Silver-108m	TRG	8	UHASL300	HASL300	REG	-0.0044	0.0135	PCi/G	0	U	21/10/2004	38263.11875	12.09	0.0236	PCi/G	0.0112	PCi/G	1	7.5	154	G	PCi/G	PR
7000-0000-010C-1C-0	1	MSR#04-3637	123957014	378218	10098-97-2	Strontium-90	TRG	45	UE905M	E905M	REG	0.00742	0.00857	PCi/G	0	U	22/10/2004	38262.25694	3.08	0.0144	PCi/G	0.00689	PCi/G	1	7.5	14.1	G	PCi/G	PR
7000-0000-010C-1C-0	1	MSR#04-3637	123957014	375469	14913-50-9	Thallium-208	TRG	8	UHASL300	HASL300	REG	0.112	0.0333	PCi/G	0		21/10/2004	38263.11875	12.09	0.0258	PCi/G	0.0122	PCi/G	1	7.5	154	G	PCi/G	PR
7000-0000-010C-1C-0	2	MSR#04-3637	123957015	375469	14331-83-0	Actinium-228	TRG	8	UHASL300	HASL300	REG	0.391	0.115	PCi/G	0		21/10/2004	38263.11875	12.09	0.112	PCi/G	0.0524	PCi/G	1	5.8	189	G	PCi/G	PR
7000-0000-010C-1C-0	2	MSR#04-3637	123957015	375469	14596-10-2	Americium-241	TRG	8	UHASL300	HASL300	REG	0.00795	0.028	PCi/G	0	U	21/10/2004	38263.11875	12.09	0.042	PCi/G	0.0205	PCi/G	1	5.8	189	G	PCi/G	PR
7000-0000-010C-1C-0	2	MSR#04-3637	123957015	375469	14913-49-6	Bismuth-212	TRG	8	UHASL300	HASL300	REG	0.264	0.138	PCi/G	0		21/10/2004	38263.11875	12.09	0.196	PCi/G	0.092	PCi/G	1	5.8	189	G	PCi/G	PR
7000-0000-010C-1C-0	2	MSR#04-3637	123957015	375469	14733-03-0	Bismuth-214	TRG	8	UHASL300	HASL300	REG	0.483	0.0999	PCi/G	0		21/10/2004	38263.11875	12.09	0.0513	PCi/G	0.0241	PCi/G	1	5.8	189	G	PCi/G	PR
7000-0000-010C-1C-0	2	MSR#04-3637	123957015	375469	13967-70-9	Cesium-134	TRG	8	UHASL300	HASL300	REG	0.0157	0.0178	PCi/G	0	U	21/10/2004	38263.11875	12.09	0.0343	PCi/G	0.0161	PCi/G	1	5.8	189	G	PCi/G	PR
7000-0000-010C-1C-0	2	MSR#04-3637	123957015	375469	10045-97-3	Cesium-137	TRG	8	UHASL300	HASL300	REG	-0.00837	0.0155	PCi/G	0	U	21/10/2004	38263.11875	12.09	0.0274	PCi/G	0.0128	PCi/G	1	5.8	189	G	PCi/G	PR
7000-0000-010C-1C-0	2	MSR#04-3637	123957015	375469	10198-40-0	Cobalt-60	TRG	8	UHASL300	HASL300	REG	-0.00586	0.0161	PCi/G	0	U	21/10/2004	38263.11875	12.09	0.0289	PCi/G	0.0131	PCi/G	1	5.8	189	G	PCi/G	PR
7000-0000-010C-1C-0	2	MSR#04-3637	123957015	375469	14683-23-9	Europium-152	TRG	8	UHASL300	HASL300	REG	-0.00242	0.0397	PCi/G	0	U	21/10/2004	38263.11875	12.09	0.0721	PCi/G	0.0345	PCi/G	1	5.8	189	G	PCi/G	PR
7000-0000-010C-1C-0	2	MSR#04-3637	123957015	375469	15585-10-1	Europium-154	TRG	8	UHASL300	HASL300	REG	0.00493	0.0493	PCi/G	0	U	21/10/2004	38263.11875	12.09	0.0923	PCi/G	0.0426	PCi/G	1	5.8	189	G	PCi/G	PR
7000-0000-010C-1C-0	2	MSR#04-3637	123957015	375469	14391-16-3	Europium-155	TRG	8	UHASL300	HASL300	REG	0.00304	0.0383	PCi/G	0	U	21/10/2004	38263.11875	12.09	0.073	PCi/G	0.0345	PCi/G	1	5.8	189	G	PCi/G	PR

7000-0000-010C-1C-0	2	MSR#04 3637	123957015	375456	15092 94-1	Lead 212	TRG	8	UHASL300	HASL300	REG	0.418	0.0574	PCi/G		0		21/10/2004	38263 11875	12:09	0.0403	PCi/G	0.0194	PCi/G	1	5.8	189G	PCi/G	PR
7000-0000-010C-1C-0	2	MSR#04 3637	123957015	375456	15087 28-4	Lead 214	TRG	8	UHASL300	HASL300	REG	0.538	0.0652	PCi/G		0		21/10/2004	38263 11875	12:09	0.0538	PCi/G	0.0257	PCi/G	1	5.8	189G	PCi/G	PR
7000-0000-010C-1C-0	2	MSR#04 3637	123957015	375456	13966 31-9	Manganese 54	TRG	8	UHASL300	HASL300	REG	0.0132	0.0256	PCi/G		0U		21/10/2004	38263 11875	12:09	0.0268	PCi/G	0.0125	PCi/G	1	5.8	189G	PCi/G	PR
7000-0000-010C-1C-0	2	MSR#04 3637	123957015	375456	14881 63-1	Niobium-94	TRG	8	UHASL300	HASL300	REG	0.00448	0.0145	PCi/G		0U		21/10/2004	38263 11875	12:09	0.0272	PCi/G	0.0126	PCi/G	1	5.8	189G	PCi/G	PR
7000-0000-010C-1C-0	2	MSR#04 3637	123957015	375456	13966-00-2	Potassium-40	TRG	8	UHASL300	HASL300	REG	8.72	0.85	PCi/G		0		21/10/2004	38263 11875	12:09	0.294	PCi/G	0.126	PCi/G	1	5.8	189G	PCi/G	PR
7000-0000-010C-1C-0	2	MSR#04 3637	123957015	375456	13982 63-3	Radium 226	TRG	8	UHASL300	HASL300	REG	0.463	0.0668	PCi/G		0		21/10/2004	38263 11875	12:09	0.0513	PCi/G	0.0241	PCi/G	1	5.8	189G	PCi/G	PR
7000-0000-010C-1C-0	2	MSR#04 3637	123957015	375456	14391 85-2	Silver 108m	TRG	8	UHASL300	HASL300	REG	0.00824	0.0131	PCi/G		0U		21/10/2004	38263 11875	12:09	0.0258	PCi/G	0.0122	PCi/G	1	5.8	189G	PCi/G	PR
7000-0000-010C-1C-0	2	MSR#04 3637	123957015	376218	10098 87-2	Strontium 90	TRG	45	UE905M	E905M	REG	0.000663	0.00703	PCi/G		0U		22/10/2004	38262 25694	3:08	0.0122	PCi/G	0.00588	PCi/G	1	5.8	14.2G	PCi/G	PR
7000-0000-010C-1C-0	2	MSR#04 3637	123957015	375456	14913 50-9	Thallium 208	TRG	8	UHASL300	HASL300	REG	0.129	0.0331	PCi/G		0		21/10/2004	38263 11875	12:09	0.0275	PCi/G	0.0129	PCi/G	1	5.8	189G	PCi/G	PR
7000-0000-010C-2C-0	3	MSR#04 3637	123957016	375456	14331 83-0	Actinium 228	TRG	8	UHASL300	HASL300	REG	0.621	0.129	PCi/G		0		21/10/2004	38263 11875	12:10	0.0839	PCi/G	0.0386	PCi/G	1	6.7	174G	PCi/G	PR
7000-0000-010C-2C-0	3	MSR#04 3637	123957016	375456	14596 10-2	Americium 241	TRG	8	UHASL300	HASL300	REG	0.00227	0.0807	PCi/G		0U		21/10/2004	38263 11875	12:10	0.142	PCi/G	0.0655	PCi/G	1	6.7	174G	PCi/G	PR
7000-0000-010C-2C-0	3	MSR#04 3637	123957016	375456	14913-49-6	Bismuth 212	TRG	8	UHASL300	HASL300	REG	0.364	0.151	PCi/G		0		21/10/2004	38263 11875	12:10	0.175	PCi/G	0.0818	PCi/G	1	6.7	174G	PCi/G	PR
7000-0000-010C-2C-0	3	MSR#04 3637	123957016	375456	14733-03-0	Bismuth 214	TRG	8	UHASL300	HASL300	REG	0.453	0.0704	PCi/G		0		21/10/2004	38263 11875	12:10	0.0445	PCi/G	0.021	PCi/G	1	6.7	174G	PCi/G	PR
7000-0000-010C-2C-0	3	MSR#04 3637	123957016	375456	13967 70-9	Cesium 134	TRG	8	UHASL300	HASL300	REG	0.00785	0.0199	PCi/G		0U		21/10/2004	38263 11875	12:10	0.0288	PCi/G	0.0135	PCi/G	1	6.7	174G	PCi/G	PR
7000-0000-010C-2C-0	3	MSR#04 3637	123957016	375456	10045 97-3	Cesium 137	TRG	8	UHASL300	HASL300	REG	0.00787	0.0132	PCi/G		0U		21/10/2004	38263 11875	12:10	0.0248	PCi/G	0.0117	PCi/G	1	6.7	174G	PCi/G	PR
7000-0000-010C-2C-0	3	MSR#04 3637	123957016	375456	10198-40-0	Cobalt 60	TRG	8	UHASL300	HASL300	REG	0.00258	0.015	PCi/G		0U		21/10/2004	38263 11875	12:10	0.028	PCi/G	0.0128	PCi/G	1	6.7	174G	PCi/G	PR
7000-0000-010C-2C-0	3	MSR#04 3637	123957016	375456	14683 23-9	Europium 152	TRG	8	UHASL300	HASL300	REG	0.00348	0.0332	PCi/G		0U		21/10/2004	38263 11875	12:10	0.0525	PCi/G	0.0248	PCi/G	1	6.7	174G	PCi/G	PR
7000-0000-010C-2C-0	3	MSR#04 3637	123957016	375456	15585 10-1	Europium-154	TRG	8	UHASL300	HASL300	REG	0.00425	0.0424	PCi/G		0U		21/10/2004	38263 11875	12:10	0.0785	PCi/G	0.036	PCi/G	1	6.7	174G	PCi/G	PR
7000-0000-010C-2C-0	3	MSR#04 3637	123957016	375456	14391-18-3	Europium-155	TRG	8	UHASL300	HASL300	REG	0.0177	0.0365	PCi/G		0U		21/10/2004	38263 11875	12:10	0.0755	PCi/G	0.0356	PCi/G	1	6.7	174G	PCi/G	PR
7000-0000-010C-2C-0	3	MSR#04 3637	123957016	375456	15092 94-1	Lead 212	TRG	8	UHASL300	HASL300	REG	0.47	0.0576	PCi/G		0		21/10/2004	38263 11875	12:10	0.035	PCi/G	0.0168	PCi/G	1	6.7	174G	PCi/G	PR
7000-0000-010C-2C-0	3	MSR#04 3637	123957016	375456	15087 28-4	Lead 214	TRG	8	UHASL300	HASL300	REG	0.502	0.0773	PCi/G		0		21/10/2004	38263 11875	12:10	0.0442	PCi/G	0.0211	PCi/G	1	6.7	174G	PCi/G	PR
7000-0000-010C-2C-0	3	MSR#04 3637	123957016	375456	13966-31-9	Manganese 54	TRG	8	UHASL300	HASL300	REG	0.0018	0.0143	PCi/G		0U		21/10/2004	38263 11875	12:10	0.0257	PCi/G	0.012	PCi/G	1	6.7	174G	PCi/G	PR
7000-0000-010C-2C-0	3	MSR#04 3637	123957016	375456	14881 63-1	Niobium-94	TRG	8	UHASL300	HASL300	REG	0.00682	0.0121	PCi/G		0U		21/10/2004	38263 11875	12:10	0.0226	PCi/G	0.0108	PCi/G	1	6.7	174G	PCi/G	PR
7000-0000-010C-2C-0	3	MSR#04 3637	123957016	375456	13966-00-2	Potassium-40	TRG	8	UHASL300	HASL300	REG	7.67	0.821	PCi/G		0		21/10/2004	38263 11875	12:10	0.237	PCi/G	0.107	PCi/G	1	6.7	174G	PCi/G	PR
7000-0000-010C-2C-0	3	MSR#04 3637	123957016	375456	13982 63-3	Radium 226	TRG	8	UHASL300	HASL300	REG	0.453	0.0704	PCi/G		0		21/10/2004	38263 11875	12:10	0.0445	PCi/G	0.021	PCi/G	1	6.7	174G	PCi/G	PR
7000-0000-010C-2C-0	3	MSR#04 3637	123957016	375456	14391-85-2	Silver 108m	TRG	8	UHASL300	HASL300	REG	0.00402	0.0106	PCi/G		0U		21/10/2004	38263 11875	12:10	0.0203	PCi/G	0.0096	PCi/G	1	6.7	174G	PCi/G	PR
7000-0000-010C-2C-0	3	MSR#04 3637	123957016	376218	10098 87-2	Strontium 90	TRG	45	UE905M	E905M	REG	0.00884	0.0061	PCi/G		0U		22/10/2004	38262 25694	3:08	0.00967	PCi/G	0.00471	PCi/G	1	6.7	14G	PCi/G	PR
7000-0000-010C-2C-0	3	MSR#04 3637	123957016	375456	14913-50-9	Thallium 208	TRG	8	UHASL300	HASL300	REG	0.137	0.0298	PCi/G		0		21/10/2004	38263 11875	12:10	0.0234	PCi/G	0.0113	PCi/G	1	6.7	174G	PCi/G	PR
7000-0000-010C-2C-0	3	MSR#04 3637	123957016	376190	10029 17-8	Tritium	TRG	20	UE906 0	E906 0	REG	0.0302	1.34	PCi/G		0U			12/11/2004	2:08	2.25	PCi/G	1.12	PCi/G	1	6.7		PCi/G	PR
7000-0000-010C-3C-0	4	MSR#04 3637	123957017	375456	14331 83-0	Actinium 228	TRG	8	UHASL300	HASL300	REG	0.363	0.105	PCi/G		0		21/10/2004	38263 11875	12:10	0.0681	PCi/G	0.0405	PCi/G	1	5.4	184G	PCi/G	PR
7000-0000-010C-3C-0	4	MSR#04 3637	123957017	375456	14596 10-2	Americium 241	TRG	8	UHASL300	HASL300	REG	0.00819	0.0526	PCi/G		0U		21/10/2004	38263 11875	12:10	0.0977	PCi/G	0.0473	PCi/G	1	5.4	184G	PCi/G	PR
7000-0000-010C-3C-0	4	MSR#04 3637	123957017	375456	14913-49-6	Bismuth 212	TRG	8	UHASL300	HASL300	REG	0	0.283	PCi/G		0UJ		21/10/2004	38263 11875	12:10	0.178	PCi/G	0.083	PCi/G	1	5.4	184G	PCi/G	PR
7000-0000-010C-3C-0	4	MSR#04 3637	123957017	375456	14733-03-0	Bismuth 214	TRG	8	UHASL300	HASL300	REG	0.409	0.0668	PCi/G		0		21/10/2004	38263 11875	12:10	0.0453	PCi/G	0.0214	PCi/G	1	5.4	184G	PCi/G	PR
7000-0000-010C-3C-0	4	MSR#04 3637	123957017	375456	13967-70-9	Cesium 134	TRG	8	UHASL300	HASL300	REG	0.0148	0.0155	PCi/G		0U		21/10/2004	38263 11875	12:10	0.0297	PCi/G	0.014	PCi/G	1	5.4	184G	PCi/G	PR
7000-0000-010C-3C-0	4	MSR#04 3637	123957017	375456	10045-97-3	Cesium 137	TRG	8	UHASL300	HASL300	REG	-0.011	0.014	PCi/G		0U		21/10/2004	38263 11875	12:10	0.0201	PCi/G	0.00949	PCi/G	1	5.4	184G	PCi/G	PR
7000-0000-010C-3C-0	4	MSR#04 3637	123957017	375456	10198-40-0	Cobalt 60	TRG	8	UHASL300	HASL300	REG	-0.0135	0.0137	PCi/G		0U		21/10/2004	38263 11875	12:10	0.0215	PCi/G	0.00978	PCi/G	1	5.4	184G	PCi/G	PR
7000-0000-010C-3C-0	4	MSR#04 3637	123957017	375456	14683 23-9	Europium 152	TRG	8	UHASL300	HASL300	REG	0.0281	0.0325	PCi/G		0U		21/10/2004	38263 11875	12:10	0.0544	PCi/G	0.0275	PCi/G	1	5.4	184G	PCi/G	PR
7000-0000-010C-3C-0	4	MSR#04 3637	123957017	375456	15585 10-1	Europium 154	TRG	8	UHASL300	HASL300	REG	0.0118	0.0461	PCi/G		0U		21/10/2004	38263 11875	12:10	0.0854	PCi/G	0.0395	PCi/G	1	5.4	184G	PCi/G	PR
7000-0000-010C-3C-0	4	MSR#04 3637	123957017	375456	14391-18-3	Europium 155	TRG	8	UHASL300	HASL300	REG	0.0423	0.0341	PCi/G		0U		21/10/2004	38263 11875	12:10	0.0694	PCi/G	0.0337	PCi/G	1	5.4	184G	PCi/G	PR
7000-0000-010C-3C-0	4	MSR#04 3637	123957017	375456	15092 94-1	Lead 212	TRG	8	UHASL300	HASL300	REG	0.361	0.0494	PCi/G		0		21/10/2004	38263 11875	12:10	0.0343	PCi/G	0.0165	PCi/G	1	5.4	184G	PCi/G	PR
7000-0000-010C-3C-0	4	MSR#04 3637	123957017	375456	15087 28-4	Lead 214	TRG	8	UHASL300	HASL300	REG	0.517	0.0814	PCi/G		0		21/10/2004	38263 11875	12:10	0.0451	PCi/G	0.019	PCi/G	1	5.4	184G	PCi/G	PR
7000-0000-010C-3C-0	4	MSR#04 3637	123957017	375456	13966-31-9	Manganese 54	TRG	8	UHASL300	HASL300	REG	0.0182	0.0145	PCi/G		0U		21/10/2004	38263 11875	12:10	0.0281	PCi/G	0.0133	PCi/G	1	5.4	184G	PCi/G	PR
7000-0000-010C-3C-0	4	MSR#04 3637	123957017	375456	14881-63-1	Niobium-94	TRG	8	UHASL300	HASL300	REG	0.00514	0.0121	PCi/G		0U		21/10/2004	38263 11875	12:10	0.0211	PCi/G	0.00987	PCi/G	1	5.4	184G	PCi/G	PR
7000-0000-010C-3C-0	4	MSR#04 3637	123957017	375456	13966-00-2	Potassium-40	TRG	8	UHASL300	HASL300	REG	7.62	0.804	PCi/G		0		21/10/2004	38263 11875	12:10	0.236	PCi/G	0.106	PCi/G	1	5.4	184G	PCi/G	PR
7000-0000-010C-3C-0	4	MSR#04 3637	123957017	375456	13982 63-3	Radium 226	TRG	8	UHASL300	HASL300	REG	0.409	0.0668	PCi/G		0		21/10/2004	38263 11875	12:10	0.0453	PCi/G	0.0214	PCi/G	1	5.4	184G	PCi/G	PR
7000-0000-010C-3C-0	4	MSR#04 3637	123957017	375456	14391-85-2	Silver 108m	TRG	8	UHASL300	HASL300	REG	0.00731	0.00888	PCi/G		0U		21/10/2004	38263 11875	12:10	0.0196	PCi/G	0.00927	PCi/G	1	5.4	184G	PCi/G	PR
7000-0000-010C-3C-0	4	MSR#04 3637	123957017	376218	10098 87-2	Strontium 90	TRG	45	UE905M	E905M	REG	-0.00155	0.0051	PCi/G		0U		22/10/2004	38262 25784	8:32	0.00905	PCi/G	0.00434	PCi/G	1	5.4	14.2G	PCi/G	PR
7000-0000-010C-3C-0	4	MSR#04 3637	123957017	375456	14913-50-9	Thallium 208	TRG	8	UHASL300	HASL300	REG	0.121	0.0258	PCi/G		0		21/10/2004	38263 11875	12:10	0.0247	PCi/G	0.0117	PCi/G	1	5.4	184G	PCi/G	PR

7000-0000-010C-3C-0	4	MSR#04-3637	123957017	378190	10028-17-8	Tritium	TRG	20	UE906.0	E906.0	REG	-0.503	1.31	PCI/G		U			12/11/2004	2.38	2.24	PCI/G	1.12	PCI/G	1	5.4			PCI/G	PR
7000-0000-010C-3C-0	5	MSR#04-3637	123957018	375469	14331-83-0	Actinum-228	TRG	8	UHASL300	HASL300	REG	0.45	0.168	PCI/G		D		21/10/2004	38283.11875	12.11	0.132	PCI/G	0.0606	PCI/G	1	7.1	183	G	PCI/G	PR
7000-0000-010C-3C-0	5	MSR#04-3637	123957018	375469	14596-10-2	Americium-241	TRG	8	UHASL300	HASL300	REG	0.00172	0.0497	PCI/G		U		21/10/2004	38283.11875	12.11	0.0798	PCI/G	0.0388	PCI/G	1	7.1	183	G	PCI/G	PR
7000-0000-010C-3C-0	5	MSR#04-3637	123957018	375469	14913-49-6	Bismuth-212	TRG	8	UHASL300	HASL300	REG	0.332	0.323	PCI/G		D		21/10/2004	38283.11875	12.11	0.314	PCI/G	0.147	PCI/G	1	7.1	183	G	PCI/G	PR
7000-0000-010C-3C-0	5	MSR#04-3637	123957018	375469	14733-03-0	Bismuth-214	TRG	8	UHASL300	HASL300	REG	0.481	0.101	PCI/G		D		21/10/2004	38283.11875	12.11	0.0688	PCI/G	0.0323	PCI/G	1	7.1	183	G	PCI/G	PR
7000-0000-010C-3C-0	5	MSR#04-3637	123957018	375469	13967-70-9	Cesium-134	TRG	8	UHASL300	HASL300	REG	0.0811	0.023	PCI/G		U		21/10/2004	38283.11875	12.11	0.0444	PCI/G	0.0207	PCI/G	1	7.1	183	G	PCI/G	PR
7000-0000-010C-3C-0	5	MSR#04-3637	123957018	375469	10045-97-3	Cesium-137	TRG	8	UHASL300	HASL300	REG	0.0111	0.0477	PCI/G		U		21/10/2004	38283.11875	12.11	0.0418	PCI/G	0.0196	PCI/G	1	7.1	183	G	PCI/G	PR
7000-0000-010C-3C-0	5	MSR#04-3637	123957018	375469	10198-40-0	Cobalt-60	TRG	8	UHASL300	HASL300	REG	-0.000618	0.019	PCI/G		U		21/10/2004	38283.11875	12.11	0.0353	PCI/G	0.0157	PCI/G	1	7.1	183	G	PCI/G	PR
7000-0000-010C-3C-0	5	MSR#04-3637	123957018	375469	14683-23-9	Europium-152	TRG	8	UHASL300	HASL300	REG	-0.00719	0.0508	PCI/G		U		21/10/2004	38283.11875	12.11	0.094	PCI/G	0.0448	PCI/G	1	7.1	183	G	PCI/G	PR
7000-0000-010C-3C-0	5	MSR#04-3637	123957018	375469	15585-10-1	Europium-154	TRG	8	UHASL300	HASL300	REG	0.0278	0.0628	PCI/G		U		21/10/2004	38283.11875	12.11	0.121	PCI/G	0.0551	PCI/G	1	7.1	183	G	PCI/G	PR
7000-0000-010C-3C-0	5	MSR#04-3637	123957018	375469	14391-16-3	Europium-155	TRG	8	UHASL300	HASL300	REG	0.0299	0.0534	PCI/G		U		21/10/2004	38283.11875	12.11	0.101	PCI/G	0.0491	PCI/G	1	7.1	183	G	PCI/G	PR
7000-0000-010C-3C-0	5	MSR#04-3637	123957018	375469	15092-94-1	Lead-212	TRG	8	UHASL300	HASL300	REG	0.432	0.0661	PCI/G		D		21/10/2004	38283.11875	12.11	0.0527	PCI/G	0.0254	PCI/G	1	7.1	183	G	PCI/G	PR
7000-0000-010C-3C-0	5	MSR#04-3637	123957018	375469	15067-28-4	Lead-214	TRG	8	UHASL300	HASL300	REG	0.45	0.0838	PCI/G		D		21/10/2004	38283.11875	12.11	0.0697	PCI/G	0.0333	PCI/G	1	7.1	183	G	PCI/G	PR
7000-0000-010C-3C-0	5	MSR#04-3637	123957018	375469	13966-31-9	Manganese-54	TRG	8	UHASL300	HASL300	REG	0.00337	0.0224	PCI/G		U		21/10/2004	38283.11875	12.11	0.0413	PCI/G	0.0193	PCI/G	1	7.1	183	G	PCI/G	PR
7000-0000-010C-3C-0	5	MSR#04-3637	123957018	375469	14681-63-1	Niobium-94	TRG	8	UHASL300	HASL300	REG	0.0131	0.0203	PCI/G		U		21/10/2004	38283.11875	12.11	0.038	PCI/G	0.0178	PCI/G	1	7.1	183	G	PCI/G	PR
7000-0000-010C-3C-0	5	MSR#04-3637	123957018	375469	13966-00-2	Potassium-40	TRG	8	UHASL300	HASL300	REG	6.8	0.892	PCI/G		D		21/10/2004	38283.11875	12.11	0.345	PCI/G	0.153	PCI/G	1	7.1	183	G	PCI/G	PR
7000-0000-010C-3C-0	5	MSR#04-3637	123957018	375469	13982-63-3	Radium-226	TRG	8	UHASL300	HASL300	REG	0.481	0.101	PCI/G		D		21/10/2004	38283.11875	12.11	0.0688	PCI/G	0.0323	PCI/G	1	7.1	183	G	PCI/G	PR
7000-0000-010C-3C-0	5	MSR#04-3637	123957018	375469	14391-85-2	Silver-108m	TRG	8	UHASL300	HASL300	REG	0.00125	0.0181	PCI/G		U		21/10/2004	38283.11875	12.11	0.0335	PCI/G	0.0156	PCI/G	1	7.1	183	G	PCI/G	PR
7000-0000-010C-3C-0	5	MSR#04-3637	123957018	378218	10098-97-2	Strontium-90	TRG	45	UE905M	E905M	REG	0.00948	0.00612	PCI/G		U		22/10/2004	38282.25784	6.32	0.00855	PCI/G	0.0047	PCI/G	1	7.1	14.35	G	PCI/G	PR
7000-0000-010C-3C-0	5	MSR#04-3637	123957018	375469	14913-50-9	Thallium-208	TRG	8	UHASL300	HASL300	REG	0.138	0.0466	PCI/G		D		21/10/2004	38283.11875	12.11	0.04	PCI/G	0.0186	PCI/G	1	7.1	183	G	PCI/G	PR
7000-0000-010C-3C-0	5	MSR#04-3637	123957018	378190	10028-17-8	Tritium	TRG	20	UE906.0	E906.0	REG	-0.0297	1.31	PCI/G		U			12/11/2004	3.08	2.21	PCI/G	1.1	PCI/G	1	7.1			PCI/G	PR
		MSR#04-3637	120072618	375469	14331-83-0	Actinum-228	TRG		U	HASL300	LB1	0.0463	0.0358	PCI/G		U		31/10/2004	12.11	0.0693	PCI/G	0.0326	PCI/G	1	0	150	G	PCI/G	PR
		MSR#04-3637	120072618	375469	14596-10-2	Americium-241	TRG		U	HASL300	LB1	-0.0119	0.0285	PCI/G		U		31/10/2004	12.11	0.0502	PCI/G	0.024	PCI/G	1	0	150	G	PCI/G	PR
		MSR#04-3637	120072618	375469	14913-49-6	Bismuth-212	TRG		U	HASL300	LB1	0.0487	0.0637	PCI/G		U		31/10/2004	12.11	0.123	PCI/G	0.0575	PCI/G	1	0	150	G	PCI/G	PR
		MSR#04-3637	120072618	375469	14733-03-0	Bismuth-214	TRG		U	HASL300	LB1	0.0215	0.0305	PCI/G		U		31/10/2004	12.11	0.0313	PCI/G	0.0147	PCI/G	1	0	150	G	PCI/G	PR
		MSR#04-3637	120072618	375469	13967-70-9	Cesium-134	TRG		U	HASL300	LB1	-0.00166	0.00637	PCI/G		U		31/10/2004	12.11	0.0167	PCI/G	0.00773	PCI/G	1	0	150	G	PCI/G	PR
		MSR#04-3637	120072618	375469	10045-97-3	Cesium-137	TRG		U	HASL300	LB1	0.0085	0.00858	PCI/G		U		31/10/2004	12.11	0.0186	PCI/G	0.00792	PCI/G	1	0	150	G	PCI/G	PR
		MSR#04-3637	120072618	375469	10198-40-0	Cobalt-60	TRG		U	HASL300	LB1	0.00354	0.00957	PCI/G		U		31/10/2004	12.11	0.0182	PCI/G	0.00826	PCI/G	1	0	150	G	PCI/G	PR
		MSR#04-3637	120072618	375469	14683-23-9	Europium-152	TRG		U	HASL300	LB1	0.0084	0.0236	PCI/G		U		31/10/2004	12.11	0.0442	PCI/G	0.021	PCI/G	1	0	150	G	PCI/G	PR
		MSR#04-3637	120072618	375469	15585-10-1	Europium-154	TRG		U	HASL300	LB1	0.0345	0.0301	PCI/G		U		31/10/2004	12.11	0.0548	PCI/G	0.0252	PCI/G	1	0	150	G	PCI/G	PR
		MSR#04-3637	120072618	375469	14391-16-3	Europium-155	TRG		U	HASL300	LB1	-0.0218	0.0231	PCI/G		U		31/10/2004	12.11	0.0444	PCI/G	0.0212	PCI/G	1	0	150	G	PCI/G	PR
		MSR#04-3637	120072618	375469	15092-94-1	Lead-212	TRG		U	HASL300	LB1	0.0183	0.0282	PCI/G		U		31/10/2004	12.11	0.0281	PCI/G	0.0125	PCI/G	1	0	150	G	PCI/G	PR
		MSR#04-3637	120072618	375469	15067-28-4	Lead-214	TRG		U	HASL300	LB1	0.0072	0.0253	PCI/G		U		31/10/2004	12.11	0.0342	PCI/G	0.0163	PCI/G	1	0	150	G	PCI/G	PR
		MSR#04-3637	120072618	375469	13966-31-9	Manganese-54	TRG		U	HASL300	LB1	0.00578	0.00966	PCI/G		U		31/10/2004	12.11	0.018	PCI/G	0.00848	PCI/G	1	0	150	G	PCI/G	PR
		MSR#04-3637	120072618	375469	14681-63-1	Niobium-94	TRG		U	HASL300	LB1	-0.00156	0.00906	PCI/G		U		31/10/2004	12.11	0.0182	PCI/G	0.00783	PCI/G	1	0	150	G	PCI/G	PR
		MSR#04-3637	120072618	375469	13966-00-2	Potassium-40	TRG		U	HASL300	LB1	0.0419	0.104	PCI/G		U		31/10/2004	12.11	0.195	PCI/G	0.0894	PCI/G	1	0	150	G	PCI/G	PR
		MSR#04-3637	120072618	375469	13982-63-3	Radium-226	TRG		U	HASL300	LB1	0.0215	0.0305	PCI/G		U		31/10/2004	12.11	0.0313	PCI/G	0.0147	PCI/G	1	0	150	G	PCI/G	PR
		MSR#04-3637	120072618	375469	14391-85-2	Silver-108m	TRG		U	HASL300	LB1	0.00456	0.00876	PCI/G		U		31/10/2004	12.11	0.0151	PCI/G	0.00712	PCI/G	1	0	150	G	PCI/G	PR
		MSR#04-3637	120072618	375469	14913-50-9	Thallium-208	TRG		U	HASL300	LB1	0.00188	0.013	PCI/G		U		31/10/2004	12.11	0.0154	PCI/G	0.00721	PCI/G	1	0	150	G	PCI/G	PR
7000-0000-001S		MSR#04-3637	120072618	375469	14331-83-0	Actinum-228	TRG		U	HASL300	LR1	1.18	0.15	PCI/G		D			31/10/2004	12.11	0.119	PCI/G	0.0562	PCI/G	1	0.4	98.6	G	PCI/G 1.33	PR
7000-0000-001S		MSR#04-3637	120072618	375469	14596-10-2	Americium-241	TRG		U	HASL300	LR1	0.042	0.138	PCI/G		U		31/10/2004	12.11	0.203	PCI/G	0.0991	PCI/G	1	0.4	98.6	G	PCI/G -0.0	55 PR
7000-0000-001S		MSR#04-3637	120072618	375469	14913-49-6	Bismuth-212	TRG		U	HASL300	LR1	0.721	0.246	PCI/G		D			31/10/2004	12.11	0.262	PCI/G	0.124	PCI/G	1	0.4	98.6	G	PCI/G 0.99	0 PR
7000-0000-001S		MSR#04-3637	120072618	375469	14733-03-0	Bismuth-214	TRG		U	HASL300	LR1	0.927	0.0966	PCI/G		D			31/10/2004	12.11	0.0672	PCI/G	0.0323	PCI/G	1	0.4	98.6	G	PCI/G 0.98	0 PR
7000-0000-001S		MSR#04-3637	120072618	375469	13967-70-9	Cesium-134	TRG		U	HASL300	LR1	0	0.0278	PCI/G		U	UJ		31/10/2004	12.11	0.0409	PCI/G	0.0192	PCI/G	1	0.4	98.6	G	PCI/G 0.08	75 PR
7000-0000-001S		MSR#04-3637	120072618	375469	10045-97-3	Cesium-137	TRG		U	HASL300	LR1	0.137	0.036	PCI/G		D			31/10/2004	12.11	0.0336	PCI/G	0.0161	PCI/G	1	0.4	98.6	G	PCI/G 0.19	2 PR
7000-0000-001S		MSR#04-3637	120072618	375469	10198-40-0	Cobalt-60	TRG		U	HASL300	LR1	0	0.0392	PCI/G		U	UJ		31/10/2004	12.11	0.0449	PCI/G	0.0212	PCI/G	1	0.4	98.6	G	PCI/G 0.02	71 PR
7000-0000-001S		MSR#04-3637	120072618	375469	14683-23-9	Europium-152	TRG		U	HASL300	LR1	0.0256	0.0577	PCI/G		U			31/10/2004	12.11	0.0985	PCI/G	0.0478	PCI/G	1	0.4	98.6	G	PCI/G -0.0	817 PR
7000-0000-001S		MSR#04-3637	120072618	375469	15585-10-1	Europium-154	TRG		U	HASL300	LR1	0.0219	0.0684	PCI/G		U			31/10/2004	12.11	0.119	PCI/G	0.056	PCI/G	1	0.4	98.6	G	PCI/G -0.0	138 PR
7000-0000-001S		MSR#04-3637	120072618	375469	14391-16-3	Europium-155	TRG		U	HASL300	LR1	0.0417	0.0745	PCI/G		U			31/10/2004	12.11	0.123	PCI/G	0.0601	PCI/G	1	0.4	98.6	G	PCI/G -0.0	387 PR
7000-0000-001S		MSR#04-3637	120072618	375469	15092-94-1	Lead-212	TRG		U	HASL300	LR1	1.18	0.0736	PCI/G		D			31/10/2004	12.11	0.0591	PCI/G	0.0287	PCI/G	1	0.4	98.6	G	PCI/G 1.24	PR
7000-0000-001S		MSR#04-3637	120072618	375469	15067-28-4	Lead-214	TRG		U	HASL300	LR1	0.962	0.0966	PCI/G		D			31/10/2004	12.11	0.0686	PCI/G	0.0321	PCI/G	1	0.4	98.6	G	PCI/G 0.94	5 PR
7000-0000-001S		MSR#04-3637	120072618	375469	13966-31-9	Manganese-54	TRG		U	HASL300	LR1	-0.00327	0.0224	PCI/G		U			31/10/2004	12.11	0.0378	PCI/G	0.018	PCI/G	1	0.4	98.6	G	PCI/G 0.03	75 PR
7000-0000-001S		MSR#04-3637	120072618	375469	14681-63-1	Niobium-94	TRG		U	HASL300	LR1	0.00125	0.0192	PCI/G		U			31/10/2004	12.11	0.033	PCI/G	0.0156	PCI/G	1	0.4	98.6	G	PCI/G 0.01	82 PR
7000-0000-001S		MSR#04-3637	120072618	375469	13966-00-2	Potassium-40	TRG		U	HASL300	LR1	18.5	0.884	PCI/G		D			31/10/2004	12.11	0.307	PCI/G	0.141	PCI/G	1	0.4	98.6	G	PCI/G 15.8	PR
7000-0000-001S		MSR#04-3637	120072618	375469	13982-63-3	Radium-226	TRG		U	HASL300	LR1	0.927	0.0966	PCI/G		D			31/10/2004	12.11	0.0672	PCI/G	0.0322	PCI/G	1	0.4	98.6	G	PCI/G 0.86	0 PR
7000-0000-001S		MSR#04-3637	120072618	375469	14391-85-2	Silver-108m	TRG		U	HASL300	LR1	-0.00695	0.0178	PCI/G		U			31/10/2004	12.11	0.0295	PCI/G	0.0141	PCI/G	1	0.4	98.6	G	PCI/G 0.04	14 PR
7000-0000-001S		MSR#04-3637	120072618	375469	14913-50-9	Thallium-208	TRG		U	HASL300	LR1	0.318	0.0497	PCI/G		D			31/10/2004	12.11	0.0346	PCI/G	0.0165	PCI/G	1	0.4	98.6	G	PCI/G 0.44	9 PR
		MSR#04-3637	120072619	375469	14331-83-0	Actinum-228	TRG		U	HASL300	BS1	0.398	0.492	PCI/G		D	U		1/11/2004	7.28	0.677	PCI/G	0.417	PCI/G	1	0	100	G	PCI/G	PR
		MSR#04-3637	120072619	375469	14596-10-2	Americium-241	TRG		U	HASL300	BS1	24.3	1.88	PCI/G		D			1/11/2004	7.28	1.31	PCI/G	0.637	PCI/G	1	0	100	G	23.4 PCI/G	PR
		MSR#04-3637	120072619	375469	14913-49-6	Bismuth-212	TRG		U	HASL300	BS1	0.113	0.942	PCI/G		D	U		1/11/2004	7.28	1.47	PCI/G	0.595	PCI/G	1	0	100	G	PCI/G	PR
		MSR#04-3637	120072619	375469	14733-03-0	Bismuth-214	TRG		U	HASL300	BS1	0.0658	0.212	PCI/G		D	U		1/11/2004	7.28	0.376	PCI/G	0.179	PCI/G	1	0	100	G	PCI/G	PR
		MSR#04-3637	120072619	375469	13967-70-9	Cesium-134	TRG		U	HASL300	BS1	-0.0658	0.129	PCI/G		D	U		1/11/2004	7.28	0.213	PCI/G	0.1	PCI/G	1	0	100	G	PCI/G	PR
		MSR#04-3637	120072619	375469	10045-97-3	Cesium-137	TRG		U	HASL300	BS1	9.62	0.455	PCI/G		D			1/11/2004	7.28	0.193	PCI/G	0.0912	PCI/G	1	0	100	G	9.17 PCI/G	PR
		MSR#04-3637	120072619	375469	10198-40-0	Cobalt-60	TRG		U	HASL300	BS1	15	0.678	PCI/G		D			1/11/2004	7.28	0.228	PCI/G	0.105	PCI/G	1	0	100	G	13.7 PCI/G	PR
		MSR#04-3637	120072619	375469	14683-23-9	Europium-152	TRG		U	HASL300	BS1	-0.0547	0.278	PCI/G		D	U		1/11/2004	7.28	0.454	PCI/G	0.217	PCI/G	1	0	100	G	PCI/G	PR
		MSR#04-3637	120072619	375469	15585-10-1	Europium-154	TRG		U	HASL300	BS1	-0.0823	0.237	PCI/G		D	U		1/11/2004	7.28	0.419	PCI/G	0.196	PCI/G	1	0	100	G	PCI/G	PR

	MSR#04-3637	1200726190	375469	14391-16-3	Europium-155	TRG		U	HASL300	BS1	-0.232	0.285	PCi/G	0	U		1/11/2004	7.28	0.482	PCi/G	0.233	PCi/G	1	0	100	G		PCi/G		PR
	MSR#04-3637	1200726190	375469	15092-94-1	Lead-212	TRG		U	HASL300	BS1	0.123	0.144	PCi/G	0	U		1/11/2004	7.28	0.254	PCi/G	0.122	PCi/G	1	0	100	G		PCi/G		PR
	MSR#04-3637	1200726190	375469	13967-29-4	Lead-214	TRG		U	HASL300	BS1	0.152	0.199	PCi/G	0	U		1/11/2004	7.28	0.347	PCi/G	0.166	PCi/G	1	0	100	G		PCi/G		PR
	MSR#04-3637	1200726190	375469	13966-31-9	Manganese-54	TRG		U	HASL300	BS1	-0.0158	0.143	PCi/G	0	U		1/11/2004	7.28	0.211	PCi/G	0.1	PCi/G	1	0	100	G		PCi/G		PR
	MSR#04-3637	1200726190	375469	14681-63-1	Niobium-94	TRG		U	HASL300	BS1	0.0665	0.095	PCi/G	0	U		1/11/2004	7.28	0.172	PCi/G	0.0815	PCi/G	1	0	100	G		PCi/G		PR
	MSR#04-3637	1200726190	375469	13966-00-2	Potassium-40	TRG		U	HASL300	BS1	0.811	1.91	PCi/G	0	U		1/11/2004	7.28	1.92	PCi/G	0.872	PCi/G	1	0	100	G		PCi/G		PR
	MSR#04-3637	1200726190	375469	13982-63-3	Radium-226	TRG		U	HASL300	BS1	0.0658	0.212	PCi/G	0	U		1/11/2004	7.28	0.378	PCi/G	0.179	PCi/G	1	0	100	G		PCi/G		PR
	MSR#04-3637	1200726190	375469	14391-85-2	Silver-108m	TRG		U	HASL300	BS1	-0.0248	0.0971	PCi/G	0	U		1/11/2004	7.28	0.189	PCi/G	0.0807	PCi/G	1	0	100	G		PCi/G		PR
	MSR#04-3637	1200726190	375469	14913-50-9	Thallium-208	TRG		U	HASL300	BS1	0.0286	0.108	PCi/G	0	U		1/11/2004	7.28	0.192	PCi/G	0.091	PCi/G	1	0	100	G		PCi/G		PR
	MSR#04-3637	1200727972	378190	10028-17-8	Tritium	TRG		U	E906.0	LB1	-0.0153	0.678	PCi/G	0	U		12/11/2004	3.41	1.14	PCi/G	0.569	PCi/G	1	0				PCi/G		PR
7000-0000-010C-3C-0	5 MSR#04-3637	1200727973	378190	10028-17-8	Tritium	TRG		U	E906.0	LR1	0.0687	1.31	PCi/G	0	U		12/11/2004	4.13	2.19	PCi/G	1.1	PCi/G	1	7.1				PCi/G	0.0	297 PR
7000-0000-010C-3C-0	5 MSR#04-3637	1200727974	378190	10028-17-8	Tritium	TRG		U	E906.0	MS1	7.58	1.87	PCi/G	0			12/11/2004	4.45	2.26	PCi/G	1.13	PCi/G	1	7.1				804	PCi/G 8.81	PR
	MSR#04-3637	1200727975	378190	10028-17-8	Tritium	TRG		U	E906.0	BS1	7.94	0.876	PCi/G	0			12/11/2004	5.17	1.12	PCi/G	0.558	PCi/G	1	0				797	PCi/G	PR
	MSR#04-3637	1200728038	378218	10098-97-2	Strontium-90	TRG		U	E905M	LB1	0.000222	0.00374	PCi/G	0	U		31/10/2004	6.32	0.00651	PCi/G	0.00313	PCi/G	1	0	14.3	G		PCi/G		PR
7000-0000-001S	MSR#04-3637	1200728040	378218	10098-97-2	Strontium-90	TRG		U	E905M	LR1	0.0266	0.0171	PCi/G	0	U		29/10/2004	4.22	0.0313	PCi/G	0.0137	PCi/G	1	0.4	12.5	G		PCi/G	0.01	4 PR
7000-0000-001S	MSR#04-3637	1200728041	378218	10098-97-2	Strontium-90	TRG		U	E905M	MS1	2.26	0.121	PCi/G	0			1/11/2004	8.51	0.0387	PCi/G	0.0171	PCi/G	1	0.4	8.3	G	2	90	PCi/G 2.91	PR
	MSR#04-3637	1200728042	378218	10098-97-2	Strontium-90	TRG		U	E905M	BS1	0.989	0.0673	PCi/G	0			29/10/2004	4.22	0.0318	PCi/G	0.0143	PCi/G	1	0	14.3	G	1	28	PCi/G	PR

Chain of Custody Form

No. 2004-00226

Connecticut Yankee Atomic Power Company
362 Injun Hollow Road, East Hampton, CT 06424
860-267-2556

Project Name: Haddam Neck Decommissioning

Contact Name & Phone:
Pete Hollenbeck 860-267-3923

Analytical Lab (Name, City, State):
On-site

Priority: ☐ 30 D. ☐ 14 D. ☐ 7 D.
Other: Next Day

Lab Use Only
Comments:
008S - 2½ short in 1L

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	Analyses Requested: CHGAM						Comment, Preservation	Lab Sample ID
7000-0000-007S	9/29/04	1022	SE	G	BP	X						Dry Sample	040930013
7000-0000-008S	9/29/04	1000	SE	G	BP	X						Dry Sample	041001002

NOTES: PO #: N/A MSR #: N/A ☐ LTP QA ☐ Radwaste QA ☒ Non QA

Samples Shipped Via:
☐ Fed Ex
☐ UPS
☒ Hand
☐ Other ____
Bill of Lading #

Internal Container Temp.: ____ Deg. C
Custody Sealed? Y ☐ N ☐
Custody Seal Intact? Y ☐ N ☐

1) Relinquished By: [signature]	Date/Time: 9/29/04 1433	2) Received By: P Hollenbeck	Date/Time: 9/29/04 1433
3) Relinquished By: P Hollenbeck	Date/Time: 9/29/04 1445	4) Received By: Nicholas W Fuchtel	Date/Time: 9/29/04 1445
5) Relinquished By	Date/Time	6) Received By	Date/Time

Connecticut Yankee Atomic Power Company
362 Injun Hollow Road, East Hampton, CT 06424
860-267-2556

Chain of Custody Form

No. 2004-00226

Project Name: Haddam Neck Decommissioning

Contact Name & Phone:
Pete Hollenbeck 860-267-3923

Analytical Lab (Name, City, State):
On-site

Priority: ☐ 30 D. ☐ 14 D. ☐ 7 D.
Other: Next Day

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	Analyses Requested: CHGAM						Comment, Preservation	Lab Sample ID
7000-0000-007S	9/29/04	1022	SE	G	BP	X						Dry Sample	
7000-0000-008S	9/29/04	1000	SE	G	BP	X						Dry Sample	

Lab Use Only
Comments:

NOTES: PO #: N/A MSR #: N/A ☐ LTP QA ☐ Radwaste QA ☒ Non QA

Samples Shipped Via:
☐ Fed Ex
☐ UPS
☒ Hand
☐ Other _____

Bill of Lading #

Internal Container Temp.: ____ Deg. C

Custody Sealed? Y ☐ N ☐

Custody Seal Intact? Y ☐ N ☐

1) Relinquished By	Date/Time 9/29/04 1433	2) Received By P Hollenbeck	Date/Time 9/29/04 1433
3) Relinquished By P Hollenbeck	Date/Time 9/29/04 1445	4) Received By Nicholas W Fuchard	Date/Time 9/29/04 1445
5) Relinquished By	Date/Time	6) Received By	Date/Time

****
1-OCT-2004 02:45:59.68

CONNECTICUT YANKEE
HADDAM NECK STATION
****

SAMPLE TITLE : - 7000-0000-008S - FSS DIRT -
REASON FOR ANALYSIS: Site Characterization
SAMPLE ID : 041001002 * SAMPLE GEOMETRY : 500GMAR
SAMPLE TIME : 29-SEP-2004 10:00 * GEO EFFICIENCY DATE: 30-JUL-2003
SAMPLE TYPE : DIRT/SEDIMENT * SAMPLE QUANTITY : 3.54000E+02 GM
****

DETECTOR : DET 2 * LIBRARY : FSS_DIRT
LAST ENERGY CAL : 1-OCT-2004 00:53: * ENERGY TOLERANCE: 1.00000
KEV/CHANNEL : 5.00870E-01 * HALF LIFE RATIO : 9.00000
START CHANNEL : 100 * END CHANNEL : 4096
ACQ DATE & TIME : 1-OCT-2004 02:02: * DEADTIME (%) : 0.0%
PRESET LIVE TIME : 0 00:43:04 * SENSITIVITY : 5.00000
ELAPSED REAL TIME : 2584.5 Secs * GAUSSIAN SEN : 10.00000
ELAPSED LIVE TIME : 2584.0 Secs * CORRECTION FACTOR: 1.00000E+06
DECAYED TO 1 DAYS HOURS
FILE IDENT : CAS$DISK:[NEU.SAMPLE.RP.NEW]041001002_ADC2_DIRTSEDIMENT.CNF;1

****
ANALYSES : PEAK V16.8 NID V3.2 MINACT V2.8 WTMEAN V1.8 INTERF V2.4
****

Collected by : HOLLENBECK
REVIEWED BY : _____
COMMENTS :

****

Post-NID Peak Search Report

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
2	74.84	236	181	1.00	149.84	144	15	11.3	2.42E+00	PB-212
										PB-214
2	77.10	391	185	0.97	154.35	144	15	7.6		PB-214
										PB-212
0	86.48	77	265	0.98	173.07	172	7	36.3		PB-212
5	89.90	105	111	1.04	179.90	178	15	16.6	3.66E+00	
5	92.91	182	198	1.41	185.93	178	15	15.6		
0	128.85	89	133	0.77	257.70	254	7	24.0		
0	185.70	165	165	1.05	371.22	365	10	16.5		RA-226
1	238.59	814	89	1.03	476.87	472	16	4.0	9.95E-01	PB-212
1	241.14	108	100	1.23	481.96	472	16	23.0		
1	242.05	69	99	1.25	483.77	472	16	30.4		PB-214
0	270.34	50	114	1.03	540.29	536	9	41.1		AC-228
0	295.09	152	81	1.22	589.73	585	9	13.4		PB-214
0	300.27	47	90	0.99	600.06	595	9	39.2		
0	338.30	170	108	1.25	676.04	669	14	15.1		AC-228
0	351.90	315	60	1.28	703.23	699	11	7.4		PB-214
0	463.40	32	65	0.80	926.00	922	10	50.3		AC-228
0	477.53	58	43	1.30	954.23	949	10	24.9		BE-7

Sample ID : 041001002 Acquisition date : 1-OCT-2004 02:02:43

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	511.05	110	66	2.20	1021.22	1015	13	18.1		
0	583.23	212	56	1.20	1165.49	1160	13	10.1		TL-208
0	609.47	186	46	1.49	1217.92	1212	10	9.1		BI-214
0	662.30	155	41	1.80	1323.52	1318	16	12.4		CS-137
0	795.73	24	30	1.12	1590.30	1583	11	49.3		
0	911.24	177	39	1.63	1821.28	1814	13	10.3		AC-228
0	969.53	91	53	1.99	1937.87	1931	15	20.4		AC-228
0	1001.03	30	7	0.93	2000.87	1994	14	25.9		
0	1120.94	50	41	1.73	2240.75	2234	17	32.7		BI-214
0	1173.22	61	13	1.31	2345.35	2339	14	18.2		CO-60
0	1332.37	54	3	1.80	2663.85	2657	13	15.2		CO-60
0	1460.92	549	9	2.14	2921.18	2912	16	4.4		K-40

Sample ID : 041001002 Acquisition date : 1-OCT-2004 02:02:43

---- Identified Nuclides ----

Nuclide	Activity (pCi/GM)	Act error	MDA (pCi/GM)	MDA error	Act/MDA
BE-7	7.450E-01	1.861E-01	2.903E-01	6.346E-03	2.566
K-40	1.845E+01	8.831E-01	3.684E-01	6.729E-03	50.075
CO-60	1.802E-01	2.118E-02	4.715E-02	8.603E-04	3.823
CS-137	3.187E-01	4.016E-02	4.230E-02	9.407E-04	7.533
TL-208	3.913E-01	4.062E-02	3.658E-02	8.512E-04	10.696
PB-212	1.398E+00	6.751E-02	5.432E-02	1.512E-03	25.739
BI-214	6.615E-01	6.009E-02	6.794E-02	1.568E-03	9.737
PB-214	8.220E-01	5.398E-02	5.584E-02	1.091E-03	14.721
RA-226	3.368E+00	5.633E-01	6.234E-01	1.512E-02	5.403
AC-228	1.431E+00	1.107E-01	1.564E-01	2.549E-03	9.150

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GM)	K.L. Ided	Act error	MDA (pCi/GM)	MDA error	Act/MDA
MN-54	2.256E-02		1.078E-02	4.882E-02	8.640E-04	0.462
NB-94	-1.332E-03		1.094E-02	4.297E-02	7.274E-04	-0.031
RU-106	-2.654E-03		7.572E-02	3.099E-01	7.108E-03	-0.009
AG-108M	5.445E-03		8.688E-03	3.679E-02	8.472E-04	0.148
AG-110M	1.369E-02		1.025E-02	4.230E-02	9.440E-04	0.324
SB-125	-8.237E-02		3.073E-02	7.798E-02	1.579E-03	-1.056
CS-134	3.319E-03		9.111E-03	3.533E-02	8.171E-04	0.094
EU-152	4.195E-02		4.356E-02	2.127E-01	3.897E-03	0.197
EU-154	-2.820E-02		3.465E-02	1.257E-01	3.908E-03	-0.224
EU-155	6.666E-02		3.037E-02	1.200E-01	2.934E-03	0.555
BI-212	2.632E-01		1.108E-01	4.765E-01	9.815E-03	0.552
RA-223	3.153E-01		1.299E-01	2.157E-01	5.565E-03	1.462
TH-228	2.173E+00		7.760E-01	3.075E+00	7.311E-02	0.707
PA-234	2.223E-02		2.033E-02	7.744E-02	1.758E-03	0.287
TH-234	8.884E-01		3.795E-01	1.500E+00	1.249E-01	0.592
U-235	2.042E-01	+	3.415E-02	7.047E-02	1.706E-03	2.898
AM-241	3.739E-02		4.012E-02	1.567E-01	4.915E-03	0.239

---- Interference between AC-228 and RA-223 ----

**** AC-228 energy lines ****

Energy	# Disint.	% Error	Comments
209.28	---------	------	Line not identified
270.23	---------	------	Line interferes with RA-223
338.32	5.065E+04	15.25	
463.00	3.150E+04	50.39	
794.70	---------	------	Line not identified
835.50	---------	------	Line not identified
911.07	5.086E+04	10.43	
964.60	---------	------	Line not identified
969.11	4.599E+04	20.43	
Average:	4.886E+04	7.87	

Interfered energy lines

Nuclide	Energy	Old Area	New Area	Critical Level	New Activity (pCi/GM)	% Error
RA-223	269.46	50.0	-10.5	31.7	0.000E+00	0.00
	269.46	Line invalidated: New Area less than critical level				

RA-223 has been rejected: Failed abundance Test

REPORT NAME : QA_CHECK (V9.1)
REPORT DATE : 1-OCT-2004 02:46
REQUESTOR : CAS

CYAPCO
HADDAM NECK STATION

POST NID QA ANALYSIS

TITLE : - 7000-0000-008S - FSS DIRT -

SAMPLE No. : 041001002
SAMPLE TYPE : DIRT/SEDIMENT
COUNT TIME : 1-OCT-2004 02:02:43.
SAMPLE TIME : 29-SEP-2004 10:00:00
LIBRARY : FSS_DIRT

OPERATOR NAME : CAS
SAMPLE GEOMETRY : 500GMAR
SAMPLE QUANTITY : 3.54000E+02
DETECTOR : DET 2

ISOTOPE	PEAK ENERGY	ENERGY DIFF (KEV)	DECAY CORR pCi/GM	COMMENTS
BE-7	477.59	-0.06	7.450E-01	QA Results OK
K-40	1460.80	0.12	1.845E+01	QA Results OK
CO-60	1332.49	-0.11	1.802E-01	QA Results OK
CS-137	661.65	0.65	3.187E-01	QA Results OK
TL-208	583.14	0.10	3.913E-01	QA Results OK
PB-212	238.63	-0.03	1.398E+00	QA Results OK
BI-214	609.31	0.16	6.615E-01	QA Results OK
PB-214	351.92	-0.02	8.220E-01	QA Results OK
RA-226	186.21	-0.51	3.368E+00	QA Results OK
AC-228	911.07	0.17	1.431E+00	QA Results OK
AVG ENERGY DIFF =		0.05	2.776E+01 = TOTAL GAMMA ACTIVITY	

74.84 KeV Peak was used in identifying 2 isotopes
77.10 KeV Peak was used in identifying 2 isotopes

UNIDENTIFIED/REJECTED PEAKS

ENERGY	NET AREA	FWHM	GAMMA/SEC	GAMMA/SEC /GM	% ERROR	FLAG	POTENTIAL ID	ACTIVITY
89.90	105.	1.04	1.005E+00	2.839E-03	16.6	P	BI-214	2.842E+01
						P	AC-228	3.693E+00
92.91	182.	1.41	1.671E+00	4.720E-03	15.6	P	PB_X-RAY	0.000E+00
						P	AC-228	3.685E+00
						U	TH-234	4.735E+00
128.85	89.	0.77	6.705E-01	1.894E-03	24.0	~~U~~	~~KR-85M~~	~~8.~~818E+03
						P	AC-228	1.848E+00
241.14	108.	1.23	1.128E+00	3.186E-03	23.0	P	PB-214	1.154E+00
300.27	47.	0.99	5.689E-01	1.607E-03	39.2	P	PB-212	1.288E+00
511.05	110.	2.20	2.009E+00	5.674E-03	18.1	U	ANN-RD	0.000E+00
795.73	24.	1.12	6.445E-01	1.821E-03	49.3	R	~~CS-134~~	5.771E-02
1001.03	30.	0.93	1.020E+00	2.880E-03	25.9	U	Ac228	

CYAPCO
HADDAM NECK STATION

POST NID QA ANALYSIS

Total Unidentified/Rejected Peaks = 8
% Unidentified/Rejected Peaks = 27.59

Flags: U - Unknown Line
R - Rejected During Analysis
P - Positively Identified (line not in analysis library)

Performed by: C. Manthaller

Reviewed by: _____

**** End Of Report (2 Pages) ****

****
30-SEP-2004 22:26:54.45

CONNECTICUT YANKEE
HADDAM NECK STATION
****

SAMPLE TITLE : - FSS DIRT -7000-0000-007S
REASON FOR ANALYSIS: Site Characterization
SAMPLE ID : 040930013 * SAMPLE GEOMETRY : 1LMAR
SAMPLE TIME : 29-SEP-2004 10:22 * GEO EFFICIENCY DATE: 30-JUL-2003
SAMPLE TYPE : DIRT/SEDIMENT * SAMPLE QUANTITY : 8.62000E+02 GM
****

DETECTOR : DET 2 * LIBRARY : FSS_DIRT
LAST ENERGY CAL : 30-SEP-2004 01:12 * ENERGY TOLERANCE: 1.00000
KEV/CHANNEL : 5.00717E-01 * HALF LIFE RATIO : 9.00000
START CHANNEL : 100 * END CHANNEL : 4096
ACQ DATE & TIME : 30-SEP-2004 22:09 * DEADTIME (%) : 0.0%
PRESET LIVE TIME : 0 00:16:40 * SENSITIVITY : 5.00000
ELAPSED REAL TIME : 1000.2 Secs * GAUSSIAN SEN : 10.00000
ELAPSED LIVE TIME : 1000.0 Secs * CORRECTION FACTOR: 1.00000E+06
DECAYED TO 1 DAYS HOURS
FILE IDENT : CAS$DISK:[NEU.SAMPLE.RP.NEW]040930013_ADC2_DIRTSEDIMENT.CNF;1

****
ANALYSES : PEAK V16.8 NID V3.2 MINACT V2.8 WTMEAN V1.8
****

Collected by : HOLLENBECK
REVIEWED BY : _____
COMMENTS :

****

Post-NID Peak Search Report

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	74.55	113	202	0.84	149.12	144	9	24.6		PB-212 PB-214
0	77.40	191	197	0.96	154.81	152	9	15.2		PB-214 PB-212
0	86.97	65	134	1.48	173.93	172	7	31.9		PB-212
4	90.08	61	66	0.93	180.15	178	17	22.3	1.16E+00	
4	93.37	87	129	1.44	186.71	178	17	26.7		
0	186.12	106	91	1.09	371.98	367	11	20.2		RA-226
0	210.33	28	84	0.77	420.35	415	9	61.8		
0	238.53	401	74	1.16	476.69	473	7	6.1		PB-212
0	241.62	54	94	1.93	482.87	481	8	36.6		PB-214
1	295.12	99	43	1.38	589.75	585	20	15.2	9.54E-01	PB-214
1	300.12	31	41	1.38	599.75	585	20	39.4		
0	338.37	107	76	1.64	676.16	669	16	20.7		AC-228
0	351.79	142	30	1.19	702.98	698	10	11.1		PB-214
0	510.86	99	25	1.94	1020.88	1014	17	16.0		
0	583.01	146	22	1.36	1165.09	1159	14	10.7		TL-208
0	609.31	122	29	1.57	1217.66	1212	15	12.9		BI-214
0	661.52	61	18	1.05	1322.03	1318	10	18.1		CS-137

Sample ID : 040930013 Acquisition date : 30-SEP-2004 22:09:57

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	727.05	39	20	1.38	1453.04	1446	13	28.1		BI-212
0	861.06	10	7	0.72	1721.01	1717	8	52.3		TL-208
0	911.46	128	0	1.92	1821.80	1816	14	8.8		AC-228
0	969.29	56	10	2.37	1937.46	1932	11	17.5		AC-228
0	1460.84	339	0	1.74	2920.99	2913	17	5.4		K-40

---- Identified Nuclides ----

Nuclide	Activity (pCi/GM)	Act error	MDA (pCi/GM)	MDA error	Act/MDA
K-40	1.744E+01	1.001E+00	1.394E-01	2.583E-03	125.092
CS-137	2.004E-01	3.662E-02	4.693E-02	1.064E-03	4.269
TL-208	4.210E-01	4.523E-02	3.743E-02	8.874E-04	11.248
BI-212	1.011E+00	2.846E-01	3.897E-01	8.186E-03	2.595
PB-212	1.139E+00	7.565E-02	8.170E-02	2.346E-03	13.943
BI-214	6.879E-01	9.020E-02	9.410E-02	2.214E-03	7.310
PB-214	6.791E-01	6.019E-02	7.535E-02	1.514E-03	9.013
RA-226	3.545E+00	7.210E-01	7.532E-01	1.874E-02	4.707
AC-228	1.573E+00	1.182E-01	1.170E-01	1.939E-03	13.450

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GM)	K.L. Ided	Act error	MDA (pCi/GM)	MDA error	Act/MDA
BE-7	2.382E-01		1.177E-01	4.880E-01	1.087E-02	0.488
MN-54	-2.657E-03		1.080E-02	4.513E-02	8.135E-04	-0.059
CO-60	5.803E-02		2.111E-02	1.034E-01	1.913E-03	0.561
NB-94	5.267E-03		9.847E-03	4.594E-02	7.915E-04	0.115
RU-106	3.439E-02		8.285E-02	3.781E-01	8.841E-03	0.091
AG-108M	-2.504E-03		1.063E-02	4.152E-02	9.747E-04	-0.060
AG-110M	1.245E-02		9.594E-03	4.517E-02	1.028E-03	0.276
SB-125	-4.404E-04		3.788E-02	1.321E-01	2.730E-03	-0.003
CS-134	1.351E-02		1.103E-02	4.837E-02	1.140E-03	0.279
EU-152	5.231E-02		7.250E-02	3.373E-01	6.270E-03	0.155
EU-154	-2.816E-02		3.741E-02	1.440E-01	4.495E-03	-0.196
EU-155	4.136E-02		4.352E-02	1.643E-01	4.062E-03	0.252
RA-223	1.942E-02		7.622E-02	2.701E-01	7.193E-03	0.072
TH-228	1.638E+00		9.995E-01	3.886E+00	9.358E-02	0.422
PA-234	5.877E-01	+	9.061E-02	1.217E-01	2.810E-03	4.828
TH-234	1.703E+00		5.195E-01	2.131E+00	1.781E-01	0.799
U-235	2.150E-01	+	4.373E-02	9.255E-02	2.298E-03	2.323
AM-241	4.049E-02		5.626E-02	2.172E-01	7.065E-03	0.186

REPORT NAME : QA_CHECK (V9.1)
REPORT DATE : 30-SEP-2004 22:26
REQUESTOR : CAS

CYAPCO
HADDAM NECK STATION

POST NID QA ANALYSIS

TITLE : - FSS DIRT -7000-0000-007S

SAMPLE No. : 040930013
SAMPLE TYPE : DIRT/SEDIMENT
COUNT TIME : 30-SEP-2004 22:09:57
SAMPLE TIME : 29-SEP-2004 10:22:00
LIBRARY : FSS_DIRT

OPERATOR NAME : CAS
SAMPLE GEOMETRY : 1LMAR
SAMPLE QUANTITY : 8.62000E+02
DETECTOR : DET 2

ISOTOPE	PEAK ENERGY	ENERGY DIFF (KEV)	DECAY CORR pCi/GM	COMMENTS
K-40	1460.80	0.04	1.744E+01	QA Results OK
CS-137	661.65	-0.13	2.004E-01	QA Results OK
TL-208	583.14	-0.13	4.210E-01	QA Results OK
BI-212	727.17	-0.12	1.011E+00	QA Results OK
PB-212	238.63	-0.10	1.139E+00	QA Results OK
BI-214	609.31	0.00	6.879E-01	QA Results OK
PB-214	351.92	-0.13	6.791E-01	QA Results OK
RA-226	186.21	-0.09	3.545E+00	QA Results OK
AC-228	911.07	0.39	1.573E+00	QA Results OK
AVG ENERGY DIFF =		-0.03	2.669E+01 = TOTAL GAMMA ACTIVITY	

74.55 KeV Peak was used in identifying 2 isotopes
77.40 KeV Peak was used in identifying 2 isotopes

UNIDENTIFIED/REJECTED PEAKS

ENERGY	NET AREA	FWHM	GAMMA/SEC	GAMMA/SEC /GM	% ERROR	FLAG	POTENTIAL ID	ACTIVITY
90.08	61.	0.93	2.354E+00	2.731E-03	22.3	P	BI-214	2.741E+01
						P	AC-228	3.536E+00
93.37	87.	1.44	3.221E+00	3.737E-03	26.7	P	AC-228	2.903E+00
						U	TH-234	3.758E+00
210.33	28.	0.77	1.072E+00	1.244E-03	61.8	P	AC-228	1.566E+01
						U	~~NP-239~~	1.612E+00
300.12	31.	1.38	1.495E+00	1.734E-03	39.4	P	PB-212	1.383E+00
510.86	99.	1.94	7.098E+00	8.234E-03	16.0	U	ANN-RD	0.000E+00

CYAPCO
HADDAM NECK STATION

POST NID QA ANALYSIS

Total Unidentified/Rejected Peaks = 5
% Unidentified/Rejected Peaks = 22.73

Flags: U - Unknown Line
R - Rejected During Analysis
P - Positively Identified (line not in analysis library)

Performed by: _____

Reviewed by: _____

**** End Of Report (2 Pages) ****

Connecticut Yankee Atomic Power Company

362 Injun Hollow Road, East Hampton, CT 06424
860-267-2556

Chain of Custody Form

No. 2004-00230

Project Name: Haddam Neck Decommissioning

Contact Name & Phone:
Pete Hollenbeck 860-267-3923

Analytical Lab (Name, City, State):
On-site

Priority: ☐ 30 D. ☐ 14 D. ☐ 7 D.
Other: 2 days

Lab Use Only
Comments:

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	Analyses Requested: CHGAM						Comment, Preservation	Lab Sample ID
7000-0000-001S	9/29	1455	SE	G	BP	X						Dry sample	0410 07003
7000-0000-002S		1510	SE	G	BP	X						Dry sample	0410 07004
7000-0000-003S		1525	SE	G	BP	X						Dry sample	0410 07005
7000-0000-004S		1535	SE	G	BP	X						Dry sample	0410 07006
7000-0000-005S		1710	SE	G	BP	X						Dry sample	0410 07007
7000-0000-006S		1720	SE	G	BP	X						Dry sample	0410 07008

NOTES: PO #: N/A MSR #: N/A ☐ LTP QA ☐ Radwaste QA ☒ Non QA

Samples Shipped Via:
☐ Fed Ex
☐ UPS
☒ Hand
☐ Other _____

Bill of Lading #

Internal Container Temp.: ____ Deg. C

Custody Sealed? Y ☐ N ☐

Custody Seal Intact? Y ☐ N ☐

1) Relinquished By: Donella	Date/Time: 10/5/04 08:30
2) Received By: [illegible]	Date/Time: 10/5/04 08:30
3) Relinquished By	Date/Time
4) Received By	Date/Time
5) Relinquished By	Date/Time
6) Received By	Date/Time

****
7-OCT-2004 08:21:41.60

CONNECTICUT YANKEE
HADDAM NECK STATION
****

SAMPLE TITLE : - FSS DIRT 7000-0000-001S
REASON FOR ANALYSIS: Site Characterization
SAMPLE ID : 041007003 * SAMPLE GEOMETRY : 1LMAR
SAMPLE TIME : 29-SEP-2004 14:55 * GEO EFFICIENCY DATE: 29-SEP-2003
SAMPLE TYPE : DIRT/SEDIMENT * SAMPLE QUANTITY : 8.73000E+02 GM
****

DETECTOR : DET 1 * LIBRARY : FSS_DIRT
LAST ENERGY CAL : 7-OCT-2004 00:14: * ENERGY TOLERANCE: 1.00000
KEV/CHANNEL : 5.00779E-01 * HALF LIFE RATIO : 9.00000
START CHANNEL : 100 * END CHANNEL : 4096
ACQ DATE & TIME : 7-OCT-2004 08:04: * DEADTIME (%) : 0.0%
PRESET LIVE TIME : 0 00:16:40 * SENSITIVITY : 5.00000
ELAPSED REAL TIME : 1000.2 Secs * GAUSSIAN SEN : 10.00000
ELAPSED LIVE TIME : 1000.0 Secs * CORRECTION FACTOR: 1.00000E+06
DECAYED TO 7 DAYS HOURS
FILE IDENT : CAS$DISK:[NEU.SAMPLE.RP.NEW]041007003_ADC1_DIRTSEDIMENT.CNF;1

****
ANALYSES : PEAK V16.8 NID V3.2 MINACT V2.8 WTMEAN V1.8
****

Collected by : DORULLA
REVIEWED BY : R Yat
COMMENTS :

****

Post-NID Peak Search Report

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.47	29	92	1.39	126.86	124	8	60.2		TH-234
4	74.77	81	106	1.10	149.42	145	15	23.8	7.89E-01	PB-212
										PB-214
4	77.16	126	63	0.88	154.19	145	15	13.2		PB-214
										PB-212
1	87.00	55	46	0.86	173.84	171	12	24.2	2.63E+00	PB-212
1	88.00	27	46	0.86	175.84	171	12	51.2		
1	90.00	34	47	0.86	179.84	171	12	36.7		
3	92.56	56	40	1.02	184.94	183	11	21.5	1.62E+00	
3	93.51	40	52	0.87	186.84	183	11	36.0		
0	185.97	35	87	1.08	371.52	368	9	50.0		RA-226
0	209.52	35	45	0.97	418.55	416	7	35.7		AC-228
3	238.57	317	37	1.01	476.59	472	14	6.4	1.86E+00	PB-212
3	240.86	35	51	1.38	481.15	472	14	55.1		
3	241.71	26	39	1.38	482.85	472	14	46.2		PB-214
1	295.23	88	20	1.21	589.78	585	22	13.2	1.30E+00	PB-214
1	299.92	26	18	1.22	599.14	585	22	35.2		
0	338.01	37	24	1.05	675.24	671	8	28.2		AC-228
6	351.87	105	17	1.24	702.92	696	18	11.6	2.08E+00	PB-214

Sample ID : 041007003 Acquisition date : 7-OCT-2004 08:04:44

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
6	355.33	25	9	2.07	709.84	696	18	31.4		
0	463.47	15	20	1.03	925.90	921	11	61.0		AC-228
0	510.81	39	35	1.10	1020.50	1015	12	34.7		
0	583.17	90	11	1.46	1165.12	1160	9	12.5		TL-208
0	609.16	101	5	0.87	1217.05	1212	10	10.8		BI-214
0	661.85	20	27	0.89	1322.37	1319	10	51.4		CS-137
0	727.37	19	16	0.89	1453.33	1447	12	49.2		BI-212
0	860.50	14	7	1.37	1719.49	1714	10	46.5		TL-208
0	910.92	72	0	1.61	1820.31	1816	9	11.8		AC-228
0	968.82	41	3	0.79	1936.08	1933	8	17.6		AC-228
0	1120.15	21	0	2.07	2238.71	2233	10	21.8		BI-214
0	1460.77	193	3	2.27	2920.16	2914	13	7.4		K-40

Sample ID : 041007003 Acquisition date : 7-OCT-2004 08:04:44

---- Identified Nuclides ----

Nuclide	Activity (pCi/GM)	Act error	MDA (pCi/GM)	MDA error	Act/MDA
K-40	1.594E+01	1.275E+00	7.629E-01	2.221E-02	20.895
CS-137	1.032E-01	5.340E-02	7.064E-02	3.815E-03	1.461
TL-208	4.173E-01	5.376E-02	6.823E-02	3.213E-03	6.116
BI-212	7.653E-01	3.785E-01	4.301E-01	2.158E-02	1.779
PB-212	1.222E+00	8.607E-02	7.601E-02	2.734E-03	16.072
BI-214	8.913E-01	9.311E-02	7.112E-02	3.512E-03	12.532
PB-214	7.468E-01	6.745E-02	1.032E-01	3.567E-03	7.234
RA-226	1.574E+00	7.887E-01	1.148E+00	3.831E-02	1.371
AC-228	1.249E+00	1.177E-01	1.446E-01	4.775E-03	8.636
TH-234	2.910E+00	1.771E+00	2.329E+00	2.031E-01	1.250

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GM)	K.L. Ided	Act error	MDA (pCi/GM)	MDA error	Act/MDA
BE-7	1.536E-01		1.490E-01	6.135E-01	2.333E-02	0.250
MN-54	6.720E-03		1.699E-02	7.663E-02	3.112E-03	0.088
CO-60	8.332E-03		2.092E-02	9.675E-02	2.775E-03	0.086
NB-94	-3.544E-02		1.444E-02	3.910E-02	1.427E-03	-0.906
RU-106	2.339E-02		1.151E-01	4.760E-01	2.403E-02	0.049
AG-108M	-1.224E-02		2.052E-02	6.755E-02	3.366E-03	-0.181
AG-110M	6.737E-03		1.040E-02	4.939E-02	2.650E-03	0.136
SB-125	-1.297E-02		3.510E-02	1.284E-01	4.348E-03	-0.101
CS-134	2.480E-02		1.015E-02	5.799E-02	2.840E-03	0.428
EU-152	2.490E-03		8.136E-02	3.835E-01	1.111E-02	0.006
EU-154	-1.903E-02		3.657E-02	1.627E-01	6.161E-03	-0.117
EU-155	8.226E-02		4.503E-02	1.911E-01	6.717E-03	0.430
RA-223	1.419E-01		8.467E-02	3.489E-01	1.307E-02	0.407
TH-228	2.860E+00		1.115E+00	4.793E+00	2.239E-01	0.597
PA-234	5.590E-01	+	7.783E-02	1.233E-01	5.442E-03	4.535
U-235	9.548E-02	+	4.784E-02	8.994E-02	2.998E-03	1.062
AM-241	-3.479E-02		7.420E-02	2.918E-01	9.711E-03	-0.119

REPORT NAME : QA_CHECK (V9.1)
REPORT DATE : 7-OCT-2004 08:21
REQUESTOR : CAS

CYAPCO
HADDAM NECK STATION

POST NID QA ANALYSIS

TITLE : - FSS DIRT 7000-0000-001S

SAMPLE No. : 041007003
SAMPLE TYPE : DIRT/SEDIMENT
COUNT TIME : 7-OCT-2004 08:04:44.
SAMPLE TIME : 29-SEP-2004 14:55:00
LIBRARY : FSS_DIRT

OPERATOR NAME : CAS
SAMPLE GEOMETRY : 1LMAR
SAMPLE QUANTITY : 8.73000E+02
DETECTOR : DET 1

ISOTOPE	PEAK ENERGY	ENERGY DIFF (KEV)	DECAY CORR pCi/GM	COMMENTS	
K-40	1460.80	-0.03	1.594E+01	QA Results OK	
CS-137	661.65	0.20	1.032E-01	* Count Rate Error =	51.
TL-208	583.14	0.03	4.173E-01	QA Results OK	
BI-212	727.17	0.20	7.653E-01	QA Results OK	
PB-212	238.63	-0.05	1.222E+00	QA Results OK	
BI-214	609.31	-0.16	8.913E-01	QA Results OK	
PB-214	351.92	-0.05	7.468E-01	QA Results OK	
RA-226	186.21	-0.24	1.574E+00	QA Results OK	
AC-228	911.07	-0.15	1.249E+00	QA Results OK	
TH-234	63.29	0.18	2.910E+00	Count Rate Error =	60.
AVG ENERGY DIFF =		-0.01	2.582E+01	= TOTAL GAMMA ACTIVITY	

accepted

74.77 KeV Peak was used in identifying 2 isotopes
77.16 KeV Peak was used in identifying 2 isotopes

UNIDENTIFIED/REJECTED PEAKS

ENERGY	NET AREA	FWHM	GAMMA/SEC	GAMMA/SEC /GM	% ERROR	FLAG	POTENTIAL ID	ACTIVITY
88.00	27.	0.86	1.515E+00	1.736E-03	51.2	~~U~~	~~CD-109~~	1.276E+00
						P	PB_X-RAY	0.000E+00
						P	PB-212	5.898E-01
						P	PB-214	1.011E+00
90.00	34.	0.86	1.852E+00	2.121E-03	36.7	P	BI-214	2.129E+01
						P	AC-228	2.746E+00
92.56	56.	1.02	2.951E+00	3.380E-03	21.5	P	PB_X-RAY	0.000E+00
						P	AC-228	2.626E+00
						P	TH-234	3.400E+00
93.51	40.	0.87	2.072E+00	2.373E-03	36.0	P	AC-228	1.844E+00
240.86	35.	1.38	1.976E+00	2.263E-03	55.1	U		
299.92	26.	1.22	1.777E+00	2.036E-03	35.2	P	PB-212	1.623E+00
355.33	25.	2.07	1.980E+00	2.267E-03	31.4	U	BA-133	1.023E-01

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CYAPCO
HADDAM NECK STATION

POST NID QA ANALYSIS

UNIDENTIFIED/REJECTED PEAKS

ENERGY	NET AREA	FWHM	GAMMA/SEC	GAMMA/SEC /GM	% ERROR	FLAG	POTENTIAL ID	ACTIVITY
510.81	39.	1.10	4.264E+00	4.884E-03	34.7	U	ANN-RD	0.000E+00

Total Unidentified/Rejected Peaks = 8
% Unidentified/Rejected Peaks = 27.59

Flags: U - Unknown Line
R - Rejected During Analysis
P - Positively Identified (line not in analysis library)

Performed by: _____

Reviewed by: _____

**** End Of Report (2 Pages) ****

****
7-OCT-2004 08:24:16.47

CONNECTICUT YANKEE
HADDAM NECK STATION
****

SAMPLE TITLE : - FSS DIRT 7000-0000-002S
REASON FOR ANALYSIS: Site Characterization
SAMPLE ID : 041007004 * SAMPLE GEOMETRY : 1LMAR
SAMPLE TIME : 29-SEP-2004 15:10 * GEO EFFICIENCY DATE: 30-JUL-2003
SAMPLE TYPE : DIRT/SEDIMENT * SAMPLE QUANTITY : 9.80000E+02 GM
****

DETECTOR : DET 2 * LIBRARY : FSS_DIRT
LAST ENERGY CAL : 7-OCT-2004 00:48: * ENERGY TOLERANCE: 1.00000
KEV/CHANNEL : 5.00738E-01 * HALF LIFE RATIO : 9.00000
START CHANNEL : 100 * END CHANNEL : 4096
ACQ DATE & TIME : 7-OCT-2004 08:07: * DEADTIME (%) : 0.0%
PRESET LIVE TIME : 0 00:16:40 * SENSITIVITY : 5.00000
ELAPSED REAL TIME : 1000.2 Secs * GAUSSIAN SEN : 10.00000
ELAPSED LIVE TIME : 1000.0 Secs * CORRECTION FACTOR: 1.00000E+06
DECAYED TO 7 DAYS HOURS
FILE IDENT : CAS$DISK:[NEU.SAMPLE.RP.NEW]041007004_ADC2_DIRTSEDIMENT.CNF;1

****
ANALYSES : PEAK V16.8 NID V3.2 MINACT V2.8 WTMEAN V1.8
****

Collected by : DORULLA
REVIEWED BY : _____
COMMENTS :

****

Post-NID Peak Search Report

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
3	74.83	146	109	1.15	149.74	146	12	14.5	6.31E-01	PB-212
										PB-214
3	77.23	198	93	0.97	154.55	146	12	10.5		PB-214
										PB-212
3	90.00	67	40	0.91	180.05	178	12	16.0	2.79E+00	
3	92.57	42	98	1.09	185.18	178	12	44.5		
3	93.32	44	84	1.08	186.68	178	12	38.3		
0	105.02	33	86	1.15	210.04	208	8	51.8		
0	185.60	89	106	0.89	371.01	366	10	24.3		RA-226
2	208.85	27	80	1.34	417.47	413	9	62.2	5.26E+00	
2	209.39	29	60	1.35	418.53	413	9	46.3		AC-228
2	238.56	349	52	0.99	476.82	471	19	6.2	1.01E+00	PB-212
2	241.28	63	63	1.40	482.24	471	19	29.2		PB-214
0	295.17	88	47	1.26	589.92	585	9	17.7		PB-214
0	327.93	35	40	1.07	655.38	650	10	37.4		
0	338.19	69	49	0.87	675.88	673	8	21.2		AC-228
0	351.89	151	40	1.03	703.26	699	10	11.3		PB-214
0	409.41	28	27	1.61	818.21	814	9	38.4		
0	510.76	30	47	1.66	1020.77	1016	9	45.6		

Sample ID : 041007004 Acquisition date : 7-OCT-2004 08:07:19

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	583.23	110	37	1.40	1165.63	1160	10	14.1		TL-208
0	609.27	120	14	1.40	1217.68	1211	14	11.3		BI-214
0	662.00	61	22	1.42	1323.12	1316	13	20.7		CS-137
0	726.82	46	14	2.01	1452.73	1444	18	23.7		BI-212
0	794.66	22	12	0.99	1588.38	1582	10	37.0		AC-228
0	911.31	99	15	1.66	1821.68	1814	16	13.5		AC-228
0	969.61	30	28	0.84	1938.31	1931	14	45.4		AC-228
0	1120.44	23	15	0.67	2240.08	2234	12	39.7		BI-214
0	1460.69	312	7	2.30	2921.12	2914	13	5.9		K-40

Sample ID : 041007004 Acquisition date : 7-OCT-2004 08:07:19

---- Identified Nuclides ----

Nuclide	Activity (pCi/GM)	Act error	MDA (pCi/GM)	MDA error	Act/MDA
K-40	1.411E+01	8.744E-01	5.568E-01	1.032E-02	25.346
CS-137	1.747E-01	3.637E-02	4.375E-02	9.921E-04	3.992
TL-208	2.871E-01	4.119E-02	4.544E-02	1.077E-03	6.319
BI-212	1.046E+00	2.490E-01	2.741E-01	5.757E-03	3.816
PB-212	8.775E-01	6.027E-02	6.437E-02	1.848E-03	13.632
BI-214	5.926E-01	6.555E-02	5.861E-02	1.379E-03	10.110
PB-214	6.095E-01	5.627E-02	7.681E-02	1.543E-03	7.936
RA-226	2.615E+00	6.394E-01	7.325E-01	1.822E-02	3.570
AC-228	9.541E-01	1.017E-01	1.206E-01	1.999E-03	7.909

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GM)	K.L. Ided	Act error	MDA (pCi/GM)	MDA error	Act/MDA
BE-7	4.021E-02		8.714E-02	3.325E-01	7.408E-03	0.121
MN-54	-1.072E-02		9.363E-03	3.450E-02	6.219E-04	-0.311
CO-60	3.566E-02		1.564E-02	7.819E-02	1.447E-03	0.456
NB-94	-5.478E-03		1.196E-02	4.682E-02	8.068E-04	-0.117
RU-106	-5.310E-02		5.967E-02	2.417E-01	5.651E-03	-0.220
AG-108M	-5.247E-03		8.297E-03	3.107E-02	7.294E-04	-0.169
AG-110M	2.651E-03		1.067E-02	4.284E-02	9.750E-04	0.062
SB-125	2.337E-02		1.902E-02	8.662E-02	1.790E-03	0.270
CS-134	2.232E-03		7.160E-03	3.092E-02	7.290E-04	0.072
EU-152	4.531E-02		7.381E-02	3.237E-01	6.017E-03	0.140
EU-154	-1.539E-02		4.384E-02	1.695E-01	5.293E-03	-0.091
EU-155	1.455E-01	+	7.537E-02	1.515E-01	3.745E-03	0.960
RA-223	9.645E-02		6.805E-02	2.603E-01	6.931E-03	0.371
TH-228	1.637E+00		8.362E-01	3.361E+00	8.094E-02	0.487
PA-234	5.365E-01	+	5.779E-02	9.895E-02	2.284E-03	5.422
TH-234	7.088E-01		4.407E-01	1.762E+00	1.473E-01	0.402
U-235	1.586E-01	+	3.878E-02	7.730E-02	1.919E-03	2.052
AM-241	2.281E-02		4.988E-02	1.937E-01	6.301E-03	0.118

REPORT NAME : QA_CHECK (V9.1)
REPORT DATE : 7-OCT-2004 08:24
REQUESTOR : CAS

CYAPCO
HADDAM NECK STATION

POST NID QA ANALYSIS

TITLE : - FSS DIRT 7000-0000-002S

SAMPLE No. : 041007004
SAMPLE TYPE : DIRT/SEDIMENT
COUNT TIME : 7-OCT-2004 08:07:19.
SAMPLE TIME : 29-SEP-2004 15:10:00
LIBRARY : FSS_DIRT

OPERATOR NAME : CAS
SAMPLE GEOMETRY : 1LMAR
SAMPLE QUANTITY : 9.80000E+02
DETECTOR : DET 2

ISOTOPE	PEAK ENERGY	ENERGY DIFF (KEV)	DECAY CORR pCi/GM	COMMENTS
K-40	1460.80	-0.11	1.411E+01	QA Results OK
CS-137	661.65	0.35	1.747E-01	QA Results OK
TL-208	583.14	0.09	2.871E-01	QA Results OK
BI-212	727.17	-0.35	1.046E+00	QA Results OK
PB-212	238.63	-0.06	8.775E-01	QA Results OK
BI-214	609.31	-0.05	5.926E-01	QA Results OK
PB-214	351.92	-0.03	6.095E-01	QA Results OK
RA-226	186.21	-0.61	2.615E+00	QA Results OK
AC-228	911.07	0.24	9.541E-01	QA Results OK
AVG ENERGY DIFF =		-0.06	2.127E+01 = TOTAL GAMMA ACTIVITY	

74.83 KeV Peak was used in identifying 2 isotopes
77.23 KeV Peak was used in identifying 2 isotopes

UNIDENTIFIED/REJECTED PEAKS

ENERGY	NET AREA	FWHM	GAMMA/SEC	GAMMA/SEC /GM	% ERROR	FLAG	POTENTIAL ID	ACTIVITY
90.00	67.	0.91	2.582E+00	2.635E-03	16.0	~~P~~	BI-214	2.645E+01
						~~P~~	AC-228	3.412E+00
92.57	42.	1.09	1.567E+00	1.599E-03	44.5	~~P~~	PB_X-RAY	0.000E+00
						~~P~~	AC-228	1.242E+00
						~~U~~	TH-234	1.608E+00
93.32	44.	1.08	1.643E+00	1.677E-03	38.3	~~P~~	AC-228	1.303E+00
						~~U~~	TH-234	1.686E+00
105.02	33.	1.15	1.091E+00	1.113E-03	51.8 ✓	~~R~~	~~EU-155~~	1.457E-01
						~~P~~	AC-228	1.891E+00
208.85	27.	1.34	1.007E+00	1.027E-03	62.2 ✓	~~U~~	~~SB-125~~	1.149E+01
						~~P~~	AC-228	6.349E-01
						~~U~~	~~NP-239~~	8.295E+00
327.93	35.	1.07	1.791E+00	1.827E-03	37.4	~~P~~	BI-212	3.822E+01
						~~P~~	AC-228	1.552E+00

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REPORT NAME : QA_CHECK (V9.1)
REPORT DATE : 7-OCT-2004 08:24
REQUESTOR : CAS

CYAPCO
HADDAM NECK STATION

POST NID QA ANALYSIS

UNIDENTIFIED/REJECTED PEAKS

ENERGY	NET AREA	FWHM	GAMMA/SEC	GAMMA/SEC /GM	% ERROR	FLAG	POTENTIAL ID	ACTIVITY
409.41	28.	1.61	1.676E+00	1.710E-03	38.4	~~P~~ U	AC-228	2.183E+00
510.76	30.	1.66	2.123E+00	2.166E-03	45.6	U	ANN-RD	0.000E+00

Total Unidentified/Rejected Peaks = 8
% Unidentified/Rejected Peaks = 30.77

Flags: U - Unknown Line
R - Rejected During Analysis
P - Positively Identified (line not in analysis library)

Performed by: _____

Reviewed by: _____

**** End Of Report (2 Pages) ****

****
7-OCT-2004 08:44:44.10

CONNECTICUT YANKEE
HADDAM NECK STATION
****

SAMPLE TITLE : - FSS DIRT 7000-0000-003S
REASON FOR ANALYSIS: Site Characterization
SAMPLE ID : 041007005 * SAMPLE GEOMETRY : 1LMAR
SAMPLE TIME : 29-SEP-2004 15:25 * GEO EFFICIENCY DATE: 29-SEP-2003
SAMPLE TYPE : DIRT/SEDIMENT * SAMPLE QUANTITY : 9.17000E+02 GM
****

DETECTOR : DET 1 * LIBRARY : FSS_DIRT
LAST ENERGY CAL : 7-OCT-2004 00:14: * ENERGY TOLERANCE: 1.00000
KEV/CHANNEL : 5.00779E-01 * HALF LIFE RATIO : 9.00000
START CHANNEL : 100 * END CHANNEL : 4096
ACQ DATE & TIME : 7-OCT-2004 08:27: * DEADTIME (%) : 0.0%
PRESET LIVE TIME : 0 00:17:06 * SENSITIVITY : 5.00000
ELAPSED REAL TIME : 1026.2 Secs * GAUSSIAN SEN : 10.00000
ELAPSED LIVE TIME : 1026.0 Secs * CORRECTION FACTOR: 1.00000E+06
DECAYED TO 7 DAYS HOURS
FILE IDENT : CAS$DISK:[NEU.SAMPLE.RP.NEW]041007005_ADC1_DIRTSEDIMENT.CNF;1

****
ANALYSES : PEAK V16.8 NID V3.2 MINACT V2.8 WTMEAN V1.8
****

Collected by : DORULLA
REVIEWED BY :
COMMENTS :

****

Post-NID Peak Search Report

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
2	74.94	74	62	0.91	149.76	146	13	19.8	2.47E+00	PB-212
										PB-214
2	77.07	94	52	0.91	154.01	146	13	15.8		PB-214
										PB-212
0	87.67	32	110	0.88	175.18	171	7	58.5		PB-212
0	186.35	52	80	1.11	372.28	368	11	36.2		RA-226
2	238.48	266	46	1.12	476.41	472	15	7.3	4.59E+00	PB-212
2	241.00	25	25	1.16	481.43	472	15	54.7		
2	242.00	50	22	1.25	483.43	472	15	25.9		PB-214
0	295.20	56	27	1.27	589.70	586	10	21.6		PB-214
0	338.47	59	28	1.08	676.16	672	10	22.1		AC-228
0	351.88	85	29	0.94	702.95	699	10	16.1		PB-214
0	510.68	53	11	1.80	1020.26	1013	15	19.4		
0	583.08	87	9	1.11	1164.95	1159	12	12.7		TL-208
0	609.45	52	15	1.17	1217.65	1213	9	19.4		BI-214
0	661.54	44	6	1.50	1321.76	1315	13	19.3		CS-137
0	727.75	28	9	1.86	1454.10	1447	12	28.7		BI-212
0	795.38	12	8	1.08	1589.30	1584	10	50.4		AC-228
0	911.50	53	8	1.42	1821.45	1816	12	17.8		AC-228

Sample ID : 041007005 Acquisition date : 7-OCT-2004 08:27:23

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	968.88	26	5	1.05	1936.20	1931	9	24.8		AC-228
0	1119.77	22	2	1.29	2237.95	2231	11	25.7		BI-214
0	1460.59	152	0	2.50	2919.79	2913	14	8.1		K-40

Sample ID : 041007005 Acquisition date : 7-OCT-2004 08:27:23

---- Identified Nuclides ----

Nuclide	Activity (pCi/GM)	Act error	MDA (pCi/GM)	MDA error	Act/MDA
K-40	1.165E+01	1.004E+00	2.077E-01	6.047E-03	56.089
CS-137	2.058E-01	4.124E-02	3.915E-02	2.115E-03	5.256
TL-208	3.682E-01	5.004E-02	3.465E-02	1.632E-03	10.625
BI-212	1.032E+00	3.008E-01	4.662E-01	2.339E-02	2.213
PB-212	9.395E-01	7.577E-02	7.504E-02	2.700E-03	12.520
BI-214	4.740E-01	7.915E-02	9.840E-02	4.859E-03	4.817
PB-214	5.560E-01	6.716E-02	8.989E-02	3.106E-03	6.185
RA-226	2.130E+00	7.752E-01	8.830E-01	2.945E-02	2.412
AC-228	1.004E+00	1.203E-01	2.157E-01	7.126E-03	4.653

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GM)	K.L. Ided	Act error	MDA (pCi/GM)	MDA error	Act/MDA
BE-7	3.518E-01		1.414E-01	6.519E-01	2.480E-02	0.540
MN-54	-1.316E-03		1.174E-02	5.369E-02	2.181E-03	-0.025
CO-60	3.903E-02		2.480E-02	1.201E-01	3.446E-03	0.325
NB-94	-1.559E-02		1.063E-02	3.796E-02	1.386E-03	-0.411
RU-106	-1.389E-01		1.448E-01	4.495E-01	2.269E-02	-0.309
AG-108M	8.264E-04		1.337E-02	5.177E-02	2.580E-03	0.016
AG-110M	-5.718E-03		1.317E-02	4.655E-02	2.498E-03	-0.123
SB-125	-1.254E-02		2.867E-02	1.057E-01	3.579E-03	-0.119
CS-134	-1.567E-02		1.363E-02	4.048E-02	1.983E-03	-0.387
EU-152	3.589E-02		6.467E-02	3.499E-01	1.014E-02	0.103
EU-154	2.333E-02		4.463E-02	2.207E-01	8.356E-03	0.106
EU-155	1.995E-02		4.028E-02	1.610E-01	5.660E-03	0.124
RA-223	-5.749E-02		8.388E-02	2.904E-01	1.088E-02	-0.198
TH-228	-8.144E-02		1.028E+00	3.965E+00	1.852E-01	-0.021
PA-234	1.774E-02		2.482E-02	1.021E-01	4.507E-03	0.174
TH-234	-2.639E-01		5.154E-01	2.016E+00	1.758E-01	-0.131
U-235	1.292E-01	+	4.702E-02	8.465E-02	2.822E-03	1.526
AM-241	-6.670E-02		7.110E-02	2.710E-01	9.020E-03	-0.246

REPORT NAME : QA_CHECK (V9.1)
REPORT DATE : 7-OCT-2004 08:44
REQUESTOR : CAS

CYAPCO
HADDAM NECK STATION

POST NID QA ANALYSIS

TITLE : - FSS DIRT 7000-0000-003S

SAMPLE No. : 041007005
SAMPLE TYPE : DIRT/SEDIMENT
COUNT TIME : 7-OCT-2004 08:27:23.
SAMPLE TIME : 29-SEP-2004 15:25:00
LIBRARY : FSS_DIRT
OPERATOR NAME : CAS
SAMPLE GEOMETRY : 1LMAR
SAMPLE QUANTITY : 9.17000E+02
DETECTOR : DET 1

ISOTOPE	PEAK ENERGY	ENERGY DIFF (KEV)	DECAY CORR pCi/GM	COMMENTS
K-40	1460.80	-0.21	1.165E+01	QA Results OK
CS-137	661.65	-0.11	2.058E-01	QA Results OK
TL-208	583.14	-0.05	3.682E-01	QA Results OK
BI-212	727.17	0.58	1.032E+00	QA Results OK
PB-212	238.63	-0.14	9.395E-01	QA Results OK
BI-214	609.31	0.14	4.740E-01	QA Results OK
PB-214	351.92	-0.04	5.560E-01	QA Results OK
RA-226	186.21	0.14	2.130E+00	QA Results OK
AC-228	911.07	0.43	1.004E+00	QA Results OK
AVG ENERGY DIFF =		0.08	1.836E+01 = TOTAL GAMMA ACTIVITY	

74.94 KeV Peak was used in identifying 2 isotopes
77.07 KeV Peak was used in identifying 2 isotopes

UNIDENTIFIED/REJECTED PEAKS

ENERGY	NET AREA	FWHM	GAMMA/SEC	GAMMA/SEC /GM	% ERROR	FLAG	POTENTIAL ID	ACTIVITY
241.00	25.	1.16	1.368E+00	1.492E-03	54.7	~~U~~ P	PB-214	5.437E-01
510.68	53.	1.80	5.668E+00	6.181E-03	19.4	~~U~~	ANN-RD	0.000E+00

Total Unidentified/Rejected Peaks = 2
% Unidentified/Rejected Peaks = 10.00

Flags: U - Unknown Line
R - Rejected During Analysis
P - Positively Identified (line not in analysis library)

CYAPCO
HADDAM NECK STATION

POST NID QA ANALYSIS

Performed by: _____

Reviewed by: _____

**** End Of Report (2 Pages) ****

****
7-OCT-2004 08:45:24.85

CONNECTICUT YANKEE
HADDAM NECK STATION
****

SAMPLE TITLE : - FSS DIRT 7000-0000-004S
REASON FOR ANALYSIS: Site Characterization
SAMPLE ID : 041007006 * SAMPLE GEOMETRY : 1LMAR
SAMPLE TIME : 29-SEP-2004 15:35 * GEO EFFICIENCY DATE: 30-JUL-2003
SAMPLE TYPE : DIRT/SEDIMENT * SAMPLE QUANTITY : 9.96000E+02 GM
****

DETECTOR : DET 2 * LIBRARY : FSS_DIRT
LAST ENERGY CAL : 7-OCT-2004 00:48: * ENERGY TOLERANCE: 1.00000
KEV/CHANNEL : 5.00738E-01 * HALF LIFE RATIO : 9.00000
START CHANNEL : 100 * END CHANNEL : 4096
ACQ DATE & TIME : 7-OCT-2004 08:28: * DEADTIME (%) : 0.0%
PRESET LIVE TIME : 0 00:16:40 * SENSITIVITY : 5.00000
ELAPSED REAL TIME : 1000.2 Secs * GAUSSIAN SEN : 10.00000
ELAPSED LIVE TIME : 1000.0 Secs * CORRECTION FACTOR: 1.00000E+06
DECAYED TO 7 DAYS HOURS
FILE IDENT : CAS$DISK:[NEU.SAMPLE.RP.NEW]041007006_ADC2_DIRTSEDIMENT.CNF;1

****
ANALYSES : PEAK V16.8 NID V3.2 MINACT V2.8 WTMEAN V1.8
****

Collected by : DORULLA
REVIEWED BY : _____
COMMENTS :

****

Post-NID Peak Search Report

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	74.86	110	99	1.14	149.82	146	7	17.7		PB-212 PB-214
0	77.19	119	93	0.92	154.47	153	6	15.5		PB-214 PB-212
0	92.59	34	129	1.26	185.22	183	8	61.5		
0	186.13	57	91	1.02	372.07	368	9	33.1		RA-226
0	209.13	39	63	0.78	418.02	414	8	38.1		AC-228
2	238.52	358	33	1.08	476.74	471	28	5.9	1.02E+00	PB-212
2	240.60	45	51	1.40	480.89	471	28	46.4		
2	242.16	30	46	1.16	484.00	471	28	44.3		PB-214
3	295.12	72	33	1.63	589.81	583	22	20.6	2.85E+00	PB-214
3	299.65	30	31	1.64	598.88	583	22	40.2		
0	338.14	65	44	0.91	675.77	671	10	23.1		AC-228
0	351.71	143	20	0.97	702.89	697	10	10.2		PB-214
0	409.81	24	26	1.15	819.00	812	13	48.3		
0	463.16	18	14	0.75	925.63	921	8	43.3		AC-228
0	511.42	61	21	1.50	1022.10	1017	13	21.0		
0	583.01	122	13	1.38	1165.19	1159	10	10.6		TL-208
0	609.31	109	26	1.62	1217.78	1210	15	14.0		BI-214

Sample ID : 041007006 Acquisition date : 7-OCT-2004 08:28:28

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	662.04	67	15	1.69	1323.19	1317	15	17.5		CS-137
0	727.83	26	15	1.50	1454.73	1446	12	36.3		BI-212
0	786.34	13	11	1.00	1571.74	1568	8	53.5		
0	911.12	78	14	1.89	1821.30	1814	14	15.2		AC-228
0	969.00	38	13	1.19	1937.09	1932	12	25.7		AC-228
0	1120.49	19	6	1.67	2240.17	2235	9	33.6		BI-214
0	1173.85	10	3	0.73	2346.96	2343	6	42.8		CO-60
0	1460.78	255	3	2.19	2921.31	2912	16	6.5		K-40
0	1764.66	19	0	1.18	3529.89	3524	11	22.9		BI-214

Sample ID : 041007006 Acquisition date : 7-OCT-2004 08:28:28

---- Identified Nuclides ----

Nuclide	Activity (pCi/GM)	Act error	MDA (pCi/GM)	MDA error	Act/MDA
K-40	1.134E+01	7.662E-01	3.343E-01	6.193E-03	33.913
CO-60	3.879E-02	1.662E-02	8.883E-02	1.644E-03	0.437
CS-137	1.902E-01	3.366E-02	3.656E-02	8.291E-04	5.203
TL-208	3.144E-01	3.404E-02	3.467E-02	8.220E-04	9.069
BI-212	5.668E-01	2.063E-01	2.897E-01	6.085E-03	1.956
PB-212	8.873E-01	5.790E-02	5.614E-02	1.612E-03	15.806
BI-214	5.433E-01	6.224E-02	6.946E-02	1.634E-03	7.822
PB-214	5.309E-01	4.844E-02	5.167E-02	1.038E-03	10.276
RA-226	1.655E+00	5.496E-01	7.793E-01	1.938E-02	2.124
AC-228	8.365E-01	8.908E-02	1.442E-01	2.389E-03	5.802

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GM)	K.L. Ided	Act error	MDA (pCi/GM)	MDA error	Act/MDA
BE-7	2.383E-01		1.121E-01	4.660E-01	1.038E-02	0.511
MN-54	5.793E-03		1.157E-02	4.971E-02	8.960E-04	0.117
NB-94	-5.748E-03		1.104E-02	4.329E-02	7.460E-04	-0.133
RU-106	9.133E-02		8.280E-02	3.864E-01	9.034E-03	0.236
AG-108M	-7.468E-03		8.610E-03	3.090E-02	7.255E-04	-0.242
AG-110M	1.836E-03		7.008E-03	3.089E-02	7.030E-04	0.059
SB-125	-2.007E-03		2.307E-02	8.416E-02	1.739E-03	-0.024
CS-134	-7.339E-03		7.066E-03	2.485E-02	5.858E-04	-0.295
EU-152	6.766E-02		6.042E-02	2.953E-01	5.489E-03	0.229
EU-154	2.369E-02		2.946E-02	1.439E-01	4.492E-03	0.165
EU-155	-4.279E-02		3.238E-02	1.108E-01	2.738E-03	-0.386
RA-223	6.361E-02		5.469E-02	2.136E-01	5.690E-03	0.298
TH-228	8.468E-01		8.052E-01	3.130E+00	7.537E-02	0.271
PA-234	3.169E-01	+	4.980E-02	7.964E-02	1.838E-03	3.979
TH-234	3.164E-01		3.806E-01	1.507E+00	1.259E-01	0.210
U-235	1.004E-01	+	3.333E-02	7.144E-02	1.774E-03	1.405
AM-241	-6.225E-02		3.877E-02	1.353E-01	4.402E-03	-0.460

REPORT NAME : QA_CHECK (V9.1)
REPORT DATE : 7-OCT-2004 08:45
REQUESTOR : CAS

CYAPCO
HADDAM NECK STATION

POST NID QA ANALYSIS

TITLE : - FSS DIRT 7000-0000-004S

SAMPLE No. : 041007006
SAMPLE TYPE : DIRT/SEDIMENT
COUNT TIME : 7-OCT-2004 08:28:28.
SAMPLE TIME : 29-SEP-2004 15:35:00
LIBRARY : FSS_DIRT

OPERATOR NAME : CAS
SAMPLE GEOMETRY : 1LMAR
SAMPLE QUANTITY : 9.96000E+02
DETECTOR : DET 2

ISOTOPE	PEAK ENERGY	ENERGY DIFF (KEV)	DECAY CORR pCi/GM	COMMENTS
K-40	1460.80	-0.02	1.134E+01	QA Results OK
~~CO-60~~	~~1332.49~~	~~0.00~~	~~3.879E-02~~	* Key Line Not Found
CS-137	661.65	0.39	1.902E-01	QA Results OK
TL-208	583.14	-0.13	3.144E-01	QA Results OK
BI-212	727.17	0.66	5.668E-01	QA Results OK
PB-212	238.63	-0.10	8.873E-01	QA Results OK
BI-214	609.31	0.00	5.433E-01	QA Results OK
PB-214	351.92	-0.21	5.309E-01	QA Results OK
RA-226	186.21	-0.08	1.655E+00	QA Results OK
AC-228	911.07	0.05	8.365E-01	QA Results OK
AVG ENERGY DIFF =		0.05	1.690E+01 = TOTAL GAMMA ACTIVITY	

① Co-60 Single peak ID. MDA < 8.8E-2 pCi/gm
Poor Resolution, high error.
10/7/04

74.86 KeV Peak was used in identifying 2 isotopes
77.19 KeV Peak was used in identifying 2 isotopes

UNIDENTIFIED/REJECTED PEAKS

ENERGY	NET AREA	FWHM	GAMMA/SEC	GAMMA/SEC /GM	% ERROR	FLAG	POTENTIAL ID	ACTIVITY
92.59	34.	1.26	1.260E+00	1.265E-03	61.5	P	PB_X-RAY	0.000E+00
						P	AC-228	9.830E-01
						U	TH-234	1.273E+00
240.60	45.	1.40	1.838E+00	1.846E-03	46.4	U		
299.65	30.	1.64	1.435E+00	1.441E-03	40.2	P	PB-212	1.149E+00
409.81	24.	1.15	1.438E+00	1.443E-03	48.3	P	AC-228	1.842E+00
511.42	61.	1.50	4.399E+00	4.416E-03	21.0	U	ANN-RD	0.000E+00
786.34	13.	1.00	1.339E+00	1.344E-03	53.5	P	BI-212	1.856E+00
						P	BI-214	1.143E+01
						P	PB-214	3.325E+00

CYAPCO
HADDAM NECK STATION

POST NID QA ANALYSIS

Total Unidentified/Rejected Peaks = 6
% Unidentified/Rejected Peaks = 23.08

Flags: U - Unknown Line
R - Rejected During Analysis
P - Positively Identified (line not in analysis library)

Performed by: _____

Reviewed by: _____

**** End Of Report (2 Pages) ****

****
7-OCT-2004 09:07:45.95

CONNECTICUT YANKEE
HADDAM NECK STATION
****

SAMPLE TITLE : - FSS DIRT 7000-0000-005S
REASON FOR ANALYSIS: Site Characterization
SAMPLE ID : 041007007 * SAMPLE GEOMETRY : 1LMAR
SAMPLE TIME : 29-SEP-2004 17:10 * GEO EFFICIENCY DATE: 29-SEP-2003
SAMPLE TYPE : DIRT/SEDIMENT * SAMPLE QUANTITY : 8.26000E+02 GM
****

DETECTOR : DET 1 * LIBRARY : FSS_DIRT
LAST ENERGY CAL : 7-OCT-2004 00:14: * ENERGY TOLERANCE: 1.00000
KEV/CHANNEL : 5.00779E-01 * HALF LIFE RATIO : 9.00000
START CHANNEL : 100 * END CHANNEL : 4096
ACQ DATE & TIME : 7-OCT-2004 08:49: * DEADTIME (%) : 0.0%
PRESET LIVE TIME : 0 00:16:41 * SENSITIVITY : 5.00000
ELAPSED REAL TIME : 1001.3 Secs * GAUSSIAN SEN : 10.00000
ELAPSED LIVE TIME : 1001.0 Secs * CORRECTION FACTOR: 1.00000E+06
DECAYED TO 7 DAYS HOURS
FILE IDENT : CAS$DISK:[NEU.SAMPLE.RP.NEW]041007007_ADC1_DIRTSEDIMENT.CNF;1

****
ANALYSES : PEAK V16.8 NID V3.2 MINACT V2.8 WTMEAN V1.8 INTERF V2.4
****

Collected by : DORULLA
REVIEWED BY : C Yat
COMMENTS :

****

Post-NID Peak Search Report

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
5	74.77	121	75	1.21	149.42	144	16	15.6	2.85E+00	PB-212
										PB-214
5	77.16	160	65	1.04	154.19	144	16	11.5		PB-214
										PB-212
0	93.18	57	101	1.34	186.19	183	7	32.5		
0	132.65	79	229	5.57	265.02	254	21	49.2		
0	185.54	32	98	1.00	370.66	368	9	58.0		RA-226
0	210.20	30	78	1.60	419.91	417	11	61.6		AC-228
1	238.68	320	41	0.96	476.79	472	17	6.4	1.72E+00	PB-212
1	240.88	47	44	1.14	481.21	472	17	33.5		
1	242.28	28	37	1.04	484.00	472	17	44.8		PB-214
0	270.32	31	34	0.96	540.00	536	9	38.3		AC-228
0	295.27	68	35	1.10	589.85	585	10	20.2		PB-214
0	299.97	34	26	1.09	599.25	595	8	31.2		
0	338.45	75	54	1.07	676.12	671	11	22.4		AC-228
0	351.89	113	28	1.21	702.97	698	12	13.2		PB-214
0	462.92	19	22	0.99	924.81	922	9	49.0		AC-228
0	510.36	51	29	1.14	1019.60	1013	13	26.0		
0	583.31	104	35	1.28	1165.39	1159	13	15.4		TL-208

Sample ID : 041007007 Acquisition date : 7-OCT-2004 08:49:39

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	609.51	87	11	1.28	1217.76	1211	14	13.3		BI-214
0	662.06	43	22	1.30	1322.79	1317	12	27.2		CS-137
0	727.74	18	15	1.26	1454.08	1448	10	46.6		BI-212
0	911.46	55	22	0.97	1821.37	1815	11	21.2		AC-228
0	969.05	46	2	1.59	1936.53	1932	9	15.9		AC-228
0	1460.78	185	0	1.51	2920.16	2915	11	7.4		K-40

Sample ID : 041007007 Acquisition date : 7-OCT-2004 08:49:39

---- Identified Nuclides ----

Nuclide	Activity (pCi/GM)	Act error	MDA (pCi/GM)	MDA error	Act/MDA
K-40	1.614E+01	1.276E+00	2.364E-01	6.881E-03	68.266
CS-137	2.306E-01	6.394E-02	9.397E-02	5.076E-03	2.454
TL-208	4.985E-01	8.044E-02	7.767E-02	3.658E-03	6.418
BI-212	7.587E-01	3.559E-01	5.639E-01	2.829E-02	1.345
PB-212	1.303E+00	9.594E-02	9.248E-02	3.327E-03	14.094
BI-214	7.969E-01	1.130E-01	1.120E-01	5.529E-03	7.117
PB-214	7.644E-01	8.423E-02	9.499E-02	3.282E-03	8.047
RA-226	1.506E+00	8.753E-01	1.125E+00	3.754E-02	1.338
AC-228	1.491E+00	1.573E-01	3.224E-01	1.065E-02	4.626

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GM)	K.L. Ided	Act error	MDA (pCi/GM)	MDA error	Act/MDA
BE-7	8.024E-02		1.341E-01	5.487E-01	2.087E-02	0.146
MN-54	-8.354E-03		1.672E-02	6.955E-02	2.825E-03	-0.120
CO-60	9.501E-03		1.888E-02	9.276E-02	2.661E-03	0.102
NB-94	-9.248E-04		1.564E-02	6.955E-02	2.539E-03	-0.013
RU-106	-1.146E-02		1.413E-01	5.354E-01	2.703E-02	-0.021
AG-108M	-8.740E-03		1.364E-02	4.659E-02	2.321E-03	-0.188
AG-110M	-4.187E-03		1.793E-02	6.402E-02	3.436E-03	-0.065
SB-125	9.106E-03		3.169E-02	1.322E-01	4.478E-03	0.069
CS-134	-7.628E-03		9.687E-03	3.234E-02	1.584E-03	-0.236
EU-152	4.084E-02		7.358E-02	3.981E-01	1.154E-02	0.103
EU-154	4.739E-03		5.522E-02	2.510E-01	9.505E-03	0.019
EU-155	-2.673E-02		4.879E-02	1.826E-01	6.417E-03	-0.146
RA-223	4.561E-01		1.757E-01	3.115E-01	1.167E-02	1.464
TH-228	-1.020E+00		1.070E+00	3.963E+00	1.852E-01	-0.257
PA-234	7.491E-01	+	9.206E-02	1.365E-01	6.026E-03	5.488
TH-234	1.218E+00		7.179E-01	3.027E+00	2.639E-01	0.402
U-235	9.133E-02	+	5.309E-02	9.541E-02	3.181E-03	0.957
AM-241	1.180E-02		8.256E-02	3.340E-01	1.112E-02	0.035

---- Interference between AC-228 and RA-223 ----

**** AC-228 energy lines ****

Energy	# Disint.	% Error	Comments
209.28	3.486E+04	61.70	
270.23	---------	------	Line interferes with RA-223
338.32	4.897E+04	22.72	
463.00	4.315E+04	49.17	
794.70	---------	------	Line not identified
835.50	---------	------	Line not identified
911.07	3.733E+04	21.46	
964.60	---------	------	Line not identified
969.11	5.453E+04	16.24	
Average:	4.520E+04	10.96	

Interfered energy lines

Nuclide	Energy	Old Area	New Area	Critical Level	New Activity (pCi/GM)	% Error
RA-223	269.46	31.0	4.5	17.2	0.000E+00	0.00
	269.46	Line invalidated: New Area less than critical level				

RA-223 has been rejected: Failed abundance Test

REPORT NAME : QA_CHECK (V9.1)
REPORT DATE : 7-OCT-2004 09:07
REQUESTOR : CAS

CYAPCO
HADDAM NECK STATION

POST NID QA ANALYSIS

TITLE : - FSS DIRT 7000-0000-005S

SAMPLE No. : 041007007
SAMPLE TYPE : DIRT/SEDIMENT
COUNT TIME : 7-OCT-2004 08:49:39.
SAMPLE TIME : 29-SEP-2004 17:10:00
LIBRARY : FSS_DIRT

OPERATOR NAME : CAS
SAMPLE GEOMETRY : 1LMAR
SAMPLE QUANTITY : 8.26000E+02
DETECTOR : DET 1

ISOTOPE	PEAK ENERGY	ENERGY DIFF (KEV)	DECAY CORR pCi/GM	COMMENTS
K-40	1460.80	-0.02	1.614E+01	QA Results OK
CS-137	661.65	0.41	2.306E-01	QA Results OK
TL-208	583.14	0.17	4.985E-01	QA Results OK
BI-212	727.17	0.57	7.587E-01	QA Results OK
PB-212	238.63	0.05	1.303E+00	QA Results OK
BI-214	609.31	0.20	7.969E-01	QA Results OK
PB-214	351.92	-0.03	7.644E-01	QA Results OK
RA-226	186.21	-0.67	1.506E+00	* Count Rate Error = 58.
AC-228	911.07	0.39	1.491E+00	QA Results OK
AVG ENERGY DIFF =		0.12	2.349E+01	= TOTAL GAMMA ACTIVITY

74.77 KeV Peak was used in identifying 2 isotopes
77.16 KeV Peak was used in identifying 2 isotopes

UNIDENTIFIED/REJECTED PEAKS

ENERGY	NET AREA	FWHM	GAMMA/SEC	GAMMA/SEC /GM	% ERROR	FLAG	POTENTIAL ID	ACTIVITY
93.18	57.	1.34	2.967E+00	3.592E-03	32.5	P	AC-228	2.793E+00
						U	TH-234	3.616E+00
132.65	79.	5.57	3.387E+00	4.100E-03	49.2	~~U~~	~~CE-144~~	1.045E+00
240.88	47.	1.14	2.619E+00	3.170E-03	33.5	~~U~~		
299.97	34.	1.09	2.276E+00	2.755E-03	31.2	~~P~~	PB-212	2.199E+00
510.36	51.	1.14	5.572E+00	6.746E-03	26.0	~~P~~	AC-228	3.907E+01
						~~U~~	ANN-RD	0.000E+00

CYAPCO
HADDAM NECK STATION

POST NID QA ANALYSIS

Total Unidentified/Rejected Peaks = 5
% Unidentified/Rejected Peaks = 21.74

Flags: U - Unknown Line
R - Rejected During Analysis
P - Positively Identified (line not in analysis library)

Performed by: _____

Reviewed by: _____

**** End Of Report (2 Pages) ****

****
7-OCT-2004 09:07:53.11

CONNECTICUT YANKEE
HADDAM NECK STATION
****

SAMPLE TITLE : - FSS DIRT 7000-0000-006S
REASON FOR ANALYSIS: Site Characterization
SAMPLE ID : 041007008 * SAMPLE GEOMETRY : 1LMAR
SAMPLE TIME : 29-SEP-2004 17:20 * GEO EFFICIENCY DATE: 30-JUL-2003
SAMPLE TYPE : DIRT/SEDIMENT * SAMPLE QUANTITY : 8.88000E+02 GM
****

DETECTOR : DET 2 * LIBRARY : FSS_DIRT
LAST ENERGY CAL : 7-OCT-2004 00:48: * ENERGY TOLERANCE: 1.00000
KEV/CHANNEL : 5.00738E-01 * HALF LIFE RATIO : 9.00000
START CHANNEL : 100 * END CHANNEL : 4096
ACQ DATE & TIME : 7-OCT-2004 08:50: * DEADTIME (%) : 0.0%
PRESET LIVE TIME : 0 00:16:40 * SENSITIVITY : 5.00000
ELAPSED REAL TIME : 1000.3 Secs * GAUSSIAN SEN : 10.00000
ELAPSED LIVE TIME : 1000.0 Secs * CORRECTION FACTOR: 1.00000E+06
DECAYED TO 7 DAYS HOURS
FILE IDENT : CAS$DISK:[NEU.SAMPLE.RP.NEW]041007008_ADC2_DIRTSEDIMENT.CNF;1

****
ANALYSES : PEAK V16.8 NID V3.2 MINACT V2.8 WTMEAN V1.8
****

Collected by : DORULLA
REVIEWED BY : _____
COMMENTS :

****

Post-NID Peak Search Report

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
3	74.88	111	120	0.89	149.84	146	12	17.3	2.62E+00	PB-212
										PB-214
3	77.17	223	120	0.98	154.42	146	12	10.4		PB-214
										PB-212
1	87.38	86	116	0.98	174.82	172	11	22.3	1.60E+00	PB-212
1	89.89	70	91	0.99	179.82	172	11	25.7		
2	92.59	80	56	1.02	185.23	183	13	17.6	1.57E+00	
2	93.57	52	86	1.00	187.18	183	13	35.9		
0	129.02	55	145	0.90	257.99	254	9	41.6		
6	185.22	27	47	1.90	370.25	367	16	57.0	2.69E+00	
6	185.95	90	55	1.38	371.71	367	16	18.9		RA-226
0	209.51	54	74	1.31	418.77	414	8	30.8		AC-228
2	238.66	578	69	1.23	477.02	471	17	4.7	1.10E+01	PB-212
2	242.16	43	73	1.16	484.00	471	17	38.4		PB-214
0	295.28	80	80	0.88	590.15	585	11	24.3		PB-214
0	300.16	28	53	0.63	599.90	597	7	46.4		
0	338.21	125	52	1.31	675.93	670	13	14.9		AC-228
0	351.69	154	48	0.91	702.85	698	11	11.8		PB-214
0	510.83	71	46	1.37	1020.91	1014	15	24.4		

Sample ID : 041007008 Acquisition date : 7-OCT-2004 08:50:54

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	583.12	178	29	1.39	1165.41	1159	13	9.8		TL-208
0	609.33	110	46	1.36	1217.82	1210	13	15.9		BI-214
0	661.44	90	29	1.56	1322.00	1315	16	16.8		CS-137
0	727.33	43	22	1.90	1453.75	1447	13	27.3		BI-212
0	861.06	30	11	1.51	1721.18	1716	10	28.1		TL-208
0	911.23	135	3	1.35	1821.54	1816	14	9.1		AC-228
0	969.09	73	10	1.76	1937.26	1932	13	15.3		AC-228
0	1173.51	27	5	1.36	2346.27	2343	8	24.7		CO-60
0	1333.31	16	11	1.60	2666.11	2658	11	48.2		CO-60
0	1460.63	390	0	2.30	2921.01	2910	19	5.1		K-40

Sample ID : 041007008 Acquisition date : 7-OCT-2004 08:50:54

---- Identified Nuclides ----

Nuclide	Activity (pCi/GM)	Act error	MDA (pCi/GM)	MDA error	Act/MDA
K-40	1.947E+01	1.050E+00	1.353E-01	2.507E-03	143.911
CO-60	1.028E-01	2.308E-02	8.352E-02	1.545E-03	1.230
CS-137	2.880E-01	4.884E-02	4.360E-02	9.887E-04	6.605
TL-208	5.287E-01	5.044E-02	5.174E-02	1.227E-03	10.218
BI-212	1.076E+00	2.944E-01	3.648E-01	7.662E-03	2.950
PB-212	1.583E+00	8.427E-02	7.253E-02	2.083E-03	21.830
BI-214	5.987E-01	9.611E-02	1.012E-01	2.382E-03	5.915
PB-214	6.586E-01	6.822E-02	8.102E-02	1.628E-03	8.129
RA-226	2.933E+00	5.589E-01	7.550E-01	1.878E-02	3.884
AC-228	1.699E+00	1.161E-01	1.331E-01	2.207E-03	12.765

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GM)	K.L. Ided	Act error	MDA (pCi/GM)	MDA error	Act/MDA
BE-7	4.839E-03		9.149E-02	3.347E-01	7.456E-03	0.014
MN-54	-5.789E-03		1.349E-02	5.289E-02	9.534E-04	-0.109
NB-94	9.056E-03		1.134E-02	5.168E-02	8.905E-04	0.175
RU-106	1.717E-02		1.106E-01	4.633E-01	1.083E-02	0.037
AG-108M	-1.218E-02		1.139E-02	4.302E-02	1.010E-03	-0.283
AG-110M	-7.901E-03		8.361E-03	2.974E-02	6.769E-04	-0.266
SB-125	8.073E-03		2.449E-02	9.567E-02	1.977E-03	0.084
CS-134	4.867E-05		1.124E-02	4.370E-02	1.030E-03	0.001
EU-152	1.304E-01		6.792E-02	3.588E-01	6.669E-03	0.363
EU-154	-8.889E-02		3.718E-02	7.884E-02	2.462E-03	-1.127
EU-155	3.914E-02		3.684E-02	1.444E-01	3.571E-03	0.271
RA-223	2.923E-02		8.312E-02	2.941E-01	7.832E-03	0.099
TH-228	1.242E+00		9.603E-01	3.740E+00	9.007E-02	0.332
PA-234	6.665E-01	+	7.098E-02	1.139E-01	2.629E-03	5.852
TH-234	1.320E+00		5.202E-01	2.110E+00	1.764E-01	0.625
U-235	1.779E-01	+	3.390E-02	8.434E-02	2.094E-03	2.109
AM-241	2.234E-02		4.813E-02	1.900E-01	6.180E-03	0.118

REPORT NAME : QA_CHECK (V9.1)
REPORT DATE : 7-OCT-2004 09:07
REQUESTOR : CAS

CYAPCO
HADDAM NECK STATION

POST NID QA ANALYSIS

TITLE : - FSS DIRT 7000-0000-006S

SAMPLE No. : 041007008
SAMPLE TYPE : DIRT/SEDIMENT
COUNT TIME : 7-OCT-2004 08:50:54.
SAMPLE TIME : 29-SEP-2004 17:20:00
LIBRARY : FSS_DIRT

OPERATOR NAME : CAS
SAMPLE GEOMETRY : 1LMAR
SAMPLE QUANTITY : 8.88000E+02
DETECTOR : DET 2

ISOTOPE	PEAK ENERGY	ENERGY DIFF (KEV)	DECAY CORR pCi/GM	COMMENTS
K-40	1460.80	-0.17	1.947E+01	QA Results OK
CO-60	1332.49	0.83	1.028E-01	QA Results OK
CS-137	661.65	-0.21	2.880E-01	QA Results OK
TL-208	583.14	-0.02	5.287E-01	QA Results OK
BI-212	727.17	0.16	1.076E+00	QA Results OK
PB-212	238.63	0.04	1.583E+00	QA Results OK
BI-214	609.31	0.02	5.987E-01	QA Results OK
PB-214	351.92	-0.23	6.586E-01	QA Results OK
RA-226	186.21	-0.26	2.933E+00	QA Results OK
AC-228	911.07	0.16	1.699E+00	QA Results OK
AVG ENERGY DIFF =		0.03	2.894E+01	= TOTAL GAMMA ACTIVITY

74.88 KeV Peak was used in identifying 2 isotopes
77.17 KeV Peak was used in identifying 2 isotopes

UNIDENTIFIED/REJECTED PEAKS

ENERGY	NET AREA	FWHM	GAMMA/SEC	GAMMA/SEC /GM	% ERROR	FLAG	POTENTIAL ID	ACTIVITY
89.89	70.	0.99	2.712E+00	3.055E-03	25.7	P	BI-214	3.067E+01
						P	AC-228	3.955E+00
92.59	80.	1.02	2.996E+00	3.374E-03	17.6	P	PB_X-RAY	0.000E+00
						P	AC-228	2.621E+00
						U	TH-234	3.393E+00
93.57	52.	1.00	1.910E+00	2.151E-03	35.9	P	AC-228	1.671E+00
129.02	55.	0.90	1.694E+00	1.907E-03	41.6	U	~~KR-85M~~	1.712E+01
						P	AC-228	1.852E+00
185.22	27.	1.90	9.412E-01	1.060E-03	57.0	P	RA-226	8.734E-01
						P	U-235	5.308E-02
300.16	28.	0.63	1.334E+00	1.503E-03	46.4	P	PB-212	1.198E+00
510.83	71.	1.37	5.076E+00	5.716E-03	24.4	U	ANN-RD	0.000E+00

A Yab

CYAPCO
HADDAM NECK STATION

POST NID QA ANALYSIS

Total Unidentified/Rejected Peaks = 7
% Unidentified/Rejected Peaks = 25.93

Flags: U - Unknown Line
R - Rejected During Analysis
P - Positively Identified (line not in analysis library)

Performed by: _____

Reviewed by: _____

**** End Of Report (2 Pages) ****

Connecticut Yankee Atomic Power Company
362 Injun Hollow Road, East Hampton, CT 06424
860-267-2556

Chain of Custody Form

No. 2004-00230

Project Name: Haddam Neck Decommissioning

Contact Name & Phone:
Pete Hollenbeck 860-267-3923

Analytical Lab (Name, City, State):
On-site

Priority: ☐ 30 D. ☐ 14 D. ☐ 7 D.
Other: 2 days

Lab Use Only
Comments:

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	Analyses Requested: CHGAM						Comment, Preservation	Lab Sample ID
7000-0000-001S	9/29	1455	SE	G	BP	X						Dry sample	
7000-0000-002S		1510	SE	G	BP	X						Dry sample	
7000-0000-003S		1525	SE	G	BP	X						Dry sample	
7000-0000-004S		1535	SE	G	BP	X						Dry sample	
7000-0000-005S		1710	SE	G	BP	X						Dry sample	
7000-0000-006S		1720	SE	G	BP	X						Dry sample	

NOTES: PO #: N/A MSR #: N/A ☐ LTP QA ☐ Radwaste QA ☒ Non QA

Samples Shipped Via:
☐ Fed Ex
☐ UPS
☒ Hand
☐ Other ____

Bill of Lading #

Internal Container Temp.: ____ Deg. C

Custody Sealed? Y ☐ N ☐

Custody Seal Intact? Y ☐ N ☐

1) Relinquished By: [signature] Date/Time: 10/5/04 08:30	2) Received By: [signature] Date/Time: 10/5/04 08:30
3) Relinquished By Date/Time	4) Received By Date/Time
5) Relinquished By Date/Time	6) Received By Date/Time

Sample Control and Accountability

Sample Collection			Sample Storage			Sample Transfer		
Sample ID	Collected By	Date/Time	Location	Placed By	Date/Time	Location	Transferred By	Date/Time
7000-0000-0015	DoRulla	9/29/04 1455	RMA EOF	DoRulla	10/14/04 1110	GENERAL ENGINEER LABS CHARLESTON, SC	JOHNSON	10-19-04/10:00
7000-0000-0025		9/29/04 1510						
7000-0000-0035		9/29/04 1525						
7000-0000-0045		9/29/04 1535						
7000-0000-0055		9/29/04 1710						
7000-0000-0065	DoRulla	9/29/04 1720						
5302-0000-0055	Holbenhack	10/5/04 1205	RMA EOF	DoRulla	10/14/04 1110			

Sample Control and Accountability

Sample Collection			Sample Storage			Sample Transfer		
Sample ID	Collected By	Date/Time	Location	Placed By	Date/Time	Location	Transferred By	Date/Time
7000-0000-0085	P. Muller	9/29/04 1000	None	PA		on-site lab	Hollenbeck	9/29/04 1433
7000-0000-0075	P. Muller	9/29/04 1022	None	PA		on-site lab	Hollenbeck	9/29/04 1433
7000-0000-0015	P. Muller	9/29/04 1455	RMA	P. Muller	9/29/04 1745	on site Lab	Dorukha	10/5/04 0830
7000-0000-0025	P. Muller	9/29/04 1510	RMA	P. Muller	9/29/04 1745			
7000-0000-0035	P. Muller	9/29/04 1525	RMA	P. Muller	9/29/04 1745			
7000-0000-0045	P. Muller	9/29/04 1535	RMA	P. Muller	9/29/04 1745			
7000-0000-0055	P. Muller	9/29/04 1710	RMA	P. Muller	9/29/04 1745			
7000-0000-0006S	P. Muller	9/29/04 1720	RMA	P. Muller	9/29/04 1745	on site Lab	Dorukha	10/5/04 0830

Sample Control and Accountability

Sample Collection			Sample Storage			Sample Transfer		
Sample ID	Collected By	Date/Time	Location	Placed By	Date/Time	Location	Transferred By	Date/Time
7000-0000-011C-1C	PJM	10/4/04 0930	EOF RMA	~~10/4/04~~ ~~1727~~ PJM	10/4/04 1727	GENERAL ENGINEER. LABS SC CHARLESTON	JOHNSON	10-19-04 / 10:00
7000-0000-011C-2C	PJM	10/4/04 1015	EOF RMA					
7000-0000-011C-3C	PJM	10/4/04 1050	EOF RMA					
7000-0000-010C-1C	PJM	10/4/04 1350	EOF RMA					
7000-0000-010C-2C	PJM	10/4/04 1455	EOF RMA					
7000-0000-010C-3C	PJM	10/4/04 1650	EOF RMA					

Daily Survey Journal

Page 1 of 1

Survey Area #: 7000	Survey Area Name: Screenwell Building
Survey Unit #: 0000	WP&IR #: 000-MEC-5000-1088-000

Specific instructions for using the Daily Survey Journal.

1 The Daily Survey Journal provides the means to record those items required by the FSSP as well as any deviations or anomalies that should be brought to the attention of the cognizant FSS Radiological Engineer or the FSS Group Supervisor.

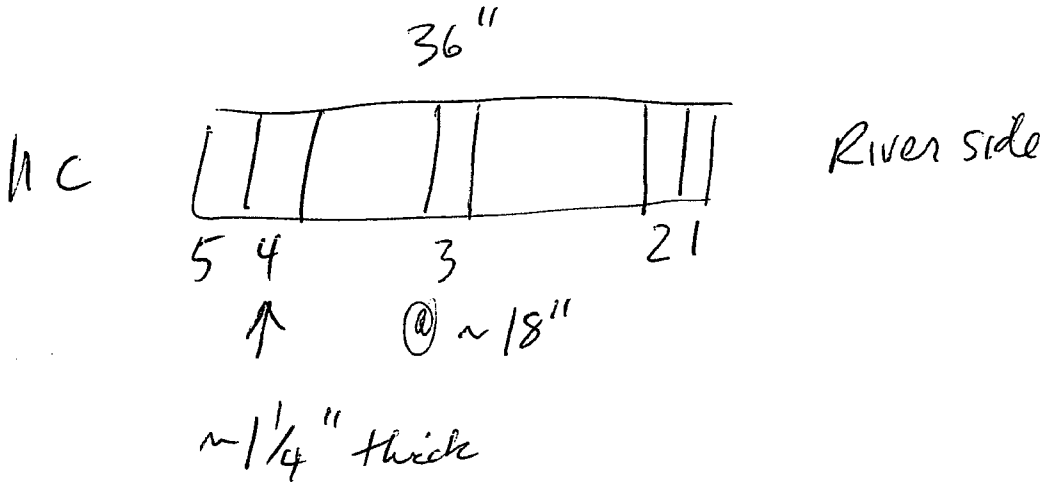
2 All documentation will be complete and legible.

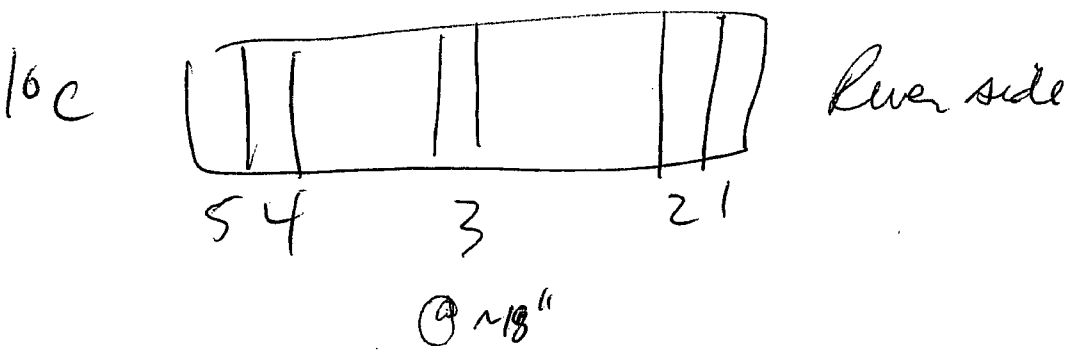
TIME	NOTES for October 5, 2004
0930	Team members: Hollenbeck, Dorulla, Bachner and Rivera briefed on today's work.
1000	Set up work area
1010	Sliced up 7000-0000-011C-3C to make wafers 7000-0000-011C-3C-04 and 05. Wafer 04 less than 2 inches due to rebar
1020	Sliced up 7000-0000-011C-2C to make wafer 7000-0000-011C-2C-03
1030	Sliced up 7000-0000-011C-1C to make wafers 7000-0000-011C-1C-01 and 02.
1040	Sliced up 7000-0000-010C-3C to make wafers 7000-0000-010C-3C-04 and 05.
1050	Sliced up 7000-0000-010C-2C to make wafer 7000-0000-010C-2C-03
1100	Sliced up 7000-0000-010C-1C to make wafers 7000-0000-010C-1C-01 and 02.
1110	Exited area

Completed by: P Hollenbeck

Date: 10/5/04

10/5/04





OCT 7 2004
MPM 1.1-01
Rev. 6

ATTACHMENT 8
(Page 1 of 1)
NON-QA MATERIAL / SERVICE REQUISITION

MSR NO. 04-3637	**PO NO.: 002337**
☐ **ITEM** ☒ **SERVICE**	
DATE REQUIRED: 11/16/04	**ORIGINATOR/DATE: P Hollenbeck 10/18/04**
SUGGESTED VENDOR: **General Engineering Labs** **2040 Savage Road** **Charleston, SC 29407** **Attn: Sara Kozlik 843-556-8171**	**VENDOR NO.: 21454**

QTY	UM	COST	MFG., CAT.NO., MOD. NO., P/N, & COMPLETE DESCRIPTION 244 245
~~18~~ 19 PA 10/18/04		Approx $6,000	Analyze the samples in the attached COC numbers 2004-00243 and ~~244~~. Analyze in accordance with CY-ISC-SOW-001 dated August 27, 2003. PA 10/18/04

SPECIAL REQUIREMENTS AND CONDITIONS:
Requirements of the original purchase order remain unchanged.

DEPARTMENT MANAGER: Teresa R Pennock	DATE: 10/18/04
FIRE PROTECTION (Fire Protection EQP Only):	DATE:
BUSINESS DIRECTOR OR OFFICER (greater than $150,000.00):	DATE:
RADIATION PROTECTION (Radioactive Material/Disposal Only):	DATE:
ENGINEERING:	DATE:
PROJECT CONTROLS: Roger Clinell Ho	DATE: 10/19/04

ACCOUNT DISTRIBUTION NUMBER

NATURAL ACCOUNT	SUB ACCOUNT			PROJECT			TASK		
	RPT UNIT	COST CENTER	PHASE	PHASE	PROJ.	WORK ORDER	COST CENTER	TASK	SUBTASK
74200	83	CLOS	04	04	FSS	0000	CLOS	501	00

Connecticut Yankee Atomic Power Company
362 Injun Hollow Road, East Hampton, CT 06424
860-267-2556

Chain of Custody Form

No. 2004-00244

Project Name: Haddam Neck Decommissioning

Contact Name & Phone:
Pete Hollenbeck 860-267-3923

Analytical Lab (Name, City, State):
General Engineering Laboratories
2040 Savage Road
Charleston, SC 29407
Sarah Kozlik

Priority: ☒ 30 D. ☐ 14 D. ☐ 7 D.
Other:

Lab Use Only
Comments:

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	CHGAM	Sr-90	H-3				Comment, Preservation	Lab Sample ID
7000-0000-011C-1C-01	10/4/04	0930	CT	CR	PB	X	X	X					
7000-0000-011C-1C-02	10/4/04	0930	CT	CR	PB	X	X	X					
7000-0000-011C-2C-03	10/4/04	1015	CT	CR	PB	X	X	X					
7000-0000-011C-3C-04	10/4/04	1050	CT	CR	PB	X	X	X					
7000-0000-011C-3C-05	10/4/04	1050	CT	CR	PB	X	X	X					
7000-0000-010C-1C-01	10/4/04	1350	CT	CR	PB	X	X	X					
7000-0000-010C-1C-02	10/4/04	1350	CT	CR	PB	X	X	X					
7000-0000-010C-2C-03	10/4/04	1455	CT	CR	PB	X	X	X					
7000-0000-010C-3C-04	10/4/04	1650	CT	CR	PB	X	X	X					
7000-0000-010C-3C-05	10/4/04	1650	CT	CR	PB	X	X	X					

NOTES: PO #: 002337 MSR #: 04-3637 ☐ LTP QA ☐ Radwaste QA ☒ Non QA

Samples Shipped Via:
☒ Fed Ex
☐ UPS
☐ Hand
☐ Other ____
7903 0930 5600
Bill of Lading #

Internal Container Temp.: ____ Deg. C

Custody Sealed?
Y ☐ N ☐
Custody Seal Intact?
Y ☐ N ☐

1) Relinquished By	Date/Time	2) Received By	Date/Time
Don Johnson	10-19-04 / 10:45	[illegible]	10/19/04 10:45
3) Relinquished By	Date/Time	4) Received By	Date/Time
5) Relinquished By	Date/Time	6) Received By	Date/Time

Connecticut Yankee Atomic Power Company
362 Injun Hollow Road, East Hampton, CT 06424
860-267-2556

Chain of Custody Form

No. 2004-00243

Project Name: Haddam Neck Decommissioning

Contact Name & Phone:
Pete Hollenbeck 860-267-3923

Analytical Lab (Name, City, State):
General Engineering Laboratories
2040 Savage Road
Charleston, SC 29407
Sarah Kozlik

Priority: ☒ 30 D. ☐ 14 D. ☐ 7 D.
Other:

Lab Use Only
Comments:

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	CHGAM	Sr-90					Comment, Preservation	Lab Sample ID
7000-0000-001S	9/29/04	1455	SE	G	PB	X	X						
7000-0000-002S	9/29/04	1510	SE	G	PB	X	X						
7000-0000-003S	9/29/04	1525	SE	G	PB	X	X						
7000-0000-004S	9/29/04	1535	SE	G	PB	X	X						
7000-0000-005S	9/29/04	1710	SE	G	PB	X	X						
7000-0000-006S	9/29/04	1720	SE	G	PB	X	X						
7000-0000-007S	9/29/04	1022	SE	G	PB	X	X						
7000-0000-008S	9/29/04	1000	SE	G	PB	X	X						

NOTES: PO #: 002337 MSR #: 04-3637 ☐ LTP QA ☐ Radwaste QA ☒ Non QA

Samples Shipped Via:
☒ Fed Ex
☐ UPS
☐ Hand
☐ Other _____
7903 0930 5600
Bill of Lading #

Internal Container Temp.: ____ Deg. C

Custody Sealed? Y ☐ N ☐

Custody Seal Intact? Y ☐ N ☐

1) Relinquished By	Date/Time	2) Received By	Date/Time
Don Johnson	10-19-04 / 10:45	B Mufalls	10/19/04 10:45
3) Relinquished By	Date/Time	4) Received By	Date/Time
5) Relinquished By	Date/Time	6) Received By	Date/Time

Chain of Custody Form

No. 2004-00245

Connecticut Yankee Atomic Power Company
362 Injun Hollow Road, East Hampton, CT 06424
860-267-2556

Project Name: Haddam Neck Decommissioning

Contact Name & Phone:
Pete Hollenbeck 860-267-3923

Analytical Lab (Name, City, State):
General Engineering Laboratories
2040 Savage Road
Charleston, SC 29407
Sarah Kozlik

Priority: ☐ 30 D. ☐ 14 D. ☒ 7 D.
Other:

Lab Use Only
Comments:

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	CHGAM	Sr-90					Comment, Preservation	Lab Sample ID
2228-0000-021L	10/12/04	1000				X	X					4 Containers. No preservation	

NOTES: PO #: 002337 MSR #: 04-3637 ☐ LTP QA ☐ Radwaste QA ☒ Non QA

Analyze entire sample for CHGAM. Filter sample and analyze both the filtrate and water for CHGAM and Sr-90.

1) Relinquished By	Date/Time	2) Received By	Date/Time
Don Johnson	10-19-04/10:45	B Murfall	10/19/04 10:45
3) Relinquished By	Date/Time	4) Received By	Date/Time
5) Relinquished By	Date/Time	6) Received By	Date/Time

Samples Shipped Via:
☒ Fed Ex
☐ UPS
☐ Hand
☐ Other _____
7903 0930 5600
Bill of Lading #

Internal Container Temp.: ____ Deg. C

Custody Sealed? Y ☐ N ☐

Custody Seal Intact? Y ☐ N ☐

From: Origin ID: (860)267-3923
Peter Hollenbeck
CONNECTICUT YANKEE ATOMIC POWER CO
362 INJUN HOLLOW ROAD

EAST HAMPTON, CT 06424

CLS091404/05/06

Ship Date: 19OCT04
Actual Wgt: 48 LB
System#: 4769161/INET1900
Account#: S *********

REF:

Delivery Address Bar Code

SHIP TO: (843)556-8171 BILL SENDER

SARAH KOZLIK
GENERAL ENGINEERING LABS
2040 SAVAGE ROAD

CHARLESTON, SC 29407

COC - 2004-00243
2004-00244
2004-00245

STANDARD OVERNIGHT

WED
Deliver By:
20OCT04

TRK# 7903 0930 5600 FORM 0201

CHS A1

29407 -SC-US

XX CHSA

Shipping Label: Your shipment is complete

1. Use the 'Print' feature from your browser to send this page to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

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Attachment D (Continued)

BRIEFING SHEET

WP&IR No.: 24265-000-GEN-5000-00137-000
Date: 10/5/04
Project Name: Concrete Slab Core Boring
Cognizant Supervisor: P. Hollenbeck
HP Brief Performed by: J. Dorulla
RWP/JS: 4121-1
RSR: 04-04
Work Briefing by: P. Hollenbeck

ACTIVITIES TO BE PERFORMED ☐ **INITIAL** ☒ **DAILY** ☐ **WEEKLY**

Slice concrete and/or bedrock samples

RADIOLOGICAL BRIEFING ITEMS

Yes	No		Yes	No	
☒	☐	Updated/Changed radiological conditions	☒	☐	Areas to enter or avoid
☒	☐	Applicable Rad Safety Controls	☒	☐	Specific Hold Points
☒	☐	Electronic Dosimeter set points	☒	☐	Radiological restrictions or precautions

Special Radiological controls covered in briefing (PC requirements, frisking requirements, etc.):

Special Tools or Materials:

Brick Saw

JOB CHECKLIST

☐	Systems isolated	☐	Asbestos removed	☒	Equipment inspection
☐	System drained	☐	Confined space permit	☐	Rigging review
☒	RWP in place	☐	Scaffold inspected	☒	JSA
☐	Hot work permit in place	☐	Spill containment	☐	ALARA review
☐	Lead permit	☐	Special ventilation	☐	Change in Structural integrity
☐	FSS Authorization	☐	Excavation Permit Requirements		Other :

SPECIAL SAFETY CONSIDERATIONS:
Trip Hazards, Leather Work Gloves, Hardhat, Ear Plugs when cutting, Eye Protection

WORK OBSERVATION REQUIRED ☐ Yes ☒ No

Supervisors responsible for Vendors performing work on site for the first time under the WP&IR shall perform an initial work observation. Additional work observations shall be determined by the Field Engineer or Area Coordinator.
Work Observation shall be performed in accordance with ADM 1.1-255 "Self Assessment and Station Work Observation."

Construction

JAN 22 2004
GPP-GGGC-00001-004
Rev CY 001 Major

Attachment D (Continued)

DAILY BRIEFING SHEET

WP&IR No: 24265-000-GEN-5000-00137-000

RWP/JS 4121-1

DATE: 10/5/04

SIGN-IN SHEET

NAME	E.I.D	NAME	E.I.D.
R Hollenbeck	78812		
J Dorutha	28136		
Hipolito Rivera	85199		
Martin Bachner	85576		

Preliminary Sediment Results in Screenwell Building

Sample	Radionuclide	Result (pCi/g)	10 mrem DCGL (pCi/g)	fDCGL
1	Cs-137	1.03E-01	3.16E+00	3.26E-02
2	Cs-137	1.75E-01	3.16E+00	5.52E-02
3	Cs-137	2.06E-01	3.16E+00	6.50E-02
4	Cs-137	1.90E-01	3.16E+00	6.01E-02
	Co-60	3.88E-02	1.52E+00	2.55E-02
5	Cs-137	2.31E-01	3.16E+00	7.29E-02
6	Cs-137	2.88E-01	3.16E+00	9.10E-02
	Co-60	1.03E-01	1.52E+00	6.75E-02
7	Cs-137	3.19E-01	3.16E+00	1.01E-01
	Co-60	1.80E-01	1.52E+00	1.18E-01
8	Cs-137	2.00E-01	3.16E+00	6.33E-02

Peter D. Hollenbeck

From: Herb C. Scribner
Sent: Thursday, October 07, 2004 11:44 AM
To: Robert Yetter; Peter D. Hollenbeck; John L. Grinley
Cc: Lewis R. Loon; Richard Peacock
Subject: FW: screenwell house and discharge tunnel log

Here are the raw field notes from the screen house characterization, this is not validated, no data is included, not for public distribution

-----Original Message-----
From: Muller, Philip [mailto:PJMULLER@mactec.com]
Sent: Thursday, October 07, 2004 11:14 AM
To: Glucksberg, Nadia; Shephard, Eugene; Herb C. Scribner
Subject: screenwell house and discharge tunnel log

Following is a log of the activities from the screenwell house and discharge tunnel.

On 29 September 2004 a diver entered all pump intake bays to collect sediment samples. Sediment distribution was similar in all bays. There was approximately 24" of sediment in each common bay between the traveling screen and the pumps, and there was approximately 6" of sediment in each individual pump bay. Sediment samples were collected by the divers in each bay at the locations of maximum sediment depth.

On the same day, a diver collected sediment samples from the area in front of the fish frighteners/security screens, on the Connecticut River side of the screenwell house. The warming water header was not observed because approximately 4.5' of sediment covered the pipe. Thus, the sample locations were on top of the warm water header, in front of each intake bay.

A diver walked along the bottom of the river out from the screenwell house to about 40' into the river in order to profile and characterize the river bottom.

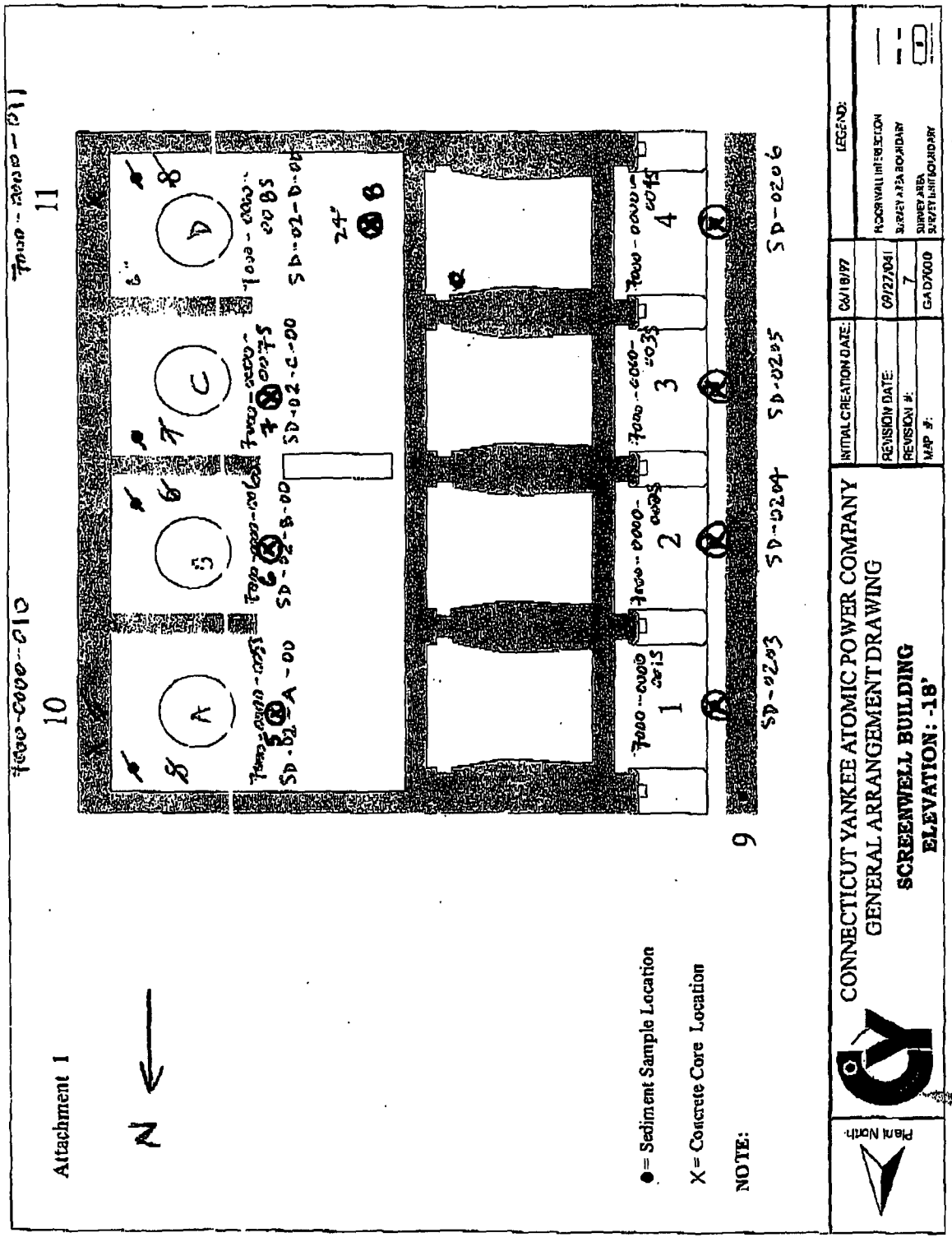
On 4 October 2004 a diver obtained concrete cores through the east wall in Bay A and Bay D. The concrete cores were 36" long and 4" dia. The cores were obtained about 3' off of the floor and 3' from the north and south walls.

Two divers collected a sediment sample at the area of the butterfly valve at the head of the warm water return line in the west discharge tunnel on 5 October 2004. The sediment in this area was only 2" thick.

All sediment was split for chemical and RAD analyses. Pete Hollenbeck has all RAD samples and the concrete cores. All samples for chemical analysis have been sent to STL in Shelton, CT.

Survey/Sampling Work Plan – SSWP

Attachment 1 – Sample Location Map



MACTEC

FACSIMILE TRANSMITTAL SHEET

TO: Pete Hollenbeck
COMPANY:
PHONE:
FAX: 860 267 3120
SUBJECT:
 # PAGES:
(incl Cover)

FROM: Phil Muller
DATE: 10/11/04
PHONE: (603) 889-3737
FAX: (603) 880-6111
Hard Copy to Follow: ☐ Yes ☑ No
COPIES:

COMMENTS:

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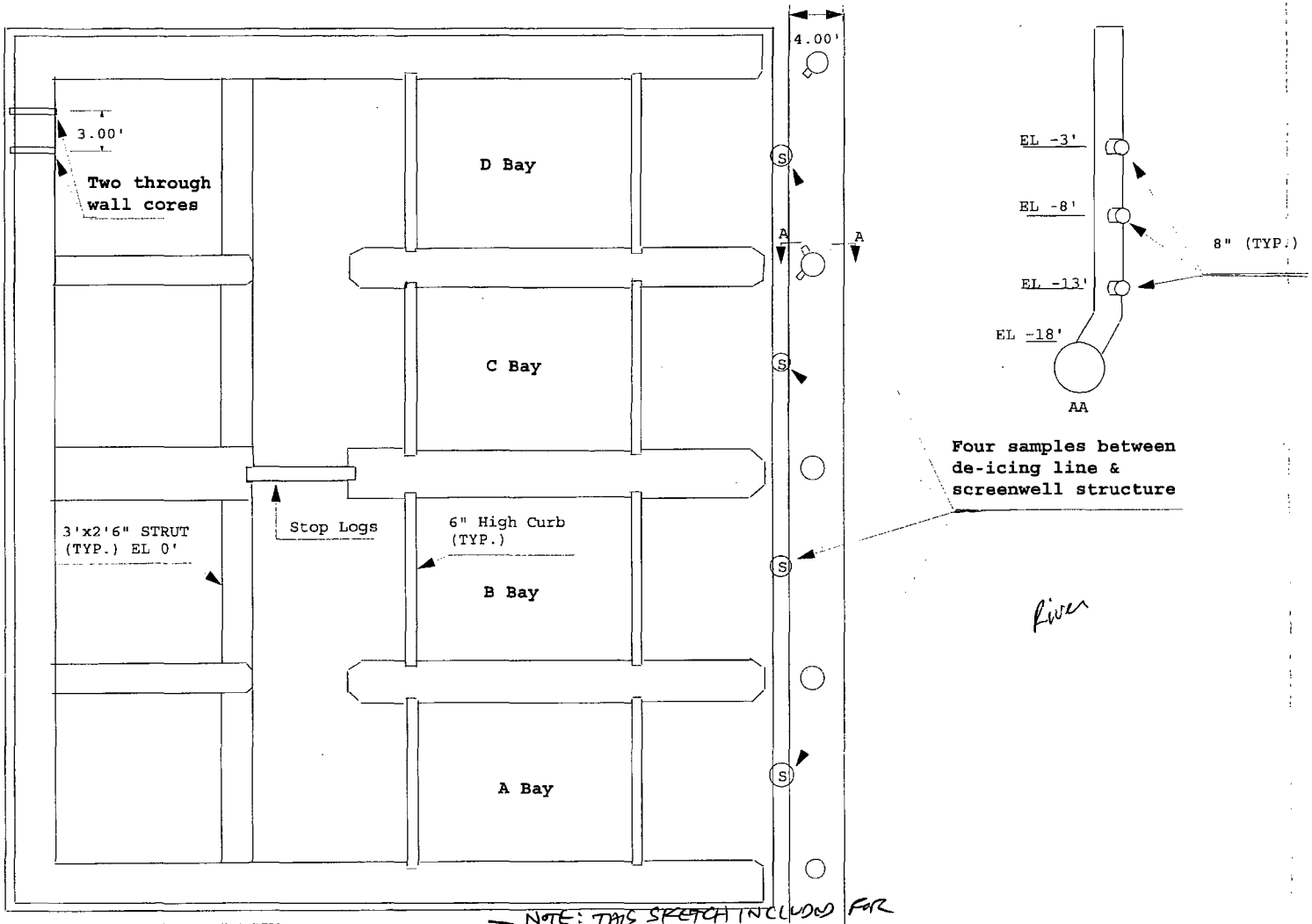

ATTACHMENT
000-MEC-5000-1088-000-06

Screenwell Plan View

NOTE: THIS SKETCH INCLUDED FOR INFO ONLY. SEE THE WPIR REFERENCED FOR OFFICIAL RECORD. AB 5/10/06

N

-18' elevation

16103-20085\2

Attachment 9

Technical Support Document CY - HP - 0184, Rev. 0, Estimates for Release of Radionuclides from Potentially Contaminated Concrete At the Haddam Neck Nuclear Plant; Terry Sullivan, Brookhaven National Laboratory Environmental Waste Technology Center, October 2004.

CONNECTICUT YANKEE ATOMIC POWER COMPANY

Connecticut Yankee Decommissioning

Health Physics Department Technical Support Document

HP Number: CY-HP-0184 Revision #: 0

Subject: Estimates for Release of Radionuclides from Potentially Contaminated Concrete at the Haddam Neck Nuclear Plant

Date: 11/17/04

Performed By: Clyde T. Newson Clyde T. Newson Date: 11/17/04

Reviewed By: R.N. McGrath Date: 11/17/04

Approved By: Terence R Peacock Date: 11/17/04

1.0 INTRODUCTION

The purpose of this Technical Support Document (TSD) is to incorporate a technical document into the Health Physics Department administration and control program.

The attached document calculates a conservative relationship between the radionuclide concentration of subsurface concrete and the maximum groundwater concentration (pCi/L) for the concrete that may remain following license termination at Connecticut Yankee.

The attached study will be used to provide technical support for a License Termination Plan (LTP) amendment submittal to the Nuclear Regulatory Commission (NRC).

2.0 DISCUSSION

Connecticut Yankee has contracted the Department of Energy, Brookhaven National Laboratory, Environmental Waste Technology Center, to perform the attached study for potentially radionuclide contaminated concrete and its relationship to the maximum groundwater concentrations that may remain at the Haddam Neck Plant site following the termination of the NRC license.

The document, Attachment 1, **Estimates for Release of Radionuclides from Potentially Contaminated Concrete At the Haddam Neck Nuclear Plant,** is being incorporated into the Health Physics Department Administration and Control through reference 1.

The document has been reviewed and accepted for accuracy.

3.0 CONCLUSION

Attachment 1, provides the technical information needed to support the CY LTP amendment request.

The document has been reviewed for accuracy and is accepted to become Attachment 1 of this Technical Support Document.

4.0 REFERENCES

4.1 RPM 1.1-3, Health Physics Department Self Assessments and Technical Support Documents, 24265-000-GPP-GGGR-R1100-002-Rev. CY-000

5.0 ATTACHMENTS

5.1 Estimates for Release of Radionuclides from Potentially Contaminated Concrete At the Haddam Neck Nuclear Plant, CY-HP-0184, Rev. 0.

ATTACHMENT 1

Estimates for Release of Radionuclides from Potentially Contaminated Concrete At the Haddam Neck Nuclear Plant

Estimates for Release of Radionuclides from Potentially Contaminated Concrete At the Haddam Neck Nuclear Plant

November 15, 2004
Revision 0

Terry Sullivan

Brookhaven National Laboratory

Environmental Waste Technology Center

Table of Contents

THE PURPOSE OF THIS TECHNICAL SUPPORT DOCUMENT (TSD) IS TO INCORPORATE A TECHNICAL DOCUMENT INTO THE HEALTH PHYSICS DEPARTMENT ADMINISTRATION AND CONTROL PROGRAM....2

THE ATTACHED DOCUMENT CALCULATES A CONSERVATIVE RELATIONSHIP BETWEEN THE RADIONUCLIDE CONCENTRATION OF SUBSURFACE CONCRETE AND THE MAXIMUM GROUNDWATER CONCENTRATION (PCI/L) FOR THE CONCRETE THAT MAY REMAIN FOLLOWING LICENSE TERMINATION AT CONNECTICUT YANKEE. 2

2.0 DISCUSSION....2

3.0 CONCLUSION....2

ATTACHMENT 1, PROVIDES THE TECHNICAL INFORMATION NEEDED TO SUPPORT THE CY LTP AMENDMENT REQUEST. 2

4.0 REFERENCES....2

1) INTRODUCTION....8

1.1 OBJECTIVE:....9
1.2 APPROACH:....9

2) INVENTORY....10

3) KEY RADIONUCLIDES....11

4) RELEASE RATE FROM THE CONCRETE....11

4.1) EXPERIMENTAL DIFFUSION COEFFICIENTS....12
4.2) CALCULATED DIFFUSION-CONTROLLED RELEASE RATES....13

5) MAXIMUM WATER CONCENTRATION....19

5.1) SORPTION....20
5.2) MAXIMUM WATER INVENTORY....21
5.3) MAXIMUM WATER CONCENTRATION....24

6) DISCUSSION....28

6.1) IMPACTS OF REBAR ON PREDICTED RELEASE....28

7) TEMPLATE FOR OTHER RADIONUCLIDES OR CONDITIONS....29

8) CONCLUSIONS....31

9) REFERENCES....31

APPENDIX A: SUBSURFACE BUILDING DIMENSIONS....33

A.1 CONTAINMENT BUILDING:....33

A.2 SPENT FUEL BUILDING:.....36

Table of Figures

Figure 1 Schematic diagram of potentially contaminated subsurface concrete. 8
Figure 2 Comparison of cumulative fractional release and actual curies in solution for Sr-90 released from the east wall of the spent fuel pool. 23

List of Tables

Table 1 Activity Inventory per unit contaminant loading of 1 pCi/g in the concrete. 10
Table 2 Concrete diffusion coefficients selected from the literature for evaluation of release 13
Table 3 Geometrical factors for plane geometry subsurface structures. 14
Table 4 Geometrical factors for cylindrical geometry subsurface structures. 15
Table 5 Tritium maximum yearly curies release for subsurface structures 16
Table 6 Iron maximum yearly curies release for subsurface structures. 17
Table 7 Cobalt maximum yearly curies release for subsurface structures. 17
Table 8 Strontium maximum yearly curies release for subsurface structures 18
Table 9 Cesium maximum yearly curies release for subsurface structures 18
Table 10 Europium maximum yearly curies release for subsurface structures 19
Table 11 Average measured distribution coefficient (K_d) (Fuhrmann, 2004). 20
Table 12 Ratio of mass in the water to total mass as a function of distribution coefficient (K_d). 21
Table 13 Saturated zone flow parameters 21
Table 14 Maximum build-up factors for water concentrations. 23
Table 15 Predicted maximum tritium water concentrations from subsurface facilities uniformly contaminated to 1 pCi/g. 25
Table 16 Predicted maximum Fe-55 water concentrations from subsurface facilities uniformly contaminated to 1 pCi/g. 25
Table 17 Predicted maximum cobalt water concentrations from subsurface facilities uniformly contaminated to 1 pCi/g. 26
Table 18 Predicted maximum strontium water concentrations from subsurface facilities uniformly contaminated to 1 pCi/g. 26
Table 19 Predicted maximum cesium water concentrations from subsurface facilities uniformly contaminated to 1 pCi/g. 27
Table 20 Predicted maximum europium water concentrations from subsurface facilities uniformly contaminated to 1 pCi/g. 27
Table 21 Maximum water concentration from all sources for each radionuclide for concrete concentration of 1 pCi/g. 28
Table 22 Cement diffusion coefficients (adapted from Serne, 2001). 30

Estimates for Release of Radionuclides from Potentially Contaminated Concrete At the Haddam Neck Nuclear Power Station

1) Introduction

Decommissioning of the Haddam Neck Nuclear Power Plant operated by Connecticut Yankee is in progress. Figure 1 shows a schematic of the Containment Building and Spent Fuel Pool (SFP) Building.

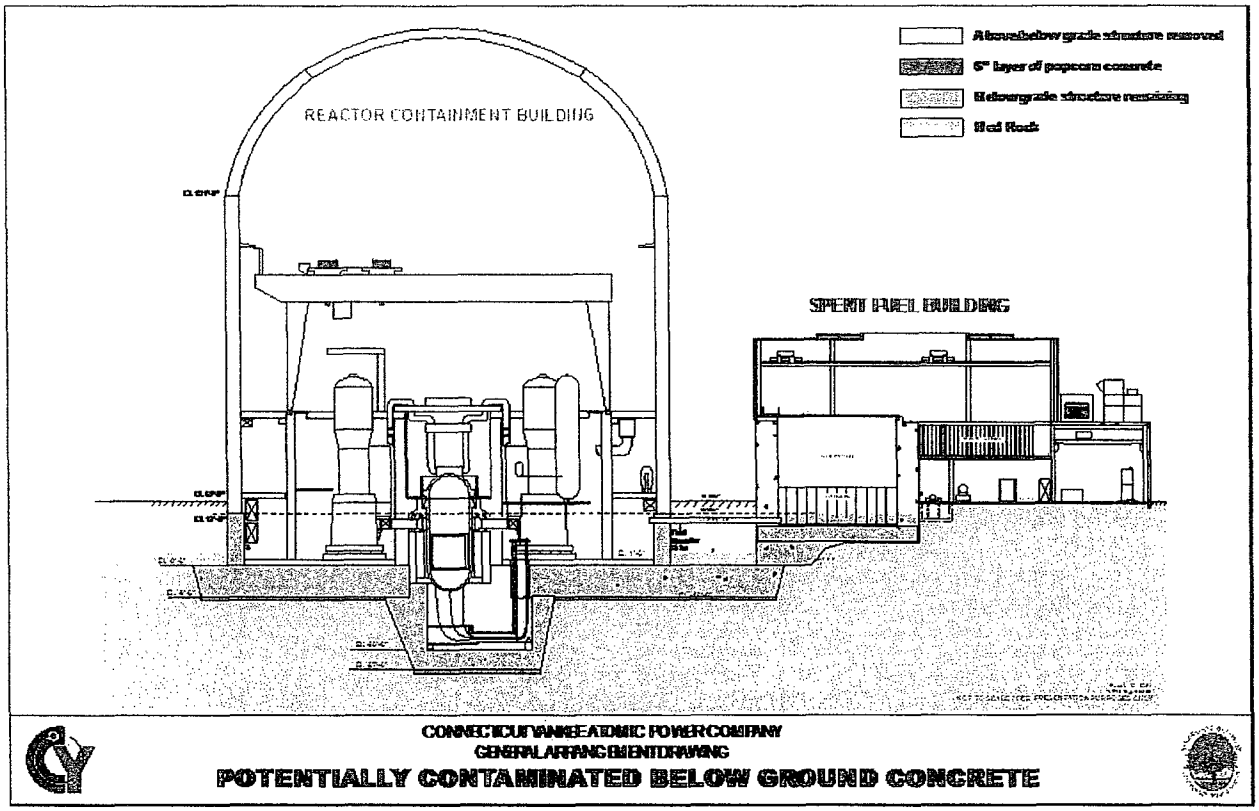

Figure 1 Schematic diagram of potentially contaminated subsurface concrete.

Consideration is being given to leaving some subsurface concrete from the Containment, Spent Fuel and certain other buildings in place following NRC license termination. Characterization data of most of these structures show small amounts of residual contamination. The In-Core Sump area of the Containment Building has shown elevated levels of tritium, Co-60, Fe-55, and Eu-152 and lesser quantities of other radionuclides due to neutron activation of the concrete in this area. This analysis is provided to determine levels of residual contamination that will not cause releases to the groundwater in excess of the acceptable dose limits.

1.1 Objective:

Calculate a conservative relationship between the radionuclide concentration of subsurface concrete and the maximum groundwater concentration (pCi/L) for the concrete that may remain following license termination at Connecticut Yankee.

1.2 Approach:

a) Determine the inventory. Based on dimensions of subsurface structures, estimates of the total inventory will be obtained for a unit concrete concentration of 1 pCi/g. The use of a unit inventory will allow scaling to actual values once characterization is complete. The calculation will allow determination of a maximum groundwater concentration in the basement once decontamination is completed and the basement backfilled.

b) Select key radionuclides. Characterization data have shown that H-3 is the most widespread concrete contaminant with by far the highest levels in the In-core Sump area. The In-core sump area concrete also has elevated levels of Fe-55, Eu-152 and to a lesser extent Co-60. Low volumetric concentrations of Sr-90 and Cs-137 have also been measured in the concrete in certain other subsurface structures. A template will be developed that will allow Connecticut Yankee to assess any radionuclide that is detected at concentrations greater than the Minimum Detectable Activity.

c) Calculate release rates from the concrete. Assume diffusion-controlled release from the concrete using literature values for diffusion coefficients, and dimensions of subsurface structures. The in-core sump will be rendered inaccessible using flowable fill. Diffusion of radionuclides through this material into the containment basement will be included in the determination of groundwater concentrations.

d) Calculate maximum groundwater concentration based on the maximum water concentration and the volume of water in the remaining containment structure. This approach uses the diffusion-controlled release model to calculate the maximum activity available to the water. For diffusion-controlled release, the maximum release rate occurs in the first year and continually decreases. The released activity undergoes radioactive decay. The maximum activity is calculated from a balance of release rates due to diffusion and the radioactive decay rate. At some point, the release rate equals the radioactive decay rate. At this time, the maximum activity available to the water is calculated. This approach does not account for transport away from the concrete structures due to the flow of groundwater through and around basements that would lead to lower available activity concentration in groundwater. Using the maximum activity available to the water, sorption effects on the backfill soil are considered and the concentration in the water is calculated based on the volume of water in the remaining containment structure.

In the above approach, consideration was given to using the annual well pumping volume (885 m^3/yr) as opposed to the volume of water in the containment structure (1,370 m^3) as the mixing volume. As it is assumed that the contamination is instantly distributed uniformly throughout the entire containment volume, the containment volume is the appropriate choice for calculating groundwater concentration.

2) Inventory

The inventory determined below uses the volume of concrete and the assumption that the concrete is uniformly contaminated at a concentration of 1 pCi/g. Calibration to measured inventories will be achieved by multiplying the values calculated at 1 pCi/g by the average measured or estimated concentration in each subsurface structure once sufficient characterization data are available to ensure that the data is representative or conservative.

Values for concrete volume for the Containment and SFP building are in Appendix A. The In-core sump has a complicated geometry and it is expected that the side walls of the sump will have different activation levels than the floor level. For this reason, the In-core sump is represented by 3 regions. A circular top region which is 11.5 ft high having a radius of 8 ft and thickness of 2 ft. The bottom region has identical geometry. The floor is represented as a circular disk with a 10 ft radius and 2 ft thickness. Analysis was performed for the exterior wall, mat, the in-core sump beneath the reactor in the containment building and for the walls and floor of the Spent Fuel Pool. Contaminant levels in the upper-half walls of the In-core sump(below the ledge that supported the Neutron Shield Tank) are expected to be much higher than in the lower half walls due to the greater neutron flux experienced in this region. Therefore, the cylindrical portion of the in-core sump was divided into two regions for the analysis.

An example of the inventory calculation for each structure follows:

Volume of containment wall –	35,496 ft^3
Concrete density –	150 lbs/ft^3
Concrete Mass –	5.3×10^6 lbs = 2.4×10^9 gms.
Inventory at 1 pCi/g -	2.4×10^{-3} Ci.

Table 1 Activity Inventory per unit contaminant loading of 1 pCi/g in the concrete.

Region	Volume (ft^3)	Curies at Unit Activity Concentration (Ci)/(pCi/g)
Containment Building		
Containment Wall	35,496	2.4×10^{-3}
Containment Mat	164,511	1.12×10^{-2}
In-core sump top section	1,301	8.9×10^{-5}
In-core sump bottom section	1,301	8.9×10^{-5}
In-core sump floor	628	4.28×10^{-5}
Total	229,580	1.51×10^{-2}
Spent Fuel Pool		
Wall Volume	8,173	5.6×10^{-4}

Floor Volume	14,128	1.0×10^{-3}
Total	22,301	1.56×10^{-3}

*Based on uniform contamination at 1 pCi/g.

3) Key Radionuclides

Preliminary volumetric concrete samples have found H-3, Co-60, and Eu-152 in the walls and floors of certain basements at Connecticut Yankee. Fe-55, Sr-90 and Cs-137 have been also found in less significant quantities. If characterization data finds appreciable levels of other radionuclides calculations can be performed as needed.

4) Release Rate from the Concrete

Rather than assuming that the entire radioactivity inventory is instantly transferred from the concrete into the groundwater (as was assumed in the revision 1a of the CY LTP), a more realistic diffusion-based transfer is assumed. A large body of experimental data suggests that diffusion controls the release out of concrete (Serne, 1992, Sullivan, 1993). Therefore, a more realistic conceptual model for estimating release from the contaminated concrete assumes that diffusion is the rate-controlling mechanism.

The diffusion process in concretes is slow and even for the radionuclides with the highest diffusion coefficient, such as H-3; transport is limited to 15 to 20 cm/yr. The subsurface structures are several meters in thickness and thus, release can be modelled assuming that the solid can be modelled as a semi-infinite media. This approximation assumes that depletion effects due to the finite-size of the contaminated region are not important. However, geometry effects are incorporated through calculating the surface area to volume ratio of the contaminated region. The assumption that depletion is not important is accurate until a fractional release rate of 20%. After this point, the semi-infinite media approximation overpredicts releases.

Diffusion-controlled release from a semi-infinite media of a non-radioactive substance can be described using the equation (Sullivan, 1988)

$$CFR = 2 \times f \times (SA/V) \times (Dt/\pi)^{0.5} \qquad (1)$$

Where CFR = cumulative fractional release of the material.
f = conversion factor = 0.01 m/cm
SA = surface area (m^2)
V = volume of concrete (m^3)
D = diffusion coefficient (cm^2/s), and
t = time (s)

The semi-infinite media approximation is valid for a cumulative fractional release of up to 0.2 (or 20% of the entire inventory) (Sullivan, 1988). At CFR values above 20%, the semi-infinite media predicts higher CFR than finite geometry models due to depletion effects. Therefore, the use of Eqn.

1 is conservative. The use of Eqn (1) to estimate CFR is appropriate as demonstrated in the results presented in Tables 5 thru 10. Only one area and one isotope (tritium) exceed a cumulative fractional release of 20 % in one year making this assumption valid. Analytical models that account for finite geometry and depletion effects are available for estimating higher fractional release values (Sullivan, 1988). The influence of radioactive decay is considered in a separate step of this analysis.

For the Connecticut Yankee system, two geometries are considered in the modelling. Plane geometry is applied to walls, including the containment building wall, and floors. Cylindrical geometry is applied to the containment mat. For planar geometry, the surface area, SA_p, is:

$$SA_p = 2 \times (H \times W + W \times D + D \times H) \quad (2)$$

Where H = wall height (m)
W = wall width (m)
D = wall depth (m)

The volume, V_p, is:

$$V_p = H \times W \times D \quad (3)$$

For cylindrical geometry, the surface area, Sa_c, is:

$$Sa_c = 2 \times \pi \times R \times (R + H) \quad (4)$$

Where R = radius (m)
and H = height (m)

The volume, V_c, is:

$$V_c = \pi \times R^2 \times H. \quad (5)$$

Equations 1 – 5 can be used to estimate the cumulative fractional release from the subsurface structures at the Haddam Neck Plant (HNP). This approach calculates the release out of all surfaces of the structures.

With diffusion controlled processes and a homogeneous distribution of radionuclides in the concrete, the maximum yearly release occurs in the first year.

4.1) Experimental Diffusion Coefficients

There are a number of studies in the literature pertaining to diffusion of radionuclides through concrete. The radionuclides that have been identified as volumetric contaminants in concrete at Haddam Neck include: H-3, Fe-55. Co-60, Sr-90, Cs-137 and Eu-152. Table 2 summarizes the literature values and provide the value selected for use during the analysis. For the purposes of analysis, the largest diffusion coefficient values found in the literature were used as they provide an

upper bound on diffusive releases. Studies conducted for the diffusion in concrete of Cs-137 and Co-60 from the Haddam Neck Plant (Mattigood, 2002) had measured values that are two to five orders of magnitude lower than in other studies. Release rates are proportional to the square root of the diffusion coefficient (Eqn. 1). This suggests that the release rate values used in these simulations for Cs-137 and Co-60 will be at least one order of magnitude higher than the values expected based on the measured diffusion coefficients. In addition, it is likely that the predicted release rates of other radionuclides (H-3, Fe-55. Eu-152, and Sr-90) may be much higher than the actual values as conservative values were selected for the diffusion coefficients. Some of the conservatism currently in the calculation can be removed (i.e., lower diffusion coefficient) if site-specific data are used.

Table 2 Concrete diffusion coefficients selected from the literature for evaluation of release

Radionuclide	Literature Diffusion Coefficient Values (cm^2/s)	References	Selected Diffusion Coefficient (cm^2/s)
H-3	6.0×10^{-9} - 5.5×10^{-7}	Matsuzuro, 1976; Serne, 2001; Szanto, 2002	5.5×10^{-7}
Fe-55	5.0×10^{-11}	Serne, 1992	5.0×10^{-11}
Co-60	4.0×10^{-15} - 4.0×10^{-11}	Mattigood, 2002; Muurinen, 1983	4.0×10^{-11}
Sr-90	1.0×10^{-11} - 5.2×10^{-10}	Sullivan, 1988	5.2×10^{-10}
Cs-137	2.7×10^{-15} - 3.0×10^{-9}	Mattigood, 2002; Atkinson, 1986	3.0×10^{-09}
Eu-152	1.0×10^{-11}	Serne, 1992	1.0×10^{-11}

4.2) Calculated Diffusion-controlled Release Rates

Facility dimensions were used with equations 1 – 5 and the selected diffusion coefficients to estimate diffusion-controlled release from the subsurface concrete structures uniformly contaminated to 1 pCi/g. Table 3 summarizes the geometry used to model release and surface area to volume ratio for subsurface structures modeled in plane geometry. The containment wall is modeled in planar geometry although it is cylindrical. This assumption is valid because of the long length of the structure relative to the thickness of the walls. Thus, curvature effects are minimal. The concrete around the pressure vessel is also modeled using planar geometry. The length used in the calculations was selected to conserve the volume of the cylindrical surfaces (e.g. containment wall and around the pressure vessel). It is approximately equivalent to a radius that is the average of the inner and outer radii of the wall.

The containment mat underlies the entire containment building and is essentially cylindrical in shape. However, internal sections of the cylinder are missing for the in core sump. As a first approximation, it is assumed that the mat is continuous and 9.5 feet thick with a radius of the mat is 75.5 ft. Using these values, the calculated volume is 170,125 ft^3. Engineering drawings indicate the containment mat has a volume of 164,511 ft^3. For the purposes of estimating release, the larger volume will be

used. This will increase the total inventory available for release by the ratio of the estimated to actual volume. The floor of the In-core sump was also modeled in cylindrical geometry. Table 4 presents the values used in the analysis.

Part of the walls of the containment building (approximately the top nine feet) and the walls of the SFP will be above the water table. For conservatism, it is assumed that release from these walls occurs at the same rate as if they were below the water table and that the released contaminants are immediately in the saturated zone. In practice, it would take additional time for these releases to reach the water table. The amount of time would depend upon flow and sorption characteristics of the unsaturated zone but could be tens of years for radionuclides that have a high degree of sorption.

Table 3 Geometrical factors for plane geometry subsurface structures.

Location	Height (ft)	Width (ft)	Length (ft)	Volume (ft^3)	SA_p/V_p (1/ft)
SPENT FUEL POOL					
North Wall	8	6	49	2,352	0.62
South Wall	8	6	49	2,352	0.62
East Wall	8	6	36	1,728	0.64
West Wall	8	6	36	1,728	0.64
Floor	6	48	49	14,112	0.42
Additional Floor*	6	3.5	3.5	74	1.48
CONTAINMENT BUILDING					
Wall**	18	4.5	438.2	35,496	0.56
PLENUM AROUND REACTOR					
In-core sump top section	11.5	2	56.5	1,301	1.21
In-core sump bottom section	11.5	2	56.5	1,301	1.21

* Actual dimensions of the pool floor are complicated by irregular geometry. Total volume of pool floor was estimated to be 14,184 ft^3 (Appendix A). The additional floor adds 74 ft^3 of volume to make the total volume match the estimated volume. Due to its high SA/V ratio, it will release a higher fraction of radionuclides than other subsurface components.

** Containment building is cylindrical, but the wall is modeled as a plane. This is a good approximation due to the long length relative to height or width.

Table 4 Geometrical factors for cylindrical geometry subsurface structures.

Location	Height (ft)	Radius (ft)	Volume (ft^3)	SA_c/V_c (1/ft)
Containment Mat	9.5	75.5	170,125	0.24
In-core sump floor	2	10	628	1.2

The total curies released, M_t, over the first year is obtained from the following expression.

$$M_t = CFR_s\ (1\ \text{year}) * I_s \qquad (6)$$

Where CFR_s(1year) = cumulative fractional release from a subsurface facility in 1 year.
I_s = total inventory of the subsurface facility (Curies).

The In-core sump will be filled with a flow able grout from elevations -20'6" to 0' 6'. The top of the fill will be 2.5 feet above the expected highest elevation of activated concrete. Therefore, even after release from the activated concrete walls, the radionuclides will need to diffuse through a minimum of 2.5 feet of grout fill. To evaluate the maximum release from the In-core sump region calculations were performed for 2 feet of contaminated concrete of 1 pCi/g covered by 2.5 feet of uncontaminated grout fill. The diffusion coefficient in the grout and concrete were selected to be identical (Table 2). as these materials should behave similarly and the values in Table 2 were the highest found in the literature for cement. The calculations show that 2.5 feet of clean grout was an effective barrier to release. The tritium release in the first year from the In-core top section was reduced from 1.57×10^{-5} Ci to 3.74×10^{-8} Ci. The release of other radionuclides decreased by more than seven orders of magnitude due to their lower diffusion coefficients and short half-lifes. The maximum release rate of any radionuclide, other than H-3, is less than 1 pCi/yr. Therefore, these projected releases are inconsequential as compared to projected releases from other components of the system.

Tables 5 – 10 summarize the predicted release rates for the Spent Fuel Pool and Containment Building over the first year for H-3, Fe-55, Co-60, Sr-90, Cs-137, and Eu-152. In these tables, the predicted release rate from the In-core sump is less than 1 pCi/yr for all radionuclides other than H-3. For conservatism, the release rate from each section of the In-core sump has been set to 1×10^{-12} Ci/yr (1 pCi/yr) for all radionuclides other than H-3. H-3 release rates were set to the values calculated for having 2.5 feet of clean grout backfill. These tables contain:

- the inventory in each subsurface structure based on a uniform contamination level of 1 pCi/g,
- % of total inventory for the structure. Defined as 100 times the ratio of the inventory of the structure to the inventory of all structures.
- the maximum yearly fractional release from the facility (CFR (1 year)). These values were derived from Equation 1, the geometry factors in Tables 3 and 4, and diffusion coefficients in Table 2.
- the total radioactivity released (Ci)
- % of total released from the structure. Defined as 100 times the ratio of the curies released from the facility to the curies released from all facilities.

Tables 5 - 10 show that the majority of the concrete mass is in the containment mat and this facility has the highest predicted release accounting for over 56% of the total assuming that all facilities have an initial assumed concentration of 1 pCi/g. The containment building is predicted to release 84% of the total radioactivity released. The grout backfill effectively reduces release from the In-core sump to far less than 1% of the total release from all contaminated walls. For a uniform initial concentration in the subsurface concrete, diffusion limits release to less than 5% of the H-3 inventory, less than 0.05% of the Fe-55 inventory, less than 0.04% of the Co-60 inventory, less than 0.15% of the Sr-90 inventory, less than 0.35% of the Cs-137 inventory and less than 0.02% of the Eu-152 inventory. Although the above percentages are subject to change as the actual characterization data is applied to the unitized values used here, the above gives a sense of the relative contributions to future groundwater activity from the different plant areas.

Characterization data are still being collected. A spatial distribution of contaminant levels is expected throughout the core samples. Modeling studies (Sullivan, 2004) indicate that with the high diffusion coefficient of H-3, tritium residing within the first eight inches (20 cm) of the surface can contribute to the peak release rate rate (first year) from the concrete. For Sr-90, due to its lower diffusion coefficient, radionuclides within the first inch of the surface contribute to peak release. Therefore, the H-3 concentrations will be assessed using an average concentration in the first eight inches from each surface and all other radionuclides will be assessed using an average depth of 1 inch. Although the peak release for a diffusion-controlled release is only influenced by the concentrations within the first few inches of the surface, the inventory of the entire mass of concrete is used in calculating the release in the model for consistency with the geometry used.

Table 5 Tritium maximum yearly curies release for subsurface structures

Radionuclide	Facility	Inventory (Ci)	% of Inventory	Maximum Yearly Release CFR(1)	Released (Ci)	% of total released
H-3	Containment mat	1.16E-02	73.6	3.49E-02	4.04E-04	56.6
H-3	Containment wall	2.42E-03	15.3	8.23E-02	1.99E-04	27.8
H-3	SFP North	1.60E-04	1.0	9.16E-02	1.47E-05	2.1
H-3	SFP South	1.60E-04	1.0	9.16E-02	1.47E-05	2.1
H-3	SFP East	1.18E-04	0.7	9.38E-02	1.11E-05	1.5
H-3	SFP West	1.18E-04	0.7	9.38E-02	1.11E-05	1.5
H-3	SFP Floor	9.62E-04	6.1	6.11E-02	5.87E-05	8.2
H-3	SFP additional	4.81E-06	0.03	2.17E-01	1.04E-06	0.1
H-3	In-core sump top	8.86E-05	0.6	4.22E-04	3.74E-08	0.0
H-3	In-core sump bottom	8.86E-05	0.6	4.22E-04	3.74E-08	0.0
H-3	In-core sump floor	4.28E-05	0.3	3.58E-04	1.53E-08	0.0
TOTAL		1.58E-02			7.15E-04	

Table 6 Iron maximum yearly curies release for subsurface structures

Radionuclide	Facility	Inventory (Ci)	% of Inventory	Maximum Yearly Release CFR(1)	Released (Ci)	% of total released
Fe-55	Containment mat	1.16E-02	73.6	3.49E-04	4.04E-06	56.6
Fe-55	Containment wall	2.42E-03	15.3	8.23E-04	1.99E-06	27.8
Fe-55	SFP North	1.60E-04	1.0	9.16E-04	1.47E-07	2.1
Fe-55	SFP South	1.60E-04	1.0	9.16E-04	1.47E-07	2.1
Fe-55	SFP East	1.18E-04	0.7	9.38E-04	1.11E-07	1.5
Fe-55	SFP West	1.18E-04	0.7	9.38E-04	1.11E-07	1.5
Fe-55	SFP Floor	9.62E-04	6.1	6.11E-04	5.87E-07	8.2
Fe-55	SFP additional	4.81E-06	0.03	2.17E-03	1.04E-08	0.1
Fe-55	In-core sump top	8.86E-05	0.6	1.13E-08	1.00E-12	0.0
Fe-55	In-core sump bottom	8.86E-05	0.6	1.13E-08	1.00E-12	0.0
Fe-55	In-core sump floor	4.28E-05	0.3	2.34E-08	1.00E-12	0.0
Total		1.58E-02			7.15E-06	

Table 7 Cobalt maximum yearly curies release for subsurface structures

Radionuclide	Facility	Inventory (Ci)	% of Inventory	Maximum Yearly Release CFR(1)	Released (Ci)	% of total released
Co-60	Containment mat	1.16E-02	73.6	3.12E-04	3.62E-06	56.6
Co-60	Containment wall	2.42E-03	15.3	7.36E-04	1.78E-06	27.8
Co-60	SFP North	1.60E-04	1.0	8.20E-04	1.32E-07	2.1
Co-60	SFP South	1.60E-04	1.0	8.20E-04	1.32E-07	2.1
Co-60	SFP East	1.18E-04	0.7	8.39E-04	9.89E-08	1.5
Co-60	SFP West	1.18E-04	0.7	8.39E-04	9.89E-08	1.5
Co-60	SFP Floor	9.62E-04	6.1	5.46E-04	5.25E-07	8.2
Co-60	SFP additional	4.81E-06	0.03	1.94E-03	9.32E-09	0.1
Co-60	In-core sump top	8.86E-05	0.6	1.13E-08	1.00E-12	0.0
Co-60	In-core sump bottom	8.86E-05	0.6	1.13E-08	1.00E-12	0.0
Co-60	In-core sump floor	4.28E-05	0.3	2.34E-08	1.00E-12	0.0
Total		1.58E-02			6.39E-06	

Table 8 Strontium maximum yearly curies release for subsurface structures

Radionuclide	Facility	Inventory (Ci)	% of Inventory	Maximum Yearly Release CFR(1)	Released (Ci)	% of total released
Sr-90	Containment mat	1.16E-02	73.6	1.12E-03	1.30E-05	56.6
Sr-90	Containment wall	2.42E-03	15.3	2.65E-03	6.42E-06	27.8
Sr-90	SFP North	1.60E-04	1.0	2.96E-03	4.74E-07	2.1
Sr-90	SFP South	1.60E-04	1.0	2.96E-03	4.74E-07	2.1
Sr-90	SFP East	1.18E-04	0.7	3.03E-03	3.57E-07	1.5
Sr-90	SFP West	1.18E-04	0.7	3.03E-03	3.57E-07	1.5
Sr-90	SFP Floor	9.62E-04	6.1	1.97E-03	1.89E-06	8.2
Sr-90	SFP additional	4.81E-06	0.0	6.99E-03	3.36E-08	0.1
Sr-90	In-core sump top	8.86E-05	0.6	5.73E-03	1.00E-12	0.0
Sr-90	In-core sump bottom	8.86E-05	0.6	5.73E-03	1.00E-12	0.0
Sr-90	In-core sump floor	4.28E-05	0.3	4.86E-03	1.00E-12	0.0
Total		1.58E-02			2.30E-05	

Table 9 Cesium maximum yearly curies release for subsurface structures

Radionuclide	Facility	Inventory (Ci)	% of Inventory	Maximum Yearly Release CFR(1)	Released (Ci)	% of total released
Cs-137	Containment mat	1.16E-02	73.6	2.70E-03	3.13E-05	56.6
Cs-137	Containment wall	2.42E-03	15.3	6.37E-03	1.54E-05	27.8
Cs-137	SFP North	1.60E-04	1.0	7.10E-03	1.14E-06	2.1
Cs-137	SFP South	1.60E-04	1.0	7.10E-03	1.14E-06	2.1
Cs-137	SFP East	1.18E-04	0.7	7.27E-03	8.56E-07	1.5
Cs-137	SFP West	1.18E-04	0.7	7.27E-03	8.56E-07	1.5
Cs-137	SFP Floor	9.62E-04	6.1	4.73E-03	4.55E-06	8.2
Cs-137	SFP additional	4.81E-06	0.0	1.68E-02	8.07E-08	0.1
Cs-137	In-core sump top	8.86E-05	0.6	1.13E-08	1.00E-12	0.0
Cs-137	In-core sump bottom	8.86E-05	0.6	1.13E-08	1.00E-12	0.0
Cs-137	In-core sump floor	4.28E-05	0.3	2.34E-08	1.00E-12	0.0
Total		1.58E-02			5.54E-05	

Table 10 Europium maximum yearly curies release for subsurface structures

Radionuclide	Facility	Inventory (Ci)	% of Inventory	Maximum Yearly Release CFR(1)	Released (Ci)	% of total released
Eu-152	Containment mat	1.16E-02	73.6	1.56E-04	1.81E-06	56.6
Eu-152	Containment wall	2.42E-03	15.3	3.68E-04	8.90E-07	27.8
Eu-152	SFP North	1.60E-04	1.0	4.10E-04	6.58E-08	2.1
Eu-152	SFP South	1.60E-04	1.0	4.10E-04	6.58E-08	2.1
Eu-152	SFP East	1.18E-04	0.7	4.20E-04	4.94E-08	1.5
Eu-152	SFP West	1.18E-04	0.7	4.20E-04	4.94E-08	1.5
Eu-152	SFP Floor	9.62E-04	6.1	2.73E-04	2.63E-07	8.2
Eu-152	SFP additional	4.81E-06	0.03	9.69E-04	4.66E-09	0.1
Eu-152	In-core sump (top)	8.86E-05	0.6	1.13E-08	1.00E-12	0.0
Eu-152	In-core-sump (bottom)	8.86E-05	0.6	1.13E-08	1.00E-12	0.0
Eu-152	In-core sump floor	4.28E-05	0.3	2.34E-08	1.00E-12	0.0
Total		1.58E-02			3.20E-06	

5) Maximum Water Concentration

The predicted maximum water concentration is a function of the release rate, the amount sorbed on to the solid phase (backfill material) and the volume of water into which release occurs. The conceptual model used to calculate the water concentration assumes that all releases from the subsurface structures are released directly into the backfilled region of the containment building. The maximum annual release rates calculated in Section 4 are used as the starting point for calculating water concentrations. These radionuclides can sorb on the backfill and thereby are temporarily removed from the water column. This process is discussed in section 5.1. In addition, although Section 4 provides the maximum annual release, the release will continue at a lower rate in subsequent years To account for this, an activity balance is performed that balances release rates from the subsurface structures with radioactive decay of material previously released. When these two rates are equal, the maximum activity in the water can be calculated. This process is discussed in Section 5.2. Using the maximum activity in the water, the maximum water concentration can be obtained, as provided in Section 5.3.

The above approach is conservative because it assumes that all releases are collected in a single well at the time of maximum concentration. The main factors in the assumption that are conservative is the mixing of releases from the SFP and the Containment building and allowing for a single well to collect all releases from both the internal and external surfaces of the subsurface structures.

5.1) Sorption

After release from the concrete, the radionuclides will be sorbed onto the surrounding backfill or soil. Sorption will reduce the amount of activity available to be removed through a well. Therefore, the final factor needed to calculate the concentration in water involves sorption onto the surrounding porous media. Sorption will reduce the solution concentration as follows:

$$M_t = RM_w \quad (7)$$

Where M_t = total curies released,
R = retardation coefficient, and
M_w = curies in the water

The desired parameter is the curies in the water, which can be found from the expression

$$M_w = M_t/R \quad (8)$$

The retardation coefficient represents the effects of sorption and is expressed as follows:

$$R = 1 + \rho K_d/\eta \quad (9)$$

Where ρ= bulk density = 1.56 g/cm^3 (LTP, Table F-1)
K_d = distribution coefficient (cm^3/g),

η = effective porosity = 0.35 (dimensionless), (LTP, Table F-1)

Distribution coefficients were taken from site-specific analysis of the proposed backfill for the containment structure at Connecticut Yankee (Fuhrmann, 2004). Distribution coefficients were obtained for Fe-55, Co-60, Sr-90, and Cs-137 on two soil types designated A and B and a mix of these two soils. Type B was selected for backfill inside of basements and the mix of the two soils will be used to backfill outside of buildings and inside building footings. Table 11 presents the measured Kd values for Soil Type B and the mix of Soils A and B. The large difference in Kd values for some radionuclides in these two soils is believed to be due to the difference in the pH values. For conservatism, the lowest measured average site-specific Kd value will be used in the analysis. This value is designated by an asterisk in Table 11.

Table 11 Average measured distribution coefficient (K_d) (Fuhrmann, 2004).

Radionuclide	Soil B: K_d (cm^3/g)	Mix of Soils A and B: K_d (cm^3/g)
Fe-55	1200*	1200
Co-60	220	22*
Sr-90	10*	44
Cs-137	149	45*

* Value used in analysis for maximum water concentration.

Using the selected values of Kd from table 11 and values of Kd for H-3 and Eu-152 from table F-1 of the CY LTP, the water concentration of each radionuclide can be determined. Table 12 presents the selected Kd value, calculated retardation coefficient, and fraction of the radionuclide that remains in the water phase

Table 12 Ratio of mass in the water to total mass as a function of distribution coefficient (K_d).

Radionuclide	K_d	R	M_w/M_t
H-3	0.06	1.26	0.79
Fe-55	1200	5350	1.90×10^{-4}
Co-60	22	99	1.01×10^{-2}
Sr-90	10	45.6	2.19×10^{-2}
Cs-137	45	202	4.96×10^{-3}
Eu-152	825	3678	2.72×10^{-4}

Using the ratios in table 12, an estimate of the maximum water concentration can be obtained from the total curies released from Tables 5 to 10.

5.2) Maximum Water Inventory

Section 4 presented the calculation of the maximum annual release rate due to diffusion out of the subsurface structures. However, the maximum water concentration depends upon the release rate, the transport rate away from the facility, and radioactive decay. Species that undergo significant sorption will accumulate on the solid phase of the subsurface media and will migrate less than those with less sorption over the course of a year. At the Connecticut Yankee site, the flow parameters used in the soil DCGL calculations presented in the License Termination Plan (LTP) are presented in Table 13. The parameters needed to estimate transport velocity include saturated hydraulic conductivity (Ksat), hydraulic gradient, and effective porosity. The water flow velocity is the product of Ksat and the hydraulic gradient divided by the effective porosity and has a value of 50 m/yr. For Sr-90 the

Table 13 Saturated zone flow parameters

	Value	Units
Ksat	1030	m/yr
Effective porosity	0.35	
Hydraulic gradient	0.017	m/m

retardation factor, which is the ratio of water flow to contaminant flow, is 45.6 and therefore, Sr-90 is anticipated to move slightly more than 1 m/yr (water flow velocity divided by retardation coefficient). The low velocity compared to the length of the facilities suggests that concentrations may increase over time for Sr-90 as release continues. Since the movement of Sr-90 is slow compared to the distance of the containment mat, this simplistic model suggests that concentrations near the walls and floor will build-up in time due to the continued release from the contaminated walls. This indicates that the release from the contaminated walls is occurring at a faster rate than the transport away from the walls and radioactive decay. As the diffusion process releases activity from

the walls and floors, the activity concentration in the groundwater increases. The activity also decreases due to radioactive decay. The intent of these calculations is to calculate the maximum activity that could be in the water using an activity balance that includes release and radioactive decay. Dilution due to flow out of the containment area due to natural processes or pumping is not considered. In this activity balance, the maximum activity present in the water/soil system is calculated as a function of release rates and decay from the following expression.

$M_s(t)$ = Activity released to solution adjusted for radioactive decay

In this activity balance, the maximum activity present in the water/soil system is calculated as a function of release rates and decay, $M_s(t)$. This calculation uses an approximation since the exact analytical expression for $M_s(t)$ represents an integral equation that requires numerical evaluation. This approximation is obtained by performing an activity balance over a time interval. The balance is determined from the activity in solution at the beginning of the time interval (t(i-1)) corrected for radioactive decay to the end of the time interval (t(i)) and the addition of activity through leaching as expressed in Equation 10.

$$M_s(t) = M_s(t(i-1))e^{-\lambda(t(i)-t(i-1))} + I(0)*(CFR(t(i)) - CFR(t(i-1))\, e^{-\lambda(t(i)+t(i-1))/2} \qquad (10)$$

Where λ = decay constant,
I(0) = the initial activity in curies of the contaminated zone at time 0,
CFR(i) = cumulative fractional release at time t_i uncorrected for decay (Eqn. 1).

The first term is the mass in solution at the beginning of the time step (Ms(t(i-1)) reduced by radioactive decay over the time interval t(i) – t(i-1). The second term is the increase in activity through diffusion-controlled release over that time interval corrected for radioactive decay to the middle of the time interval, ((t(i) + t(i-1))/2). Using the middle of the time interval is the approximation that limits Eqn (10) from being an exact analytical solution. At time= 0, the cumulative fractional release is 0 and the activity in the groundwater is 0. Therefore, after the first time interval, the activity in solution is the cumulative fractional release over that time period adjusted for decay. Over the next time increment (from time (2) to time (1)) this activity in solution at time (1) decreases due to radioactive decay and increases due to diffusion-controlled release. At some point in time, depending on decay constant and CFR values, the total concentration of radioactivity in solution has a maximum value. This occurs when the decay rate is balanced by the release rate.

Figure 2 presents the results of this calculation for Sr-90 from the East Wall of the Spent Fuel Pool. The East wall was selected for illustration as this has the highest initial release rate because it has the highest surface area to volume ratio of any subsurface facility with the exception of the In-Core Sump. Releases from the In-Core Sump are limited by the flowable fill. Therefore, the East Wall has the highest fraction of radioactivity in solution of any of the subsurface structures. Figure 2 compares the cumulative fractional release to the curies available in solution as calculated by Equation 10. The cumulative release always increases in time. After 1 year, the fractional release is approximately 3×10^{-3} and the activity in solution is essentially the same as the activity released as there is no time for decay. As time progresses, these two curves diverge. This is because the activity released and in solution undergoes decay (first term in equation 10). Whereas the cumulative fractional release does

not account for decay once the material is released. The fraction of the activity in solution is important for assessing maximum concentrations in the water. For Sr-90, this value increases to slightly less than 9 x 10^{-3} with the peak occurring around 20 years. Therefore, the buildup factor, which is the ratio of the peak concentration in solution divided by the concentration after the first years release (maximum release rate) is less than a factor of 3. The peak buildup factor for Sr-90 is 2.84 and occurs after 21 years. Buildup factors calculated for each radionuclide are presented in Table 14. The activity released in the first year is multiplied by the buildup factors to calculate the maximum water concentrations for each radionuclide.

Table 14 Maximum build-up factors for water concentrations.

Radionuclide	Buildup Factor
H-3	1.91
Fe-55	1.62
Co-60	1.65
Sr-90	2.84
Cs-137	2.86
Eu-152	1.93

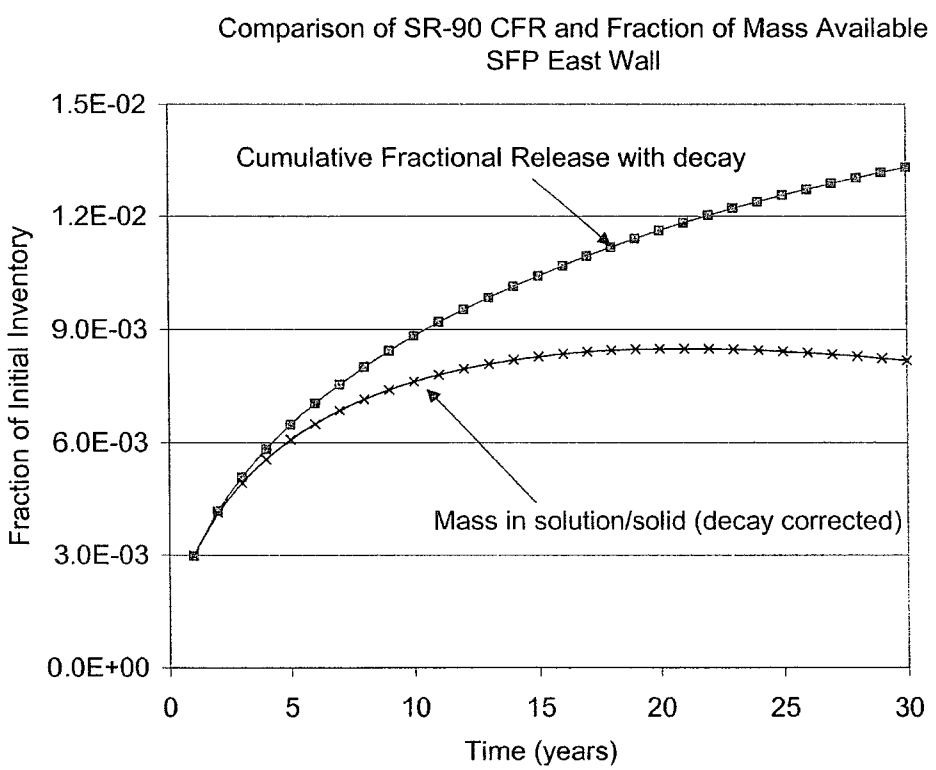

Figure 2 Comparison of cumulative fractional release and actual curies in solution for Sr-90 released from the east wall of the spent fuel pool.

5.3) Maximum Water Concentration

The maximum water concentration is calculated from the following equation.

$$C_w = I * CFR(1) \times B/(R \times W_p) \quad (11)$$

Where I = inventory (Ci) in the subsurface facility,
CFR(1) = fraction of inventory released in the first year (1/y)
B = build-up factor that could occur if no transport away from the source were permitted,
R = retardation factor
W_p = dilution volume, (1.37×10^6 l/y)

The dilution volume was calculated as the volume of water in the remains of the containment structure. It is planned to drill holes through the containment wall to allow flow into the center section of the structure. Based on data, the expected groundwater elevation will be 8.5 feet, which is eight feet above the base of the containment mat. The volume of water above the containment mat assuming 35% porosity is 1.37×10^6 liters. This is approximately 55% more water than the annual pumping volume used in calculating the soil DCGLs. Therefore, a dilution volume of 1.37×10^6 liters is used for calculating the water concentration. The activity release from the Spent Fuel Pool structures and the Containment Building structures are summed to calculate the maximum water concentration. This implies that one well collects all of the releases from these two buildings. While it is not clear that this is physically possible, particularly for radionuclides other than H-3, which move at rates of less than 1 m/y, it is conservative. In addition, in modelling releases, it was assumed that release occurred over both the interior and exterior of the walls. Both contributions are assumed to enter the central area of the subsurface containment structure for collection in a well. Considering only the internal releases would decrease the concentrations by approximately a factor of two. For the containment sump area, releases external to the central area were not considered. Detailed flow and transport calculations could be performed if a more precise estimate of mixing between releases from the Spent Fuel Pool and Contaminant Building is desired to remove some of the conservatism present in this calculation.

Tables 15 - 20 present the inventory, maximum cumulative fractional release rate, maximum inventory release in one year, and the predicted maximum water concentration that would occur from each subsurface facility and sums the total from all facilities for all radionuclides. The results in Tables 15 - 20 indicate that the containment mat and wall are the two major sources for release for the assumed concrete contamination of 1 pCi/g. This is due to their larger surface area as compared to the SFP and In-core sump. The total predicted maximum water concentrations are based on a uniform concrete contamination of 1 pCi/g and results in groundwater concentrations that are individually less than the drinking water standards (EPA MCLs). The predicted water concentrations are directly proportional to the assumed initial concentration in the concrete.

Table 15 Predicted maximum tritium water concentrations from subsurface facilities uniformly contaminated to 1 pCi/g.

Facility	Inventory (Ci)	Maximum Annual Fractional Release Rate	Maximum Yearly Release (Ci)	Maximum Water Concentration (pCi/L)
	Tritium Releases, R=1.27, B = 1.91			
Containment mat	1.16E-02	3.49E-02	4.04E-04	445
Containment wall	2.42E-03	8.23E-02	1.99E-04	219
SFP North	1.60E-04	9.16E-02	1.47E-05	16
SFP South	1.60E-04	9.16E-02	1.47E-05	16
SFP East	1.18E-04	9.38E-02	1.11E-05	12
SFP West	1.18E-04	9.38E-02	1.11E-05	12
SFP Floor	9.62E-04	6.11E-02	5.87E-05	65
SFP additional	4.81E-06	2.17E-01	1.04E-06	1.1
In-core sump top	8.86E-05	4.22E-04	3.74E-08	4.10E-02
In-core sump bottom	8.86E-05	4.22E-04	3.74E-08	4.10E-02
In-core sump floor	4.28E-05	3.58E-04	1.53E-08	1.68E-02
Total	1.58E-02		7.15E-04	786

Table 16 Predicted maximum Fe-55 water concentrations from subsurface facilities uniformly contaminated to 1 pCi/g.

Facility	Inventory (Ci)	Maximum Annual Fractional Release Rate	Maximum Yearly Release (Ci)	Maximum Water Concentration (pCi/L)
	Fe-55 Releases, R=5350 , B = 1.62			
Containment mat	1.16E-02	3.49E-04	4.04E-06	8.94E-04
Containment wall	2.42E-03	8.23E-04	1.99E-06	4.40E-04
SFP North	1.60E-04	9.16E-04	1.47E-07	3.25E-05
SFP South	1.60E-04	9.16E-04	1.47E-07	3.25E-05
SFP East	1.18E-04	9.38E-04	1.11E-07	2.44E-05
SFP West	1.18E-04	9.38E-04	1.11E-07	2.44E-05
SFP Floor	9.62E-04	6.11E-04	5.87E-07	1.30E-04
SFP additional	4.81E-06	2.17E-03	1.04E-08	2.30E-06
In-core sump top	8.86E-05	1.13E-08	1.00E-12	2.21E-10
In-core sump bottom	8.86E-05	1.13E-08	1.00E-12	2.21E-10
In-core sump floor	4.28E-05	2.34E-08	1.00E-12	2.21E-10
Total	1.58E-02		7.15E-06	1.58E-03

Table 17 Predicted maximum cobalt water concentrations from subsurface facilities uniformly contaminated to 1 pCi/g.

Facility	Inventory (Ci)	Maximum Annual Fractional Release Rate	Maximum Yearly Release (Ci)	Maximum Water Concentration (pCi/L)
	Cobalt Releases, R=99, B = 1.65			
Containment mat	1.16E-02	3.12E-04	3.62E-06	4.40E-02
Containment wall	2.42E-03	7.36E-04	1.78E-06	2.16E-02
SFP North	1.60E-04	8.20E-04	1.32E-07	1.60E-03
SFP South	1.60E-04	8.20E-04	1.32E-07	1.60E-03
SFP East	1.18E-04	8.39E-04	9.89E-08	1.20E-03
SFP West	1.18E-04	8.39E-04	9.89E-08	1.20E-03
SFP Floor	9.62E-04	5.46E-04	5.25E-07	6.39E-03
SFP additional	4.81E-06	1.94E-03	9.32E-09	1.13E-04
In-core sump top	8.86E-05	1.13E-08	1.00E-12	1.22E-08
In-core sump bottom	8.86E-05	1.13E-08	1.00E-12	1.22E-08
In-core sump floor	4.28E-05	2.34E-08	1.00E-12	1.22E-08
Total	1.58E-02		6.39E-06	7.77E-02

Table 18 Predicted maximum strontium water concentrations from subsurface facilities uniformly contaminated to 1 pCi/g.

Facility	Inventory (Ci)	Maximum Annual Fractional Release Rate	Maximum Yearly Release (Ci)	Maximum Water Concentration (pCi/L)
	Strontium Releases, R=45.6, B = 2.84			
Containment mat	1.16E-02	1.12E-03	1.30E-05	5.93E-01
Containment wall	2.42E-03	2.65E-03	6.42E-06	2.92E-01
SFP North	1.60E-04	2.96E-03	4.74E-07	2.16E-02
SFP South	1.60E-04	2.96E-03	4.74E-07	2.16E-02
SFP East	1.18E-04	3.03E-03	3.57E-07	1.62E-02
SFP West	1.18E-04	3.03E-03	3.57E-07	1.62E-02
SFP Floor	9.62E-04	1.97E-03	1.89E-06	8.62E-02
SFP additional	4.81E-06	6.99E-03	3.36E-08	1.53E-03
In-core sump top	8.86E-05	5.73E-03	1.00E-12	4.55E-08
In-core sump bottom	8.86E-05	5.73E-03	1.00E-12	4.55E-08
In-core sump floor	4.28E-05	4.86E-03	1.00E-12	4.55E-08
Total	1.58E-02		2.30E-05	1.05

Table 19 Predicted maximum cesium water concentrations from subsurface facilities uniformly contaminated to 1 pCi/g.

Facility	Inventory (Ci)	Maximum Annual Fractional Release Rate	Maximum Yearly Release (Ci)	Maximum Water Concentration (pCi/L)
	Cesium Releases, R=202, B = 2.86			
Containment mat	1.16E-02	2.70E-03	3.13E-05	3.24E-01
Containment wall	2.42E-03	6.37E-03	1.54E-05	1.60E-01
SFP North	1.60E-04	7.10E-03	1.14E-06	1.18E-02
SFP South	1.60E-04	7.10E-03	1.14E-06	1.18E-02
SFP East	1.18E-04	7.27E-03	8.56E-07	8.87E-03
SFP West	1.18E-04	7.27E-03	8.56E-07	8.87E-03
SFP Floor	9.62E-04	4.73E-03	4.55E-06	4.71E-02
SFP additional	4.81E-06	1.68E-02	8.07E-08	8.36E-04
In-core sump top	8.86E-05	1.13E-08	1.00E-12	1.04E-08
In-core sump bottom	8.86E-05	1.13E-08	1.00E-12	1.04E-08
In-core sump floor	4.28E-05	2.34E-08	1.00E-12	1.04E-08
Total	`1.58E-02		5.54E-05	0.57

Table 20 Predicted maximum europium water concentrations from subsurface facilities uniformly contaminated to 1 pCi/g.

Facility	Inventory (Ci)	Maximum Annual Fractional Release Rate	Maximum Yearly Release (Ci)	Maximum Water Concentration (pCi/L)
	Europium, R=3678, B = 1.93			
Containment mat	1.16E-02	3.49E-04	4.04E-06	6.94E-04
Containment wall	2.42E-03	8.23E-04	1.99E-06	3.41E-04
SFP North	1.60E-04	9.16E-04	1.47E-07	2.52E-05
SFP South	1.60E-04	9.16E-04	1.47E-07	2.52E-05
SFP East	1.18E-04	9.38E-04	1.11E-07	1.90E-05
SFP West	1.18E-04	9.38E-04	1.11E-07	1.90E-05
SFP Floor	9.62E-04	6.11E-04	5.87E-07	1.01E-04
SFP additional	4.81E-06	2.17E-03	1.04E-08	1.79E-06
In-core sump top	8.86E-05	1.13E-08	1.00E-12	3.84E-10
In-core sump bottom	8.86E-05	1.13E-08	1.00E-12	3.84E-10
In-core sump floor	4.28E-05	2.34E-08	1.00E-12	3.84E-10
Total	1.58E-02		7.15E-06	1.23E-03

Table 21 summarizes the maximum water concentration from all subsurface structures. All are below the drinking water standards.

Table 21 Maximum water concentration from all sources for each radionuclide for concrete concentration of 1 pCi/g.

Radionuclide	Maximum Water Concentration (pCi/L)
H-3	786
Fe-55	$1.58\ 10^{-2}$
Co-60	$7.77\ 10^{-3}$
Sr-90	1.05
Cs-137	0.57
Eu-152	$1.23\ 10^{-3}$

6) Discussion

The approach used to calculate maximum water concentration is conceptually similar to assuming that there is a 'bathtub' filled with groundwater to the average water elevation of 8.5 ' along with the subsurface soil. The maximum concentration in this 'bathtub' is calculated based on concrete release characteristics, radioactive decay, and soil sorption characteristics. For all structures other than the In-core sump, release is conservatively assumed to occur from both sides of the subsurface structures into the' bathtub'. Release from the In-core sump is assumed to travel through the flowable grout used to fill the sump. Releases to the outside of the containment structure from the In-core sump are assumed to be insignificant due to the large diffusion distance from the ICI sump walls. In addition, all releases from the SFP are assumed to enter the subsurface containment bathtub instantly. These conservative assumptions remove the need for detailed water flow calculations and provide at least a factor of 2 in conservatism.

The calculations performed assume a uniform distribution within the concrete. Due to the thickness of the concrete, it is likely that concentrations in the middle of the concrete will be much lower than on the outside. This, however, will not have a major impact on the predicted peak water concentrations. Numerical studies show that for Sr-90, with a diffusion coefficient of 5.2×10^{-10} cm^2/s, only the first 2.5 cm will contribute to groundwater contamination in the first year. For H-3, with a much larger diffusion coefficient than Sr-90, 5.5×10^{-7} cm^2/s, contamination within the first 15 – 20 cm will contribute to groundwater contamination in the first year.

6.1) Impacts of Rebar on Predicted Release

It has been assumed that the concrete has been uniformly contaminated to 1 pCi/g. However, the concrete will also contain rebar. In the In-core sump region, the rebar will be activated and will have a different activity profile than the concrete. It is likely that radioactive iron and cobalt concentrations in the rebar will be higher than in the concrete and therefore, the potential for increased release needs to be examined.

For metals, release is generally controlled by corrosion processes. Therefore, release of radioactivity from the activated metals will require corrosive agents (Cl, etc.) to diffuse into the concrete and reach the rebar. Once released from the rebar, the released radioactive contamination will have to diffuse out of the concrete to enter the groundwater. There will be several inches (2.5 – 3) of concrete between the rebar and concrete surface. Therefore, even if the concentrations in the vicinity of the rebar are much greater than in the concrete, their ultimate release will be greatly diminished due to the need to diffuse through cement. Calculations of diffusion through concrete show that for the diffusion coefficients used in this analysis, Table 2, iron and cobalt release rates will be diminished by two to three orders of magnitude over three inches. In addition, at the In-core sump region, once the contaminants reach the surface, they will have to diffuse through at least 2.5 feet of concrete from the flowable fill that will be used. For these reasons, releases from activated rebar are not anticipated to provide much of a contribution to the total mass released.

To account for activated rebar, the most conservative approach would be to assume that the contamination level used to model releases is the largest of the measured contamination levels in the concrete and rebar. This approach will avoid the need for detailed modelling of rebar corrosion, radionuclide release, and subsequent transport of radionuclides to the surface of the concrete. This approach will be very conservative in the case of the rebar concentration being greater than the cement concentration of radioactivity as it neglects diffusion through the concrete that covers the rebar.

7) Template for other radionuclides or conditions

Tables 15 – 20 show the calculated maximum water concentration based on a uniform concentration of 1 pCi/g. These tables can be used directly to estimate the release of H-3, Co-60, Sr-90, Cs-137, and Eu-152. As additional characterization data are collected, the average measured concentration values for the subsurface structures can be multiplied by the maximum water concentrations in Tables 15 – 20 to obtain an estimate of the future groundwater concentration. For all of the above radionuclides, except, H-3, diffusion through the concrete is a slow process and the average concentration within the first inch (2.5 cm) will be used to estimate releases. For H-3, the average concentration over the first eight inches (20 cm) can be used.

If characterization data determine that radionuclides other than those found in Tables 15 – 20 are present, upper bounds for release of these nuclides can be estimated by choosing the radionuclide in Tables 15 – 20 that has a higher diffusion coefficient and lower retardation (distribution) coefficient than the radionuclide of concern. As a minimum, all radionuclides identified as having detectable quantities in CY concrete will be examined for their impact on groundwater. As an example, the minimum site-specific Kd for Am-241 was measured as 200 cm^3/g in the mix of soils A and B (Fuhrmann, 2004). Reviewing literature data of diffusion coefficients in cement for Am-241 a value of 5×10^{-13} cm^2/s (Serne, 1992) was suggested. Therefore, using either Cs-137 (Kd = 45, D = 3×10^{-9} cm^2/s) or Co-60 (Kd = 22, D = 4×10^{-11} cm^2/s) as a surrogate to determine an upper bound would be appropriate. In this case, Co-60 has a lower release rate than Cs-137 and use of the Co-60 release rate as an upper bound for Am-241 would be appropriate. When site-specific Kd values are not available, the estimated Kd value should be consistent with the value used in Table F-1 of the CY License Termination Plan (LTP) or the soil DCGL calculations. Literature values of diffusion coefficients are presented in Table 22. It is likely that Sr-90 will bound most of the other

radionuclides (except Tc-99 and C-14) under consideration because it has a relatively high diffusion coefficient in cement (5×10^{-10} cm^2/s) and a relatively low distribution coefficient (10 cm^3/g).

For Tc-99 and C-14, site-specific Kd values are not available for these long-lived radionuclides. However, the value selected for C-14 in Table F-1 is 11 cm^3/g. In cement chemical environments, carbon often forms carbonates and is not readily transported through the cement. A few experiments have estimated diffusion coefficients based on leaching data. The estimated diffusion coefficient values range from 7×10^{-15} to 1×10^{-12} cm^2/s (Habeyab, 1985, Serne, 2001). Therefore, Sr-90 can be used as an upper bound for C-14. For Tc, the Kd value in Table F-1 is 0.51, therefore, H-3 could be used as an upper bound for Tc. The diffusion coefficient for Tc in cement will be lower than that of H-3 (Table 22). If use of a surrogate as an upper bound is not satisfactory for a particular radionuclide, the approach used to generate Tables 15 – 20 could be used to generate future groundwater concentrations using the values for cement diffusion coefficients (Table 22) and Kd values presented in Table F-1 of the CY License Termination Plan.

Table 22 Cement diffusion coefficients (adapted from Serne, 2001).

Radiounuclide	Diffusion Coefficient (cm^2/s)
Ac	5.00E-11
Ag	5.00E-11
Am	5.00E-13
C-14 as carbonate	1.00E-12
Cm	5.00E-11
Co	5.00E-11
Cs	5.00E-10
Eu	5.00E-11
Fe	5.00E-11
H-3	5.00E-08
Mn	5.00E-11
Nb	5.00E-11
Ni	5.00E-10
Np(V)	5.00E-10
Pa	5.00E-08
Pb	1.00E-11
Pu	5.00E-11
Ra	5.00E-11
Sr	5.00E-11
Tc	1.00E-08
Th	1.00E-12
U	1.00E-12

8) Conclusions

Subsurface structures that are currently part of the Containment and Spent Fuel Pool buildings may be left in place at the Haddam Neck Plant. This analysis has determined the relationship between volumetric contamination within these structures and the maximum future groundwater concentration. Estimates of the maximum water concentration of H-3, Fe-55, Co-60, Sr-90, Cs-137, and Eu-152 that could occur due to releases from these subsurface structures have been obtained for a unit concentration of the radionuclides in the concrete structure. Release from the concrete is controlled by diffusion. Maximum groundwater concentrations are calculated as a function of release rate, radioactive decay, and sorption with the assumption that releases from all structures are well mixed in the volume of water that will reside above the containment mat (1.37×10^6 liters). The maximum estimated concentrations for each radionuclide expected at CY are in Table 21 based on a uniform concrete concentration of 1 pCi/g.

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Appendix A: Subsurface building dimensions

A.1 Containment Building:

1 Damp proofing was applied to exterior concrete surfaces to el. 21' 6" ±

2 Below the concrete mat popcorn concrete, leveling or make bedrock concrete was poured to el. -10' 0" and is bounded by bedrock and the popcorn concrete.

3 Demolition of the Containment Building will include the dome and walls to 4 feet below grade elevation of 21' 6" to approximate elevation 17' 6".

4 The bottom surface of the popcorn concrete is exposed to bedrock and was not calculated due to its porosity.

5 The mat concrete is poured on the popcorn concrete. It's surface area exposed to the popcorn concrete was calculated but not included in the total surface area exposed.

6 Water seals were prepared for each concrete pour. A water seal consisted of a labyrinth with polyvinylchloride sheeting inserts.

Containment Building:

1. The interior radius of the containment is 67' 6" R.
2. The wall thickness is 4' 6".
3. The exterior radius is 67' 6" + 4' 6" = 72' R
4. Volume of the wall is Height x (exterior area of the circle – interior area of the circle).
5. Volume of wall in cu ft = (el. -0 6" to el. 17' 6") x ((Πx $(72)^2$) – (Πx $(67.5)^2$))
6. Volume of wall in cu ft = (18) x (16,286 – 14,314)
7. Volume of wall in cu ft = (18) x (1,972)
8. Volume of Wall in cu ft = 35,496 cu ft

9. = Exterior of wall exposed to earth in sq ft = 2*Π*R*H = 2*3.14159*72*18 = 8143 ft^2

10. The containment mat has a radius 3' 6" larger than the exterior wall of the containment or = 72' 0" + 3' 6" = 75' 6" R
11. The containment mat is 9' 6" thick, less the volume of the Incore Sump volume (keyhole) and the Containment Sump and RHR Recycle volumes.
12. From concrete prints, 16103-50082 sh1, FC-34A, the volume of concrete poured in the mat is 6,093 cu yd or 6,093 cu yd x 27 cu ft/cu yd = 164,511 cu ft.

13. The surface area of the containment mat exposed to earth in sq ft = Height x circumference

14. The surface area of the containment mat exposed to earth in sq ft = 9.5 ft x 2 x Π x 75.5 ft
15. The surface area of the containment mat exposed to earth in sq ft = 4,507 sq ft
16. The surface area of the containment mat exposed to popcorn concrete in sq ft = surface area of the circle
17. The surface area of the containment mat exposed to popcorn concrete in sq ft = Πx $(R)^2$
18. The surface area of the containment mat exposed to popcorn concrete in sq ft = Πx $(75.5)^2$
19. The surface area of the containment mat exposed to popcorn concrete in sq ft = Πx 5700
20. The surface area of the containment mat exposed to popcorn concrete in sq ft = 17,908 sq ft

21. There is .5 ft of popcorn concrete under the containment mat.
22. The volume of popcorn concrete in cu ft = Height x (area of the circle).
23. The volume of popcorn concrete in cu ft = .5 ft x $\prod(75.5)^2$
24. The volume of popcorn concrete in cu ft = 8,954 cu ft

25. The surface area of the popcorn concrete exposed to earth in sq ft = The surface area created by the increased circumference + the surface area of the height of the popcorn concrete.
26. The surface area of the popcorn concrete exposed to earth in sq ft = (Popcorn concrete surface area - Containment exterior surface area) + (height of popcorn concrete x circumference of the popcorn concrete).
27. The surface area of the popcorn concrete exposed to earth in sq ft = $(\prod(75.5)^2) - (\prod(72)^2) + (.5 \times 2 \times \prod \times 75.5)$
28. The surface area of the popcorn concrete exposed to earth in sq ft = (17,908 – 16,286) + (237)
29. The surface area of the popcorn concrete exposed to earth in sq ft = 1,622 + 237
30. The surface area of the popcorn concrete exposed to earth in sq ft = 1,859 sq ft

Refer to attached sketches

Containment Building		
Item	**Description**	**Dimension**
8	Volume of Containment concrete Wall in cu ft	35,496 cu ft
13	Volume of Containment concrete mat in cu ft	164,511 cu ft
25	Volume of Popcorn concrete in cu ft	8,954 cu ft
	Total volume of Primary Containment in cu ft	208,961 cu ft
10	Surface area of Containment concrete walls exposed to earth in sq ft	8143 sq ft
16	Surface area of Containment concrete mat exposed to earth in sq ft	4,507 sq ft
31	Surface area of Containment Popcorn concrete exposed to earth in sq ft	1,859 sq ft
	Total Primary Containment concrete exposed to earth in sq ft	14509 sq ft
	Grade elevation	21ft 6in
1	Inside Radius	67ft 6in R
2	Wall Thickness	4ft 6in
3	Grade elevation	21ft 6in
4	Top of Steel liner elevation	-0ft 6in
5	Bottom of concrete elevation	-9ft 6in
6	Popcorn concrete thickness	6in
7	Bedrock elevation	-10ft 0in
8	Mat concrete volume 6,093 cu yd from construction print 16103-50082 sh1, FC-34A. This is the amount of poured concrete. Takes into account the Incore Sump area (keyhole) and the containment sump and RHR Recycle sump areas.	164,511 cu ft
9	Interior Wall Volume in cu ft	257,650 cu ft
10	Exterior Wall Volume in cu ft	293,148 cu ft
11	Wall volume from elevation -0ft 6in to elevation 17ft 6 in, a total of 18ft	35,498 cu ft
12	Bedrock elevation at Bottom of Incore Sump Area	-27ft 0 in
13	East West Centerline of Incore Sump dimension 15ft radius	
14	North South Centerline of Incore Sump dimension 15ft 10in	
15	Mat radius 67ft 6in + 4ft 6in + 3ft 6in = 75ft 6in	75ft 6in R
16	Total concrete volume below elevation 17ft 6in = Containment wall volume + Concrete mat volume + Popcorn concrete volume. Total concrete volume = 35,496 + 164,511 + 8,954	208,961 cu ft
17	Weight of concrete	150 # / cu ft

A.2 Spent Fuel Building:

1 Damp proofing was applied to exterior concrete surfaces to el. 20' 6" ±.

2 The Spent Fuel Building will be demolished to 4 feet below grade level.

3 The remaining portion of the Spent Fuel Building below grade level is the spent fuel pool.

Spent Fuel Building:

1. The walls and floor of the spent fuel building are 6 ft thick.
2. The bottom of the spent fuel pool is elevation 13' 5 ¾" called 13' 6".
3. The bottom of the cask laydown area in the pool area on the southeast side of the pool is at elevation 10' 113/4" called 11' 0".
4. The interior dimensions of the cask laydown area are N/S 10' 0", E/W 9' 0".
5. The bottom of the cask laydown are concrete is at elevation 5' 0".
6. The bottom of the cask laydown area concrete in the N/S direction is 22' 0" and in the E/W direction is 21' 0".
7. The bottom of the pool concrete is at elevation 7' 6"
8. The walls of the spent fuel pool are poured in water seals of the pool floor concrete.
9. The northwest side of the spent fuel pool reinforced concrete floor foundation sits on concrete fill that is approximately 15' 0" wide in the E/W direction and approximately 24' 0" long in the N/S direction between elevations -0' 6" to 7' 6" and sits partially on the containment mat at the -0' 6" elevation.
10. If the spent fuel building is demolished to 4 feet below grade to elevation 17' 6" the walls of the spent fuel pool that remain go to elevation 13' 6" where they are poured into the reinforced concrete floor of the spent fuel pool. The walls of the spent fuel pool will be 4 feet high.

11. The volume of the north south walls in cu ft = Length x Height x Thickness x 2 walls
12. The volume of the north south walls in cu ft = 49 x 4 x 6 x 2
13. The volume of the north south walls in cu ft = 2,352 cu ft

14. The volume of the east west walls in cu ft = Length x Height x Thickness x 2 walls
15. The volume of the east west walls in cu ft = 36 x 4 x 6 x 2
16. The volume of the east west walls in cu ft = 1,728 cu ft

17. The surface area of the north south walls exposed to earth in sq ft = Length x Height x 2
18. The surface area of the north south walls exposed to earth in sq ft = 49 x 4 x 2
19. The surface area of the north south walls exposed to earth in sq ft = 392 sq ft

20. The surface area of the east west walls exposed to in sq ft = Length x Height x 2
21. The surface area of the east west walls exposed to earth in sq ft = 48 x 4 x 2
22. The surface area of the east west walls exposed to earth in sq ft = 384 sq ft

23. The pool floor volume of reinforced concrete in cu ft = (Volume of Cask area) + volume of non cask area + volume of remainder of pool floor
24. The pool floor cask area reinforced concrete volume in cu ft = (22 x 23.5 x 8) – (9 x 10 x 2.5) – (2.5 x 2.5 x .5 x 22) = 4136 -225 – 69 = 3,842 cu ft
25. The pool floor non cask area reinforced concrete volume in cu ft = (27 x 23.5 x 6) = 3,807 cu ft
26. The pool floor remaining reinforced concrete volume in cu ft = (24.5 x 49 x 6) = 7,203 cu ft
27. The pool floor volume of reinforced concrete in cu ft = 3,842 + 3,807 + 7,203 = 14,852 cu ft

28. The pool floor surface area exposed to earth in sq ft = (Cask laydown surface area) + (non cask laydown surface area) + (Remainder of floor side surface area)
29. The pool floor cask E/W laydown surface area exposed to earth in sq ft = (23.5 x 8) – (2.5 x 9) - (.5 x 2.5 x 2.5) = 188 -23-3 = 162 sq ft
30. The pool floor cask N/S laydown surface area exposed to earth in sq ft = (27 x 6) + (24.5 x 6) = 162 + 147 = 309 sq ft
31. The pool floor non cask laydown surface area exposed to earth in sq ft = (24.5 x 8) – (2.5 x 10) – (.5 x 2.5 x 2.5) = 196 – 25 – 3 = 168 sq ft
32. The pool floor Remainder N/S E/W surface area exposed to earth in sq ft = (24.5 x 6) + (24.5 x 6) + (48 x 6) = 147 + 147 + 288 = 582 sq ft
33. The pool floor surface area exposed to earth in sq ft = 162 + 309 + 168 + 582 = 1,221 sq ft

34. The pool floor fill concrete on the north west side sits on the containment mat. The volume of the fill concrete = (21.25 x 8 x 15) – (.5 x 4 x 8 x 21.25) = 2,550 – 340 = 2,210 cu ft

Spent Fuel Pool Building		
Item	**Description**	**Dimension**
13	The volume of the north south walls in cu ft = 2,352 cu ft	2,352 cu ft
16	The volume of the east west walls in cu ft = 1,728 cu ft	1,728 cu ft
27	The pool floor volume of reinforced concrete in cu ft = 3,842 + 3,807 + 7,203 = 14,852 cu ft	14,852 cu ft
	Total volume of fuel pool reinforced concrete	18,932 cu ft
19	The surface area of the north south walls exposed to earth in sq ft = 392 sq ft	392 sq ft
22	The surface area of the east west walls exposed to earth in sq ft = 384 sq ft	384 sq ft
29	The pool floor cask E/W laydown surface area exposed to earth in sq ft = (23.5 x 8) – (2.5 x 9) - (.5 x 2.5 x 2.5) = 188 - 23-3 = 162 sq ft	162 sq ft
30	The pool floor cask N/S laydown surface area exposed to earth in sq ft = (27 x 6) + (24.5 x 6) = 162 + 147 = 309 sq ft	309 sq ft
31	The pool floor non cask laydown surface area exposed to earth in sq ft = (24.5 x 8) – (2.5 x 10) – (.5 x 2.5 x 2.5) = 196 – 25 – 3 = 168 sq ft	168 sq ft
32	The pool floor Remainder N/S E/W surface area exposed to earth in sq ft = (24.5 x 6) + (24.5 x 6) + (48 x 6) = 147 + 147 + 288 = 582 sq ft	582 sq ft
33	The pool floor surface area exposed to earth in sq ft = 162 + 309 + 168 + 582 = 1,221 sq ft	1,221 sq ft
	Total pool surface area exposed to earth = 392 + 384 + 1,221 = 1,997 sq ft	1,997 sq ft
1	Grade elevation	21ft 6in
2	Bottom of inside pool elevation	13ft 6in
3	Bottom of pool inside cask laydown area elevation	11ft 0in
4	Wall Thickness	6ft
5	Floor thickness	6ft
6	N/S Length	49ft 0in
7	E/W Length	48ft 0in

Attachment 10

Technical Support Document CY- HP - 0185, Rev. 1,
Kd Values of Backfill Material for Connecticut Yankee;
Mark Fuhrmann Environmental Sciences Dept. Brookhaven National Laboratory, June 1, 2006

April 17, 2006
ACP 1.2-17.2
Rev. 24

Attachment 3
Nuclear Plant Records Transmittal Form
(Page 1 of 1)

NUCLEAR PLANT RECORDS TRANSMITTAL		NPR USE ONLY CONTROL NO. U.N. NO. 2321
DEPARTMENT OF ORIGIN **Rad Protection**	RECORDS CLASSIFICATION (SEE INSTRUCTIONS): ☐ CONFIDENTIAL ☐ SAFEGUARDS ☐ QA RECORD	RETENTION (Ref. Attachment 5A-K): **L(+)LP+10**
DOCUMENTATION/RECORD TYPE (ref. Attachment 5A-K): **Technical Evaluations, Analysis and Reports**		DATE SUBMITTED TO NPR: **06/05/06 (02)**

DESCRIPTION OF RECORDS (NOTE: USE MORE THAN ONE TRANSMITTAL IF REQUIRED)

CY-HP-0185 Rev. 1 K_d Values of Backfill Material for Connecticut Yankee 05/31/06

Special Instructions for OD processing: Optical Character Recognition (OCR) required? ☐ YES ☐ NO

RECORDS ENTERED BY (PRINT NAME):	SUPERVISOR/PERSON ENTERING RECORDS (Signature):
Penny White	Penny White

RECEIPT (BY NPR)

DATE: 6/8/06	RECORDS ARE AS DESCRIBED BY ORIGINATOR: ☒ YES ☐ NO
CONDITION OF RECORDS: ☒ GOOD ☐ OTHER (Describe Below)	
RECEIVED AND ACCEPTED BY (SIGNATURE)	TEMPORARY FILE LOCATION NO. NPR

PROCESSING (By NPR, Except for Adding 'Alternative Storage Ref.' As Applicable)

DATE PROCESSED	ASSIGNED OD NUMBER	SIGNATURE OF NPR PROCESSING PERSONNEL	ALTERNATIVE STORAGE REFERENCE	
			LOCATION	INDEXING REF. (IF ANY)
6/8/06	CY-032			

CONNECTICUT YANKEE ATOMIC POWER COMPANY

Connecticut Yankee Decommissioning

Health Physics Department Technical Support Document

HP Number: CY-HP-0185 Revision #: 1

Subject: K_d Values of Backfill Material for Connecticut Yankee

Date: 05/31/06

Performed By: Clyde T. Newson Date: 05 /31/06

Reviewed By: P.N. McGrath Date: 6/1/06

Approved By: M.J. Marston Date: 6/1/06

1.0 INTRODUCTION

The purpose of this Technical Support Document (TSD) is to incorporate a technical document into the Health Physics Department administration and control program.

The two attached documents calculates the K_d values for different soils to be used as backfill material at the Haddam Neck Plant Site.

The attached studies will be used to provide technical support for a License Termination Plan (LTP) amendment submittal to the Nuclear Regulatory Commission (NRC).

2.0 DISCUSSION

Connecticut Yankee has contracted the Department of Energy, Brookhaven National Laboratory, Environmental Sciences Department, to perform the attached studies to provide K_d values for different soils to be used as backfill material at the Haddam Neck Plant Site in preparation for releasing the grounds and structures from the NRC license.

The document, Attachment 1, **K_d Values of Backfill Material for Connecticut Yankee**, is being incorporated into the Health Physics Department administration and control program through reference 1. This documents the use of soil types A, B and AB mix as backfill material below the vadose zone in the saturated zone.

The document, Attachment 2, **K_d Values of Backfill Material for Connecticut Yankee, Final Report, April 17, 2006,** is being incorporated into the Health Physics Department administration and control program through reference 1. This documents 3 additional soil types, C1, C2 and C3 that were evaluated for use as backfill. This was needed because the vendor for the type A and B soil used all the type B soil and it was not available for use as backfill in the primary containment basement. Following the evaluation, the type C2 soil met the requirements for a substitute for the type B soil and was designated type C soil.

The documents have been reviewed and accepted for accuracy.

3.0 CONCLUSION

Attachments 1 and 2 provides the technical information needed to support the CYAPCO LTP amendment request for the Basement Fill Model.

The documents have been reviewed for accuracy and are accepted to become Attachments 1 and 2 of this Technical Support Document.

4.0 REFERENCES

4.1 RPM 1.1-3, Health Physics Department Self Assessments and Technical Support Documents, 24265-000-GPP-GGGR-R1100-002-Rev. CY-000

5.0 ATTACHMENTS

5.1 K_d Values of Backfill Material for Connecticut Yankee, Final Report, November 9, 2004, Revision 0.

5.2 K_d Values of Backfill Material for Connecticut Yankee, Final Report, April 17, 2006, Revision 0.

ATTACHMENT 1

K_d Values of Backfill Material for Connecticut Yankee
Final Report
November 9, 2004
Revision 0

K_d Values of Backfill Material for Connecticut Yankee

Final Report

November 9, 2004
Revision 0

Mark Fuhrmann

Environmental Sciences Dept.

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K_d Values of Backfill Material for Connecticut Yankee

Methods

Two soil samples were received from Connecticut Yankee for use in K_d experiments. These are prospective backfill materials that are gravelly sands, labeled Butler 081204-A1, and Butler 081304-B1. They are referred to below as Soil A and Soil B. About 0.5 kg of each damp soil was oven dried at 60°C. They were sieved through a number 12 (1.7 mm) mesh, and each fraction was weighed. The fines were used for the K_d experiments. The calculated K_d was adjusted by multiplying by the fraction of fines in the material. This adjustment assumes a K_d of zero for the coarse fraction.

Groundwater from the site was filtered through a 0.7 micrometer filter. Aliquots of 55 g of water were weighed into sample cups, radioactive tracer (after dilution and pH adjustment) was added to each cup (typically 0.5 mL). An aliquot of each was withdrawn into a plastic syringe, filtered through a 0.2 micron Surfactant Free Cellulose Acetate (SFCA) syringe filter. For gamma emitters, 5 mL were pipetted into plastic sample vials for radionuclide analysis on a HPGe gamma-ray detector connected to a Canberra spectroscopy system. For Fe-55, with no gamma ray, 1 mL of the filtered sample was pipetted into 18 mL of Ultima-Gold liquid scintillation cocktail. These were the References used to determine the original concentration of each solution. Two grams of the dried and sieved soil were then added to each experiment. The "Mix" samples were 1g of each soil, combined. All initial K_d experiments were conducted in triplicate.

After reacting, pH was measured and samples were withdrawn and filtered in the same way as the references. Gamma-emitters were counted on an HPGe gamma-ray detector, always in the same geometry. Count times varied from 1000 to 30000 seconds. For Fe-55 Liquid Scintillation Counting was done on a Wallac Model 1414 instrument. For short half-life isotopes, the sample and the reference were counted sequentially. The difference in count rates between the reference and the sample was determined for each specimen. From this the K_d (concentration on solid / concentration in liquid) (in mL/g) was calculated based on the quantity of activity removed from the solution. This value was

corrected for gravel content by multiplying by the decimal fraction of fines present in the material.

In order to better define the K_d at specific pH values, several sets of experiments were run in which the pH of the K_d experiments were manipulated with either NaOH (1M or 0.1 M) or HCl (0.15M). After addition of the reagent, the samples were allowed to sit overnight for the pH to reach steady-state, and were then sampled as described above.

Results

Gravel and fine fractions were separated at 1.7 mm. Results are shown in table 1, along with the pH of the groundwater – soil mixture. The size fractions may differ somewhat from the actual content of bulk material since they were taken from about 0.5 kg samples.

Table 1. Gravel, Fines and pH

	% fines	% gravel	pH
Soil A	61.9	38.1	3.6
Soil B	80.9	19.1	5.5
Mix	71.4	28.6	4.5

The best value of K_d for each element tested is given in Table 2. It became apparent from initial experiments that Soil B generally has the most sorption ability. Soil A has exceptionally low values which appear to be related to its' very acidic nature. K_d of these materials varies with pH, as one would expect. Consequently, subsequent experiments focused on refining the K_d value for Soil B at the pH of the ground water in contact with that soil. For Soil B the best K_d values are based on pH of 5.5 ± 0.3, while those of the Mix are for pH of 4.5 ± 0.3. pH of Soil A in the different sorption experiments varied from 3.9 to 2.6 but because the natural pH of this material is so acidic, and the K_ds are so low, few refinements of these values were conducted. The exceptions are for Co and Sr as discussed below. In Table 2, when experimental pH values were sufficiently close to the desired value (see Table 1) the average K_d and one standard deviation distribution are

given. If the best value was obtained from interpolation of pH adjusted experimental data, then just the value is reported.

Table 2. K_d values averages of triplicate experiments (± one standard deviation) adjusted for gravel content

	Co-57	Cs-137	Am-241	Fe-55	Sr-85
Soil A	2 ± 0.08	23 ± 0.7	18 ± 0.2	160 ± 3.8	15 ± 0.7
Soil B	220 ± 31	149 ± 9	1550	1200	10
Mix	22	45 ± 4.4	200	1200	44

Cobalt. Figure 1 is a plot of Co K_d as a function of pH for all soil types. At pH values below 5 (Soil A) there was little removal of Co from solution, but above pH 5 (Soil B) Co was effectively removed from solution. This can be attributed either to adsorption or precipitation, perhaps with an iron mineral. The mixture does fall between the two, but not half-way between. This is because sorption is a non-linear function of pH, which is typically a major factor controlling sorption. An experiment was conducted on Co samples of Soil A in which NaOH was added to the soil – water mixture to adjust the pH. This material is strongly buffering, but as the pH was increased, so too was the K_d for Co. The adjusted K_d follows the curve for the unadjusted samples of the Mix and Soil B, indicating that the materials are similar and that pH is a major control on quantity of Co in solution. Figure 2 shows the Co K_d values for each of the triplicate samples, unadjusted for pH. The best value for Co sorbed on Soil B is at least 220 mL/g .

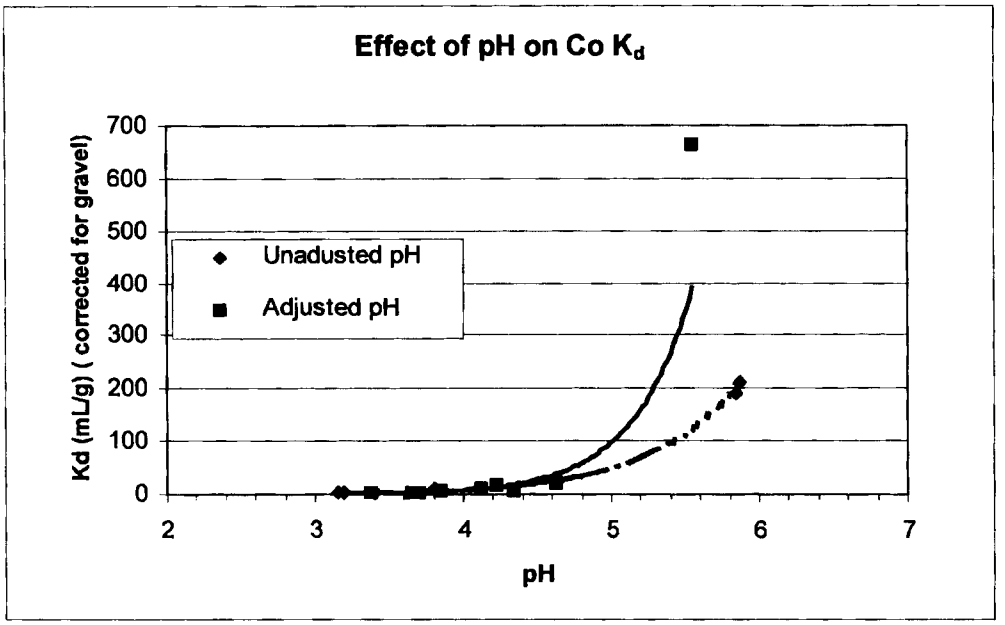

Figure 1. Effect of pH on Co sorption on backfill materials.

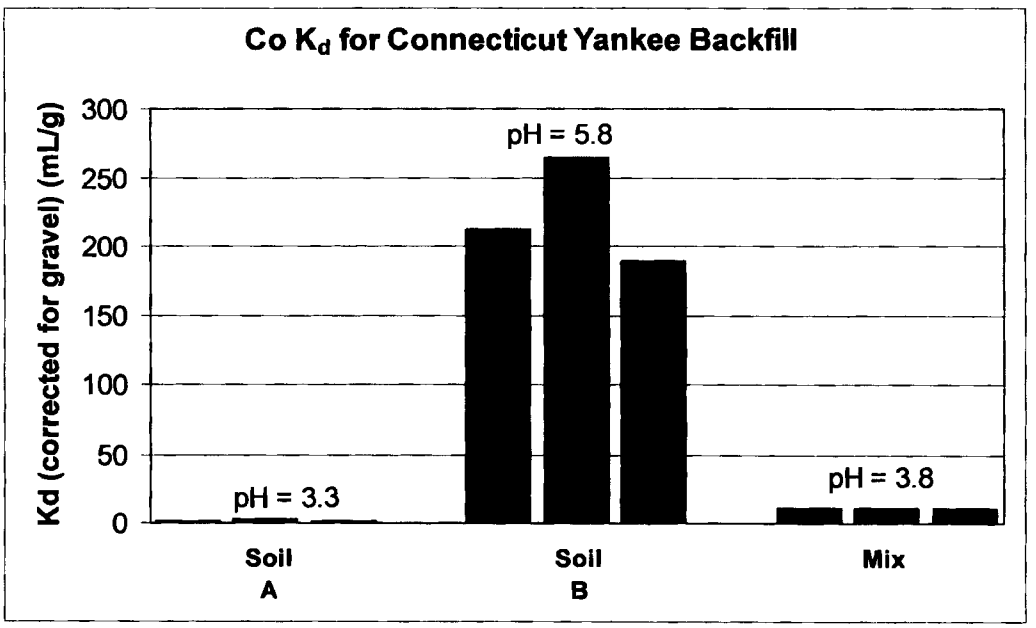

Figure 2. K_d values of Co on backfill materials, unadjusted for pH.

Cesium. Values of K_d for Cs-137 on the backfill materials are shown in Figure 3. The best value for Cs sorbed onto Soil B is 150 mL/g.

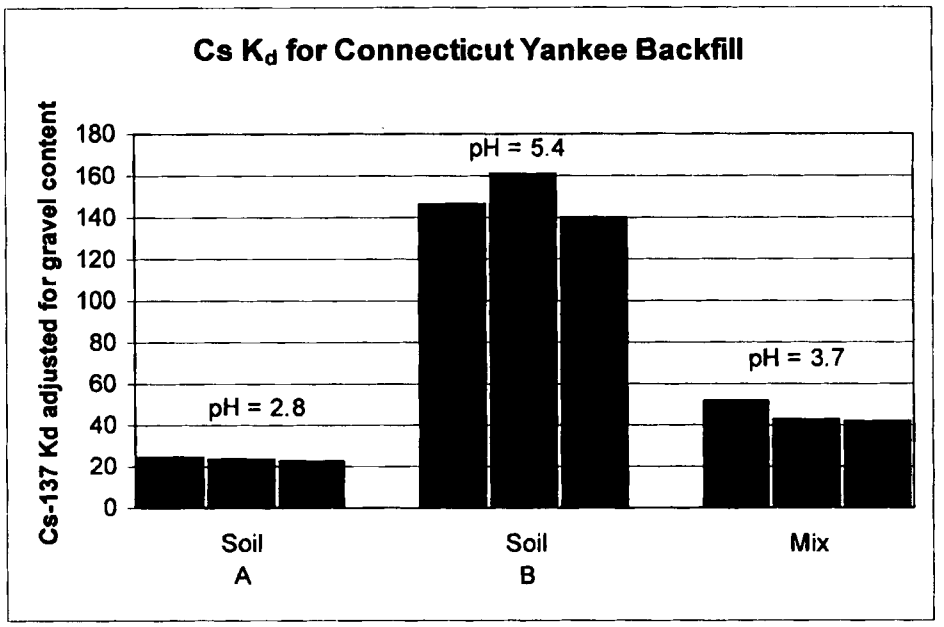

Figure 3. K_d of Cs on backfill materials.

Iron. The sorption (or precipitation) of Fe on the backfill materials is shown, in Figure 4, as a function of pH. Above pH 4.5, Fe-55 is completely removed from solution. The K_d values around 1200 represent a detection limit. This group of samples contains both Soil B and the Mix, so the best value K_d for Fe-55 in both materials is at least 1200 ml/g.

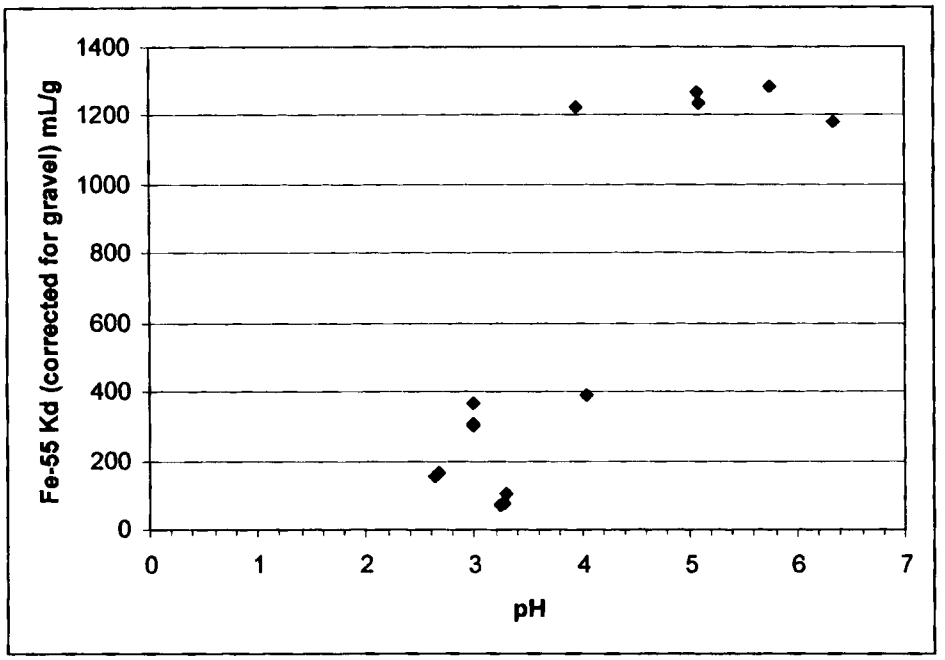

Figure 4. Fe-55 K_d values are strongly controlled by pH. Around pH 4.5 and above Fe-55 is completely removed from solution.

Americium. K_d values for Am-241 are given in Figure 5. Soil B had the highest, averaging 335 mL/g. With a minor addition of NaOH (after the original neutralization of the tracer) the pH changed very little, from 5.3 to 5.5, however the K_d increased to 1550 mL/g. The best value for Am on Soil B is 1550 mL/g. However, for the Mix soil, with its' lower pH, the best value is about 200 mL/g at pH = 4.5. This is interpolated from Figure 5. Figure 6 shows the values for Am in the samples with unadjusted pH.

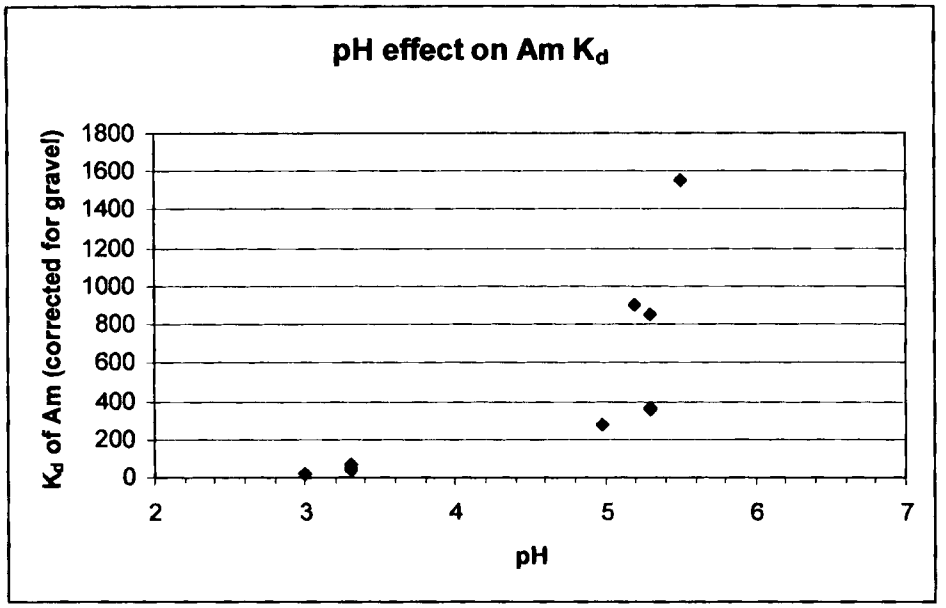

Figure 5. Effect of pH on Am K_d.

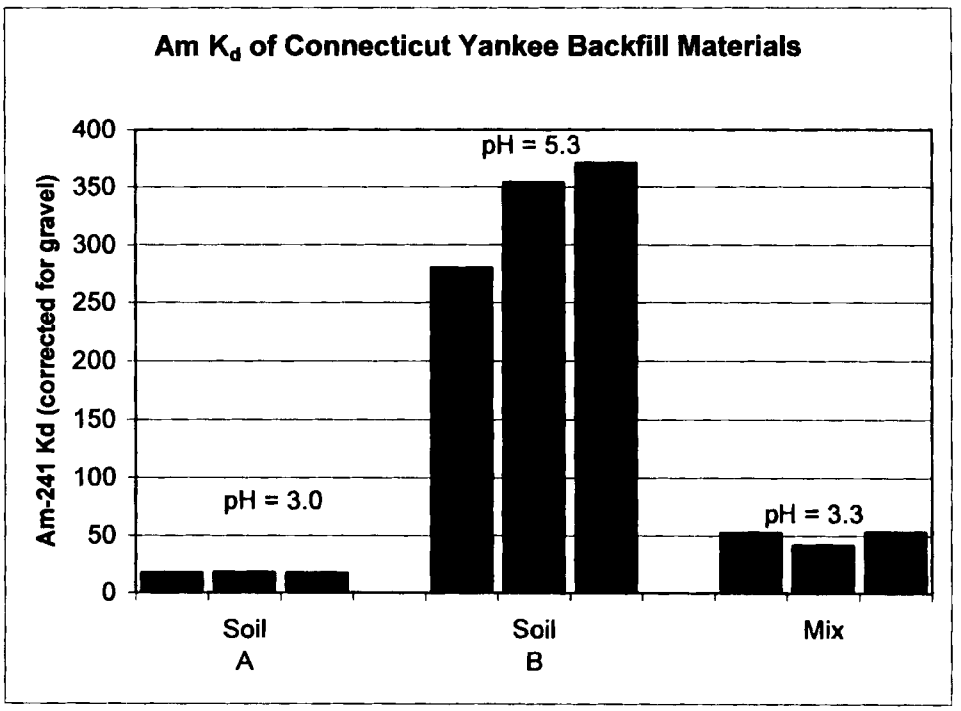

Figure 6. K_d values for Am on backfill soils, unadjusted pH.

Strontium. K_d values for Sr-85 are shown in Figure 7 as measured in samples with uncorrected pH. These pH values are slightly higher than desired because the tracer, as received from the supplier was alkaline instead of being in 0.5 M HCl. Of interest here is that the Mix soil has a higher K_d than does either of its components. This anomalous behavior could only occur if the K_d of Soil A increased dramatically with increasing pH. Because of the relatively low K_d value for Sr, and the low drinking water limits for Sr-90, it was decided to assess this behavior in detail in order to provide the best K_d value for Sr. Consequently, a series of pH adjustments were made to track the evolution of K_d with pH.

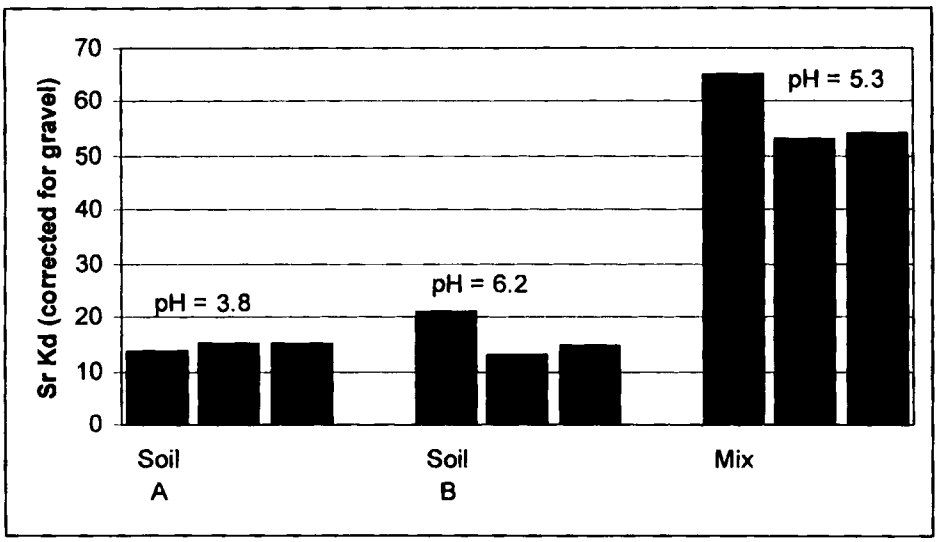

Figure 7. K_d values for Sr on Connecticut Yankee backfill material, uncorrected for pH.

The uptake of each soil was determined over a range of pH, as shown in Figure 8. Soil B is relatively unresponsive to pH, with respect to Sr sorption. It ranges from a low with K_d = 5.4 at pH = 4.5 to a high at pH = 6.1 of 21. The best value, at pH = 5.5, is 10 mL/g. Soil A, while not applicable as backfill, because of its' low sorption coefficients for other elements, was included in these experiments to assess the behavior of the Mix soil. The K_d of Soil A increased significantly as pH was increased, from a low of 13.8 at pH = 3.7 to a high of 55 at pH = 5.4. The Mix soil has relatively high K_ds for Sr, with little

change over the short range of pH tested. The best value for the Mix at pH = 4.5 is 44 mL/g.

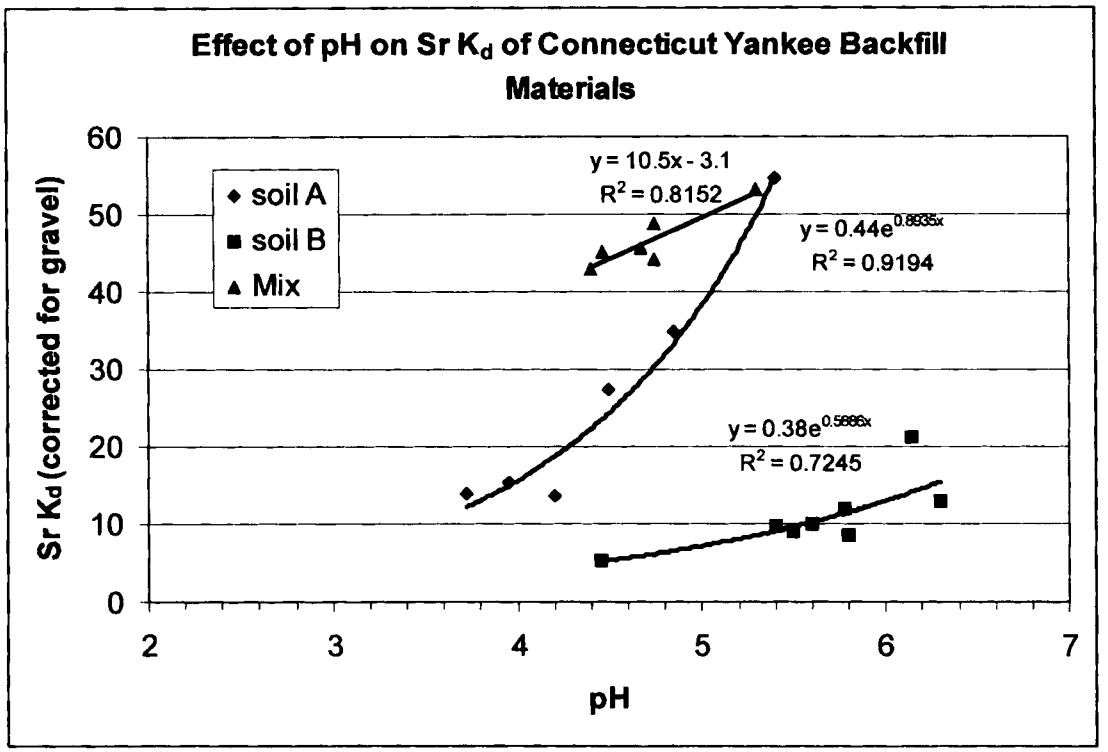

Figure 8. Effect of pH on Sr K_d of Connecticut Yankee backfill material.

ATTACHMENT 2

K_d Values of Backfill Material for Connecticut Yankee,

Final Report

April 17, 2006

Revision 0

K_d Values of Backfill Material for Connecticut Yankee

Final Report

April 17, 2006

Revision 0

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K_d Values of Backfill Material for Connecticut Yankee

Methods

Three soil samples were received from Connecticut Yankee for use in K_d experiments. These are prospective backfill materials that are sands containing some gravel, labeled C-1, C-2, and C-3. For gravel content, about 0.5 kg of each damp soil was wet sieved through a number 12 (1.7 mm) mesh. The gravel fraction was dried and weighed and the fines fraction was determined by weight difference and corrected for moisture content.

Smaller portions (about 5 g) of the soil were taken for duplicate moisture content determinations. As received soil was weighed out, air dried over night and reweighed.

Only fines (less than 1.7 mm) were used for the K_d experiments. The calculated K_d was adjusted by multiplying by the fraction of fines in the material. This adjustment assumes a K_d of zero for the coarse fraction. Aliquots of 55 g of distilled deionized water were weighed into sample cups and weighed amounts (about 2 g) of soil were added. These were allowed to stand overnight to equilibrate. Radioactive tracer (after dilution and pH adjustment) was added to each cup (0.5 mL). A reference for each tracer was made by adding the tracer to 55 g of water with no soil. This was sampled as an actual experiment would be and counted. The experiments, because of the urgent request by Connecticut Yankee personnel, were allowed to react for only 24 hours and were then sampled. After reacting, pH was measured and samples were withdrawn. For sampling of each experiment, about 5.5 mL of solution were withdrawn into a plastic syringe, filtered through a 0.2 micron Surfactant Free Cellulose Acetate (SFCA) syringe filter. Gamma-emitters were counted on an HPGe gamma-ray detector, always in the same 5 mL geometry. Count times varied from 1200 to 55000 seconds. All initial K_d experiments were conducted in triplicate. The experiments were resampled 21 days after the start of the experiments and were recounted to ascertain the initial Kd values.

The difference in count rates between the reference and the sample was determined for each specimen. From this the K_d (concentration on solid / concentration in liquid) (in

mL/g) was calculated based on the quantity of activity removed from the solution. This value was corrected for gravel content by multiplying by the decimal fraction of fines present in the material.

Values of K_d for Cs-137 and Co-57 were determined for the three soil types, in triplicate. Based on these analyses, triplicate K_d 's for Am-241 and Sr-85 were determined only for soil C-2.

Results

Initial K_d values for Cs-137 and Co-57 were reported as requested, after analysis of samples taken at 24 hours. While these preliminary values provided the required information, 24 hours is insufficient time to obtain accurate values. Consequently, the experiments for Cs and Co were resampled after 21 days and were counted. Not surprisingly these final values were significantly higher than those determined from the 24 hour samples. The values from the longer reaction time are presented here.

Sieve Analysis and pH. Gravel and fine fractions were separated at 1.7 mm. Results are shown in table 1, along with the pH of the groundwater – soil mixture. The size fractions may differ somewhat from the actual content of bulk material since they were taken from about 0.5 kg samples. The actual gravel content in large samples may be different and should be checked relative to the values in Table 1, since they may alter the Kd values.

Table 1. Gravel, Fines and pH

Soil	% fines	% gravel	% moisture	pH
C-1	95.1	4.9	6.3	8.1
C-2	84.3	15.7	4.9	6.3
C-3	98.4	1.6	18.6	6.5

Cesium.

Values for pH and K_d for Cs on the three candidate soils are shown in Table 2. The K_ds are compared in Figure 1 showing that C-1 has the highest values, followed by C-3. Those for C-2 are substantially lower, in part because of the higher gravel content.

Table 2.

Cs-137 K_d values averages of triplicate experiments adjusted for gravel content

Soil	Average pH	Sample A	Sample B	Sample C	Average K_d
C-1	7.8	7700	6900	8400	7700
C-2	6.3	460	270	370	370
C-3	6.5	3200	4600	2600	3500

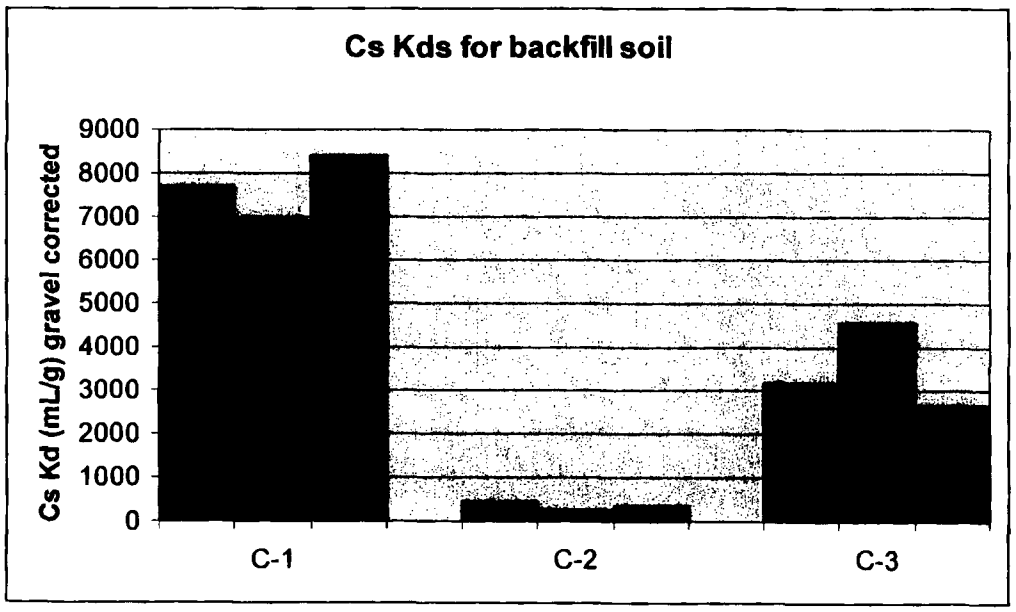

Figure 9. Values of K_d Cs-137 for Backfill Soils.

Cobalt.

K_d values for Co are less spread out than those for Cs, although their relative values are the same: C-1 is the highest, C-3 the lowest. K_ds are given in Table 3 for Co as are the pH values at the time of sampling. The pH values of the Co and Cs samples, at the time of sampling, are similar.

Table 3.

Co-57 K_d values averages of triplicate experiments adjusted for gravel content

	Average pH	Sample A	Sample B	Sample C	Average K_d
C-1	7.7	860	1000	1100	1000
C-2	6.3	600	3300*	500	550*
C-3	6.4	1100	950	680	900

* One sample of soil C-2 is anomalously high and is excluded from the average.

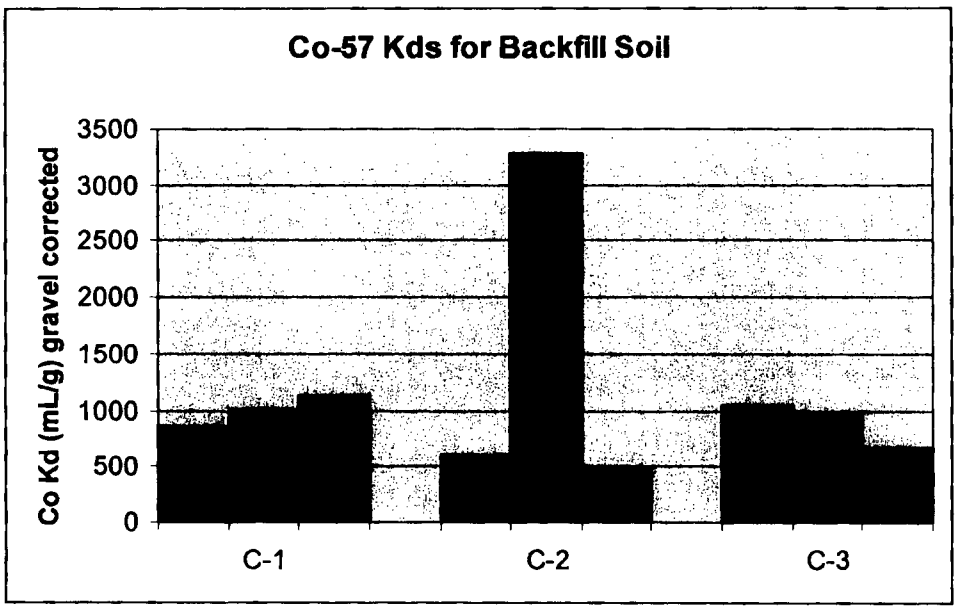

Figure 10. Values of Co-57 K_ds for backfill soils. Note that the anomalously high value for one of the C-2 soils has been removed from the average value.

Americium and Strontium. Values of K_d for Am-241 and Sr-85 are given in Table 4, for soil C-2. These are adjusted for gravel content. The very high value for the Am K_d for sample C is excluded from the average. The pH of this sample was anomalously high and this probably drove the K_d to an unrealistically high value. The average, given in Table 4 is a more realistic value.

Table 4.

K_d values averages of triplicate experiments adjusted for gravel content

	Average pH	Sample A	Sample B	Sample C	Average K_d
Sr-85	6.9	49	23	38	37
Am-241	6.9	4,300	5,800	260,000	5100

Attachment 11

A Compact Diskette (CD) of the calculation and data spreadsheets used for the application of the Basement Fill Model on the Containment and the Discharge Tunnel.