CONNECTICUT YANKEE ATOMIC POWER COMPANY

Connecticut Yankee Decommissioning

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Subject: Calculation of Future Groundwater Dose Resulting from Residual Radioactivity in Concrete to Remain in the Groundwater Saturated Zone using the CY LTP Basement Fill Model

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Calculation of Future Groundwater Dose Resulting from Residual Radioactivity in Concrete to Remain in the Groundwater Saturated Zone Using the CY LTP Basement Fill Model

1.0 Introduction

The CY LTP Amendment approved in August 2005 (Reference 6.1) requires that the radioactivity contained in concrete that remains below grade level and in the groundwater saturated zone be included in the calculation of future groundwater dose using the Basement Fill Model. The purpose of this calculation is to determine the projected future groundwater dose using actual concrete core sample analysis data from these structures.

The result of the containment basement fill model is the dose due to future groundwater of 1.58 mrem/year Total Effective Dose Equivalent (TEDE).

The result of the discharge tunnel basement fill model is the dose due to future groundwater of 0.23 mrem/year TEDE.

Both of the above, the containment and the discharge tunnel future groundwater individual doses are fractions of the 2 mrem/yr target level for future groundwater dose established in Reference 6.4. This is an acceptable level as it is a very small fraction of the total allowable dose, leaving this concrete at the time of release of the respective survey areas from the license is acceptable.

2.0 General Model

In Reference 6.1, the Basement Fill Model utilizes a conservative inventory based approach to project the dose due to groundwater contamination that diffuses from concrete which is to remain at the time of release of a Survey Area from the NRC license. The model has the following general steps:

- The inventory in concrete structures is first calculated based on the analysis results for core samples taken from the actual structures to remain. The core analyses data was reviewed to determine which concrete core wafers data would be included in the model. In all cases, the most conservative values of sample data were applied to the model which could mean one, two or three wafers averaged, all wafers averaged, steel liner data or rebar or piping which ever had the highest data value or the highest single wafer sample data.
- Using the results of a diffusion study performed by Brookhaven National Labs, the maximum yearly quantity of radioactivity to diffuse out of the concrete is calculated for each radionuclide that has a confirmed detection from the concrete core sample results.
- In the case of structures included in this calculation, the activity diffused is assumed to migrate to the containment basement and reach equilibrium with the clean backfill soil.

- The Discharge Tunnel was not backfilled with any soils. There will be no retardation through soil which is accounted for in the basement fill model for the discharge tunnel.
- The equilibrium groundwater concentration is calculated and is next used to calculate the future groundwater dose using the CY LTP Groundwater Derived Concentration Guideline Levels (DCGLs)
- The future groundwater dose calculated in the previous step is compared to the target dose of 2 mrem/yr, which has been established for this component of the LTP Compliance equation (Reference 6.4).
- Reference 6.3 has been revised. The project did not have sufficient type AB soil to complete the backfill of the containment structure and the spent fuel pool. Additional soil sources were analyzed by the Brookhaven National Laboratory and a suitable soil was identified and called type C soil. The type C soil has substantially higher Kd values than the type AB soils. However, the basement fill calculations used the type AB soil Kd values which adds to the conservatism of the model. The containment and spent fuel pool structures were backfilled with the type C soil.
- Reference 6.2 section 7 states that for the radionuclides of concern diffusion through the concrete is a very slow process except for tritium and uses the first inch for all except tritium and the first 8 inches for tritium. The data evaluation uses averages for various concrete core sample wafers with varying locations through out the thickness of the concrete being evaluated adding additional conservatism to the basement fill model calculations.
- The Containment Basement Fill Model includes analyses of reinforcing steel (rebar), the Incore Sump Area portion of the carbon steel containment liner, the eighteen (18) inch diameter RHR piping, the Incore Sump Area two (2) inch sump piping and the Incore Sump Area seven (7) one (1) inch drain lines. These lines are treated as concrete in the model. The highest analytical value was used in the model whether it was piping, steel liner or concrete as applicable.

3.0 Basement Fill Model Structures

3.1 Structures included in the Containment Basement Fill Model

In addition to the containment mat, foundation and walls which includes the concrete filled In-Core Instrument Sump (ICI) the following portions of structures are included in the containment basement fill model:

- The RHR System Loop Header Drain Pipe (Concrete Filled and Capped)
- The ICI Sump area was filled with concrete. The ICI sump drain line piping and the seven (7) 1 inch drain lines in the annulus area of the ICI Sump and the steel liner in the ICI Sump were decontaminated. All drain lines were filled with the "flowable fill" concrete or grout.
- Cable Vault
- The Containment Mat Sump
- The Spent Fuel Pool
- The Spent Fuel Building and Yard Crane concrete foundation footings

- Service Building Wall and Primary Auxiliary Building (PAB) southwest partial wing wall
- Waste Disposal Building
- The "B" Switchgear Building foundation

3.2 Structure Descriptions

3.2.1 Containment and ICI Sump

The containment is a right circular cylinder with a foundation mat that contains the In-Core Instrument (ICI) Sump. The containment is constructed of reinforced concrete with four and one-half (4.5) feet thick walls. The containment circular wall is approximately 22 feet high to grade elevation of el. 21' 6". The inside diameter of the containment is 135 feet.

The ICI sump is lined with a carbon steel liner. The ICI sump area has a 2 inch diameter pipe connecting two water accumulation area sumps. This pipe is approximately 25 feet long embedded in the concrete mat below the ICI sump. The pipe was decontaminated, filled with grout and capped. The seven (1) 1 inch ICI Sump annulus drain lines were filled with grout before the ICI sump was filled with flowable fill, a watery mix of concrete to the floor elevation of the containment el. - 0' 6". The containment was then backfilled with "clean fill" soil material. Concrete cores were performed to encompass portions of the grouted piping and steel liner and were part of the concrete analyses included in the containment basement fill model. The highest single analyzed data was used in the model.

3.2.2 RHR System Loop Header Drain Pipe (Concrete Filled and Capped)

The RHR System Loop Header Drain Pipe is an 18 inch diameter stainless steel pipe installed in the containment. It runs vertically approximately 12 feet where it makes a 90 degree turn and runs horizontally through the containment concrete floor and base mat to the exterior of the containment wall where it was cut and capped. This pipe was decontaminated, filled with concrete flowable fill and cap welded on both ends. The piping is considered to be embedded piping and is considered as concrete in the containment basement fill model.

3.2.3 Cable Vault

The Cable Vault is a concrete structure located on the northwest side of the containment. The cable sleeves from the outside to the interior area of the cable vault were removed. The containment side wall containing the wall sleeves was removed. This area was backfilled with "clean fill" soil material.

3.2.4 Containment Mat Sump

The Containment Mat Sump was used to pump collected water from below and adjacent to the containment mat area some 40 feet below grade elevation. The sump was constructed from concrete culvert piping stacked vertically.

The mat sump was 6 feet in diameter. The equipment was removed from the sump as was the first eight (8) foot section of concrete culvert. The area was filled with "clean fill" soil material.

3.2.5 Spent Fuel Pool

The Spent Fuel Pool was a reinforced concrete structure that was stainless steel lined. The walls and floor of the spent fuel pool are 6 feet thick. The liner was decontaminated and removed. The north wall of the spent fuel pool was removed to allow easier access to the spent fuel pool for decommissioning. The remaining walls were removed to grade elevation, el. 21' 6". Contamination in the floor required the removal of approximately 12 inches of the floor. Additional concrete was used to provide a foundation between bedrock and the bottom of the spent fuel pool floor.

3.2.6 Spent Fuel Building and Yard Crane Concrete Foundation Footings

The Spent Fuel Building contained equipment that supported the operation of the spent fuel pool and was located directly to the south of the spent fuel pool. The spent fuel building was removed to grade elevation. The remaining foundation footings which vary in length to bedrock remain. There are several yard crane footings constructed of reinforced concrete that were poured onto the bedrock that vary in length.

3.2.7 Service Building Wall and Primary Auxiliary Building (PAB) Southwest Partial Wing Wall

The Service Building wall is the east wall of the service building with a small portion of the PAB southwest wing wall. This wall was exposed to its entire depth on the east side during the demolition of the PAB building and excavation. The thickness of the walls vary from 1.5 to 2 feet.

3.2.8 Waste Disposal Building

The Waste Disposal Building was demolished to below grade. The remaining below grade portions of the building were small amounts of footings. The area was backfilled with "clean fill" soil material.

3.2.9 B Switchgear Building

This concrete structure housed electrical support equipment. The building was approximately 66 feet long and 36 feet wide. There were no contaminated systems in the building. The equipment was removed and the structure was surveyed and demolished to approximately 4 feet below grade level. The painted concrete was abated and 8 concrete core bore samples were taken. The area was backfilled to grade with "clean fill" soil material.

3.3 Structures included in the Discharge Tunnel Basement Fill Model

In addition to the Discharge Tunnel concrete for the two bays the following portions of structures are included in the discharge tunnel basement fill model:

- The concrete pad at the outlet of the discharge tunnels
- The Screenwell Building concrete cooling water intake bays

There are several footings and concrete foundations which remained in this area of the site which are not included in the basement fill model. The Main Turbine concrete pedestal foundation and turbine building floor footings remain. They do not meet the criteria to be included in the basement fill model. Soil sampling was performed next to the turbine pedestal and turbine foundation footings and were found to be free of surface and depth soil contamination.

3.4 Structure Descriptions

3.4.1 Discharge Tunnels and Outlet Concrete Pad

There are two Discharge Tunnels, the east tunnel was designated the discharge tunnel for unit #2 and the west discharge tunnel was designated the discharge tunnel for unit #1, the former operating unit. The unit #1 discharge tunnel is approximately 203 feet long by 15 1/2 feet in height and 12 feet wide. This tunnel received river water from the discharge side of the main condenser, service water discharge, storm drain discharges, and normal plant radioactive water effluent discharges.

The unit #2 discharge tunnel is approximately 393 feet long by 15 1/2 feet in height and 18 feet wide. This tunnel was not used to support the operations of unit #1.

All piping from the discharge tunnels have been removed and covers installed to seal the tunnels. The discharge tunnel stop logs have been installed. Soil and rip rap have been added to contour the bank of the canal at the discharge of the tunnels. Some soil sediments remain in the discharge tunnels. The concrete pad extending from the discharge tunnels remains in place. Concrete core samples and soil samples below the concrete were acquired. The concrete core samples are included in the basement fill model calculation for the discharge tunnels. A total of 10 concrete core samples were taken in the discharge tunnels.

Each of the discharge tunnels had varying amounts of sediment in them. These sediments were sampled and are included in the Discharge Tunnel Sample Data sheets. The doses from these sediments are fractions of the Dose Concentration Guideline Levels (DCGL) and are included on the Discharge Tunnel Basement Fill Model Dose Summary sheet.

3.4.2 Intake Structrue (Screenwell) Building

The Intake Structure Building was located on the west side of the site next to the Connecticut River. The building was approximately 65 feet long from north to south along the flow of the river and had 4 bays for the intake of river

water. The building ran 60 feet from the river in the easterly direction. There were 8 concrete core samples taken of the concrete that was to remain. The structure was surveyed, some equipment removed and demolished to 4 feet below grade. The structure housed the main circulating water pumps, service water pumps, emergency service water pumps, an electric and diesel driven fire pumps, chemical injection equipment with associated electrical switchgear and mechanical piping and valves for the systems.

The 4 intake bays were filled with "clean fill" soil material. Rip rap was placed over the filled areas and contoured to the river bank to minimize erosion.

4.0 Application of the Basement Fill Model

Application of the Basement Fill Model was a lengthy process. The buildings had to be placed in a condition where concrete core samples could be taken and the final configuration established. The concrete cores had to be managed and cut into wafers which were sent to the off site laboratory for analyses. General Engineering Laboratories (GEL) of South Carolina was used to process and analyze the majority of the concrete core wafers. A few concrete core samples were analyzed by Severn Trent Laboratories, Inc (STL). The concrete core samples were subject to the same stringent analyses requirements as were the soil samples, percentages were counted for Hard to Detect (HTD) radionuclides as well as Quality Control (QC) samples and all had the Chain of Custody (COC) protocol.

Table 5-10 of the LTP is reproduced here to provide the number of concrete core samples that were required to be taken in each of the potentially contaminated structures. Approximately 30 concrete core samples were taken and analyzed above the 84 required by the LTP Table 5-10.

Table 5-10
Volumetric Concrete Sample Requirements

Basement Area to Remain (Below Elevation 21')	Concrete Samples Collected to Date (08/31/2006)	Additional Concrete Samples to be Collected	Minimum Total Number Of Samples To be Used for the Inventory Calculation
Containment Mat	14	0	14
Containment Walls	10	0	10
In Core Sump	9	0	9
Spent Fuel Pool	12	0	12
Cable Vault	13	0	13
"B" Switchgear Building	8	0	8
Discharge Tunnels/Structure	10	0	10
Intake Structure	8	0	8

The Attachments to this Technical Support Document (TSD) contains the following:

- The calculation spreadsheets used to apply the basement fill model to the Containment and Discharge Tunnel structures.
- The concrete core sample data development used as inputs to the basement fill model calculations for the Containment and the Discharge Tunnels.
- The concrete core data sheets from GEL and STL.
- The concrete dimension calculations for the containment and discharge structures included in the respective basement fill model calculations.
- A copy of the TSD #184
- A copy of the TSD #185
- A Compact Diskette (CD) containing the spreadsheets used for developing the data and the calculation spreadsheets for the application of the Basement Fill Model to the Containment and the Discharge Tunnel.

4.1 Basement Fill Model Calculation Example

The following example is from the Containment Basement Fill Model calculation spreadsheet for Cobalt 60. Each of the columns will be defined and/ or discussed as appropriate. The letter designation at the top of each column has been added to aid in the example.

(Sample Calculation Spreadsheet)

A	B	C	D	E	F
C. Co-60					
Facility Area	(1) Maximum Water Concentration @ 1 pCi/g Concrete Concentration	Actual Concrete Concent-ration	Maximum Water Concentration @ Actual Concrete Concen-tr ation	Ground-water DCGL @ 25 mrem/yr	Groundwater Dose at Actual Concrete Concentration
Volumetric Contamination	pCi/L	pCi/g	pCi/L	pCi/L	mrem/yr
Containment Mat	**4.40E-02**	2.44E-02	1.07E-03		2.35E-05
Containment Wall	**2.16E-02**	6.13E-02	1.32E-03		2.91E-05
SFP North Wall (Removed)	0.00E+00	1.00E+00	0.00E+00		0.00E+00
SFP East Wall	**1.20E-03**	1.50E-01	1.80E-04		3.96E-06
SFP South Wall	**1.60E-03**	3.01E-01	4.82E-04		1.06E-05
SFP West Wall	**1.20E-03**	1.61E-01	1.94E-04		4.25E-06
SFP Floor	**6.39E-03**	9.92E-02	6.34E-04		1.39E-05
SFB Column and Crane Footing Concrete	4.99E-04	-2.61E-03	-1.30E-06		-2.85E-08
In-core Sump Top Wall	**1.22E-08**	2.70E+03	3.29E-05		7.22E-07
In-core Sump Bottom Wall	**1.22E-08**	7.60E+02	9.27E-06		2.03E-07
In-core Sump Floor	**1.22E-08**	1.05E+03	1.28E-05		2.81E-07
Service Building Wall	2.07E-03	6.03E-03	1.25E-05		2.74E-07
Cable Vault Outer Walls	2.06E-03	1.58E-02	3.26E-05		7.14E-07
B Switchgear Floor	1.23E-05	3.03E-03	3.74E-08		8.19E-10
B Switchgear Walls	3.84E-05	1.29E-02	4.96E-07		1.09E-08
			0.00E+00		0.00E+00
		Total	**3.99E-03**	1,140	**8.74E-05**

(1) Bold indicates the value was copied from TSD 184, Table 17

4.1.1 Column A
Identifies the radionuclide and provides a description of the areas of the Containment basement fill model being evaluated.

4.1.2 Column B
This is the Maximum Water Concentration @ 1 pCi/g Concrete concentration. The concentration values can come from either tables, those highlighted in bold print and previously calculated, or from a basement fill model calculation on this spreadsheet.

4.1.3 Column C
This is the Actual Concrete Concentration in pCi/g. This value is from the data spreadsheets and is the underlined or bolded value in the data spreadsheet for the radionuclide being evaluated. It is typically a conservative average of the concentration for various concrete core sample wafer sections. The spreadsheet "CY LTP Containment BFM Data.xls" contains the laboratory results by description area and radionuclide. Results are evaluated as reported and used in the data set as appropriate. In some cases negative results are used as permitted in MARSSIM to allow for statistical computations rather than using < MDC where reasonable assessments and statistical computations becomes difficult.

4.1.4 Column D
The Maximum Water Concentration @ Actual Concrete Concentration is a calculation. It is the product of Columns B and C (Col. B value X Col. C value = Col. D value). A total concentration from each area evaluated is included.

4.1.5 Column E
The Groundwater DCGL @ 25 mrem/yr, 1,140 pCi/L for Co-60 is used by each of the area concentrations calculated in Column D. It is used to calculate the future groundwater dose in mrem/yr displayed in Column F. The DCGL for groundwater is taken from Reference 6.6, Table 6-2, Base Case DCGLs for Groundwater.

4.16 Column F
The Groundwater Dose at Actual Concrete Concentration in mrem/yr is a calculation. This is the product of Column D in pCi/L and the limit of 25 mrem/yr and divided by Column E the limit in pCi/L, resulting in the actual annual dose from the area being evaluated in mrem/yr. (Col. D value X 25)/ Col.E value = Col. F value, future groundwater dose in mrem/yr.

The total dose is then used in the corresponding radionuclide listing in the spreadsheet "Future GW Dose Summary"

5.0 Conclusions

The methodology for determining the future groundwater dose contribution from concrete using the Basement Fill Model, inventory-based approach described in an amendment to the CY LTP has been successfully completed.

Both the Containment and the Discharge Tunnel calculated future groundwater doses each meet the target future groundwater dose of 2 mrem/yr (Reference 6-4).

6.0 References

6.1 Letter from CY to NRC re: LTP Amendment Dated December 1, 2004, CY Letter CY-04-131 and License Termination Plan (LTP) Rev. 3, Dated August 2005.

6.2 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.

6.3 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.

6.4 Memo, ISC 07-016, R. McGrath to File, Operational DCGLs/Dose Targets for New Survey Units, includes attachment, ISC 06-024, R. McGrath to File, 'Revised Target Operational DCGLs/Dose Targets for CY" dated August 2, 2006.

6.5 Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM), Rev. 1

6.6 Haddam Neck Plant License Termination Plan (LTP)

7.0 Attachments

Attachment 1: Containment Basement Fill Model Calculation Spreadsheet
Attachment 2: Containment Basement Fill Model Data Spreadsheet
Attachment 3: Containment Structures Dimensions
Attachment 4: Containment Basement Fill Model Sample Data
Attachment 5: Discharge Tunnel Basement Fill Model Calculation Spreadsheet
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File 1

Attachment 1

Containment Basement Fill Model Calculation Spreadsheet

CY LTP Containment Future Groundwater Dose Summary

Source	Radionuclide	Future Groundwater Dose from Individual Worksheet	Percent of Dose from Concrete Sources	Percent of Dose from All Sources
Concrete		mrem/yr	%	%
Containment/	H-3	1.12E+00	9.30E+01	7.13E+01
Spent Fuel Pool/	C-14	3.11E-04	2.57E-02	1.97E-02
Service Bldg Wall/	Fe-55	8.78E-08	7.27E-06	5.57E-06
Cable Vault	Co-60	1.30E-04	1.07E-02	8.23E-03
Mat Sump Walls	Ni-63	1.34E-04	1.11E-02	8.49E-03
Waste Disposal Bldg	Sr-90	7.78E-03	6.44E-01	4.93E-01
B SWGR Bldg	Tc-99	5.54E-07	4.59E-05	3.52E-05
Spent Fuel Bldg.	Cs-134	9.12E-04	7.55E-02	5.79E-02
and Crane Footings	Cs-137	7.23E-02	5.99E+00	4.59E+00
	Eu-152	3.97E-08	3.28E-06	2.52E-06
	Eu-154	4.40E-08	3.64E-06	2.79E-06
	Pu-241	3.29E-05	2.73E-03	2.09E-03
	Am-241	2.85E-03	2.36E-01	1.81E-01
	Subtotal	**1.21E+00**	1.00E+02	7.66E+01

Source	Radionuclide	Future Groundwater Dose from Individual Worksheet	Percent of Dose from Containment Liner Source	Percent of Dose from All Sources
		mrem/yr	%	%
Containment	H-3	0.00E+00	0.00E+00	0.00E+00
Liner and	C-14	1.76E-05	4.79E-03	1.12E-03
RHR Piping	Fe-55	2.92E-06	7.93E-04	1.85E-04
	Co-60	7.12E-04	1.93E-01	4.52E-02
	Ni-63	8.78E-05	2.39E-02	5.57E-03
	Sr-90	2.39E-04	6.50E-02	1.52E-02
	Tc-99	0.00E+00	0.00E+00	0.00E+00
	Cs-134	3.80E-05	1.03E-02	2.41E-03
	Cs-137	2.08E-03	5.66E-01	1.32E-01
	Eu-154	2.77E-07	7.53E-05	1.76E-05
	Pu-238	5.71E-03	1.55E+00	3.62E-01
	Pu-239	6.20E-03	1.68E+00	3.93E-01
	Pu-241	1.63E-01	4.44E+01	1.04E+01
	Am-241	1.23E-02	3.33E+00	7.79E-01
	Cm-243	1.77E-01	4.82E+01	1.13E+01
	Subtotal	**3.68E-01**	1.00E+02	2.34E+01

Total Dose - All Sources	**1.58E+00**		1.00E+02

CY LTP Containment Basement Fill Model

A. Tritium

Volumetric Contamination

Facility Area	(1) 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
Containment Mat	**4.45E+02**	2.75E+00	1.23E+03		4.70E-02
Containment Wall	**2.19E+02**	6.39E+00	1.40E+03		5.37E-02
SFP North Wall (Removed)	0.00E+00	0.00E+00	0.00E+00		0.00E+00
SFP East Wall	**1.20E+01**	3.88E+02	4.66E+03		1.79E-01
SFP South Wall	**1.60E+01**	2.29E+02	3.66E+03		1.40E-01
SFP West Wall	**1.20E+01**	6.83E+02	8.20E+03		3.14E-01
SFP Floor	**6.50E+01**	1.34E+02	8.71E+03		3.34E-01
SFB Column and Crane Footing Concrete	1.74E+00	-1.98E-01	0.00E+00		0.00E+00
In-core Sump Top Wall	**4.10E-02**	6.25E+03	2.56E+02		9.83E-03
In-core Sump Bottom Wall	**4.10E-02**	2.49E+03	1.02E+02		3.91E-03
In-core Sump Floor	**1.68E-02**	4.85E+03	8.15E+01		3.12E-03
Service Building Wall	4.78E+01	1.49E+01	7.14E+02		2.74E-02
Cable Vault Outer Walls	3.79E+01	2.76E+00	1.05E+02		4.01E-03
Cable Vault Floor	3.21E+01	3.56E+00	1.14E+02		4.37E-03
Mat Sump Walls	1.93E+01	1.53E+00	2.95E+01		1.13E-03
Waste Disposal Bldg	1.19E+01	4.42E+00	5.25E+01		2.01E-03
		Total	2.93E+04	6.52E+05	1.12E+00

(1) Bold indicates the value was copied from TSD 184, Table 15

Surface Contamination

Facility Area	Inventory at 1 dpm/100 cm2 (Assumes 100% Release)	Actual Surface Contamin-ation Level	Inventory at Actual Surface Contamination level	Retardation Coefficient	Groundwater Concentration at Actual Contamination Level	Groundwater Dose at Actual Contamination levels
	Ci	dpm/100cm2	Ci		pCi/L	mrem/yr
Containment Liner	7.57E-08	0	0.00E+00	1.26	0.00	0.00E+00
					Total GW Dose	**1.12E+00**

Liner Surface Area Calc	Walls (2*pi*r*h)=2*pi*(67.5')*(9')=3,817 ft2		
	Floor (pi*r2) = pi*(67.5')2 = 14,314 ft2		
		Total = 18,131 ft2 or 1.68 E07 cm2	
Ci at 1 dpm/100 cm2(Liner) = (Ci/2.22 E12dpm)*(1dpm/100cm2)*1.68 E07 cm2 = 7.57 E-08 Ci			

CY LTP Containment Basement Fill Model

A. Tritium

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

Containment Water Volume W/ 8.5 ft depth = 1.37E+06

Height Below Water Table (m)	Wid-th (m)	Len-ght (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	Containme nt Water Volume	Max Water Concen-tration @ 1 pCi/g (pCi/L)
Service Building East Wall													
2.74	0.67	55.49	102.12	3.75	2.5E+08	2.5E-04	5.5E-07	0.1761	4.32E-05	1.26	1.91	1.4E+06	4.78E+01
Cable Vault Outside Wall													
5.03	0.43	27.41	58.85	5.16	1.4E+08	1.4E-04	5.5E-07	0.2424	3.42E-05	1.26	1.91	1.4E+06	3.79E+01
Cable Vault Floor													
0.40	4.66	25	46.22	5.55	1.1E+08	1.1E-04	5.5E-07	0.2611	2.90E-05	1.26	1.91	1.4E+06	3.21E+01
SFB Column and Crane Footing Concrete													
1.91	1.19	1.52	3.46	4.04	8.3E+06	8.3E-06	5.50E-07	0.1901	1.58E-06	1.26	1.91	1.4E+06	1.74E+00
Mat Sump Walls													
11.74	0.18	6.32	13.20	11.73	3.2E+07	3.2E-05	5.5E-07	0.55153	1.75E-05	1.26	1.91	1.4E+06	1.93E+01
Waste Disposal Bldg													
1.83	0.91	16.77	28.06	3.40	6.7E+07	6.7E-05	5.5E-07	0.1598	1.08E-05	1.26	1.91	1.4E+06	1.19E+01

CY LTP Containment Basement Fill Model

B. Fe-55

Volumetric Contamination

Facility Area	(1) 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
Containment Mat	**8.94E-04**	N/A	0.00E+00		0.00E+00
Containment Wall	**4.40E-04**	N/A	0.00E+00		0.00E+00
SFP North Wall (Removed)	0.00E+00	0.00E+00	0.00E+00		0.00E+00
SFP East Wall	**2.44E-05**	-9.06E-01	0.00E+00		0.00E+00
SFP South Wall	**3.25E-05**	-4.62E-01	0.00E+00		0.00E+00
SFP West Wall	**2.44E-05**	-1.58E-01	0.00E+00		0.00E+00
SFP Floor	**1.30E-04**	1.70E+00	2.21E-04		8.45E-08
SFB Column and Crane Footing Concrete	1.01E-05	-7.69E-01	0.00E+00		0.00E+00
In-core Sump Top Wall	**2.21E-10**	2.01E+04	4.44E-06		1.70E-09
In-core Sump Bottom Wall	**2.21E-10**	1.00E+04	2.21E-06		8.45E-10
In-core Sump Floor	**2.21E-10**	9.55E+03	2.11E-06		8.07E-10
		Total	2.30E-04	6.54E+04	8.78E-08

(1) Bold indicates the value was copied from TSD 184, Table 16

Surface Contamination

Facility Area	Inventory at 1 dpm/100 cm2 (Assumes 100% Release)	Actual Surface Contamin-ation Level	Inventory at Actual Surface Contamination level	Retardation Coefficient	Groundwater Concentration at Actual Contamination Level	Groundwater Dose at Actual Contamination levels
	Ci	dpm/100cm2	Ci		pCi/L	mrem/yr
Containment Liner	7.57E-08	740	5.60E-05	5350	**7.64E-03**	**2.92E-06**
					Total GW Dose	**3.01E-06**

CY LTP Containment Basement Fill Model

B.Fe-55

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

Containment Water Volume W/ 8.5 ft depth = 1.4E+06

Height Below Water Table (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 Facto r	Containme nt Water Volume	Max Water Concen-tration @ 1 pCi/g (pCi/L)
Service Building East Wall													
2.74	0.67	55.488	102.12	3.75	2.5E+08	2.5E-04	5.0E-11	0.0017	4.12E-07	5350	1.62	1.4E+06	9.10E-05
Cable Vault Outside Wall													
5.03	0.43	27.41	58.85	5.16	1.4E+08	1.4E-04	5.0E-11	0.0023	3.26E-07	5350	1.62	1.4E+06	7.21E-05
Cable Vault Floor													
0.40	4.665	25	46.22	2.53	1.1E+08	1.1E-04	5.0E-11	0.0011	1.26E-07	5350	1.62	1.4E+06	2.78E-05
SFB Column and Crane Footing Concrete													
3.27	3.27	3.27	34.83	1.22	8.4E+07	8.4E-05	5.0E-11	0.0005	4.59E-08	5350	1.6	1.4E+06	1.01E-05

CY LTP Containment Basement Fill Model

C. Co-60					
Facility Area	(1) 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
Containment Mat	**4.40E-02**	2.69E-02	1.19E-03		2.60E-05
Containment Wall	**2.16E-02**	6.13E-02	1.32E-03		2.91E-05
SFP North Wall (Removed)	0.00E+00	0.00E+00	0.00E+00		0.00E+00
SFP East Wall	**1.20E-03**	4.45E-01	5.34E-04		1.17E-05
SFP South Wall	**1.60E-03**	9.55E-01	1.53E-03		3.35E-05
SFP West Wall	**1.20E-03**	2.14E-01	2.57E-04		5.64E-06
SFP Floor	**6.39E-03**	1.47E-01	9.36E-04		2.05E-05
SFB Column and Crane Footing Concrete	4.99E-04	-2.61E-03	-1.30E-06		-2.85E-08
In-core Sump Top Wall	**1.22E-08**	2.70E+03	3.29E-05		7.22E-07
In-core Sump Bottom Wall	**1.22E-08**	7.60E+02	9.27E-06		2.03E-07
In-core Sump Floor	**1.22E-08**	2.23E+03	2.72E-05		5.97E-07
Service Building Wall	4.47E-03	6.03E-03	2.70E-05		5.91E-07
Cable Vault Outer Walls	3.55E-03	1.58E-02	5.61E-05		1.23E-06
B Switchgear Floor	2.46E-05	4.82E-03	1.19E-07		2.60E-09
B Switchgear Walls	7.68E-05	1.22E-02	9.37E-07		2.05E-08
			0.00E+00		0.00E+00
		Total	5.92E-03	1,140	1.30E-04

(1) Bold indicates the value was copied from TSD 184, Table 17

Facility Area	Inventory at 1 dpm/100 cm2 (Assumes 100% Release)	Actual Surface Contamin-ation Level	Inventory at Actual Surface Contamination level	Retardation Coefficient	Groundwater Concentration at Actual Contamination Level	Groundwater Dose at Actual Contamination levels
Surface Contamination	Ci	dpm/100cm2	Ci		pCi/L	mrem/yr
Containment Liner	7.57E-08	0	0.00E+00	99	0.00E+00	0.00E+00
RHR Recirc Pipe	1.20E-09	3670	4.40E-06	99	3.25E-02	7.12E-04
					Total GW Dose	**8.42E-04**

CY LTP Containment Basement Fill Model

C. Co-60				Concrete Density@150 lb/ft3 (g/m3) =					2.40E+06				
				Containment Water Volume W/ 8.5 ft depth =					1.4E+06				
Height Below Water Table (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	Containm ent Water Volume	Max Water Concen-tration @ 1 pCi/g (pCi/L)
Service Building East Wall													
2.74	0.67	55.49	102.12	3.75	2.5E+08	2.5E-04	4.0E-11	0.0015	3.68E-07	99	1.65	1.4E+06	4.5E-03
Cable Vault Outside Wall													
5.03	0.43	27.41	58.85	5.16	1.4E+08	1.4E-04	4.0E-11	0.0021	2.92E-07	99	1.65	1.4E+06	3.5E-03
SFB Column and Crane Footing Concrete													
3.27	3.27	3.27	34.83	1.22	8.4E+07	8.4E-05	4.0E-11	0.0005	4.10E-08	99	1.65	1.4E+06	5.0E-04
B Switchgear Floor													
0.05	11.59	20.73	12.20	0.17	2.9E+07	2.9E-05	4.0E-11	0.0001	2.03E-09	99.00	1.65	1.4E+06	2.5E-05
B Switchgear Walls													
0.05	0.25	64.63	0.83	7.87	2.0E+06	2.0E-06	4.0E-11	0.0032	6.32E-09	99.00	1.65	1.4E+06	7.7E-05

CY LTP Containment Basement Fill Model

D. Sr-90

Facility Area	(1) 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
Containment Mat	**5.93E-01**	1.86E-02	1.10E-02		1.10E-03
Containment Wall	**2.92E-01**	8.26E-03	2.41E-03		2.40E-04
SFP North Wall (Removed)	0.00E+00	0.00E+00	0.00E+00		0.00E+00
SFP East Wall	**1.62E-02**	6.44E-02	1.04E-03		1.04E-04
SFP South Wall	**2.16E-02**	1.34E-02	2.89E-04		2.88E-05
SFP West Wall	**1.62E-02**	4.39E-03	7.11E-05		7.08E-06
SFP Floor	**8.62E-02**	4.49E-01	3.87E-02		3.86E-03
SFB Column and Crane Footing Concrete	6.73E-03	9.72E-04	6.54E-06		6.51E-07
In-core Sump Top Wall	**4.55E-08**	1.22E+01	5.55E-07		5.53E-08
In-core Sump Bottom Wall	**4.55E-08**	5.65E-01	2.57E-08		2.56E-09
In-core Sump Floor	**4.55E-08**	7.00E+00	3.19E-07		3.17E-08
Service Building Wall	6.03E-02	5.67E-02	3.42E-03		3.41E-04
Cable Vault Outer Walls	4.79E-02	2.27E-01	1.09E-02		1.08E-03
Cable Vault Floor	3.68E-02	2.79E-01	1.03E-02		1.02E-03
Mat Sump Walls	2.34E-02	-1.49E-03	-3.48E-05		-3.47E-06
B Switchgear Floor	3.32E-04	-5.41E-04	-1.79E-07		-1.79E-08
B Switchgear Walls	1.0E-03	1.57E-02	1.62E-05		1.62E-06
Waste Disposal Bldg	2.9E-07	4.38E-02	1.25E-08		1.24E-09
		Total	7.81E-02	251	7.78E-03

(1) Bold indicates the value was copied from TSD 184, Table 18

Facility Area	Inventory at 1 dpm/100 cm2 (Assumes 100% Release)	Actual Surface Contamin-ation Level	Inventory at Actual Surface Contamination level	Retardation Coefficient	Groundwater Concentration at Actual Contamination Level	Groundwater Dose at Actual Contamination levels
Surface Contamination	Ci	dpm/100cm2	Ci		pCi/L	mrem/yr
Containment Liner	7.57E-08	0	0.00E+00	45.6	0.00E+00	0.00E+00
RHR Recirc Pipe	1.20E-09	125	1.50E-07	45.6	2.40E-03	2.39E-04
					Total GW Dose	**8.02E-03**

CY LTP Containment Basement Fill Model

D. Sr-90					Concrete Density@150 lb/ft3 (g/m3) =					2.4E+06			
					Containment Water Volume W/ 8.5 ft depth =					1.4E+06			
Height Below Water Table (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	Contain ment Water Volume	Max Water Concen-tration @ 1 pCi/g (pCi/L)
Service Building East Wall													
2.74	0.67	55.49	102.12	3.75	2.5E+08	2.5E-04	5.2E-10	0.00542	1.33E-06	45.6	2.84	1.4E+06	6.0E-02
Cable Vault Outside Wall													
5.03	0.43	27.41	58.85	5.16	1.4E+08	1.4E-04	5.2E-10	0.00745	1.05E-06	45.6	2.84	1.4E+06	4.8E-02
Cable Vault Floor													
0.40	4.66	25.00	46.22	5.05	1.1E+08	1.1E-04	5.2E-10	0.0073	8.10E-07	45.6	2.84	1.4E+06	3.7E-02
SFB Column and Crane Footing Concrete													
3.27	3.27	3.27	34.83	1.22	8.4E+07	8.4E-05	5.2E-10	0.001770	1.48E-07	45.6	2.84	1.4E+06	6.7E-03
Mat Sump Walls													
11.74	0.18	6.32	13.20	11.25	3.2E+07	3.2E-05	5.2E-10	0.016255	5.15E-07	45.6	2.84	1.4E+06	2.3E-02
B Switchgear Floor													
0.05	11.59	20.73	12.20	0.17	2.9E+07	2.9E-05	5.2E-10	0.00025	7.31E-09	45.6	2.84	1.4E+06	3.3E-04
B Switchgear Walls													
0.05	0.25	64.63	0.83	7.87	2.0E+06	2.0E-06	5.2E-10	0.011378	2.28E-08	45.6	2.84	1.4E+06	1.0E-03
Waste Disposal Bldg													
1.83	0.91	16.77	28.06	3.40	1.3E+03	1.3E-09	5.2E-10	0.004913	6.29E-12	45.6	2.84	1.4E+06	2.9E-07

CY LTP Containment Basement Fill Model

E. Cs-134					
Facility Area	(1) 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
Containment Mat	**3.24E-01**	1.90E-02	6.17E-03		4.51E-04
Containment Wall	**1.60E-01**	1.20E-02	1.93E-03		1.41E-04
SFP North Wall (Removed)	0.00E+00	0.00E+00	0.00E+00		0.00E+00
SFP East Wall	**8.87E-03**	2.16E-02	1.92E-04		1.40E-05
SFP South Wall	**1.18E-02**	2.01E-02	2.37E-04		1.73E-05
SFP West Wall	**8.87E-03**	3.19E-02	2.83E-04		2.07E-05
SFP Floor	**4.71E-02**	3.01E-02	1.42E-03		1.03E-04
SFB Column and Crane Footing Concrete	3.67E-03	1.65E-02	6.05E-05		4.42E-06
In-core Sump Top Wall	**1.04E-08**	7.82E+00	8.13E-08		5.95E-09
In-core Sump Bottom Wall	**1.04E-08**	5.01E+00	5.21E-08		3.81E-09
In-core Sump Floor	**1.04E-08**	6.91E+00	7.19E-08		5.25E-09
Service Building Wall	3.29E-02	2.31E-02	7.61E-04		5.56E-05
Cable Vault Outer Walls	2.61E-02	2.40E-02	6.27E-04		4.58E-05
Cable Vault Floor	2.01E-02	2.84E-02	5.72E-04		4.18E-05
Mat Sump Walls	1.28E-02	1.74E-02	2.22E-04		1.62E-05
B Switchgear Walls	5.65E-04	2.11E-02	1.19E-05		8.71E-07
			0.00E+00		0.00E+00
		Total	1.25E-02	342	9.12E-04

(1) Bold indicates the value was copied from TSD 184, Table 19

Facility Area	Inventory at 1 dpm/100 cm2 (Assumes 100% Release)	Actual Surface Contamin-ation Level	Inventory at Actual Surface Contamination level	Retardation Coefficient	Groundwater Concentration at Actual Contamination Level	Groundwater Dose at Actual Contamination levels
Surface Contamination	Ci	dpm/100cm2	Ci		pCi/L	mrem/yr
Containment Liner	7.57E-08	0	0.00E+00	202	0.00E+00	0.00E+00
RHR Recirc Pipe	1.20E-09	120	1.44E-07	202	5.20E-04	3.80E-05
					Total GW Dose	**9.50E-04**

CY LTP Containment Basement Fill Model

E. Cs-134					Concrete Density@150 lb/ft3 (g/m3) =					2.4E+06			
					Containment Water Volume W/ 8.5 ft depth =					1.4E+06			
Height Below Water Table (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	Containm ent Water Volume	Max Water Concen-tration @ 1 pCi/g (pCi/L)
Service Building East Wall													
2.74	0.67	55.5	102.12	3.75	2.5E+08	2.5E-04	3.0E-09	0.013008	3.19E-06	202	2.86	1.4E+06	3.3E-02
Cable Vault Outside Wall													
5.03	0.43	27.41	58.9	5.16	1.4E+08	1.4E-04	3.0E-09	0.017902	2.53E-06	202	2.86	1.4E+06	2.6E-02
Cable Vault Floor													
0.40	4.66	25	46.22	5.05	1.1E+08	1.1E-04	3.0E-09	0.017543	1.95E-06	202	2.86	1.4E+06	2.0E-02
SFB Column and Crane Footing Concrete													
3.27	3.27	3.27	34.83	1.22	8.4E+07	8.4E-05	3.00E-09	0.004252	3.55E-07	202	2.86	1.4E+06	3.7E-03
Mat Sump Walls													
11.74	0.18	6.32	13.20	11.25	3.2E+07	3.2E-05	3.0E-09	0.039043	1.24E-06	202	2.86	1.4E+06	1.3E-02
B Switchgear Walls													
0.05	0.25	64.63	0.83	7.87	2.0E+06	2.0E-06	3.0E-09	0.02733	5.47E-08	202	2.86	1.4E+06	5.6E-04

CY LTP Containment Basement Fill Model

F. Cs-137					
Facility Area	(1) 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
Containment Mat	**3.24E-01**	8.68E-02	2.81E-02		1.63E-03
Containment Wall	**1.60E-01**	7.44E-02	1.19E-02		6.91E-04
SFP North Wall (Removed)	0.00E+00	0.00E+00	0.00E+00		0.00E+00
SFP East Wall	**8.87E-03**	5.85E+00	5.19E-02		3.01E-03
SFP South Wall	**1.18E-02**	1.50E+01	1.77E-01		1.03E-02
SFP West Wall	**8.87E-03**	6.80E+00	6.04E-02		3.50E-03
SFP Floor	**4.71E-02**	1.94E+01	9.15E-01		5.31E-02
SFB Column and Crane Footing Concrete	3.67E-03	8.18E-04	3.00E-06		1.74E-07
In-core Sump Top Wall	**1.04E-08**	7.50E+02	7.80E-06		4.52E-07
In-core Sump Bottom Wall	**1.04E-08**	3.89E+01	4.05E-07		2.35E-08
In-core Sump Floor	**1.04E-08**	5.92E+02	6.16E-06		3.57E-07
Service Building Wall	3.29E-02	3.72E-03	1.23E-04		7.12E-06
Cable Vault Outer Walls	2.61E-02	2.82E-02	7.38E-04		4.28E-05
Cable Vault Floor	2.01E-02	7.35E-03	1.48E-04		8.57E-06
Mat Sump Walls	1.28E-02	2.85E-02	3.64E-04		2.11E-05
B Switchgear Floor	1.81E-04	1.70E-02	3.08E-06		1.79E-07
Waste Disposal Bldg	8.20E-03	6.44E-02	5.28E-04		3.06E-05
		Total	1.25E+00	431	7.23E-02

(1) Bold indicates the value was copied from TSD 184, Table 19

Facility Area	Inventory at 1 dpm/100 cm2 (Assumes 100% Release)	Actual Surface Contamin-ation Level	Inventory at Actual Surface Contamination level	Retardation Coefficient	Groundwater Concentration at Actual Contamination Level	Groundwater Dose at Actual Contamination levels
Surface Contamination	Ci	dpm/100cm2	Ci		pCi/L	mrem/yr
Containment Liner	7.57E-08	0	0.00E+00	202	0.00E+00	0.00E+00
RHR Recirc Pipe	1.20E-09	8280	9.94E-06	202	3.59E-02	2.08E-03
					Total GW Dose	**7.44E-02**

CY LTP Containment Basement Fill Model

F. Cs-137				Concrete Density@150 lb/ft3 (g/m3) =					2.4E+06			
				Containment Water Volume W/ 8.5 ft depth =					1.4E+06			
Height Below Water Table (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	Containm ent Water Volume	Max Water Concen-tration @ 1 pCi/g (pCi/L)
Service Building East Wall												
2.74	55.49	102.1	3.75	2.5E+08	2.5E-04	3.0E-09	0.0130	3.19E-06	202	2.86	1.4E+06	3.3E-02
Cable Vault Outside Wall												
5.03	27.409	58.9	5.16	1.4E+08	1.4E-04	3.0E-09	0.0179	2.53E-06	202	2.86	1.4E+06	2.6E-02
Cable Vault Floor												
0.40	25	46.22	5.05	1.1E+08	1.1E-04	3.0E-09	0.0175	1.95E-06	202	2.86	1.4E+06	2.0E-02
SFB Column and Crane Footing Concrete												
3.27	3.27	34.83	1.22	8.4E+07	8.4E-05	3.0E-09	0.0043	3.55E-07	202	2.86	1.4E+06	3.7E-03
Mat Sump Walls												
11.74	6.32	13.20	11.25	3.2E+07	3.2E-05	3.0E-09	0.03904	1.24E-06	202	2.86	1.4E+06	1.3E-02
B Switchgear Floor												
0.05	20.73	12.20	0.17	2.9E+07	2.9E-05	3.0E-09	0.0006	1.76E-08	202	2.86	1.4E+06	1.81E-04
Waste Disposal Bldg												
1.83	16.77	28.06	3.40	6.7E+07	6.7E-05	3.0E-09	0.0118	7.95E-07	202	2.86	1.4E+06	8.20E-03

CY LTP Containment Basement Fill Model

G. Eu-152

Facility Area	(1) 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
Containment Mat	**6.94E-04**	1.21E-02	8.40E-06		2.87E-08
Containment Wall	**3.41E-04**	7.01E-03	2.39E-06		8.15E-09
SFP North Wall (Removed)	0.00E+00	<MDA	0.00E+00		0.00E+00
SFP East Wall	**1.90E-05**	<MDA	0.00E+00		0.00E+00
SFP South Wall	**2.52E-05**	<MDA	0.00E+00		0.00E+00
SFP West Wall	**1.90E-05**	<MDA	0.00E+00		0.00E+00
SFP Floor	**1.01E-04**	<MDA	0.00E+00		0.00E+00
SFB Column and Crane Footing Concrete	1.79E-06	<MDA	0.00E+00		0.00E+00
In-core Sump Top Wall	**3.84E-10**	9.26E+02	3.56E-07		1.21E-09
In-core Sump Bottom Wall	**3.84E-10**	7.27E+02	2.79E-07		9.52E-10
In-core Sump Floor	**3.84E-10**	5.19E+02	1.99E-07		6.80E-10
		Total	1.16E-05	7,330	3.97E-08

(1) Bold indicates the value was copied from TSD 184, Table 20

Facility Area	Inventory at 1 dpm/100 cm2 (Assumes 100% Release)	Actual Surface Contamin-ation Level	Inventory at Actual Surface Contamination level	Retardation Coefficient	Groundwater Concentration at Actual Contamination Level	Groundwater Dose at Actual Contamination levels
Surface Contamination	Ci	dpm/100cm2	Ci		pCi/L	mrem/yr
Containment Liner	7.57E-08	0	0.00E+00	3678	0.00E+00	0.00E+00
					Total GW Dose	**3.97E-08**

CY LTP Containment Basement Fill Model

H. Eu-154

Facility Area	(1) 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
Containment Mat	**6.94E-04**	7.85E-03	5.45E-06		2.70E-08
Containment Wall	**3.41E-04**	9.85E-03	3.36E-06		1.66E-08
SFP North Wall (Removed)	0.00E+00	<MDA	0.00E+00		0.00E+00
SFP East Wall	**1.90E-05**	<MDA	0.00E+00		0.00E+00
SFP South Wall	**2.52E-05**	<MDA	0.00E+00		0.00E+00
SFP West Wall	**1.90E-05**	<MDA	0.00E+00		0.00E+00
SFP Floor	**1.01E-04**	<MDA	0.00E+00		0.00E+00
SFB Column and Crane Footing Concrete	**1.79E-06**	<MDA	0.00E+00		0.00E+00
In-core Sump Top Wall	**3.84E-10**	8.78E+01	3.37E-08		1.67E-10
In-core Sump Bottom Wall	**3.84E-10**	6.58E+01	2.53E-08		1.25E-10
In-core Sump Floor	**3.84E-10**	5.59E+01	2.15E-08		1.06E-10
		Total	8.89E-06	5,050	4.40E-08

(1) Bold indicates the value was copied from TSD 184, Table 20

Facility Area	Inventory at 1 dpm/100 cm2 (Assumes 100% Release)	Actual Surface Contamin-ation Level	Inventory at Actual Surface Contamination level	Retardation Coefficient	Groundwater Concentration at Actual Contamination Level	Groundwater Dose at Actual Contamination levels
Surface Contamination	Ci	dpm/100cm2	Ci		pCi/L	mrem/yr
Containment Liner	7.57E-08	0	0.00E+00	3678	0.00E+00	0.00E+00
RHR Recirc Pipe	1.20E-09	235	2.82E-07	3678	5.60E-05	2.77E-07
					Total GW Dose	**3.21E-07**

CY LTP Containment Basement Fill Model

I. Am-241					
Facility Area	(1) 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
Containment Mat	**4.40E-02**	1.83E-02	8.07E-04		1.53E-03
Containment Wall	**2.16E-02**	<MDA	0.00E+00		0.00E+00
SFP North Wall (Removed)	0.00E+00	0.00E+00	0.00E+00		0.00E+00
SFP East Wall	**8.87E-03**	1.77E-02	2.84E-05		5.37E-05
SFP South Wall	**1.60E-03**	1.24E-01	1.49E-04		2.82E-04
SFP West Wall	**1.20E-03**	1.92E-02	2.30E-05		4.36E-05
SFP Floor	**6.39E-03**	2.36E-02	1.51E-04		2.85E-04
SFB Column and Crane Footing Concrete	4.99E-04	7.50E-03	3.74E-06		7.08E-06
In-core Sump Top Wall	**1.22E-08**	3.08E+01	3.76E-07		7.12E-07
In-core Sump Bottom Wall	**1.22E-08**	7.29E-01	8.89E-09		1.68E-08
In-core Sump Floor	**1.22E-08**	1.18E+00	1.44E-08		2.73E-08
Service Building Wall	3.29E-02	1.04E-02	3.43E-04		6.49E-04
Cable Vault Outer Walls	3.55E-03	<MDA	0.00E+00		0.00E+00
Cable Vault Floor	2.73E-03	<MDA	0.00E+00		0.00E+00
B Switchgear Walls	7.68E-05	3.04E-02	2.34E-06		4.42E-06
		Total	1.51E-03	13	2.85E-03

(1) Bold indicates the value was copied from TSD 184, Table 17

Facility Area	Inventory at 1 dpm/100 cm2 (Assumes 100% Release)	Actual Surface Contamin-ation Level	Inventory at Actual Surface Contamination level	Retardation Coefficient	Groundwater Concentration at Actual Contamination Level	Groundwater Dose at Actual Contamination levels
Surface Contamination	Ci	dpm/100cm2	Ci		pCi/L	mrem/yr
Containment Liner	7.57E-08	0	0.00E+00	99	0.00E+00	0.00E+00
RHR Recirc Pipe	1.20E-09	562	6.744E-07	99	4.97E-03	9.42E-03
					Total GW Dose	**1.23E-02**

CY LTP Containment Basement Fill Model

I. Am-241					Concrete Density@150 lb/ft3 (g/m3) =					2.4E+06			
					Containment Water Volume W/ 8.5 ft depth =					1.4E+06			
Height Below Water Table (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	Containm ent Water Volume	Max Water Concen-tration @ 1 pCi/g (pCi/L)
Service Building East Wall													
2.74	0.67	55.5	102.12	3.75	2.5E+08	2.5E-04	4.0E-11	0.001502	3.68E-07	99	1.65	1.4E+06	4.5E-03
Cable Vault Outside Wall													
5.03	0.43	27.41	58.9	5.16	1.4E+08	1.4E-04	4.0E-11	0.002067	2.92E-07	99	1.65	1.4E+06	3.6E-03
Cable Vault Floor													
0.40	4.66	25	46.22	5.05	1.1E+08	1.1E-04	4.0E-11	0.002026	2.25E-07	99	1.65	1.4E+06	2.7E-03
SFB Column and Crane Footing Concrete													
3.27	3.27	3.27	34.83	1.22	8.4E+07	8.4E-05	4.0E-11	0.000491	4.10E-08	99	1.65	1.4E+06	5.0E-04
B Switchgear Walls													
0.05	0.25	64.63	0.83	7.87	2.0E+06	2.0E-06	4.0E-11	0.003156	6.32E-09	99	1.65	1.4E+06	7.7E-05

CY LTP Containment Basement Fill Model

J. Ni-63					
Facility Area	(1) 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
Containment Mat	**5.93E-01**	0.00E+00	0.00E+00		0.00E+00
Containment Wall	**2.92E-01**	0.00E+00	0.00E+00		0.00E+00
SFP North Wall (Removed)	0.00E+00	0.00E+00	0.00E+00		0.00E+00
SFP East Wall	**1.62E-02**	1.04E+00	1.68E-02		1.34E-05
SFP South Wall	**2.16E-02**	4.40E-01	9.50E-03		7.54E-06
SFP West Wall	**1.62E-02**	2.10E-01	3.40E-03		2.70E-06
SFP Floor	**8.62E-02**	3.98E-01	3.43E-02		2.73E-05
SFB Column and Crane Footing Concrete	6.72E-03	-4.89E-01	-3.29E-03		-2.61E-06
In-core Sump Top Wall	**4.55E-08**	4.95E+02	2.25E-05		1.79E-08
In-core Sump Bottom Wall	**4.55E-08**	8.58E+01	3.90E-06		3.10E-09
In-core Sump Floor	**4.55E-08**	7.91E+02	3.60E-05		2.86E-08
Service Building Wall	6.03E-02	0.00E+00	0.00E+00		0.00E+00
Cable Vault Outer Walls	4.79E-02	2.25E+00	1.08E-01		8.55E-05
Cable Vault Floor	1.84E-02	0.00E+00	0.00E+00		0.00E+00
		Total	1.69E-01	31,500	1.34E-04

(1) Bold indicates the value was copied from TSD 184, Table 18

	Groundwater DCGL (pCi/L)		31500			
Facility Area	Inventory at 1 dpm/100 cm2 (Assumes 100% Release)	Actual Surface Contamin-ation Level	Inventory at Actual Surface Contamination level	Retardation Coefficient	Groundwater Concentration at Actual Contamination Level	Groundwater Dose at Actual Contamination levels
Surface Contamination	Ci	dpm/100cm2	Ci		pCi/L	mrem/yr
Containment Liner	7.57E-08	0	0.00E+00	45.6	0.00E+00	0.00E+00
RHR Recirc Pipe	1.20E-09	5760	6.912E-06	45.6	1.11E-01	8.78E-05
					Total GW D	**2.22E-04**

CY LTP Containment Basement Fill Model

J. Ni-63					Concrete Density@150 lb/ft3 (g/m3) =					2.4E+06			
					Containment Water Volume W/ 8.5 ft depth =					1.4E+06			
Height Below Water Table (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	Contain ment Water Volume	Max Water Concen-tration @ 1 pCi/g (pCi/L)
Service Building East Wall													
2.74	0.67	55.488	102.12	3.75	2.5E+08	2.5E-04	5.20E-10	0.0054	1.33E-06	45.6	2.84	1.4E+06	6.0E-02
Cable Vault Outside Wall													
5.03	0.43	27.409	58.9	5.16	1.4E+08	1.4E-04	5.20E-10	0.0075	1.05E-06	45.6	2.84	1.4E+06	4.8E-02
Cable Vault Floor													
0.40	4.66	25	46.22	5.05	1.1E+08	1.1E-04	5.20E-10	0.0073	8.10E-07	45.6	2.84	1.4E+06	3.7E-02
SFB Column and Crane Footing Concrete													
3.27	3.27	3.27	34.83	1.22	8.4E+07	8.4E-05	5.20E-10	0.0018	1.48E-07	45.6	2.84	1.4E+06	6.7E-03

CY LTP Containment Basement Fill Model

K. C-14

Facility Area	(1) 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
Containment Mat	**5.93E-01**	3.55E-02	2.11E-02		5.84E-05
Containment Wall	**2.92E-01**	1.16E-01	3.39E-02		9.40E-05
SFP North Wall (Removed)	0.00E+00	0.00E+00	0.00E+00		0.00E+00
SFP East Wall	**1.62E-02**	8.42E-01	1.36E-02		3.78E-05
SFP South Wall	**2.16E-02**	2.04E-01	4.41E-03		1.22E-05
SFP West Wall	**1.62E-02**	-1.00E-01	-1.62E-03		-4.49E-06
SFP Floor	**8.62E-02**	4.84E-02	4.18E-03		1.16E-05
SFB Column and Crane Footing Concrete	6.72E-03	3.98E+00	2.67E-02		7.42E-05
In-core Sump Top Wall	**4.55E-08**	5.76E+00	2.62E-07		7.27E-10
In-core Sump Bottom Wall	**4.55E-08**	1.54E+00	7.01E-08		1.94E-10
In-core Sump Floor	**4.55E-08**	2.35E+00	1.07E-07		2.97E-10
Cable Vault Outer Walls	4.79E-02	2.02E-01	9.66E-03		2.68E-05
		Total	1.12E-01	9,013	3.11E-04

(1) Bold indicates the value was copied from TSD 184, Table 18

Facility Area	Inventory at 1 dpm/100 cm2 (Assumes 100% Release)	Actual Surface Contamin-ation Level	Inventory at Actual Surface Contamination level	Retardation Coefficient	Groundwater Concentration at Actual Contamination Level	Groundwater Dose at Actual Contamination levels
Surface Contamination	Ci	dpm/100cm2	Ci		pCi/L	mrem/yr
Containment Liner	7.57E-08	0	0.00E+00	45.6	0.00E+00	0.00E+00
RHR Recirc Pipe	1.20E-09	331	3.972E-07	45.6	6.36E-03	1.76E-05
					Total GW Dose	**3.28E-04**

CY LTP Containment Basement Fill Model

K. C-14					Concrete Density@150 lb/ft3 (g/m3) =					2.4E+06			
					Containment Water Volume W/ 8.5 ft depth =					1.4E+06			
Height Below Water Table (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	Containment Water Volume	Max Water Concen-tration @ 1 pCi/g (pCi/L)
Cable Vault Outside Wall													
5.03	0.43	27.41	58.85	5.16	1.4E+08	1.4E-04	5.2E-10	0.0075	1.05E-06	45.6	2.84	1.4E+06	4.8E-02
SFB Column and Crane Footing Concrete													
3.27	3.27	3.27	34.83	1.22	8.4E+07	8.4E-05	5.2E-10	0.0018	1.48E-07	45.6	2.84	1.37E+06	6.72E-03

CY LTP Containment Basement Fill Model

L. Tc-99					
Facility Area	(1) 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 Contaminatic	pCi/L	pCi/g	pCi/L	pCi/L	mrem/yr
B Switchgear Floor	2.89E-03	2.02E-01	5.85E-04		5.54E-07
			Total	2.64E+04	5.54E-07

L. Tc-99	Groundwater DCGL (pCi/L	26400				
Facility Area	Inventory at 1 dpm/100 cm2 (Assumes 100% Release)	Actual Surface Contaminati on Level	Inventory at Actual Surface Contaminat ion level	Retardation Coefficient	Groundwater Concentration at Actual Contamination Level	Groundwater Dose at Actual Contamination levels
Surface Contamination	Ci	dpm/100cm2	Ci		pCi/L	mrem/yr
Containment Liner	7.57E-08	0	0.00E+00	99	0.00E+00	0.00E+00
					Total GW Dose	**5.54E-07**

M. Pu-238	Groundwater DCGL (pCi/L	15.1				
Facility Area	Inventory at 1 dpm/100 cm2 (Assumes 100% Release)	Actual Surface Contaminati on Level	Inventory at Actual Surface Contaminat ion level	Retardation Coefficient	Groundwater Concentration at Actual Contamination Level	Groundwater Dose at Actual Contamination levels
Surface Contamination	Ci	dpm/100cm2	Ci		pCi/L	mrem/yr
Containment Liner	7.57E-08	0	0.00E+00	99	0.00E+00	0.00E+00
RHR Recirc Pipe	1.20E-09	390	4.68E-07	99	3.45E-03	5.71E-03
					Total GW Dose	**5.71E-03**

N. Pu-239	Groundwater DCGL (pCi/L	13.6				
Facility Area	Inventory at 1 dpm/100 cm2 (Assumes 100% Release)	Actual Surface Contaminati on Level	Inventory at Actual Surface Contaminat ion level	Retardation Coefficient	Groundwater Concentration at Actual Contamination Level	Groundwater Dose at Actual Contamination levels
Surface Contamination	Ci	dpm/100cm2	Ci		pCi/L	mrem/yr
Containment Liner	7.57E-08	0	0.00E+00	99	0.00E+00	0.00E+00
RHR Recirc Pipe	1.20E-09	381	4.57E-07	99	3.37E-03	6.20E-03
					Total GW Dose	**6.20E-03**

CY LTP Containment Basement Fill Model

								Concrete Density@150 lb/ft3 (g/m3) =					2.4E+06
L. Tc-99										Containment Water Volume (			1.4E+06
Height Below Water Table (m)	Width (m)	Length (m)	Volume (m3)	Surface Area/ Volume (1/m)	Total Weight of Concrete (g)	Curies at 1 pCi/g Unit Activity	Diffusion Coefficient (cm2/s)	Cumulative Fractional Release	Maximum Curies Released at 1 pCi/g Activity (Ci)	Retardation Factor	Build-up Factor	Containment Water Volume (L)	Max Water Concentration @ 1 pCi/g (pCi/L)
B Switchgear Floor													
0.05	11.59	20.73	12.20	0.17	2.9E+07	2.9E-05	5.5E-07	8.12E-03	2.38E-07	99.00	1.65	1.4E+06	2.89E-03

CY LTP Containment Basement Fill Model

Future Groundwater Dose Calculation

O. Pu-241					
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 Contaminati	pCi/L	pCi/g	pCi/L	pCi/L	mrem/yr
B Switchgear Floor	2.76E-05	3.85E+00	1.06E-04		5.77E-06
B Switchgear Walls	8.60E-05	5.82E+00	5.00E-04		2.72E-05
		Total	**6.06E-04**	460	**3.29E-05**

O. Pu-241	Groundwater DCGL (pCi/L)		460			
Facility Area	Inventory at 1 dpm/100 cm2 (Assumes 100% Release)	Actual Surface Contamination Level	Inventory at Actual Surface Contamination level	Retardation Coefficient	Groundwater Concentration at Actual Contamination Level	Groundwater Dose at Actual Contamination levels
Surface Contamination	Ci	dpm/100cm2	Ci		pCi/L	mrem/yr
Containment Liner	7.57E-08	0	0.00E+00	1.65	0.00E+00	0.00E+00
RHR Recirc Pipe	1.20E-09	5660	6.79E-06	1.65	3.00E+00	1.63E-01
					Total GW Dose	**1.63E-01**

P. Cm-243	Groundwater DCGL (pCi/L)		19.4			
Facility Area	Inventory at 1 dpm/100 cm2 (Assumes 100% Release)	Actual Surface Contamination Level	Inventory at Actual Surface Contamination level	Retardation Coefficient	Groundwater Concentration at Actual Contamination Level	Groundwater Dose at Actual Contamination levels
Surface Contamination	Ci	dpm/100cm2	Ci		pCi/L	mrem/yr
Containment Liner	7.57E-08	0	0.00E+00	1.26	**0.00E+00**	**0.00E+00**
RHR Recirc Pipe	1.20E-09	198	2.38E-07	1.26	1.38E-01	1.77E-01
					Total GW Dose	**1.77E-01**

CY LTP Containment Basement Fill Model

								Concrete Density@150 lb/ft3 (g/m3) =					2.4E+06
O. Pu-241									Containment Water Volume (L)				1.4E+06
Height Below Water Table (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	Exca-vation Volume	Max Water Concen-tration @ 1 pCi/g (pCi/L)
B Switchgear Floor													
0.05	11.59	20.73	12.20	0.17	2.9E+07	2.9E-05	5.0E-11	7.74E-05	2.27E-09	99.00	1.65	1.4E+06	2.76E-05
B Switchgear Walls													
0.05	0.25	64.63	0.83	7.87	2.0E+06	2.0E-06	5.0E-11	3.53E-03	7.07E-09	99.00	1.65	1.4E+06	8.60E-05

File

Attachment 2

Containment Basement Fill Model Data Spreadsheet

Compilation of Containment Mat Concrete Core (CC) Samples

Radionuclide	Averages		
	Average of All Samples	Average of I/S & O/S 1st Core Wafer	Average of I/S & O/S 1st Two Core Wafers (for H-3 only)
	(ρCi/g)	(ρCi/g)	(ρCi/g)
H-3	3.20E+00	3.49E+00	**3.61E+00**
C-14	*-9.48E-02*	*-6.82E-02*	N/A
Mn-54	*5.23E-03*	*6.42E-03*	N/A
Fe-55	*9.58E-01*	N/A	N/A
Co-60	2.79E-02	**3.70E-02**	N/A
Ni-63	**3.17E-01**	*-3.20E-01*	N/A
Sr-90	6.76E-03	**9.56E-03**	N/A
Nb-94	*7.57E-03*	*7.51E-03*	N/A
Tc-99	*-2.30E-02*	*-3.42E-02*	N/A
Ag-108m	*3.78E-03*	*3.56E-03*	N/A
Cs-134	**1.69E-02**	1.43E-02	N/A
Cs-137	2.41E-02	**4.13E-02**	N/A
Eu-152	**6.57E-03**	6.12E-03	N/A
Eu-154	*7.22E-04*	*9.54E-03*	N/A
Eu-155	**2.76E-02**	*1.95E-02*	N/A
Pu-238	*2.12E-03*	*7.23E-04*	N/A
Pu-239	*1.77E-03*	*1.00E-03*	N/A
Pu-241	5.36E-01	**5.87E-01**	N/A
Am-241	**6.63E-03**	4.04E-03	N/A
Cm-243	*4.35E-03*	*6.87E-03*	N/A

Notes:

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

Containment Mat Characterization Samples (Below Containment Liner)

Radio-nuclide	Sample # 3100-0000-175								Sample # 3100-0000-176					
	175-4C-01	175-4C-02	175-10C-01	175-17C-01	175-20C-01	175-20C-02	175-21B-01 Bed-rock	175-21B-02 Bed-rock	176-3C-01	176-3C-02	176-8C-01	176-12C-01	176-18C-01	176-18C-02
	pCi/g	pCi/g	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	**6.11**	**4.50**	0.11	0.00	0.00	0.83	***0.00***	***0.00***	**2.43**	***0.33***	3.14	5.07	**3.40**	**1.51**
C-14	0.00	0.00	N/A	N/A	N/A	N/A	N/A	N/A	0.00	0.00	N/A	N/A	N/A	N/A
Mn-54	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.01	0.00
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	N/A	N/A
Co-60	***0.04***	0.04	0.00	0.16	0.03	***0.03***	0.00	0.00	**0.01**	0.02	0.03	0.02	0.01	**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	N/A	N/A
Sr-90	***0.01***	0.01	0.00	0.00	0.00	***0.00***	0.00	0.00	**0.02**	0.02	0.02	0.01	0.01	**0.01**
Nb-94	0.01	0.02	0.00	0.03	0.03	0.05	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.01
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	N/A	N/A
Ag-108m	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cs-134	0.00	0.04	0.06	0.04	0.01	0.00	0.01	0.00	0.02	0.00	0.02	0.00	0.00	0.00
Cs-137	**0.10**	0.05	0.02	0.00	0.05	***0.01***	0.02	0.01	**0.03**	0.04	0.02	0.07	0.03	**0.05**
Eu-152	0.00	0.00	0.05	0.02	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01
Eu-154	0.05	0.00	0.00	0.00	0.05	0.00	0.02	0.00	0.00	0.01	0.00	0.00	0.00	0.01
Eu-155	0.05	0.06	0.00	0.00	0.02	0.03	0.02	0.01	0.02	0.43	0.02	0.03	0.01	0.02
Pu-238	0.00	0.00	N/A	N/A	N/A	N/A	N/A	N/A	0.00	0.00	N/A	N/A	N/A	N/A
Pu-239	0.00	0.00	N/A	N/A	N/A	N/A	N/A	N/A	0.01	0.01	N/A	N/A	N/A	N/A
Pu-241	***0.00***	0.00	N/A	N/A	N/A	N/A	N/A	N/A	***0.00***	0.00	N/A	N/A	N/A	N/A
Am-241	0.01	0.00	0.00	0.11	0.09	0.00	0.00	0.00	0.01	0.00	0.05	0.00	0.00	0.00
Cm-243	0.01	0.00	N/A	N/A	N/A	N/A	N/A	N/A	0.00	0.00	N/A	N/A	N/A	N/A

Containment Mat Characterization Samples (Below Containment Liner)

Radio-nuclide	Sample # 3100-0000-177						Sample # 3100-0000-178					
	177-4C-01	177-4C-02	177-11C-01	177-14C-01	177-21C-01	177-21C-02	178-4C-01	178-4C-02	178-9C-01	178-13C-01	178-17C-01	178-18C-01
	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	***1.01***	***0.92***	*1.13*	*0.25*	**2.82**	**3.95**	**2.34**	**1.41**	*0.00*	*0.41*	**2.22**	***0.73***
C-14	*0.00*	*0.00*	N/A	N/A	N/A	N/A	*0.43*	*0.00*	N/A	N/A	N/A	N/A
Mn-54	*0.02*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.01*	*0.00*	0.02	*0.00*	*0.00*	*0.01*
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	**0.07**	0.02	*0.01*	*0.02*	*0.01*	**0.03**	**0.03**	0.16	*0.00*	*0.00*	*0.01*	**0.03**
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	**0.02**	*0.00*	0.02	*0.00*	0.02	**0.12**	**0.01**	0.02	*0.00*	0.01	*0.00*	**0.01**
Nb-94	*0.01*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.02*	*0.01*	*0.01*	*0.00*	*0.01*	*0.00*
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	*0.02*	*0.00*	*0.00*	*0.01*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.01*	*0.00*	*0.01*
Cs-134	*0.00*	*0.01*	*0.03*	0.03	*0.00*	0.01	0.03	0.04	*0.03*	0.02	0.02	*0.00*
Cs-137	**0.03**	0.03	0.02	0.02	*0.01*	***0.01***	**0.04**	0.02	*0.00*	*0.02*	0.05	**0.58**
Eu-152	*0.01*	*0.00*	*0.01*	*0.00*	*0.00*	*0.00*	*0.03*	*0.00*	*0.01*	*0.00*	0.05	*0.03*
Eu-154	*0.01*	*0.02*	*0.00*	*0.00*	*0.00*	*0.02*	*0.00*	*0.02*	*0.04*	*0.00*	*0.00*	*0.00*
Eu-155	*0.05*	*0.02*	*0.03*	*0.02*	*0.01*	*0.01*	*0.02*	*0.03*	0.05	*0.03*	*0.01*	*0.01*
Pu-238	*0.00*	*0.00*	N/A	N/A	N/A	N/A	*0.02*	*0.00*	N/A	N/A	N/A	N/A
Pu-239	*0.01*	*0.00*	N/A	N/A	N/A	N/A	*0.00*	*0.00*	N/A	N/A	N/A	N/A
Pu-241	**2.71**	*2.55*	N/A	N/A	N/A	N/A	***1.02***	*0.00*	N/A	N/A	N/A	N/A
Am-241	*0.00*	*0.01*	*0.00*	*0.00*	*0.00*	*0.00*	*0.01*	*0.01*	*0.02*	*0.10*	*0.00*	*0.05*
Cm-243	*0.00*	*0.00*	N/A	N/A	N/A	N/A	*0.01*	*0.01*	N/A	N/A	N/A	N/A

Containment Mat Characterization Samples (Below Containment Liner)

Radio-nuclide	Sample # 3100-0000-179						Sample # 3100-0000-180					
	179-4C-01	179-4C-02	179-9C-01	179-12C-01	179-15C-01	179-15C-02	180-4C-01	180-4C-02	180-10C-01	180-14C-01	180-18C-01	180-18C-02
	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	**2.35**	**9.34**	*1.70*	*0.18*	**1.76**	**2.52**	**4.48**	**3.52**	*0.65*	*0.00*	**2.24**	**4.78**
C-14	*0.00*	*0.00*	N/A	N/A	N/A	N/A	*0.00*	*0.00*	N/A	N/A	N/A	N/A
Mn-54	*0.00*	*0.01*	*0.03*	*0.02*	*0.00*	*0.00*	*0.01*	*0.00*	*0.01*	*0.00*	*0.00*	*0.00*
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	***0.02***	*0.00*	*0.01*	*0.01*	*0.00*	***0.02***	***0.01***	0.03	*0.00*	*0.01*	*0.00*	***0.01***
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***	0.02	*0.01*	*0.00*	*0.00*	**0.01**	**0.02**	*0.00*	*0.00*	*0.00*	0.01	***0.00***
Nb-94	*0.00*	*0.00*	*0.01*	*0.02*	*0.00*	*0.00*	*0.00*	*0.01*	*0.00*	*0.01*	*0.00*	*0.00*
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	*0.00*	*0.00*	*0.00*	*0.01*	*0.00*	*0.01*	*0.00*	*0.00*	*0.00*	*0.01*	*0.01*	*0.00*
Cs-134	*0.06*	*0.03*	*0.08*	*0.00*	*0.01*	*0.03*	*0.02*	*0.00*	0.03	0.03	*0.00*	0.02
Cs-137	**0.04**	0.08	*0.02*	*0.03*	*0.00*	**0.06**	**0.04**	0.03	*0.00*	*0.00*	0.10	**0.05**
Eu-152	*0.02*	*0.00*	*0.08*	*0.00*	*0.00*	*0.00*	0.05	*0.02*	*0.01*	*0.00*	*0.01*	*0.00*
Eu-154	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.02*	*0.00*	*0.03*	*0.00*	*0.00*
Eu-155	*0.02*	*0.06*	*0.09*	*0.01*	*0.02*	*0.04*	*0.05*	*0.02*	*0.03*	0.05	*0.02*	*0.03*
Pu-238	*0.01*	*0.01*	N/A	N/A	N/A	N/A	*0.00*	*0.00*	N/A	N/A	N/A	N/A
Pu-239	*0.01*	*0.00*	N/A	N/A	N/A	N/A	*0.01*	*0.01*	N/A	N/A	N/A	N/A
Pu-241	***0.00***	*0.00*	N/A	N/A	N/A	N/A	***0.00***	*0.00*	N/A	N/A	N/A	N/A
Am-241	*0.00*	*0.00*	*0.11*	*0.08*	*0.01*	*0.00*	0.03	*0.01*	*0.00*	*0.00*	*0.00*	*0.00*
Cm-243	*0.00*	*0.00*	N/A	N/A	N/A	N/A	*0.00*	*0.00*	N/A	N/A	N/A	N/A

Containment Mat Characterization Samples (Below Containment Liner)

Radio-nuclide	Sample # 3100-0000-190							Sample # 3100-0000-191					
	190-C1C-01	190-C1C-02	190-C1C-03	190-C1C-04	190-RB	190-C2C-01	190-C4C-01	191-C1C-01	191-C1C-02	191-C1C-03	191-C1C-04	191-C3C-01	191-C5C-01
	pCi/g	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	**3.12**	***1.01***	*1.05*	*1.05*	*0.13*	***0.53***	***0.84***	**4.88**	**3.54**	*2.38*	2.84	***1.66***	***1.03***
C-14	*-0.38*	*-0.23*	N/A	N/A	*-0.40*	N/A	N/A	*-0.29*	*-0.22*	N/A	N/A	N/A	N/A
Mn-54	*0.02*	*0.01*	*-0.01*	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	*1.03*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Co-60	**0.11**	*0.02*	*0.02*	0.05	*-0.01*	*-0.02*	***0.01***	***0.02***	*0.03*	0.13	0.10	*0.00*	***0.02***
Ni-63	*0.88*	*-0.45*	*-0.33*	*-0.26*	*0.38*	*0.15*	*0.77*	*0.96*	12.00	12.10	5.50	*0.73*	*-0.69*
Sr-90	***0.03***	*0.00*	*0.02*	*0.02*	*0.01*	*-0.01*	***0.02***	***-0.01***	*0.00*	*-0.02*	*-0.01*	*0.02*	***0.00***
Nb-94	*-0.02*	*0.03*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tc-99	*-0.06*	*-0.18*	N/A	N/A	*0.06*	N/A	N/A	*0.05*	*-0.04*	N/A	N/A	N/A	N/A
Ag-108m	*0.00*	*0.03*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cs-134	*0.04*	*0.03*	*0.02*	*0.00*	*0.01*	*0.01*	*0.03*	*0.00*	*0.00*	*0.02*	*0.03*	*0.00*	*0.02*
Cs-137	***0.01***	*0.04*	*0.01*	*0.03*	*-0.01*	*0.00*	***0.03***	***-0.02***	*0.00*	*-0.02*	*0.01*	*0.02*	**0.04**
Eu-152	*0.08*	*0.00*	*0.02*	*0.02*	*0.00*	*0.01*	*-0.07*	*0.02*	*0.02*	*0.03*	*0.04*	*0.02*	*-0.02*
Eu-154	*0.03*	*0.06*	*-0.02*	*-0.08*	*0.00*	*0.00*	*0.03*	*0.08*	*0.03*	*-0.05*	*-0.02*	*-0.06*	*-0.03*
Eu-155	*0.00*	*0.00*	*0.01*	*0.00*	*0.01*	*0.08*	*0.07*	*0.00*	*0.01*	*0.05*	*0.04*	*-0.01*	*0.01*
Pu-238	*0.00*	*0.01*	N/A	N/A	*0.00*	N/A	N/A	*0.00*	*0.02*	N/A	N/A	N/A	N/A
Pu-239	*0.01*	*0.01*	N/A	N/A	*0.00*	N/A	N/A	*0.00*	*0.00*	N/A	N/A	N/A	N/A
Pu-241	***0.83***	*0.80*	N/A	N/A	*0.40*	N/A	N/A	***0.71***	*-0.01*	N/A	N/A	N/A	N/A
Am-241	*0.01*	*0.01*	0.01	-0.08	*0.00*	*-0.08*	*-0.03*	*0.00*	*0.00*	*0.04*	*-0.03*	*0.06*	*0.04*
Cm-243	*0.00*	*0.02*	N/A	N/A	*0.00*	N/A	N/A	*0.00*	*0.00*	N/A	N/A	N/A	N/A

Containment Mat Characterization Samples (Below Containment Liner)

Radio-nuclide	Sample # 3100-0000-192							Sample # 3100-0000-193					
	192-C1C-01	192-C1C-02	192-C1C-03	192-C1C-04	192 RB	192-C3C-01	192-C5C-02	193-C1C-01	193-C1C-02	193-C1C-03	193-C1C-04	193-C4C-01	193-C5C-01
	pCi/g	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	***-0.37***	***1.12***	3.61	4.49	*0.08*	**2.58**	**3.06**	**4.67**	***2.73***	*1.39*	*-0.82*	***0.26***	***0.87***
C-14	*-0.16*	*-0.04*	N/A	N/A	*-0.31*	N/A	N/A	*-0.10*	*-0.29*	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	N/A
Fe-55	N/A	N/A	N/A	N/A	*0.89*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Co-60	***0.01***	*0.03*	*0.03*	*-0.01*	*0.00*	*0.00*	***-0.02***	***0.01***	*0.00*	*0.00*	*0.01*	*0.00*	***-0.01***
Ni-63	*0.51*	*0.52*	*0.80*	*-0.28*	*2.44*	*-0.26*	*0.38*	*-0.31*	*-1.04*	*-0.96*	*-0.53*	*-1.56*	*-2.08*
Sr-90	***0.00***	*0.01*	*0.00*	*0.00*	*0.00*	*0.01*	***-0.01***	***-0.02***	*0.03*	*0.02*	*0.00*	*0.00*	***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	N/A	N/A
Tc-99	*-0.19*	*-0.04*	N/A	N/A	*0.03*	N/A	N/A	*0.06*	*-0.14*	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	N/A
Cs-134	*0.00*	*0.03*	*0.00*	*0.04*	*0.01*	*0.02*	*0.00*	*0.00*	*0.02*	*0.01*	*0.00*	*0.01*	*0.04*
Cs-137	***0.00***	*0.00*	*0.00*	*0.01*	*0.01*	*-0.01*	***0.00***	***0.01***	*-0.01*	*0.02*	*-0.01*	*-0.01*	***-0.01***
Eu-152	*0.01*	*0.00*	*0.01*	*0.01*	*0.01*	*0.01*	*0.03*	*0.08*	*0.01*	*-0.01*	*0.00*	*0.01*	*-0.02*
Eu-154	*0.00*	*-0.01*	*0.07*	*-0.01*	*0.03*	*-0.06*	*0.04*	*0.00*	*0.03*	*-0.01*	*-0.05*	*-0.01*	*0.01*
Eu-155	*0.01*	*0.03*	*0.04*	*0.00*	*-0.01*	*0.06*	*0.08*	*-0.01*	*0.04*	*0.06*	*0.03*	*0.04*	*0.00*
Pu-238	*0.00*	*-0.01*	N/A	N/A	*-0.01*	N/A	N/A	*0.00*	*0.04*	N/A	N/A	N/A	N/A
Pu-239	*-0.01*	*-0.01*	N/A	N/A	*-0.02*	N/A	N/A	*-0.01*	*0.00*	N/A	N/A	N/A	N/A
Pu-241	***-1.36***	*-0.29*	N/A	N/A	*0.51*	N/A	N/A	***-0.34***	*-0.04*	N/A	N/A	N/A	N/A
Am-241	*-0.01*	*0.01*	*-0.03*	*0.00*	*0.00*	*0.05*	*-0.02*	*0.02*	*0.00*	*N/A*	*0.00*	*0.00*	*0.01*
Cm-243	*0.05*	*-0.02*	N/A	N/A	*-0.01*	N/A	N/A	*0.00*	*0.00*	N/A	N/A	N/A	N/A

Containment Mat Characterization Samples (Below Containment Liner)

Radio-nuclide	Sample # 3100-0000-194						Sample # 3100-0000-195					
	194-C1C-01	194-C1C-02	194-C1C-03	194-C1C-04	194-C3C-01	194-C4C-01	195-C1C-01	195-C1C-02	195-C1C-03	195-C1C-04	195-C3C-01	195-C4C-01
	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	**5.52**	**4.26**	0.94	1.28	***-0.18***	***0.46***	***1.34***	***0.99***	0.41	0.50	***-0.15***	***0.34***
C-14	-0.15	-0.15	N/A	N/A	N/A	N/A	-0.25	-0.24	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	**0.50**	0.01	0.02	0.01	0.01	***0.01***	***0.00***	0.01	0.01	0.03	0.02	***0.02***
Ni-63	-0.60	0.24	-1.67	-0.20	-0.73	-0.07	-0.16	-1.11	-1.41	-0.79	0.29	-0.47
Sr-90	***0.00***	0.02	0.00	0.04	0.01	***0.02***	***0.00***	0.00	0.00	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	-0.11	-0.02	N/A	N/A	N/A	N/A	0.08	0.12	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	0.02	0.00	0.03	0.01	0.00	-0.01	0.00	0.02	0.02	0.02	0.02	0.03
Cs-137	***0.01***	0.00	0.00	0.01	0.00	***0.01***	***0.00***	0.00	0.01	0.01	0.00	***0.01***
Eu-152	-0.03	-0.02	0.02	0.01	-0.01	0.05	-0.01	0.01	-0.02	0.00	-0.03	0.02
Eu-154	0.00	-0.04	0.03	-0.05	-0.03	-0.01	0.02	0.00	-0.01	-0.01	-0.01	-0.02
Eu-155	-0.01	0.02	0.00	0.02	0.03	0.03	0.02	0.04	0.01	0.04	0.01	-0.01
Pu-238	0.00	-0.01	N/A	N/A	N/A	N/A	-0.01	0.00	N/A	N/A	N/A	N/A
Pu-239	0.00	0.00	N/A	N/A	N/A	N/A	-0.01	0.00	N/A	N/A	N/A	N/A
Pu-241	***-1.15***	-0.36	N/A	N/A	N/A	N/A	***0.39***	1.41	N/A	N/A	N/A	N/A
Am-241	0.00	-0.01	0.02	0.01	0.05	0.01	0.00	0.00	0.07	-0.03	-0.07	-0.01
Cm-243	0.01	0.00	N/A	N/A	N/A	N/A	0.00	0.00	N/A	N/A	N/A	N/A

Containment Mat Characterization Samples (Below Containment Liner)

Radio-nuclide	Sample # 3100-0000-196						Sample # 3100-0000-197					
	196-C1C-01	196-C1C-02	196-C1C-03	196-C1C-04	196-C3C-01	196-C5C-01	197-C1C-01	197-C1C-02	197-C1C-03	197-C1C-04	197-C3C-01	197-C4C-01
	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	**27.80**	**31.50**	22.30	20.60	**17.30**	**6.32**	**3.65**	**3.01**	3.32	*2.06*	***1.55***	***1.07***
C-14	*-0.16*	*-0.23*	N/A	N/A	N/A	N/A	*0.10*	*0.22*	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	***0.02***	*0.02*	*0.01*	*0.01*	*0.01*	***0.00***	***0.00***	0.18	*0.01*	0.08	*0.00*	***0.03***
Ni-63	*-1.21*	*-0.63*	*-0.90*	*0.05*	*-0.65*	*-0.69*	*-0.23*	*0.36*	*-0.36*	*-0.86*	*0.07*	*-1.80*
Sr-90	***0.00***	*-0.01*	*0.01*	*0.01*	*0.00*	***0.00***	***0.00***	*0.00*	*-0.01*	*-0.01*	*-0.01*	***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	*-0.14*	*-0.03*	N/A	N/A	N/A	N/A	*0.03*	*0.09*	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	*0.01*	*0.02*	*0.04*	*0.03*	*0.00*	*0.00*	*0.02*	*0.04*	*0.00*	*0.01*	*0.01*	*0.01*
Cs-137	***0.01***	*0.01*	*0.00*	*0.00*	*0.00*	***0.00***	***0.01***	0.03	*0.02*	*0.01*	*0.01*	***0.01***
Eu-152	*0.01*	*0.00*	*0.01*	*0.00*	*0.01*	*0.01*	*-0.04*	*0.00*	*-0.03*	*0.02*	*-0.02*	*-0.09*
Eu-154	*0.02*	*0.00*	*-0.05*	*-0.03*	*-0.02*	*-0.03*	*0.00*	*-0.01*	*-0.03*	*0.00*	*-0.02*	*0.05*
Eu-155	*0.03*	*0.04*	*0.01*	*0.04*	*0.01*	*0.02*	*0.04*	*0.00*	*0.03*	*0.01*	*0.00*	*-0.07*
Pu-238	*0.00*	*0.00*	N/A	N/A	N/A	N/A	*0.00*	*0.00*	N/A	N/A	N/A	N/A
Pu-239	*0.01*	*0.01*	N/A	N/A	N/A	N/A	*0.00*	*0.00*	N/A	N/A	N/A	N/A
Pu-241	***4.86***	*1.69*	N/A	N/A	N/A	N/A	***0.54***	*1.18*	N/A	N/A	N/A	N/A
Am-241	*0.01*	*0.01*	*-0.02*	*-0.07*	*0.02*	*0.00*	*0.02*	*-0.01*	*-0.02*	*-0.03*	*-0.01*	*-0.03*
Cm-243	*0.00*	*0.02*	N/A	N/A	N/A	N/A	*0.01*	*0.02*	N/A	N/A	N/A	N/A

Compilation of Containment Wall (Outside of Liner) Concrete Core (CC) Samples

Radionuclide	Average of All Containment Wall Samples	Avg of 1st Inside and 1st Outside	Average of I/S & O/S 1st Two Core Wafers (for H-3 only)
	(ρCi/g)	(ρCi/g)	(ρCi/g)
H-3	2.22E+00	**3.23E+00**	2.14E+00
C-14	**3.81E-02**	*7.63E-02*	N/A
Mn-54	6.40E-03	**8.44E-03**	N/A
Fe-55	*7.80E-01*	*1.01E+00*	N/A
Co-60	5.61E-02	**6.37E-02**	N/A
Ni-63	*-1.34E+00*	*-1.26E+00*	N/A
Sr-90	**4.12E-03**	2.82E-03	N/A
Nb-94	*3.48E-03*	*7.44E-04*	N/A
Tc-99	*-2.31E-02*	*-5.75E-03*	N/A
Ag-108m	*4.35E-03*	*8.89E-03*	N/A
Cs-134	1.70E-02	**1.71E-02**	N/A
Cs-137	2.33E-02	**3.23E-02**	N/A
Eu-152	*-1.51E-03*	*2.75E-04*	N/A
Eu-154	*5.46E-03*	*1.17E-02*	N/A
Eu-155	**2.46E-02**	2.05E-02	N/A
Pu-238	*2.06E-03*	*1.52E-03*	N/A
Pu-239	*6.26E-04*	*-2.91E-03*	N/A
Pu-241	*1.18E-01*	*1.80E-01*	N/A
Am-241	*8.12E-03*	*1.27E-02*	N/A
Cm-243	*-5.92E-04*	*-2.43E-03*	N/A

Notes:

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

Containment Wall (Outside of Liner) Characterization Samples

Radionuclide	Sample # 3100-0000-181						Sample # 3100-0000-182					
	181-1C-01	181-1C-02	181-3C-01	181-4C-01	181-6C-01	181-6C-02	182-1C-01	182-1C-02	182-4C	182-5C-01	182-9C-01	182-9C-02
	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	**3.85**	*0.85*	*0.53*	13.20	1.99	**4.28**	**8.37**	*0.75*	*1.15*	11.40	*0.50*	***0.87***
C-14	*0.00*	0.32	N/A	N/A	N/A	N/A	*0.10*	*0.00*	N/A	N/A	N/A	N/A
Mn-54	***0.01***	*0.00*	*0.01*	*0.00*	0.02	***0.00***	**0.02**	*0.00*	*0.00*	*0.00*	0.02	**0.02**
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	**0.20**	0.05	*0.01*	*0.00*	0.06	**0.03**	**0.07**	0.04	0.14	0.07	*0.01*	***0.01***
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	0.01	0.02	*0.00*	***0.00***	***0.00***	*0.00*	*0.00*	*0.00*	*0.00*	***0.01***
Nb-94	*0.00*	*0.00*	*0.00*	*0.00*	*0.01*	*0.00*	*0.00*	*0.01*	*0.01*	*0.00*	*0.00*	*0.00*
Tc-99	*0.00*	*0.00*	N/A	N/A	N/A	N/A	*0.00*	*0.00*	N/A	N/A	N/A	N/A
Ag-108m	*0.00*	*0.00*	*0.01*	*0.00*	*0.00*	*0.00*	*0.01*	*0.00*	*0.00*	*0.00*	*0.00*	*0.02*
Cs-134	***0.00***	*0.02*	*0.00*	0.02	0.04	***0.02***	***0.00***	*0.00*	*0.02*	0.02	*0.00*	***0.02***
Cs-137	**0.20**	0.04	0.02	0.02	*0.01*	***0.00***	**0.07**	0.05	0.08	0.03	0.03	***0.00***
Eu-152	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.03*	*0.00*	*0.04*
Eu-154	*0.00*	*0.00*	*0.02*	*0.00*	*0.03*	*0.00*	*0.00*	*0.00*	*0.02*	*0.00*	*0.00*	*0.03*
Eu-155	*0.05*	*0.01*	*0.02*	*0.02*	0.04	*0.04*	*0.01*	*0.00*	*0.03*	*0.02*	0.08	*0.00*
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	*0.03*	*0.01*	*0.02*	*0.01*	*0.00*	*0.01*	*0.00*	*0.03*	*0.04*	*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

Containment Wall (Outside of Liner) Characterization Samples

Radionuclide	Sample # 3100-0000-183						Sample # 3100-0000-184					
	183-1C-01	183-1C-02	183-5C-01	183-6C-01	183-9C-01	183-9C-02	184-1C-01	184-1C-02	184-3C-01	184-5C-01	184-8C-01	184-8C-02
	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	**2.26**	7.54	5.29	*0.39*	1.54	***1.11***	**6.28**	3.10	13.00	2.08	*0.30*	**24.10**
C-14	*0.16*	*0.00*	N/A	N/A	N/A	N/A	*0.21*	*0.07*	N/A	N/A	N/A	N/A
Mn-54	***0.01***	*0.01*	*0.00*	*0.00*	*0.00*	***0.00***	***0.01***	*0.00*	*0.01*	*0.01*	*0.00*	***0.01***
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	**0.02**	0.07	*0.00*	*0.00*	*0.00*	***0.01***	**0.14**	0.08	*0.02*	*0.01*	*0.01*	***0.01***
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**	*0.00*	*0.00*	*0.01*	0.00	**0.03**	***0.00***	0.01	0.01	0.01	*0.00*	**0.01**
Nb-94	*0.00*	*0.01*	*0.00*	*0.00*	*0.01*	*0.00*	*0.00*	*0.00*	*0.02*	*0.00*	*0.01*	*0.00*
Tc-99	*0.00*	*0.00*	N/A	N/A	N/A	N/A	*0.00*	*0.00*	N/A	N/A	N/A	N/A
Ag-108m	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.03*	*0.00*	*0.01*	*0.00*	*0.00*	*0.00*	*0.01*
Cs-134	***0.01***	*0.00*	*0.00*	*0.00*	*0.00*	***0.00***	**0.03**	0.03	*0.01*	*0.00*	*0.00*	**0.02**
Cs-137	***0.01***	0.04	0.03	*0.03*	*0.01*	**0.23**	**0.06**	0.06	0.03	0.03	0.02	**0.02**
Eu-152	*0.01*	*0.00*	*0.00*	*0.00*	*0.01*	*0.00*	*0.00*	*0.02*	*0.00*	*0.00*	*0.00*	*0.01*
Eu-154	*0.01*	*0.00*	*0.00*	*0.01*	*0.02*	*0.00*	*0.00*	*0.00*	*0.00*	*0.01*	*0.04*	*0.04*
Eu-155	*0.02*	*0.02*	*0.01*	0.05	*0.02*	*0.00*	*0.02*	*0.02*	*0.04*	*0.02*	*0.01*	*0.01*
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	*0.01*	*0.00*	*0.00*	*0.02*	*0.00*	*0.03*	*0.01*	*0.00*	*0.05*	*0.05*	*0.05*	*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

Containment Wall (Outside of Liner) Characterization Samples

Radionuclide	Sample # 3100-0000-198						Sample # 3100-0000-199					
	198-C1C-01	198-C1C-02	198-C1C-03	198-C1C-04	198-C2C-01	198-C3C-01	199-C1C-01	199-C1C-02	199-C1C-03	199-C1C-04	199-C2C-01	199-C4C-01
	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	0.00	-0.90	-0.99	-1.41	-0.25	0.06	-0.26	0.44	-1.23	-0.56	0.00	0.11
C-14	0.06	-0.01	N/A	N/A	N/A	N/A	0.00	-0.31	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	0.63	N/A	N/A	N/A	N/A	1.44	1.70	N/A	N/A	N/A	N/A
Co-60	0.00	0.02	-0.02	0.01	0.00	0.03	0.00	0.00	0.01	0.01	0.01	0.01
Ni-63	-2.52	-0.61	-0.48	-1.43	-1.03	-1.52	-1.18	-1.56	-0.90	0.55	-0.53	-0.37
Sr-90	0.01	0.02	0.00	0.02	0.00	-0.01	-0.02	-0.01	-0.01	0.01	0.02	-0.02
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	-0.04	-0.06	N/A	N/A	N/A	N/A	0.07	-0.12	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	0.04	0.01	0.04	0.02	0.04	0.03	0.03	0.01	0.03	0.01	0.02	0.03
Cs-137	0.03	0.01	0.01	-0.01	0.00	-0.01	0.00	0.00	-0.02	0.05	-0.01	0.00
Eu-152	0.02	0.10	0.01	-0.10	0.00	-0.03	0.01	0.00	-0.03	-0.02	0.02	0.03
Eu-154	0.03	-0.06	-0.01	0.05	-0.01	-0.02	-0.01	0.01	-0.03	0.05	0.00	0.01
Eu-155	-0.04	0.00	0.00	0.01	0.02	0.03	0.02	0.03	0.01	0.06	0.03	0.00
Pu-238	0.00	0.00	N/A	N/A	N/A	N/A	0.00	0.00	N/A	N/A	N/A	N/A
Pu-239	0.00	0.00	N/A	N/A	N/A	N/A	0.00	0.01	N/A	N/A	N/A	N/A
Pu-241	-0.29	-1.71	N/A	N/A	N/A	N/A	-0.65	-0.70	N/A	N/A	N/A	N/A
Am-241	-0.01	-0.01	0.06	0.03	-0.01	0.00	0.02	0.01	0.03	-0.01	-0.01	0.01
Cm-243	0.00	0.00	N/A	N/A	N/A	N/A	0.00	0.01	N/A	N/A	N/A	N/A

Containment Wall (Outside of Liner) Characterization Samples

Radionuclide	Sample # 3100-0000-200							Sample # 3100-0000-201					
	200-C1C-01	200-C1C-02	200-C1C-03	200-C1C-04	200-RB	200-C3C-01	200-C5C-01	201-C1C-01	201-C1C-02	201-C1C-03	201-C1C-04	201-C4C-01	201-C6C-01
	pCi/g	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	2.00	0.90	1.52	0.50	-0.07	0.97	1.85	1.76	-0.14	1.47	-0.59	0.06	-0.52
C-14	0.02	0.07	N/A	N/A	-0.39	N/A	N/A	0.14	0.09	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	N/A
Fe-55	N/A	N/A	N/A	N/A	1.60	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Co-60	0.04	0.00	0.05	0.14	0.00	0.00	0.08	0.04	0.03	0.06	0.00	0.02	-0.01
Ni-63	-0.64	-0.51	-0.52	-1.56	1.12	-1.74	-1.94	-0.91	-1.12	-1.49	-1.81	-13.50	-1.13
Sr-90	0.00	0.01	0.01	-0.01	0.00	0.02	0.00	0.00	-0.02	0.02	0.02	-0.01	0.03
Nb-94	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tc-99	0.04	-0.21	N/A	N/A	-0.09	N/A	N/A	-0.04	0.03	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	N/A
Cs-134	0.02	0.00	0.02	0.02	0.01	0.04	0.02	0.04	0.03	0.00	0.02	0.04	0.01
Cs-137	0.00	0.01	0.00	0.00	0.00	0.02	0.00	-0.03	0.00	0.01	0.03	0.00	0.00
Eu-152	0.02	-0.05	-0.01	0.01	-0.01	-0.08	0.03	-0.04	-0.02	0.05	0.00	0.03	-0.04
Eu-154	0.02	-0.03	-0.03	-0.02	0.00	0.05	-0.02	-0.02	0.00	0.00	0.04	-0.04	-0.04
Eu-155	0.03	0.04	0.04	0.00	0.02	0.05	0.02	0.08	0.07	0.01	0.04	0.03	0.03
Pu-238	0.00	0.01	N/A	N/A	0.01	N/A	N/A	0.01	0.00	N/A	N/A	N/A	N/A
Pu-239	-0.02	0.01	N/A	N/A	0.00	N/A	N/A	0.00	-0.01	N/A	N/A	N/A	N/A
Pu-241	-0.39	0.91	N/A	N/A	-0.63	N/A	N/A	0.30	0.70	N/A	N/A	N/A	N/A
Am-241	0.00	0.00	-0.02	0.01	0.01	-0.07	0.02	-0.01	-0.01	0.00	0.01	0.01	0.07
Cm-243	0.00	0.02	N/A	N/A	0.00	N/A	N/A	0.00	-0.01	N/A	N/A	N/A	N/A

Containment Wall (Outside of Liner) Characterization Samples

Radionuclide	Sample # 3100-0000-202						Sample # 3100-0000-203					
	202-C1C-01	202-C1C-02	202-C1C-03	202-C1C-04	202-C6C-01	202-C9C-01	203-C1C-01	203-C1C-02	203-C1C-03	203-C1C-04	203-C4C-01	203-C6C-01
	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	4.72	4.33	2.09	1.11	-0.48	1.51	2.52	-0.22	-0.26	0.86	-0.35	-0.19
C-14	0.24	0.15	N/A	N/A	N/A	N/A	-0.17	0.05	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	1.00	0.02	N/A	N/A	N/A	N/A	0.59	-0.73	N/A	N/A	N/A	N/A
Co-60	0.29	0.00	0.89	0.10	0.08	0.01	0.25	0.00	0.08	0.06	0.02	0.05
Ni-63	-1.29	-1.26	0.06	-0.31	-1.05	-0.77	-0.91	-1.17	-1.02	-0.73	-1.86	-1.92
Sr-90	0.01	0.00	0.01	-0.02	-0.02	0.00	0.01	-0.01	0.07	0.02	0.00	-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	N/A
Tc-99	-0.07	-0.02	N/A	N/A	N/A	N/A	-0.02	0.04	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	-0.01	0.02	0.01	0.03	0.02	0.02	0.00	0.03	0.00	0.03	0.04	0.03
Cs-137	0.02	0.00	0.03	0.02	0.02	0.00	0.03	0.04	0.01	0.02	0.01	0.02
Eu-152	-0.02	-0.01	-0.02	-0.03	0.01	-0.03	-0.01	0.02	-0.02	-0.02	0.01	0.00
Eu-154	0.10	-0.02	0.00	-0.02	-0.02	0.08	0.02	-0.02	0.00	0.05	0.00	0.01
Eu-155	0.01	0.03	0.05	0.01	-0.01	0.02	0.03	0.09	-0.02	0.04	0.03	0.02
Pu-238	0.00	0.00	N/A	N/A	N/A	N/A	0.00	0.00	N/A	N/A	N/A	N/A
Pu-239	0.00	0.02	N/A	N/A	N/A	N/A	0.00	0.00	N/A	N/A	N/A	N/A
Pu-241	1.22	0.71	N/A	N/A	N/A	N/A	0.90	1.18	N/A	N/A	N/A	N/A
Am-241	0.02	0.00	0.00	0.01	-0.06	-0.02	0.00	0.00	0.03	-0.08	0.02	0.02
Cm-243	-0.01	-0.01	N/A	N/A	N/A	N/A	0.00	0.01	N/A	N/A	N/A	N/A

Compilation of Incore Sump Lower Wall Concrete Core (CC) Samples

Radionuclide	Average of All Incore Sump Lower Wall Samples	Maximum Sample Result	
	(pCi/g)	(pCi/g)	Notes:
H-3	6.77E+02	**3.44E+03**	
C-14	3.97E-01	**1.54E+00**	
Mn-54	*-5.38E-02*	**3.19E-02**	
Fe-55	5.41E+02	**1.00E+04**	Liner
Co-60	1.54E+02	**7.60E+02**	Liner
Ni-63	3.76E+00	**8.58E+01**	Liner
Sr-90	6.38E-02	**5.65E-01**	Liner
Nb-94	6.91E-02	**4.25E-01**	
Tc-99	3.94E-01	**1.12E+00**	Liner
Ag-108m	*2.38E-02*	*2.37E-01*	
Cs-134	6.04E-01	**5.01E+00**	
Cs-137	1.30E+00	**3.89E+01**	Liner
Eu-152	1.71E+02	**7.99E+02**	
Eu-154	1.36E+01	**7.01E+01**	
Eu-155	2.04E-01	**1.26E+00**	
Pu-238	4.11E-02	**3.62E-01**	Liner
Pu-239	1.92E-02	**7.60E-02**	
Pu-241	2.37E+00	**9.86E+00**	Liner
Am-241	-9.91E-03	**7.29E-01**	Liner
Cm-243	3.76E-02	**3.75E-01**	Liner

Notes:

1. **Sample Results in Italic Font are <Detectable Activity (i.e. < 2sigma error)**
2. **Sample Results that are less then Detectable Activity are shown as reported values**
3. **N/A - Samples not analyzed for these radionuclides**
4. **Bold Font Value used in Calculation**
5. **Liner This is a sample of the containment carbon steel liner that remains in the Incore Sump Area**

In Core Sump Lower Wall Characterization Sample

Radionuclide	Wall Sample # 3002-0000-189														
	189-Liner	189-1C-01	189-1C-02	189-1C-03	189-2C-01	189-2C-02	189-2C-03	189-2C-04	189-2C-05	189-3C-01	189-3C-02	189-3C-03	189-3C-04	189-3C-05	189-3C-06
	pCi/g	pCi/g	pCi/g	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	2040	2490	1350	830	368	216	146	86.10	39.90	23.70	9.93	6.44	-1.34	0.00
C-14	N/A	**1.54**	1.00	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	-0.09	-0.24	-0.15	-0.17	0.01	0.07	0.05	0.00	0.04	0.00	0.00	**0.03**	-0.02	-0.02	0.00
Fe-55	**10000**	533	468	307	92.60	30.20	4.37	8.66	1.82	-17.20	-5.10	12.70	12.20	-12.50	-6.44
Co-60	**760**	483	322	197	81.30	20.80	11.60	4.54	2.10	1.28	0.56	0.35	0.12	0.18	0.48
Ni-63	**85.80**	3.37	2.72	3.99	1.07	-4.38	-2.50	2.50	1.33	-7.04	-4.85	1.66	-3.84	-0.12	-3.34
Sr-90	**0.57**	0.03	0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nb-94	0.20	0.38	**0.43**	0.01	-0.07	0.00	0.03	0.01	0.01	0.01	0.02	0.01	-0.01	0.03	0.00
Tc-99	**1.12**	0.42	0.46	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	-0.04	0.04	0.24	0.11	-0.02	0.03	-0.01	0.00	-0.01	-0.01	0.00	0.01	0.00	0.00	0.01
Cs-134	0.45	**5.01**	2.07	0.94	0.60	0.11	0.14	0.04	0.01	0.03	0.00	0.02	0.02	0.00	0.00
Cs-137	**38.90**	-0.59	0.04	0.17	0.09	0.07	-0.01	0.02	0.03	0.06	0.03	0.00	0.02	-0.01	0.47
Eu-152	2.42	727	528	278	106	29.50	17.20	6.06	2.93	1.60	0.85	0.30	0.13	0.05	0.27
Eu-154	1.18	65.80	43.70	21.70	8.95	2.06	1.16	0.47	0.26	0.09	0.09	0.03	0.05	-0.06	0.00
Eu-155	1.07	1.12	-0.83	0.40	-0.05	0.16	-0.12	-0.13	0.04	-0.03	0.01	0.04	0.05	-0.02	0.04
Pu-238	**0.36**	0.00	-0.01	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	0.03	0.01	0.00	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	**9.86**	0.65	0.68	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	**0.73**	0.02	0.02	-0.67	-0.61	-0.01	-0.11	-0.08	0.12	0.06	0.04	-0.01	0.05	-0.06	0.04
Cm-243	**0.38**	0.01	0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Liner This is a sample of the containment carbon steel liner that remains in the Incore Sump Area

In Core Sump Lower Wall Characterization Sample

Radionuclide	Wall Sample # 3002-0000-195							Wall Sample # 3002-0000-196							
	195 Liner	C1C-01	C1C-02	C1C-03	C1C-04	C3C-01	C4C-01	Liner	C1C-01	C1C-02	C1C-03	C1C-04	RB	C3C-01	C5C-01
	pCi/g	pCi/g	pCi/g	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	1.02	1080	1740	1150	809	4.53	0.83	7.04	2430	**3440**	314	1050	2.82	3.99	0.86
C-14	*-0.23*	N/A	N/A	N/A	N/A	N/A	N/A	*-0.12*	N/A	N/A	N/A	N/A	*-0.20*	N/A	N/A
Mn-54	*0.01*	*-0.34*	*0.01*	*-0.13*	*0.08*	*0.03*	*0.02*	*0.00*	*-0.51*	*-0.16*	*-0.27*	*0.12*	*0.00*	*0.01*	*0.00*
Fe-55	13.30	430	383	186	N/A	N/A	N/A	2.01	1.11	0.50	N/A	N/A	0.31	N/A	N/A
Co-60	0.51	688	511	170	65.90	*0.04*	*0.02*	0.40	564	598	97.50	50.90	*0.00*	0.08	0.07
Ni-63	*-0.31*	1.67	2.97	1.21	N/A	N/A	N/A	0.44	2.68	1.51	N/A	N/A	*-0.02*	N/A	N/A
Sr-90	0.04	0.07	0.09	0.13	*0.00*	*0.01*	*0.00*	0.04	0.04	0.09	*0.00*	*0.00*	*0.00*	*0.01*	*0.02*
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	N/A	N/A	N/A
Tc-99	*-0.07*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.05	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	N/A	N/A	N/A
Cs-134	0.03	2.01	1.11	0.50	0.10	0.03	0.03	*0.03*	2.73	1.45	0.40	0.26	*0.00*	*0.02*	*0.00*
Cs-137	*0.07*	*-0.29*	*-0.08*	*-0.02*	*-0.17*	*0.01*	*-0.01*	*0.00*	*-0.03*	*0.12*	*-0.03*	*0.11*	*0.01*	*0.00*	*0.03*
Eu-152	*0.00*	**799**	613	218	89.50	*0.01*	*0.07*	0.26	714	764	142	75.10	*0.00*	*0.11*	*0.05*
Eu-154	*0.02*	69.00	46.90	16.20	*0.00*	*0.00*	*0.00*	*0.01*	**70.10**	59.60	*0.00*	*0.00*	*-0.01*	*0.00*	*0.10*
Eu-155	*-0.04*	**1.26**	*0.00*	0.41	0.52	*-0.02*	*0.01*	*0.08*	0.67	0.88	0.42	0.16	*0.01*	*-0.02*	*0.03*
Pu-238	*0.00*	*0.02*	*-0.01*	N/A	N/A	N/A	N/A	*0.00*	*-0.01*	0.06	N/A	N/A	*0.00*	N/A	N/A
Pu-239	*0.00*	*0.01*	*0.04*	N/A	N/A	N/A	N/A	*0.00*	*0.02*	**0.08**	N/A	N/A	*0.00*	N/A	N/A
Pu-241	N/A	4.04	0.27	N/A	N/A	N/A	N/A	N/A	0.04	1.07	N/A	N/A	N/A	N/A	N/A
Am-241	*0.02*	0.10	*0.00*	0.49	*-0.41*	*-0.02*	*-0.02*	*0.01*	*0.00*	*-0.01*	*0.04*	*0.02*	*0.00*	*-0.02*	*-0.01*
Cm-243	*0.02*	*0.00*	*0.00*	N/A	N/A	N/A	N/A	*0.00*	*-0.03*	*0.00*	N/A	N/A	*0.00*	N/A	N/A

Liner This is a sample of the containment carbon steel liner that remains in the Incore Sump Area

Compilation of Incore Sump Upper Wall Concrete Core (CC) Samples

Radio-nuclide	Average of All Incore Sump Lower Wall Samples	Maximum Sample Result	
	(pCi/g)	(pCi/g)	Notes:
H-3	1.70E+03	**9.63E+03**	
C-14	2.54E+00	**5.76E+00**	
Mn-54	-5.39E-02	**1.16E+00**	
Fe-55	1.57E+03	**2.01E+04**	Liner
Co-60	3.19E+02	**2.70E+03**	Liner
Ni-63	1.82E+01	**4.95E+02**	Liner
Sr-90	1.03E+00	**1.22E+01**	Liner
Nb-94	5.68E-02	**4.25E-01**	
Tc-99	3.49E-01	**7.86E-01**	Liner
Ag-108m	*2.94E-02*	*4.53E-01*	
Cs-134	1.27E+00	**9.52E+00**	
Cs-137	1.82E+01	**7.50E+02**	Liner
Eu-152	2.94E+02	**2.74E+03**	
Eu-154	2.38E+01	**2.56E+02**	
Eu-155	4.82E-01	**2.72E+00**	
Pu-238	1.30E+00	**1.36E+01**	Liner
Pu-239	6.28E-01	**6.56E+00**	Liner
Pu-241	2.40E+01	**2.82E+02**	Liner
Am-241	8.49E-01	**3.08E+01**	Liner
Cm-243	1.16E+00	**9.75E+00**	Liner

Notes:

1. **Sample Results in Italic Font are <Detectable Activity (i.e. < 2sigma error)**
2. **Sample Results that are less then Detectable Activity are shown as reported values**
3. **N/A - Samples not analyzed for these radionuclides**
4. **Bold Font Value used in Calculation**
5. **Liner This is a sample of the containment carbon steel liner that remains in the Incore Sump Area**

In Core Sump Upper Wall Characterization Samples

Radionuclide	Wall Sample # 3002-0000-191													
	191-Liner	191-1C-01	191-1C-02	191-1C-03	191-1C-04	191-1C-05	191-2C-01	191-2C-02	191-2C-03	191-2C-04	191-2C-05	191-2C-06	191-3C-01	191-3C-02
	pCi/g	pCi/g	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	6250	4280	4640	2050	1350	550	283	184	85.40	31.70	40.40	28.80	32.20
C-14	N/A	**5.76**	2.84	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mn-54	**1.16**	*-0.02*	*0.48*	*0.25*	*0.21*	*0.12*	*0.09*	*0.06*	*0.04*	*0.03*	*0.03*	0.03	*0.02*	*0.02*
Fe-55	**20100**	1110	900	648	305	137	55.00	23.60	6.32	*1.26*	*15.60*	*19.50*	*16.30*	7.30
Co-60	**2700**	572	518	299	142	60.60	25.30	10.70	3.45	1.54	1.56	1.09	1.41	0.28
Ni-63	**495**	7.00	5.11	2.53	*0.31*	*1.86*	*7.63*	*9.12*	*10.70*	*9.50*	*9.37*	*7.83*	*6.83*	*8.78*
Sr-90	**12.20**	0.05	0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nb-94	*-0.35*	*0.03*	**0.43**	*0.19*	*0.16*	*0.10*	*0.06*	*0.04*	*0.03*	*0.03*	*0.03*	*0.02*	*0.02*	0.03
Tc-99	*0.50*	0.55	0.46	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ag-108m	*-0.28*	*-0.34*	*0.45*	*0.16*	*0.13*	*0.07*	*0.06*	*0.03*	*0.03*	*0.03*	*0.02*	*0.02*	*0.01*	*0.02*
Cs-134	1.28	7.82	4.90	*1.18*	1.02	*0.33*	0.14	*0.05*	*0.04*	*0.04*	*0.06*	*0.03*	*0.02*	*0.02*
Cs-137	**750**	*0.55*	*-0.79*	*0.44*	*-0.09*	*0.24*	*0.08*	*0.05*	*0.04*	0.04	0.16	0.16	0.02	0.13
Eu-152	18.20	926	829	495	243	107	43.20	20.70	6.20	2.62	0.98	0.71	*0.08*	0.19
Eu-154	*0.00*	87.80	76.60	39.80	17.60	8.20	3.27	0.47	0.54	*0.12*	*0.09*	*0.05*	0.05	*0.07*
Eu-155	*5.00*	*2.85*	*2.28*	*0.44*	*-0.13*	*0.52*	*0.21*	*0.12*	*0.09*	*0.08*	*0.06*	*0.06*	*0.05*	*0.06*
Pu-238	**13.60**	*0.00*	*0.02*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pu-239	**6.56**	0.03	*0.02*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pu-241	**282**	*-2.43*	*2.15*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Am-241	**30.80**	*0.01*	*0.02*	*0.53*	*0.73*	*0.09*	*0.23*	*0.18*	*0.14*	*0.19*	*0.04*	*0.14*	*0.05*	*0.09*
Cm-243	**9.75**	*0.01*	*0.02*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Liner This is a sample of the containment carbon steel liner that remains in the Incore Sump Area

In Core Sump Upper Wall Characterization Samples

Radionuclide	Wall Sample # 3002-0000-190													
	Liner	C-1C-01	C-1C-02	C-2C-01	C-2C-02	C-2C-03	C-3C-01	C-3C-02	C-3C-03	C-3C-04	C-3C-05	C-4C-01	C-4C-02	C-4C-03
	pCi/g	pCi/g	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	3870	3510	2405	1300	680	337	242	135	51.20	32.10	16.90	11.00	6.12
C-14	N/A	2.43	2.43	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mn-54	*-0.04*	*-1.29*	*-0.05*	*-0.21*	*0.48*	*-0.08*	*0.01*	0.12	0.41	*0.03*	*0.05*	*0.04*	*0.02*	*0.00*
Fe-55	18500	964	785	145	57.90	19.30	87.60	3.45	*-0.97*	*-1.76*	*-3.86*	*-0.38*	*-4.70*	*-1.19*
Co-60	1560	633	281	109	47.80	20.30	9.79	4.43	2.01	1.32	0.56	*0.00*	0.13	0.26
Ni-63	76.30	7.56	2.29	*-0.73*	*-1.12*	*-1.23*	*-2.00*	*-1.25*	*-1.73*	*-1.56*	*-1.81*	*-2.21*	*-1.17*	*-1.66*
Sr-90	0.61	0.06	0.06	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
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	N/A	N/A
Tc-99	0.22	0.68	0.01	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	N/A	N/A
Cs-134	*-1.42*	**9.52**	4.08	1.23	0.53	0.10	0.31	0.06	0.15	*-0.11*	0.13	0.05	*-0.02*	*0.01*
Cs-137	19.20	1.01	0.18	0.25	0.26	*-0.26*	0.05	0.06	0.04	0.68	0.06	0.07	0.06	0.17
Eu-152	10.40	914	531	171	83.10	36.70	17.90	8.48	3.81	1.35	0.75	0.13	0.31	0.26
Eu-154	1.22	91.80	48.60	14.60	6.20	*0.00*	1.13	0.69	0.41	0.50	*-0.01*	*-0.03*	0.10	*-0.02*
Eu-155	*-3.09*	1.25	1.49	0.28	*0.01*	*-0.13*	0.14	0.24	0.03	*-0.11*	*-0.10*	0.05	*-0.10*	*-0.02*
Pu-238	0.36	*0.00*	*-0.02*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pu-239	0.25	*0.05*	*-0.01*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pu-241	12.60	*-0.98*	*-1.26*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Am-241	0.98	0.05	*-0.03*	*-0.35*	*0.24*	*0.08*	*-0.25*	*0.01*	*0.02*	*0.26*	*0.23*	*-0.05*	*-0.08*	*-0.13*
Cm-243	0.89	0.03	0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Liner This is a sample of the containment carbon steel liner that remains in the Incore Sump Area

In Core Sump Upper Wall Characterization Samples

Radionuclide	Wall Sample # 3002-0000-192													
	Liner	C-1C-01	C-1C-02	C-2C-01	C-3C-01	C-3C-02	C-3C-03	C-3C-04	C-3C-05	C-4C-01	C-4C-02	C-4C-03	C-4C-04	C-2C-01-RE
	pCi/g	pCi/g	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	3320	3310	861	2830	1050	483	318	180	95.30	70.80	52.30	56.00	N/A
C-14	N/A	4.06	2.52	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mn-54	*-2.32*	*-0.41*	*0.03*	*0.13*	*-0.31*	*0.16*	*0.10*	*-0.05*	*0.00*	*0.01*	*0.02*	*-0.03*	*0.08*	*0.37*
Fe-55	18600	1180	808	356	79.40	57.20	30.20	10.80	*-0.03*	*-1.34*	*-3.18*	*-9.10*	*-1.75*	8080
Co-60	1980	652	405	207	73.30	39.80	18.40	7.86	4.39	1.52	0.73	*0.00*	0.33	389
Ni-63	183	9.02	3.18	2.06	*-1.34*	*-1.55*	*-2.65*	*-1.79*	*-1.98*	*-1.96*	*-0.30*	*-1.26*	*-0.86*	14.50
Sr-90	2.13	0.11	0.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
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	N/A	N/A
Tc-99	**0.79**	0.24	0.35	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	N/A	N/A
Cs-134	0.35	7.07	4.24	1.66	0.37	0.52	0.17	0.06	0.15	0.03	0.12	0.09	0.03	0.86
Cs-137	37.50	*-0.27*	1.14	0.90	*-0.11*	0.12	0.05	0.10	0.18	0.08	0.04	0.00	0.06	1.24
Eu-152	13.10	953	717	324	120	64.00	29.60	14.00	7.50	2.64	1.19	0.48	*0.03*	14.30
Eu-154	2.58	96.10	57.00	25.60	10.40	5.92	2.19	*0.00*	*0.00*	0.18	*-0.12*	*-0.16*	*0.08*	0.30
Eu-155	1.97	2.72	1.35	0.35	0.13	*-0.14*	0.04	0.06	0.10	0.10	0.13	*-0.04*	*-0.06*	*-0.34*
Pu-238	0.61	*-0.03*	*-0.02*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pu-239	0.33	*0.04*	*0.02*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pu-241	19.00	*-0.88*	*-1.44*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Am-241	2.32	0.06	*0.01*	*0.59*	*-0.90*	*-0.16*	*-0.05*	*-0.21*	*-0.11*	*-0.03*	*0.01*	*-0.07*	*0.29*	*-3.80*
Cm-243	1.92	0.03	0.03	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Liner This is a sample of the containment carbon steel liner that remains in the Incore Sump Area

In Core Sump Upper Wall Characterization Samples

Radionuclide	Wall Sample # 3002-0000-194											
	Liner	C1C-01	C1C-02	C1C-03	C1C-04	C1C-05	RB	P	C3C-01	C3C-02	C5C-01	C5C-02
	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	*0.00*	6460	8820	**9630**	6940	4790	6.15	0.28	913	962	526	742
C-14	0.11	N/A	N/A	N/A	N/A	N/A	N/A	0.19	N/A	N/A	N/A	N/A
Mn-54	*0.02*	*-1.48*	*-0.40*	*0.30*	*-0.58*	*-0.37*	*0.00*	*0.04*	*-0.11*	*-0.09*	*-0.03*	*-0.02*
Fe-55	11.40	1950	1640	969	554	284	*0.00*	2.43	N/A	N/A	N/A	N/A
Co-60	1.89	2140	1800	1260	717	340	0.00	28.00	44.50	45.60	30.50	46.70
Ni-63	0.36	8.58	8.58	6.62	4.04	1.87	*-0.03*	28.40	N/A	N/A	N/A	N/A
Sr-90	0.41	0.31	0.14	0.06	0.06	0.06	0.01	5.08	0.01	0.01	*-0.01*	*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	*0.00*	N/A	N/A	N/A	N/A	N/A	N/A	*0.06*	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	*0.01*	6.32	7.93	3.62	2.10	0.83	*0.00*	0.05	0.13	0.07	*0.00*	0.15
Cs-137	0.35	*-0.65*	*-0.16*	*-0.01*	*-0.12*	*0.00*	*0.01*	172	*0.02*	*-0.12*	*0.02*	*0.03*
Eu-152	*0.00*	**2740**	2690	1910	1050	495	*0.01*	*-0.06*	62.90	69.20	45.20	68.90
Eu-154	*-0.02*	**256**	197	130	67.50	33.10	*0.00*	4.37	*0.00*	*0.00*	*0.00*	*0.00*
Eu-155	*0.00*	1.25	1.85	2.30	1.13	0.51	*0.00*	0.65	0.11	0.16	0.12	*-0.07*
Pu-238	*-0.01*	0.02	0.02	NA	NA	NA	*0.00*	3.60	NA	NA	NA	NA
Pu-239	*-0.01*	0.10	0.04	NA	NA	NA	*0.00*	1.36	NA	NA	NA	NA
Pu-241	NA	1.39	1.43	NA	NA	NA	*0.00*	*0.00*	NA	NA	NA	NA
Am-241	*-0.01*	*0.02*	*0.00*	*0.27*	*-0.28*	*0.00*	*0.00*	13.90	*-0.18*	*0.21*	*-0.02*	*-0.22*
Cm-243	*-0.01*	*0.00*	*0.00*	NA	NA	NA	*0.00*	3.57	NA	NA	NA	NA

RB This is a sample of the Reinforcing steel (ReBar)

P This is a sample of the one (1) inch diameter drain line piping

Liner This is a sample of the containment carbon steel liner that remains in the Incore Sump Area

Compilation of Incore Sump Upper Wall Concrete Core (CC) Samples

Radionuclide	Average of All Incore Sump Lower Wall Samples	Maximum Sample Result	
	(pCi/g)	(pCi/g)	
H-3	6.43E+02	**4.85E+03**	
C-14	1.16E+02	**1.60E+03**	
Mn-54	1.25E-01	**2.94E+00**	
Fe-55	4.59E+02	**9.55E+03**	Liner
Co-60	1.15E+02	**2.23E+03**	
Ni-63	2.27E+01	**7.91E+02**	
Sr-90	7.54E-01	**7.00E+00**	Liner
Nb-94	*1.30E-02*	*4.18E-01*	
Tc-99	3.27E-01	1.04E+00	Liner
Ag-108m	*-5.68E-02*	*3.10E-01*	
Cs-134	7.15E-01	**6.91E+00**	
Cs-137	1.42E+01	**5.92E+02**	
Eu-152	8.42E+01	**5.19E+02**	
Eu-154	7.86E+00	**5.59E+01**	
Eu-155	2.38E-01	**2.49E+00**	
Pu-238	8.27E-02	**7.58E-01**	Liner
Pu-239	5.28E-02	**3.18E-01**	Liner
Pu-241	1.27E+00	**9.81E-01**	
Am-241	7.11E-02	**1.18E+00**	Liner
Cm-243	8.52E-02	**4.55E-01**	Liner

Notes:

1. **Sample Results in Italic Font are <Detectable Activity (i.e. < 2sigma error)**
2. **Sample Results that are less then Detectable Activity are shown as reported values**
3. **N/A - Samples not analyzed for these radionuclides**
4. **Bold Font Value used in Calculation**
5. **Liner - This is the result of the sample of the carbon steel liner that remains in the Incore Sump Area**

In Core Sump Floor Characterization Samples

Radionuclide	Floor Sample # 3002-0000-187																
	187-Liner	187-1C-01	187-1C-02	187-1C-03	187-1C-04	187-1C-05	187-1C-06	187-1C-07	187-1C-08	187-3C-01	187-3C-02	187-3C-03	187-4C-01	187-4C-02	187-4C-03	187-4C-04	187-4C-05
	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	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	326	1590	2110	3010	2530	2890	2870	**4850**	414	172	157	78.60	13.00	19.90	3.46	2.97
C-14	N/A	**1600**	5.18	3.44	3.13	2.11	1.39	0.63	0.97	-0.04	0.08	N/A	N/A	N/A	N/A	N/A	N/A
Mn-54	0.98	**2.94**	0.74	0.01	0.03	-0.09	-0.08	-0.50	-0.19	-0.03	0.04	-0.01	0.00	0.00	0.01	0.02	0.00
Fe-55	2680	830	651	675	597	542	341	260	218	15.70	1.90	0.12	0.51	0.08	0.59	-0.66	0.49
Co-60	135	**2230**	392	319	258	245	216	127	98.60	18.00	5.49	4.91	1.64	0.67	0.32	0.26	0.21
Ni-63	84.70	**791**	4.09	3.34	3.12	3.10	14.60	2.04	1.13	-0.01	-0.10	0.12	0.20	0.30	0.08	0.21	-0.02
Sr-90	1.75	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.02	0.00	N/A	N/A	N/A	N/A	N/A	N/A
Nb-94	-0.13	0.35	0.42	0.10	0.13	-0.32	0.18	-0.14	-0.15	0.02	0.02	0.00	0.01	0.01	0.00	0.02	0.00
Tc-99	**1.04**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.54	0.37	N/A	N/A	N/A	N/A	N/A	N/A
Ag-108m	-0.03	-0.05	0.23	0.31	-0.20	-0.22	-0.18	0.03	-0.63	-0.01	0.00	0.01	0.02	0.00	0.00	0.00	0.00
Cs-134	0.25	**6.91**	5.44	4.54	3.24	2.30	1.84	1.31	0.86	0.09	0.05	0.04	0.01	0.04	0.02	0.00	0.02
Cs-137	12.60	**592**	0.00	0.17	0.12	0.05	0.20	0.66	1.57	0.05	0.04	0.02	0.19	0.19	0.09	0.05	0.13
Eu-152	-0.49	453	**519**	500	418	338	246	192	128	20.10	7.45	3.29	1.58	0.59	0.28	0.10	0.03
Eu-154	1.91	**55.90**	52.90	47.20	38.20	28.60	21.80	15.20	9.16	1.78	0.49	0.31	0.05	0.05	-0.01	0.00	0.01
Eu-155	1.15	1.22	1.40	**2.49**	0.48	0.00	0.34	0.38	0.07	0.11	0.15	0.05	0.06	0.00	0.01	0.04	0.04
Pu-238	-0.08	0.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-0.01	0.04	N/A	N/A	N/A	N/A	N/A	N/A
Pu-239	0.04	0.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.03	0.02	N/A	N/A	N/A	N/A	N/A	N/A
Pu-241	3.54	2.04	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.86	-0.22	N/A	N/A	N/A	N/A	N/A	N/A
Am-241	0.24	0.29	0.42	-0.58	0.68	0.35	0.19	0.14	0.00	0.02	0.01	-0.01	0.04	0.03	0.01	0.00	-0.03
Cm-243	0.40	0.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00	0.00	N/A	N/A	N/A	N/A	N/A	N/A

In Core Sump Floor Characterization Samples

		Floor Sample # 3002-0000-187						Floor Sample # 3002-0000-188												
187-4C-06	Radionuclide	187-5C-01	187-5C-02	187-5C-03	187-5C-04	187-5C-05	187-5C-06	188-Liner	188-1C-01	188-1C-02	188-1C-03	188-1C-04	188-2C-05	188-2C-06	188-2C-07	188-2C-08	188-3C-09	188-3C-10	188-3C-11	188-3C-12
pCi/g		pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g
2.44	H-3	1.35	0.67	2.30	1.23	1.19	2.84	N/A	3340	2490	1900	1140	718	506	242	116	93.70	58.80	29.40	17.40
N/A	C-14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.35	1.48	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
0.01	Mn-54	0.01	0.00	0.02	0.01	0.00	0.00	0.81	0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
-0.73	Fe-55	-1.20	-2.61	-0.71	-1.95	-0.64	1.00	**9550**	403	371	230	155	73.00	30.70	9.95	1.03	-2.32	-0.32	-10.00	-12.70
0.22	Co-60	0.13	0.02	0.00	0.03	0.04	0.10	1050	301	229	154	79.90	36.40	22.00	6.30	4.75	1.56	1.06	0.18	0.11
-0.26	Ni-63	-0.19	-0.08	-0.31	-0.06	-0.28	0.01	296	2.56	2.62	0.76	1.64	-0.23	0.39	0.36	-0.14	-1.03	-0.86	-0.35	-0.82
N/A	Sr-90	N/A	N/A	N/A	N/A	N/A	N/A	**7.00**	0.10	0.16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
-0.01	Nb-94	0.01	0.02	0.01	0.01	0.00	0.00	-0.09	-0.16	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	0.27	0.27	0.40	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
0.00	Ag-108m	0.01	-0.02	0.01	0.00	0.00	0.00	-0.42	-0.35	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
0.01	Cs-134	0.00	0.01	0.04	0.02	0.02	0.03	-0.88	4.54	2.92	1.45	0.80	-0.07	0.32	0.07	-0.12	0.01	0.14	0.10	0.27
0.12	Cs-137	0.23	0.07	0.11	0.10	0.12	0.15	126	-0.04	0.13	0.35	0.45	0.16	0.05	0.00	0.06	0.04	0.10	-0.05	0.02
-0.02	Eu-152	0.05	0.02	-0.03	-0.01	-0.05	-0.03	3.56	515	407	296	154	68.40	39.40	9.98	6.26	2.43	1.32	0.86	-0.13
-0.01	Eu-154	-0.03	-0.01	-0.03	-0.03	-0.07	0.04	-0.35	50.90	37.40	24.80	8.94	4.91	2.79	1.31	0.90	0.12	0.00	0.28	-0.16
0.03	Eu-155	0.02	0.01	0.01	0.03	-0.02	0.04	1.67	-0.57	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	**0.76**	0.01	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	**0.32**	0.03	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	5.91	0.36	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
-0.07	Am-241	0.03	-0.06	-0.05	-0.01	-0.01	0.00	**1.18**	0.03	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	**0.46**	0.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

In Core Sump Floor Characterization Samples

		Floor Sample # 3002-0000-193													
188-1C-13	Radionuclide	C1C-01	C1C-02	C1C-03	C1C-04	C1C-05	B-01	B-02	C3C-01	C3C-02	C5C-01	C5C-02	Liner	RB	P
pCi/g		pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g
17.40	H-3	246	107	31.50	12.50	5.35	6.83	0.19	0.85	-0.26	9.14	7.09	0.22	1.39	0.79
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	-0.15	-0.09
N/A	Mn-54	0.12	0.01	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.00	N/A	-0.02	-0.01	0.01
-5.16	Fe-55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	316.00	N/A	N/A	N/A
0.08	Co-60	25.50	9.86	0.81	0.33	0.19	0.01	0.03	0.00	-0.01	0.01	-0.01	0.00	0.02	0.00
-0.57	Ni-63	-1.35	-1.40	-1.15	-3.20	-2.85	-3.16	-1.65	-2.85	-2.21	-3.19	-2.63	0.26	0.11	0.43
N/A	Sr-90	0.00	0.00	0.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.01	0.01	0.00
N/A	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	N/A	N/A
N/A	Tc-99	-0.21	-0.07	N/A	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	N/A	N/A
0.07	Cs-134	0.17	0.12	0.02	0.03	0.03	0.00	0.01	0.03	0.02	0.04	0.01	-0.01	0.01	-0.01
0.06	Cs-137	0.03	-0.02	0.03	0.01	0.01	0.00	0.02	0.01	0.00	0.00	0.00	0.03	0.00	0.00
-0.07	Eu-152	32.50	11.90	0.80	0.45	0.22	-0.03	0.00	0.07	-0.03	0.02	-0.01	-0.01	0.01	0.01
0.31	Eu-154	2.09	0.92	0.02	0.05	0.04	-0.04	0.00	0.00	-0.01	-0.05	-0.04	-0.03	-0.01	0.02
N/A	Eu-155	0.14	0.03	0.02	0.00	0.04	0.01	-0.01	0.03	-0.04	0.10	0.02	-0.03	0.00	0.00
N/A	Pu-238	0.00	0.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.01	0.03	0.00
N/A	Pu-239	0.00	0.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-0.02	-0.01	0.01
N/A	Pu-241	-0.46	-0.68	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00	**0.98**	0.66
N/A	Am-241	0.00	0.00	0.00	0.06	-0.03	0.00	0.00	-0.10	-0.03	-0.01	0.14	0.00	0.00	0.00
N/A	Cm-243	0.00	0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00	0.00	0.00

B Bedrock core sample
P Piping sample
RB Reinforcing steel (ReBar)

Compilation of Cable Vault Wall Concrete Core (CC) Samples

	Average All Samples	Average of 1st Inside and 1st Outside Samples	Average of I/S & O/S 1st Two Core Wafers (for H-3 only)	
	pCi/g	pCi/g	pCi/g	Notes:
H-3	**4.77E+00**	4.10E+00	2.60E+00	
C-14	**2.02E-01**	2.02E-01	N/A	
Mn-54	*1.28E-02*	*4.82E-03*	N/A	False Positive
Fe-55	*-1.43E+00*	*-1.43E+00*	N/A	
Co-60	5.12E-03	**1.06E-02**	N/A	
Ni-63	**2.25E+00**	2.25E+00	N/A	Analy. Bias=1.92 pCi/g
Sr-90	1.59E-01	**2.50E-01**	N/A	Same as All
Nb-94	*5.83E-03*	*-1.30E-03*	N/A	False Positive
Tc-99	*-5.75E-02*	*-5.75E-02*	N/A	
Ag-108m	*5.91E-03*	*9.07E-03*	N/A	
Cs-134	**2.01E-02**	1.93E-02	N/A	
Cs-137	4.44E-03	**1.54E-02**	N/A	
Eu-152	*1.14E-02*	*1.47E-02*	N/A	
Eu-154	**2.40E-02**	*-6.06E-03*	N/A	
Eu-155	*2.79E-02*	*2.90E-02*	N/A	False Positive
Pu-238	*-6.33E-03*	*-6.33E-03*	N/A	
Pu-239	*2.55E-03*	*2.55E-03*	N/A	
Pu-241	*3.23E-01*	*3.23E-01*	N/A	
Am-241	*1.35E-03*	*-1.23E-02*	N/A	False Positive
Cm-243	*1.87E-02*	*1.87E-02*	N/A	

Notes:

1. **Sample Results in Italic Font are <Detectable Activity (i.e. < 2sigma error)**
2. **Sample Results that are less then Detectable Activity are shown as reported values**
3. **N/A - Samples not analyzed for these radionuclides**
4. **Bold Font Value used in Calculation**
5. **False Positive - Data was evaluated, identified as a False Positive, and the data was excluded.**

Cable Vault Wall Characterization Samples

Radionuclide	Upper Wall (Inside to Outside)						Upper Wall (Inside to Outside)						
	Wall Sample # 3107-0000-189						Wall Sample # 3107-0000-190						
	3107-189-1C-01	3107-189-1C-02	3107-189-2C-03	3107-189-2C-04	3107-189-2C-05	3107-189-2C-06	3107-190-1C-01	3107-190-1C-02	3107-190-1C-03	3107-190-1C-04	3107-190-1C-05	3107-190-2C-06	3107-190-2C-07
	pCi/g	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	0.59	0.65	0.36	0.18	0.12	0.21	0.88	1.08	0.73	0.25	0.24	0.82	0.54
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	N/A
Mn-54	*0.00*	N/A	N/A	N/A	0.03	*0.01*	*-0.01*	N/A	N/A	N/A	N/A	*0.02*	*0.00*
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	*0.04*
Co-60	***-0.01***	N/A	N/A	N/A	*0.01*	***0.02***	***0.02***	N/A	N/A	N/A	N/A	*0.01*	***0.03***
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	N/A
Sr-90	N/A	N/A	N/A	N/A	N/A	**0.06**	N/A	N/A	N/A	N/A	N/A	N/A	**0.21**
Nb-94	*0.00*	N/A	N/A	N/A	*0.02*	*-0.01*	*-0.03*	N/A	N/A	N/A	N/A	0.02	*-0.02*
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	N/A
Ag-108m	*0.01*	N/A	N/A	N/A	*0.00*	*0.01*	*0.00*	N/A	N/A	N/A	N/A	*0.00*	*0.00*
Cs-134	*0.02*	N/A	N/A	N/A	0.03	0.03	*0.00*	N/A	N/A	N/A	N/A	*0.02*	*0.04*
Cs-137	*-0.01*	N/A	N/A	N/A	*0.00*	*-0.02*	*0.00*	N/A	N/A	N/A	N/A	*-0.01*	*0.00*
Eu-152	*-0.08*	N/A	N/A	N/A	*-0.02*	*0.00*	*0.03*	N/A	N/A	N/A	N/A	*0.01*	*0.04*
Eu-154	*-0.02*	N/A	N/A	N/A	*0.01*	*-0.07*	*0.01*	N/A	N/A	N/A	N/A	*0.02*	*-0.15*
Eu-155	*0.00*	N/A	N/A	N/A	*-0.03*	*0.00*	*0.07*	N/A	N/A	N/A	N/A	*0.06*	*0.02*
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	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	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	N/A
Am-241	*-0.08*	N/A	N/A	N/A	*0.01*	*0.01*	*-0.01*	N/A	N/A	N/A	N/A	*-0.01*	*0.02*
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	N/A

Cable Vault Wall Characterization Samples

Radionuclide	Upper Wall (Inside to Outside)										Lower Footer (Out to In)			
	Wall Sample # 3107-0000-191										Wall Sample # 3107-0000-192			
	3107-191-1C-01	3107-191-1C-02	3107-191-1C-03	3107-191-1C-04	3107-191-2C-05	3107-191-2C-06	3107-191-2C-07	3107-191-2C-08	3107-191-3C-09	3107-191-3C-10	3107-192-1C-01	3107-192-1C-02	3107-192-1C-03	3107-192-2C-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	pCi/g	pCi/g
H-3	0.85	0.81	1.38	1.06	4.25	3.42	4.42	4.09	7.04	4.07	*-0.49*	*0.89*	7.72	5.21
C-14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.39	N/A	N/A	N/A
Mn-54	*0.00*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*0.01*	*-0.01*	*0.01*	*-0.01*	*0.02*	*0.02*
Fe-55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*-2.77*	N/A	N/A	N/A
Co-60	**0.05**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*0.00*	***0.02***	***0.00***	*0.01*	*0.01*	**0.02**
Ni-63	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.12	N/A	N/A	N/A
Sr-90	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.08**	**1.09**	*-0.01*	*-0.01*	**0.03**
Nb-94	*0.00*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*0.00*	*-0.01*	*0.00*	*0.01*	*0.02*	*0.02*
Tc-99	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*0.47*	N/A	N/A	N/A
Ag-108m	*0.02*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*-0.01*	*0.00*	*0.01*	*-0.01*	*0.00*	*0.02*
Cs-134	*0.01*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*0.01*	*0.03*	0.04	*0.00*	*0.04*	*0.01*
Cs-137	0.32	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*0.00*	*-0.01*	*0.00*	*0.01*	*0.00*	*-0.01*
Eu-152	*0.05*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*-0.04*	*-0.04*	*0.01*	*-0.08*	*0.05*	*0.05*
Eu-154	*-0.03*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*0.02*	*-0.03*	*0.04*	*0.00*	*0.00*	*0.06*
Eu-155	*0.00*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*0.02*	*0.03*	*0.02*	*-0.02*	*0.04*	0.06
Pu-238	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*0.00*	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	*0.01*	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	*1.02*	N/A	N/A	N/A
Am-241	*0.00*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*0.01*	*-0.03*	*0.01*	*-0.02*	0.14	*-0.08*
Cm-243	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*0.03*	N/A	N/A	N/A

Cable Vault Wall Characterization Samples

Radionuclide	Lower Footer (Out to In)				Lower Footer(Out to In)						Lower Footer(Out to In)					
	Wall Sample # 3107-0000-193				Wall Sample # 3107-0000-194						Wall Sample # 3107-0000-195					
	3107-193-1C-01	3107-193-1C-02	3107-193-2C-03	3107-193-2C-04	3107-194-1C-01	3107-194-1C-02	3107-194-1C-03	3107-194-1C-04	3107-194-1C-05	3107-194-2C-06	3107-195-1C-01	195-1C-02	3107-195-1C-03	3107-195-1C-04	3107-195-2C-05	195-2C-06
	pCi/g	pCi/g	pCi/g	pCi/g	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	1.14	*1.24*	3.99	14.60	6.51	13.70	11.90	11.20	6.14	1.58	4.95	13.00	17.00	13.10	11.30	7.50
C-14	*0.01*	N/A	N/A	N/A	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	*0.02*	*0.02*	*0.02*	*0.02*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.03	N/A
Fe-55	*-1.56*	N/A	N/A	N/A	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	**0.01**	*0.01*	*0.00*	***0.00***	***0.02***	*-0.01*	*0.01*	*0.00*	*0.02*	***0.00***	***0.00***	*-0.01*	*0.00*	*0.00*	*-0.03*	***0.02***
Ni-63	2.38	N/A	N/A	N/A	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	**1.07**	0.00	*-0.02*	***-0.01***	**0.03**	0.02	*0.00*	0.06	0.02	**0.08**	**0.09**	0.10	0.03	0.13	0.20	**0.16**
Nb-94	*0.02*	*0.02*	*0.02*	*0.03*	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	*-0.59*	N/A	N/A	N/A	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	*0.02*	*0.02*	*0.02*	*0.02*	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	*0.01*	0.04	*0.00*	0.04	*0.03*	*0.02*	*0.02*	*0.03*	*0.01*	*0.02*	*0.01*	*-0.01*	*0.02*	*0.00*	*0.02*	*0.01*
Cs-137	*0.01*	*-0.01*	*0.01*	*0.00*	*0.02*	*0.00*	*-0.03*	*-0.02*	*-0.01*	*0.01*	0.04	*0.01*	*0.02*	*0.00*	*0.00*	*0.00*
Eu-152	*0.04*	*0.07*	*0.05*	*0.05*	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	*0.07*	*0.07*	*0.07*	*0.06*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.09	N/A
Eu-155	*0.04*	*0.06*	*0.06*	*0.05*	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	*-0.01*	N/A	N/A	N/A	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	*0.00*	N/A	N/A	N/A	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	*-0.38*	N/A	N/A	N/A	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	*0.02*	*0.01*	*0.01*	*0.01*	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	*0.01*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Cable Vault Wall Characterization Samples

Radionuclide	Lower Footer(Out to In)						Lower Footer(Out to In)					
	Wall Sample # 3107-0000-196						Wall Sample # 3107-0000-197					
	196-1C-01	196-1C-02	3107-196-1C-03	3107-196-2C-04	3107-196-2C-05	3107-196-2C-06	197-1C-01	3107-197-1C-02	3107-197-1C-03	3107-197-1C-04	3107-197-1C-05	3107-197-1C-06
	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	5.55	6.98	4.18	10.80	13.30	15.80	2.19	5.85	3.50	4.42	4.87	5.24
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	0.03	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	***0.02***	*-0.01*	*-0.01*	*0.00*	*0.00*	***0.00***	***0.00***	*0.01*	*0.00*	0.02	*0.01*	***0.01***
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	**0.19**	0.15	0.05	0.24	0.09	**0.13**	**0.28**	0.11	0.20	0.05	0.08	**0.09**
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	*-0.01*	*0.00*	0.05	0.08	*0.03*	0.04	*0.02*	*0.01*	0.04	0.03	0.02	*-0.01*
Cs-137	*0.01*	*-0.01*	*-0.01*	*-0.02*	*-0.03*	*0.01*	*-0.01*	0.04	*0.00*	*0.00*	*0.01*	*0.02*
Eu-152	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eu-154	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.09	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	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

Cable Vault Wall Characterization Samples

Radionuclide	Lower Footer(Out to In)						Lower Footer(Out to In)					
	Wall Sample # 3107-0000-198						Wall Sample # 3107-0000-199					
	3107-198-1C-01	3107-198-1C-02	3107-198-1C-03	3107-198-1C-04	3107-198-1C-05	3107-198-1C-06	3107-199-1C-01	3107-199-1C-02	3107-199-1C-03	3107-199-1C-04	3107-199-1C-05	3107-199-2C-06
	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	4.17	7.78	8.31	6.25	8.21	6.46	1.77	1.84	0.43	0.27	0.65	0.85
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	0.03	N/A	N/A	N/A	N/A	N/A	0.03	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	***0.02***	*0.00*	*0.00*	*-0.01*	*-0.01*	***-0.01***	***0.00***	*0.00*	*0.01*	*0.02*	*-0.02*	***0.00***
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	**0.24**	0.15	0.07	0.14	0.18	**0.15**	**0.57**	0.18	0.15	0.16	0.23	**0.21**
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	*-0.01*	*0.01*	0.03	*0.01*	*0.01*	*0.02*	0.03	*0.01*	*0.02*	*0.01*	*0.01*	0.02
Cs-137	*-0.01*	*0.00*	*0.00*	*-0.03*	*0.00*	*-0.01*	*0.00*	*-0.02*	*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	N/A	N/A
Eu-154	N/A	N/A	N/A	N/A	0.09	N/A	N/A	N/A	N/A	N/A	0.09	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	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

Compilation of Cable Vault Floor Concrete Core (CC) Samples

Radionuclide	Average All Samples	Average of 1st Inside and 1st Outside Samples	Average of I/S & O/S 1st Two Core Wafers (for H-3 only)	
	ρCi/g	ρCi/g	ρCi/g	Notes:
H-3	3.48E+00	1.98E+00	**3.56E+00**	
C-14	N/A	N/A	N/A	
Mn-54	*6.16E-03*	*1.05E-02*	N/A	False Positive
Fe-55	N/A	N/A	N/A	
Co-60	*2.32E-03*	*-2.43E-03*	N/A	
Ni-63	N/A	N/A	N/A	
Sr-90	**2.79E-01**	N/A	N/A	
Nb-94	*-4.93E-03*	*-6.56E-03*	N/A	
Tc-99	N/A	N/A	N/A	
Ag-108m	*-2.43E-03*	*-5.20E-03*	N/A	
Cs-134	**2.84E-02**	2.43E-02	N/A	
Cs-137	*-1.77E-03*	**7.35E-03**	N/A	
Eu-152	*-2.15E-02*	*-2.23E-02*	N/A	
Eu-154	*1.13E-02*	*1.63E-02*	N/A	
Eu-155	**2.13E-02**	1.60E-02	N/A	
Pu-238	*1.31E-02*	N/A	N/A	
Pu-239	*0.00E+00*	N/A	N/A	
Pu-241	*2.41E-01*	N/A	N/A	
Am-241	*-7.58E-03*	*-2.45E-02*	N/A	False Positive
Cm-243	*0.00E+00*	N/A	N/A	

Notes:

1. **Sample Results in Italic Font are <Detectable Activity (i.e. < 2sigma error)**
2. **Sample Results that are less then Detectable Activity are shown as reported values**
3. **N/A - Samples not analyzed for these radionuclides**
4. **Bold Font Value used in Calculation**
5. **False Positive - Data was evaluated and identified as a False Positive and data was excluded.**

Cable Vault Floor Characterization Samples

Radionuclide	Interior (Inside to Outside)							Interior (Inside to Outside)					
	Floor Sample # 3107-0000-187							Floor Sample # 3107-0000-188					
	3107-187-1C-01	3107-187-1C-02	3107-187-1C-03	3107-187-1C-04	3107-187-2C-05	3107-187-2C-06	3107-187-2C-07	3107-188-1C-01	3107-188-1C-02	3107-188-1C-03	3107-188-1C-04	3107-188-1C-05	3107-188-1C-06
	pCi/g	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	**0.64**	**0.99**	1.60	3.89	8.80	**14.70**	**4.21**	**2.66**	**3.19**	1.49	0.94	**1.69**	**0.39**
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	N/A
Mn-54	*0.00*	N/A	N/A	N/A	N/A	*0.00*	*0.02*	0.03	N/A	N/A	N/A	*0.00*	*-0.01*
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	N/A
Co-60	*-0.02*	N/A	N/A	N/A	N/A	*0.02*	*-0.02*	*0.01*	N/A	N/A	N/A	*0.01*	*0.01*
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	N/A
Sr-90	N/A	N/A	N/A	N/A	N/A	N/A	0.22	0.27	N/A	N/A	N/A	N/A	0.35
Nb-94	*-0.01*	N/A	N/A	N/A	N/A	*0.00*	*-0.02*	*0.02*	N/A	N/A	N/A	*-0.01*	*-0.01*
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	N/A
Ag-108m	*0.02*	N/A	N/A	N/A	N/A	*0.00*	*-0.04*	*0.01*	N/A	N/A	N/A	*0.01*	*-0.02*
Cs-134	0.04	N/A	N/A	N/A	N/A	0.04	0.05	*0.01*	N/A	N/A	N/A	0.04	*0.00*
Cs-137	***0.00***	N/A	N/A	N/A	N/A	*-0.03*	***0.02***	**0.03**	N/A	N/A	N/A	*-0.01*	***-0.03***
Eu-152	*0.02*	N/A	N/A	N/A	N/A	*-0.07*	*-0.07*	*0.02*	N/A	N/A	N/A	*0.03*	*-0.06*
Eu-154	*0.07*	N/A	N/A	N/A	N/A	*-0.04*	*-0.03*	*-0.03*	N/A	N/A	N/A	*0.04*	*0.06*
Eu-155	*-0.01*	N/A	N/A	N/A	N/A	*0.03*	0.08	*-0.03*	N/A	N/A	N/A	*0.03*	*0.02*
Pu-238	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*0.01*	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	*0.00*	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	*0.24*	N/A	N/A	N/A	N/A	N/A
Am-241	*0.00*	N/A	N/A	N/A	N/A	*0.00*	*0.03*	*0.01*	N/A	N/A	N/A	0.05	*-0.14*
Cm-243	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*0.00*	N/A	N/A	N/A	N/A	N/A

Compilation of Waste Disposal Building Concrete Core (CC) Samples

Radionuclide	Average All Samples	Average of 1st Inside and 1st Outside Samples	Average of I/S & O/S 1st Two Core Wafers (for H-3 only)	
	ρCi/g	ρCi/g	ρCi/g	Notes:
H-3	3.45E+00	**4.42E+00**	3.37E+00	
C-14	N/A	N/A	N/A	
Mn-54	N/A	N/A	N/A	
Fe-55	N/A	N/A	N/A	
Co-60	N/A	N/A	N/A	
Ni-63	N/A	N/A	N/A	
Sr-90	2.31E-02	**4.38E-02**	N/A	
Nb-94	N/A	N/A	N/A	
Tc-99	N/A	N/A	N/A	
Ag-108m	N/A	N/A	N/A	
Cs-134	N/A	N/A	N/A	
Cs-137	3.10E-02	**6.44E-02**	N/A	
Eu-152	N/A	N/A	N/A	
Eu-154	N/A	N/A	N/A	
Eu-155	N/A	N/A	N/A	
Pu-238	N/A	N/A	N/A	
Pu-239	N/A	N/A	N/A	
Pu-241	N/A	N/A	N/A	
Am-241	*6.93E-02*	N/A	N/A	False Positive
Cm-243	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 less then Detectable Activity are shown as reported values**
3. **N/A - Samples not analyzed for these radionuclides**
4. **Bold Font Value used in Calculation**
5. **False Positive - Data was evaluated and identified as a False Positive and data was excluded.**

Waste Disposal Building Characterization Samples

Radionuclide	Top to bottom					Top to bottom					Top to bottom				
	Sample # 6000-0000-100					Sample # 6000-0000-101					Sample # 6000-0000-102				
	6000-100-1C-01	6000-100-2C-02	6000-100-4C-03	6000-100-8C-04	6000-100-9C-05	6000-101-1C-01	6000-101-1C-02	6000-101-8C-03	6000-101-12C-04	6000-101-12C-05	6000-102-1C-01	6000-102-2C-02	6000-102-7C-03	6000-102-11C-04	6000-102-11C-05
	pCi/g	pCi/g	pCi/g	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	***3.65***	*3.96*	*1.31*	*5.15*	***2.43***	***3.93***	*2.20*	*1.44*	*-4.21*	***5.33***	***2.34***	*2.02*	*5.36*	*4.46*	***2.20***
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	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	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	N/A	N/A	N/A
Co-60	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
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	N/A	N/A	N/A
Sr-90	**0.02**	*0.01*	*0.01*	0.02	***0.00***	**0.02**	0.02	*0.00*	*0.01*	**0.02**	**0.01**	*0.01*	*0.01*	*0.00*	**0.04**
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	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	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	N/A	N/A	N/A
Cs-134	N/A	N/A	N/A	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-137	**0.20**	*-0.01*	*-0.01*	*0.01*	***-0.01***	***0.00***	*0.01*	*0.00*	*0.04*	***0.00***	***-0.01***	*-0.01*	*0.02*	*0.02*	***-0.02***
Eu-152	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	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	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	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	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	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	N/A	N/A	N/A
Am-241	0.07	N/A	N/A	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	N/A	N/A	N/A

Waste Disposal Building Characterization Samples

Radionuclide	Top to bottom				
	Sample # 6000-0000-103				
	6000-103-1C-01	6000-103-2C-02	6000-103-4C-03	6000-103-7C-04	6000-103-8C-05
	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g
H-3	***4.54***	*4.73*	*3.88*	*3.29*	**10.90**
C-14	N/A	N/A	N/A	N/A	N/A
Mn-54	N/A	N/A	N/A	N/A	N/A
Fe-55	N/A	N/A	N/A	N/A	N/A
Co-60	N/A	N/A	N/A	N/A	N/A
Ni-63	N/A	N/A	N/A	N/A	N/A
Sr-90	**0.03**	*0.00*	0.02	*0.01*	**0.21**
Nb-94	N/A	N/A	N/A	N/A	N/A
Tc-99	N/A	N/A	N/A	N/A	N/A
Ag-108m	N/A	N/A	N/A	N/A	N/A
Cs-134	N/A	N/A	N/A	N/A	N/A
Cs-137	***-0.03***	*0.02*	*0.00*	*0.02*	***0.37***
Eu-152	N/A	N/A	N/A	N/A	N/A
Eu-154	N/A	N/A	N/A	N/A	N/A
Eu-155	N/A	N/A	N/A	N/A	N/A
Pu-238	N/A	N/A	N/A	N/A	N/A
Pu-239	N/A	N/A	N/A	N/A	N/A
Pu-241	N/A	N/A	N/A	N/A	N/A
Am-241	N/A	N/A	N/A	N/A	N/A
Cm-243	N/A	N/A	N/A	N/A	N/A

Compilation of Containment Mat RHR Pit Concrete Core (CC) Samples

Radionuclide	Average All Samples	Average of 1st Inside and 1st Outside Samples	Average of I/S & O/S 1st Two Core Wafers (for H-3 only)	
	pCi/g	pCi/g	pCi/g	
H-3	1.56E+00	*-2.57E-01*	**2.00E+00**	
C-14	*3.85E-01*	N/A	N/A	
Mn-54	N/A	N/A	N/A	
Fe-55	N/A	N/A	N/A	
Co-60	**4.26E-03**	*4.12E-03*	N/A	
Ni-63	N/A	N/A	N/A	
Sr-90	**1.03E-02**	7.13E-03	N/A	
Nb-94	*2.91E-02*	N/A	N/A	False Positive
Tc-99	N/A	N/A	N/A	
Ag-108m	N/A	N/A	N/A	
Cs-134	1.59E-02	**2.29E-02**	N/A	
Cs-137	**1.11E-02**	*3.09E-02*	N/A	
Eu-152	N/A	N/A	N/A	
Eu-154	N/A	N/A	N/A	
Eu-155	*1.20E-01*	N/A	N/A	False Positive
Pu-238	N/A	N/A	N/A	
Pu-239	N/A	N/A	N/A	
Pu-241	N/A	N/A	N/A	
Am-241	N/A	N/A	N/A	
Cm-243	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 less then Detectable Activity are shown as reported values**
3. **N/A - Samples not analyzed for these radionuclides**
4. **Bold Font Value used in Calculation**
5. **False Positive - Data was evaluated and identified as a False Positive and data was excluded.**

Containment Mat Characterization Samples in RHR Pit Area

Radionuclide	Outside Coring In			Outside Coring In			Outside Coring In		
	Sample # 3000-0000-200			Sample # 3000-0000-201			Sample # 3000-0000-202		
	3000-200-1C-01	3000-200-1C-02	3000-200-1C-03	3000-201-1C-01	3000-201-1C-02	3000-201-1C-03	3000-202-1C-01	3000-202-1C-02	3000-202-1C-03
	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g
H-3	*-5.31*	*0.00*	*-2.61*	*3.17*	8.00	*4.41*	*1.37*	*4.77*	*0.20*
C-14	N/A	N/A	N/A	0.03	N/A	N/A	0.74	N/A	N/A
Mn-54	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
Co-60	*0.01*	*0.01*	*-0.01*	*0.00*	*-0.02*	*0.00*	*0.00*	*0.00*	0.05
Ni-63	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr-90	0.02	*0.00*	*0.00*	*-0.01*	*0.02*	0.02	*0.00*	*0.00*	0.03
Nb-94	N/A	N/A	N/A	N/A	N/A	N/A	0.03	N/A	N/A
Tc-99	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
Cs-134	**0.05**	*0.00*	*0.00*	***0.02***	*0.03*	*0.00*	***0.00***	*0.01*	0.03
Cs-137	0.09	*0.00*	*0.01*	*0.00*	*0.02*	*-0.01*	*0.01*	*0.00*	*-0.02*
Eu-152	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
Eu-155	N/A	N/A	N/A	N/A	0.12	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
Pu-239	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
Am-241	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

Compilation of Service Building Wall Concrete Core (CC) Samples

Radionuclide	Average All Samples	Average of 1st Inside and 1st Outside Samples	Average of I/S & O/S 1st Two Core Wafers (for H-3 only)	Comments
	pCi/g	pCi/g	pCi/g	
H-3	**1.49E+01**	1.12E+01	1.32E+01	
C-14	*3.96E-02*	*3.96E-02*	N/A	Analy. Bias= 0.177 pCi/g (107/108)
Mn-54	*1.23E-02*	*1.04E-02*	N/A	False Positives
Fe-55	*-2.09E+00*	*-2.26E+00*	N/A	
Co-60	3.48E-03	**6.03E-03**	N/A	
Ni-63	*1.26E+00*	*1.49E+00*	N/A	Blank is 1.92 pCi/g-Positive Bias
Sr-90	2.66E-02	**5.67E-02**	N/A	
Nb-94	*1.53E-02*	*2.61E-02*	N/A	
Tc-99	*-4.04E-01*	*-4.04E-01*	N/A	
Ag-108m	*7.52E-03*	*9.28E-03*	N/A	
Cs-134	2.10E-02	**2.31E-02**	N/A	
Cs-137	1.68E-03	**3.72E-03**	N/A	
Eu-152	*1.80E-02*	*1.57E-02*	N/A	
Eu-154	*2.80E-02*	*2.65E-02*	N/A	False Positives
Eu-155	*3.94E-02*	*5.39E-02*	N/A	False Positives
Pu-238	*6.65E-03*	*8.11E-03*	N/A	
Pu-239	3.66E-03	*3.66E-03*	N/A	
Pu-241	*1.08E-01*	*1.08E-01*	N/A	
Am-241	*6.78E-03*	*1.04E-02*	N/A	
Cm-243	*4.88E-03*	*4.88E-03*	N/A	False Positives

Notes:

1. **Sample Results in Italic Font are <Detectable Activity (i.e. < 2sigma error)**
2. **Sample Results that are less then Detectable Activity are shown as reported values**
3. **N/A - Samples not analyzed for these radionuclides**
4. **Bold Font Value used in Calculation**
5. **Samples 105 and 106, False Positive Eu-155 and Cs-134 respectively, data excluded**

Service Building East Wall Characterization Samples (Plus 9' Wingwall - PAB North Wall)

Radio-nuclide	Sample # 2228-0000-103					Sample # 2228-0000-22							Sample # 2228-0000-23						
	5000-103-1C-01	5000-103-1C-02	5000-103-2C-01	5000-103-3C-03	5000-103-3C-04	2228-22 1C-01	2228-22 1C-02	2228-22 1C-03	2228-22 1C-04	2228-22 1C-05	2228-22 2C-01	2228-22 3C-01	2228-23 1C-01	2228-23 1C-02	2228-23 1C-03	2228-23 1C-04	2228-23 1C-05	2228-23 2C-01	2228-23 3C-01
	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	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	9.00	37.10	6.38	31.60	23.40	8.20	27.40	28.30	50.60	56.00	1.27	12.40	32.30	55.70	50.80	59.60	36.90	3.77	22.30
C-14	0.28	N/A	N/A	N/A	N/A	N/A	N/A	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	0.03	0.02	0.02	0.01	0.02	-0.01	0.01	<0.00	-0.01	-0.01	0.03	-0.02	0.00	0.03	0.01	0.00	<.001	0.03	0.00
Fe-55	-3.22	N/A	N/A	N/A	N/A	N/A	N/A	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	-0.06	0.00	0.00	0.01	0.02	-0.01	-0.01	-0.01	0.01	0.00	0.00	0.02	0.01	-0.01	-0.02	0.01	<.01	0.01	0.02
Ni-63	1.64	N/A	N/A	N/A	N/A	N/A	N/A	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	0.08	0.03	0.02	0.00	0.02	0.27	0.05	0.05	0.04	0.03	0.06	0.02	0.06	0.05	0.01	0.07	0.05	0.04	0.36
Nb-94	0.02	0.02	0.02	0.01	0.02	0.01	0.02	-0.01	-0.01	<0.00	0.02	0.01	0.00	0.01	-0.01	-0.02	0.02	0.00	-0.02
Tc-99	-0.61	N/A	N/A	N/A	N/A	N/A	N/A	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	0.02	0.02	0.02	0.04	0.02	0.01	0.02	0.01	-0.01	-0.01	-0.02	-0.02	0.01	-0.01	-0.03	<.001	0.01	0.00	<.003
Cs-134	0.02	0.01	0.02	0.00	0.00	0.02	0.04	0.03	0.03	0.00	0.01	0.08	0.01	0.04	0.02	0.01	0.04	0.02	0.03
Cs-137	0.01	-0.01	-0.01	-0.01	0.01	0.00	-0.02	-0.01	-0.02	-0.01	0.04	-0.01	0.02	-0.02	0.00	0.02	-0.01	0.01	0.02
Eu-152	0.07	0.05	0.05	0.04	0.05	-0.03	-0.01	-0.03	-0.01	0.00	0.04	0.01	-0.02	-0.02	0.05	-0.01	-0.02	0.02	-0.01
Eu-154	0.09	0.06	0.06	0.05	0.06	-0.04	0.01	0.00	0.01	0.02	-0.04	0.06	0.01	0.00	0.03	0.00	0.03	0.03	-0.04
Eu-155	0.07	0.06	0.04	0.03	0.05	0.04	<0.01	0.00	0.01	0.00	-0.02	0.15	0.06	0.06	0.03	0.01	0.03	0.01	0.03
Pu-238	0.01	N/A	N/A	N/A	N/A	N/A	N/A	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	0.00	N/A	N/A	N/A	N/A	N/A	N/A	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	0.06	N/A	N/A	N/A	N/A	N/A	N/A	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	0.03	0.03	0.03	-0.01	-0.02	0.00	0.09	-0.01	0.12	0.00	-0.02	-0.03	0.00	-0.07	0.01	-0.07	0.00	0.01	-0.07
Cm-243	0.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Radio-nuclide	Sample # 2228-0000-107									Sample # 2228-0000-108								
	5000-107-1C-01	5000-107-1C-02	5000-107-1C-03	5000-107-1C-04	5000-107-2C-01	5000-107-3C-01	5000-107-3C-02	5000-107-3C-03	5000-107-3C-04	5000-108-1C-01	5000-108-1C-02	5000-108-1C-03	5000-108-1C-04	5000-108-2C-05	5000-108-2C-06	5000-108-2C-07	5000-108-2C-08	5000-108-2C-09
	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	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	2.67	1.49	3.98	2.67	-0.04	4.13	8.47	3.25	9.20	1.76	12.40	9.95	11.70	4.36	5.08	1.83	1.87	1.96
C-14	0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mn-54	0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe-55	-1.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.51	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Co-60	0.00	0.02	-0.01	-0.01	0.01	0.00	-0.01	0.00	0.00	0.00	0.01	0.02	0.03	0.00	0.02	0.00	0.00	0.03
Ni-63	-0.21	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.10	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	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nb-94	0.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tc-99	-0.08	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.23	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ag-108m	0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cs-134	0.02	0.02	0.00	0.02	0.04	0.02	0.02	0.01	0.02	0.03	0.04	0.02	0.00	0.02	0.03	0.02	0.04	0.04
Cs-137	0.00	0.00	0.01	0.02	0.00	0.00	0.01	0.01	0.00	0.02	-0.01	-0.01	0.03	0.01	0.01	-0.01	0.03	0.01
Eu-152	-0.03	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eu-154	-0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.03	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eu-155	0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.02	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	N/A	0.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pu-239	-0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pu-241	1.97	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Am-241	0.00	0.00	0.08	-0.08	0.06	-0.03	0.04	0.06	0.00	0.00	0.03	0.08	0.02	-0.31	0.05	0.00	-0.02	0.03
Cm-243	-0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Radio-nuclide	Sample # 2228-0000-104					Sample # 2228-0000-105				Sample # 2228-0000-106				
	5000-104-1C-01	5000-104-1C-02	5000-104-2C-01	5000-104-3C-03	5000-104-3C-04	5000-105-1C-01	5000-105-1C-02	5000-105-3C-01	5000-105-4C-03	5000-106-1C-01	5000-106-1C-02	5000-106-3C-01	5000-106-4C-03	5000-106-4C-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	pCi/g	pCi/g
H-3	12.50	32.20	-0.16	31.40	39.60	1.21	2.32	0.14	1.11	1.05	1.08	0.12	-0.45	0.43
C-14	-0.03	N/A	N/A	N/A	N/A	-0.19	N/A	N/A	N/A	-0.04	N/A	N/A	N/A	N/A
Mn-54	0.02	0.02	0.02	0.02	0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe-55	-4.00	N/A	N/A	N/A	N/A	-2.47	N/A	N/A	N/A	-3.11	N/A	N/A	N/A	N/A
Co-60	0.01	0.00	-0.01	0.01	0.00	0.01	0.01	-0.01	0.02	0.00	-0.01	0.00	0.00	0.00
Ni-63	1.74	N/A	N/A	N/A	N/A	2.66	N/A	N/A	N/A	1.63	N/A	N/A	N/A	N/A
Sr-90	0.09	0.00	0.02	0.01	-0.02	0.01	-0.01	-0.02	-0.01	0.00	0.00	0.00	-0.04	0.01
Nb-94	0.20	0.02	0.02	0.02	0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tc-99	-0.89	N/A	N/A	N/A	N/A	-0.69	N/A	N/A	N/A	-0.39	N/A	N/A	N/A	N/A
Ag-108m	0.02	0.02	0.02	0.02	0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cs-134	0.03	0.03	0.03	0.02	0.01	0.01	0.01	0.03	0.00	0.03	0.00	0.00	0.02	0.02
Cs-137	0.00	-0.01	0.01	0.00	-0.01	0.00	0.00	0.01	0.00	-0.02	0.00	-0.01	-0.01	0.01
Eu-152	0.05	0.05	0.05	0.06	0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eu-154	0.07	0.08	0.06	0.07	0.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eu-155	0.05	0.05	0.05	0.09	0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pu-238	0.01	N/A	N/A	N/A	N/A	0.00	N/A	N/A	N/A	-0.02	N/A	N/A	N/A	N/A
Pu-239	0.01	N/A	N/A	N/A	N/A	0.00	N/A	N/A	N/A	0.02	N/A	N/A	N/A	N/A
Pu-241	-1.10	N/A	N/A	N/A	N/A	-0.64	N/A	N/A	N/A	-1.15	N/A	N/A	N/A	N/A
Am-241	0.04	0.11	-0.06	-0.01	0.05	0.03	-0.02	0.02	0.03	0.03	0.04	-0.01	0.02	0.07
Cm-243	0.03	N/A	N/A	N/A	N/A	0.00	N/A	N/A	N/A	0.01	N/A	N/A	N/A	N/A

Compilation of SFP Concrete Core (CC) Samples					
Radio-nuclide	Average of East Wall CC Samples	Average of South Wall CC Samples	Average of West Wall CC Samples	Average of Floor CC Samples	Average of Spent Fuel Bldg Columns Samples
	ρCi/g	ρCi/g	ρCi/g	ρCi/g	ρCi/g
H-3	3.88E+02	2.29E+02	6.83E+02	1.34E+02	-1.98E-01
C-14	8.42E-01	2.04E-01	-1.00E-01	4.84E-02	3.98E+00
Mn-54					
Fe-55	-9.06E-01	-4.62E-01	-1.58E-01	1.70E+00	-7.69E-01
Co-60	4.45E-01	9.55E-01	2.14E-01	1.47E-01	-2.61E-03
Ni-63	1.04E+00	4.40E-01	2.10E-01	3.98E-01	-4.89E-01
Sr-90	6.44E-02	1.34E-02	4.39E-03	4.49E-01	9.72E-04
Nb-94					
Tc-99					
Ag-108m					
Cs-134	2.16E-02	2.01E-02	3.19E-02	3.01E-02	1.65E-02
Cs-137	5.85E+00	1.50E+01	6.80E+00	1.94E+01	8.18E-04
Eu-152					
Eu-154					
Eu-155					
Pu-238					
Pu-239					
Pu-241					
Am-241	1.77E-02	1.24E-01	1.92E-02	2.36E-02	7.50E-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**
5. **Yellow Highlighted indicates that the concrete was removed**
6. **Gray highlighted indicates bedrock samples**

Spent Fuel Pool Concrete Core Samples

Radio-nuclide	SFP Center of East Wall							Average of 1st Three Samples (H3 Only), Average of 1st Inside and 1st Outside Samples	Average of All Samples
	1000-0000-118-C-								
	1C-01 (0-2")	1C-02 (2-4")	1C-06 (8-10")	2C-07 (20-22")	3C-03 (36-38")	5C-04 (68-70")	5C-05 (70-72")		
	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g
H-3	597	399	62.80	*0.34*	*1.31*	*1.72*	*2.82*	**353**	152
C-14	1.63	*0.23*	N/A	N/A	N/A	N/A	N/A	**1.63**	0.93
Mn-54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe-55	*1.75*	*-2.80*	*0.18*	*-2.09*	*-1.39*	*0.77*	*-2.05*	***-0.15***	*-0.80*
Co-60	0.33	0.13	0.06	0.05	0.04	*-0.01*	1.35	***0.84***	**0.28**
Ni-63	9.96	*0.55*	*-1.55*	*-1.39*	*-1.48*	*0.14*	*-1.65*	***4.16***	0.65
Sr-90	0.20	*0.00*	*0.01*	0.01	*0.00*	*0.00*	*0.00*	***0.10***	0.03
Nb-94	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
Ag-108m	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cs-134	*0.01*	*0.01*	*0.04*	*0.02*	*0.03*	*0.03*	*0.04*	***0.03***	***0.03***
Cs-137	20.00	*0.05*	*0.02*	0.03	*0.00*	*-0.02*	*0.03*	***10.01***	2.87
Eu-152	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
Eu-155	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
Pu-239	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
Am-241	0.02	0.00	0.02	0.05	-0.01	-0.18	0.03	***0.02***	*-0.01*
Cm-243	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Spent Fuel Pool Concrete Core Samples									
Radio-nuclide	SFP South of Center of East Wall							Average of 1st Three Samples (H3 Only), Average of 1st Inside and 1st Outside Samples	*Average of All Samples*
	1000-0000-117-C-								
	1C-01 (0-2")	1C-02 (2-4")	1C-03 (4-6")	5C-04 (37-39")	6C-05 (39-41")	7C-06 (71.5-73.5")	7C-07 (73.5-75.5")		
	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g
H-3	536	512	222	*0.62*	*0.16*	*1.33*	*0.84*	**423**	182
C-14	*0.05*	*-0.05*	N/A	N/A	N/A	N/A	N/A	***0.05***	*0.00*
Mn-54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe-55	-0.96	-3.83	-4.29	-1.96	-1.53	-2.08	-2.36	***-1.66***	-2.43
Co-60	0.05	*0.00*	*0.00*	*0.02*	*0.03*	*0.01*	*0.05*	**0.05**	0.02
Ni-63	*-2.43*	*-3.08*	*-3.83*	*-2.87*	*-2.65*	*-3.48*	*-1.72*	***-2.08***	*-2.87*
Sr-90	0.06	*0.00*	*0.00*	0.01	*0.00*	*0.00*	*0.00*	**0.03**	0.01
Nb-94	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
Ag-108m	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cs-134	*0.02*	*0.03*	*0.00*	*0.02*	*0.02*	*0.00*	*0.01*	***0.02***	*0.01*
Cs-137	3.33	*0.04*	*0.03*	*0.01*	*0.00*	*0.02*	*0.03*	**1.68**	0.49
Eu-152	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
Eu-155	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
Pu-239	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
Am-241	*0.00*	*0.00*	*-0.02*	*-0.09*	*0.00*	*-0.05*	*0.03*	***0.01***	*-0.02*
Cm-243	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Spent Fuel Pool Concrete Core Samples									
Radio-nuclide	SFP Center of South Wall							Average of 1st Three Samples (H3 Only), Average of 1st Inside and 1st Outside Samples	Average of All Samples
	1000-0000-115-C-								
	1C-01 (0-2")	1C-02 (2-4")	1C-03 (4-6")	2C-04 (25-27")	3C-05 (27-29")	5C-06 (66-68")	5C-07 (68-70")		
	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g
H-3	329	300	56.60	*0.05*	*-0.14*	35.00	336	**229**	151
C-14	*0.20*	*-0.27*	N/A	N/A	N/A	N/A	N/A	**0.20**	-0.03
Mn-54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe-55	*-1.00*	*-0.91*	*-0.28*	*0.32*	*-0.35*	*-0.76*	*-0.25*	*-0.62*	***-0.46***
Co-60	0.19	*0.00*	*0.01*	*0.02*	*0.01*	0.17	1.72	**0.96**	0.30
Ni-63	*2.20*	*1.47*	*0.16*	*-0.25*	*-1.41*	*-0.60*	*-1.32*	*0.44*	*0.04*
Sr-90	0.02	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	**0.01**	0.00
Nb-94	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
Ag-108m	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cs-134	*0.00*	*0.00*	*0.03*	*0.02*	*0.03*	*0.04*	*0.02*	*0.01*	***0.02***
Cs-137	29.10	0.16	*0.00*	*0.03*	*0.00*	0.30	0.90	**15.00**	4.36
Eu-152	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
Eu-155	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
Pu-239	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
Am-241	*0.01*	*0.00*	*-0.01*	*0.06*	*0.13*	*-0.01*	0.24	***0.12***	0.06
Cm-243	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Spent Fuel Pool Concrete Core Samples									
Radio-nuclide	SFP Center of West Wall							Average of 1st Three Samples (H3 Only), Average of 1st Inside and 1st Outside Samples	Average of All Samples
	1000-0000-116-C-								
	1C-01 (0-2")	1C-02 (2-4")	1C-03 (4-6")	3C-04 (42-44")	4C-05 (44-46")	5C-06 (68.5-70.5")	5C-07 (70.5-72.5")		
	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g
H-3	673	970	406	10.80	13.40	5.42	*2.09*	**683**	297
C-14	*-0.10*	*-0.21*	NA	NA	NA	NA	NA	***-0.10***	*-0.15*
Mn-54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe-55	*-0.38*	*0.12*	*-0.49*	*0.20*	*0.36*	*-0.26*	*-0.66*	*-0.52*	***-0.16***
Co-60	0.44	*0.03*	*0.01*	*0.00*	*0.01*	0.09	*-0.01*	**0.21**	0.08
Ni-63	*1.32*	*0.20*	*0.47*	*-0.25*	*-1.28*	*0.00*	*-0.90*	***0.21***	*-0.06*
Sr-90	*0.01*	*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
Tc-99	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
Cs-134	*0.03*	*0.00*	*0.02*	*0.00*	*0.05*	*0.03*	*0.03*	***0.03***	***0.02***
Cs-137	13.60	0.71	*0.00*	*0.00*	*0.01*	0.05	0.01	**6.80**	*2.05*
Eu-152	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
Eu-155	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
Pu-239	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
Am-241	*0.00*	*0.04*	*0.01*	*-0.01*	*0.04*	*0.03*	*0.02*	*0.01*	***0.02***
Cm-243	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

SFP NE Floor at Weld Seam									
Radio-nuclide	1000-000-122-C-							Average of 1st Three Samples (H3 Only), Average of 1st Inside and 1st Outside Samples	Average of All Samples
	1C-03 (2-4")	1C-05 (6-8")	1C-06 (8-10")	2C-10 (20-22")	3C-07 (32-34")	3C-08 (34-36")	4C-09 (58-60")		
	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g
H-3	**411**	**17.00**	2.61	**186**	2.10	1.33	2.02	**63.14**	47.86
C-14	*0.01*	*0.16*	*0.00*	N/A	N/A	N/A	N/A	***0.01***	N/A
Mn-54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe-55	*0.39*	*-0.76*	*-2.64*	*-12.10*	-0.26	-1.46	-2.30	-7.20	**-4.03**
Co-60	*0.03*	*0.01*	*-0.01*	*0.01*	**0.07**	*0.03*	*0.01*	0.01	**0.03**
Ni-63	*-0.59*	*0.69*	*-0.42*	*1.42*	*-1.65*	*-0.20*	*-1.44*	***-0.01***	*-0.47*
Sr-90	*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
Tc-99	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
Cs-134	*0.01*	*0.02*	*0.04*	*0.01*	*0.02*	*0.01*	*0.02*	***0.02***	*0.02*
Cs-137	**0.06**	**0.16**	**0.96**	*0.03*	**0.32**	**0.06**	**0.05**	**0.04**	0.11
Eu-152	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
Eu-155	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
Pu-239	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
Am-241	*0.02*	*0.00*	*0.00*	*0.01*	*0.07*	*0.00*	*0.01*	*0.01*	***0.02***
Cm-243	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

SFP North of Center Floor at Weld Seam									
Radio-nuclide	1000-000-124-C-							Average of 1st Three Samples (H3 Only), Average of 1st Inside and 1st Outside Samples	Average of All Samples
	1C-02 (2-4")	1C-04 (6-8")	1C-05 (8-10")	2C-09 (20-22")	3C-06 (32-34")	3C-07 (34-36")	4C-08 (58-60")		
	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g
H-3	1,150	334	239	72	347	214	298	211	**234**
C-14	*0.35*	*0.12*	*-0.09*	N/A	N/A	N/A	N/A	***0.35***	N/A
Mn-54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe-55	*-1.23*	*-1.79*	*-2.40*	*-15.30*	*-0.66*	*-1.22*	*-0.90*	*-8.10*	***-4.52***
Co-60	*0.03*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Ni-63	*-0.10*	*-0.66*	*-0.35*	*-0.50*	*-0.75*	*-1.02*	*-0.77*	***-0.63***	*-0.76*
Sr-90	0.01	0.00	0.00	-0.01	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
Tc-99	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
Cs-134	*0.00*	*0.00*	*0.02*	*0.03*	*0.01*	*0.02*	*0.01*	***0.02***	*0.02*
Cs-137	1.58	0.24	0.19	0.04	*0.03*	*0.02*	0.09	**0.07**	0.05
Eu-152	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
Eu-155	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
Pu-239	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
Am-241	*-0.01*	*0.01*	*0.01*	*-0.04*	*-0.05*	*-0.03*	*0.06*	***0.01***	*-0.01*
Cm-243	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

SFP North Outside Vertical Surface of Floor							
Radio-nuclide	9801-00-SFB-01-					Average of 1st Three Samples (H3 Only), Average of 1st Inside and 1st Outside Samples	Average of All Concrete Cores
	C1 (0-2")	C2 (2-4")	C3 (4-6")	C4 (6-8")			
	pCi/g	pCi/g	pCi/g	pCi/g		pCi/g	pCi/g
H-3	45.50	76.60	50.90	-0.13		**57.67**	43.22
C-14	*-0.59*	*-0.33*	*-0.37*	*-0.53*		*-0.56*	***-0.46***
Mn-54	N/A	N/A	N/A	N/A		N/A	N/A
Fe-55	*-1.40*	*1.69*	*-4.67*	*1.08*		***-0.16***	***-0.83***
Co-60	*-0.01*	*0.02*	*-0.02*	*0.01*		***0.00***	***0.00***
Ni-63	*0.75*	*1.56*	*0.18*	*-0.26*		*0.25*	***0.56***
Sr-90	0.12	0.03	*0.00*	0.37		**0.25**	0.13
Nb-94	N/A	N/A	N/A	N/A		N/A	N/A
Tc-99	0.84	*0.15*	*-0.26*	*0.09*		**0.47**	0.21
Ag-108m	N/A	N/A	N/A	N/A		N/A	N/A
Cs-134	*0.04*	*0.04*	*0.00*	*0.03*		***0.04***	*0.03*
Cs-137	20.20	*-0.01*	*0.03*	*0.02*		**10.11**	5.06
Eu-152	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
Eu-155	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
Pu-239	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
Am-241	*0.01*	*-0.01*	*-0.01*	*0.00*		***0.00***	***0.00***
Cm-243	N/A	N/A	N/A	N/A		N/A	N/A

SFP SW Corner Floor											
Radio-nuclide	1000-0000-119-C-									Average of 1st Three Samples (H3 Only), Average of 1st Inside and 1st Outside Samples	Avg of All CC Samples
	1C-01 (10-12")	1C-02 (12-14")	1C-03 (14-16")	5C-04 (62-64")	5C-05 (64-66")	6C-06 (80.5-82.5")	7B-07 (82.5-84.5")	7B-08 (86.5-88.5")	7B-09 (107-109")		
	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g
H-3	227	172	81.70	81.10	39.40	265	263	7.25	3.65	**160**	144
C-14	*-0.19*	*-0.37*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	***-0.19***	-0.28
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	*-2.01*	*-2.10*	*-0.03*	*-1.95*	*-1.93*	*0.02*	*-0.15*	*-0.96*	*-0.65*	***-0.99***	*-1.16*
Co-60	0.40	*0.00*	*-0.01*	*0.03*	*0.02*	*-0.02*	*0.00*	*0.00*	*0.00*	**0.19**	0.06
Ni-63	*0.22*	*-0.80*	*-0.77*	*-0.57*	*-0.99*	*-2.38*	*-0.80*	*-0.88*	*-1.18*	*-1.08*	***-0.87***
Sr-90	0.02	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	**0.01**	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
Tc-99	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
Cs-134	*0.02*	*0.00*	*0.01*	*0.01*	*0.00*	*-0.02*	*0.02*	*0.00*	*0.03*	*0.00*	***0.01***
Cs-137	7.53	*0.01*	*0.02*	*0.01*	*0.01*	0.04	0.04	*0.02*	*0.00*	**3.79**	1.09
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	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
Pu-241	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Am-241	*0.01*	0.04	*0.01*	*0.01*	*-0.09*	*0.01*	*-0.01*	*-0.08*	*0.03*	***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

SFP NW Corner of Floor											
Radio-nuclide	1000-0000-121-C-									Average of 1st Three Samples (H3 Only), Average of 1st Inside and 1st Outside Samples	Average of All CC Samples
	1C-01 (10-12")	1C-02 (12-14")	1C-03 (14-16")	8C-04 (92-94")	10C-05 (114-116")	13C-06 (154-156")	13C-07 (156-158")	14B-08 (160.5-162.5")	15B-09 (173.5-175.5")		
	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g
H-3	24.20	6.51	1.66	2.59	0.15	1.93	1.81	0.38	0.81	**10.79**	5.55
C-14	-0.38	-0.21	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-0.38	**-0.30**
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	-0.98	-1.28	-1.19	-1.77	-1.09	-1.02	0.15	-0.25	-0.40	**-0.41**	-1.03
Co-60	0.79	0.02	0.00	0.02	0.04	0.00	0.01	-0.01	0.01	**0.40**	0.12
Ni-63	-1.19	-1.06	-3.29	-2.67	-1.68	-1.27	-0.98	-1.12	-1.33	**-1.08**	-1.73
Sr-90	0.00	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	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
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	0.04	0.00	0.00	0.02	0.03	0.04	0.07	0.01	0.02	**0.06**	0.03
Cs-137	0.19	-0.01	0.01	0.02	0.05	-0.02	0.01	0.02	-0.02	**0.10**	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	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
Pu-241	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Am-241	0.02	0.00	-0.03	0.00	-0.01	-0.02	0.02	-0.07	-0.01	**0.02**	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

SFP Center of West Side of Floor									
Radio-nuclide	1000-0000-120-C-							Average of 1st Three Samples (H3 Only), Average of 1st Inside and 1st Outside Samples	Average of All Samples
	1C-01 (10-12")	1C-02 (12-14")	1C-03 (14-16")	3C-04 (48.5-50.5")	4C-05 (50.5-52.5")	5C-06 (75-77")	5C-07 (77-79")		
	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g
H-3	8.65	2.56	0.48	-0.03	13.40	14.90	10.60	3.90	**7.22**
C-14	0.90	*-0.20*	N/A	N/A	N/A	N/A	N/A	**0.90**	0.35
Mn-54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe-55	*-0.07*	*-5.85*	*-1.26*	*-0.63*	*0.30*	*-1.27*	*-1.54*	***-0.80***	*-1.47*
Co-60	0.51	*0.00*	*-0.01*	*0.02*	*0.01*	*0.02*	0.11	**0.31**	0.09
Ni-63	*1.22*	*0.77*	*-0.14*	*-1.28*	*-0.80*	*-1.83*	*-1.70*	***-0.24***	*-0.54*
Sr-90	0.03	*0.00*	*0.00*	*0.00*	*-0.01*	*-0.01*	*0.00*	**0.01**	0.00
Nb-94	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
Ag-108m	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cs-134	*0.04*	*0.02*	*0.00*	*-0.02*	*0.02*	*0.03*	*0.02*	***0.03***	*0.01*
Cs-137	1.54	*0.00*	*0.00*	*0.04*	*0.01*	*0.04*	*0.02*	**0.78**	0.24
Eu-152	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
Eu-155	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
Pu-239	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
Am-241	*0.01*	*-0.01*	*0.03*	*0.09*	*0.04*	*-0.02*	*0.04*	***0.03***	*0.03*
Cm-243	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

SFP Center East Side of Floor									
Radio-nuclide	1000-0000-123-C-							Average of 1st Three Samples (H3 Only), Average of 1st Inside and 1st Outside Samples	Average of All Samples
	1C-01 (10-12")	1C-02 (12-14")	2C-03 (14-16")	4C-04 (47.5-49.5")	5C-05 (53-55")	6C-06 (72.5-74.5")	6C-07 (74.5-76.5")		
	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g
H-3	**298**	**176**	**139**	**50.70**	**10.80**	**47.60**	**43.20**	**204.3**	109.3
C-14	*-0.05*	*-0.22*	N/A	N/A	N/A	N/A	N/A	***-0.05***	*-0.14*
Mn-54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe-55	*-0.03*	*0.71*	*-0.22*	*-0.27*	*-0.07*	*0.35*	*1.43*	***0.70***	*0.27*
Co-60	**0.19**	**0.19**	*0.01*	*0.02*	*-0.01*	*0.01*	*0.01*	**0.10**	0.06
Ni-63	*1.89*	*1.37*	*0.55*	*-0.96*	*-0.27*	*0.48*	*-0.30*	***0.79***	*0.39*
Sr-90	**0.03**	*0.01*	*0.00*	**0.28**	*0.00*	*-0.01*	*0.00*	0.01	**0.04**
Nb-94	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
Ag-108m	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cs-134	*0.05*	*0.01*	*0.03*	*0.00*	*0.00*	*0.03*	*-0.02*	***0.01***	*0.01*
Cs-137	**3.99**	**2.60**	*0.05*	**0.09**	*0.01*	**0.03**	*0.04*	**2.01**	0.97
Eu-152	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
Eu-155	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
Pu-239	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
Am-241	*0.00*	*-0.01*	*0.17*	*-0.02*	*0.05*	*-0.06*	*0.04*	*0.02*	***0.03***
Cm-243	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

SFP NE Side of Cask Pit Floor									
Radio-nuclide	1000-0000-126-C-							Average of 1st Three Samples *(H3 Only)*, Average of 1st Inside and 1st Outside Samples	*Average of All* Samples
	1C-01 (10-12")	1C-02 (12-14")	1C-03 (14-16")	3C-04 (45.5-47.5")	4C-05 (47.5-49.5")	5C-06 (67.5-69.5")	5C-07 (69.5-71.5")		
	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g
H-3	134.00	71.90	19.50	*0.57*	*0.03*	*0.96*	*1.26*	**75.13**	32.60
C-14	*-0.14*	*-0.14*	N/A	N/A	N/A	N/A	N/A	***-0.14***	*-0.14*
Mn-54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe-55	*-0.02*	*0.29*	*-4.12*	*-1.44*	*0.33*	*-0.45*	*-1.34*	***-0.68***	*-0.96*
Co-60	0.14	0.10	*0.01*	*0.00*	*0.03*	*0.00*	*0.01*	**0.07**	0.04
Ni-63	*1.04*	*1.81*	*0.13*	*1.62*	*0.13*	*1.46*	*1.00*	*1.02*	***1.03***
Sr-90	*0.00*	*0.00*	0.02	0.02	0.02	*0.00*	*0.00*	0.00	**0.01**
Nb-94	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
Ag-108m	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*	*0.00*	*0.03*	*0.00*	*0.01*	***0.02***	*0.01*
Cs-137	0.54	0.18	*0.00*	0.05	0.05	*0.01*	*0.03*	**0.28**	0.12
Eu-152	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
Eu-155	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
Pu-239	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
Am-241	*0.00*	*-0.01*	*0.02*	*0.00*	*0.00*	*-0.02*	*0.06*	***0.03***	*0.01*
Cm-243	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

SFP Southside Center of Floor											
Radio-nuclide	1000-0000-125-C-									Average of 1st Three Samples (H3 Only), Average of 1st Inside and 1st Outside Samples	Average of All CC Samples
	1C-01 (10-12")	2C-02 (12-14")	2C-03 (14-16")	6C-04 (66-68")	7C-05 (68-70")	10C-06 (103.5-105.5")	10C-07 (105.5-107.5")	11B-08 (117.5-119.5")	11B-09 (119.5-121.5")		
	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g
H-3	291	560	331	41.70	13.30	282	105	*0.20*	*0.17*	**394**	232
C-14	*0.55*	*0.60*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*0.55*	***0.57***
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	*-0.01*	*-0.79*	*-0.04*	2.20	*-1.76*	9.45	2.85	*-0.40*	*-1.05*	1.42	**1.70**
Co-60	0.09	*0.03*	*0.01*	*0.01*	*0.00*	0.10	0.35	*-0.01*	*-0.01*	**0.22**	0.09
Ni-63	*2.25*	*2.43*	*-0.76*	*-0.93*	*0.00*	*1.83*	5.84	*0.21*	*-0.90*	**4.05**	1.52
Sr-90	0.40	0.67	0.71	*-0.01*	*0.01*	0.71	7.05	*0.01*	*0.01*	**3.72**	1.36
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	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
Cs-134	*0.00*	0.11	*0.00*	*0.02*	*0.00*	*0.03*	0.16	*0.00*	*0.00*	**0.08**	0.04
Cs-137	4.49	22.70	19.10	*0.01*	0.06	108	311	0.40	0.08	**157.75**	66.48
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	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
Pu-241	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Am-241	*0.01*	*0.00*	*-0.03*	*0.02*	*0.01*	*0.04*	*0.13*	*-0.17*	*-0.03*	***0.07***	*0.03*
Cm-243	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Spent Fuel Building SW Column R101, North Face									
Radio-nuclide	9801-0-R101-SFCC-01-							Average of 1st *Three Samples* (H3 Only), Average of 1st Inside and 1st Outside Samples	Average of All CC Samples
	C1 (0-2")	C2 (2-4")	C3 (4-6")	C4 (13-15")	C5 (26-28")	C6 (28-30")			
	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g		pCi/g	pCi/g
H-3	*-0.31*	*-0.21*	*-0.37*	*-0.91*	*-0.49*	*-0.51*		***-0.30***	*-0.47*
C-14	1.11	N/A	N/A	N/A	N/A	N/A		**1.11**	1.11
Mn-54	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A
Fe-55	*-0.58*	N/A	N/A	N/A	N/A	N/A		***-0.58***	*-0.58*
Co-60	*-0.01*	*0.00*	*0.01*	*0.00*	*0.00*	*0.01*		*0.00*	***0.00***
Ni-63	*-0.19*	N/A	N/A	N/A	N/A	N/A		***-0.19***	*-0.19*
Sr-90	*0.00*	*0.00*	*0.00*	*0.01*	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
Tc-99	*0.78*	N/A	N/A	N/A	N/A	N/A		*0.78*	***0.78***
Ag-108m	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A
Cs-134	*0.00*	*0.03*	*0.02*	*0.01*	*0.02*	*0.01*		*0.01*	***0.02***
Cs-137	*0.00*	*0.01*	*-0.01*	*-0.01*	*-0.02*	*0.00*		***0.00***	*0.00*
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	N/A		N/A	N/A
Pu-239	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
Am-241	*0.01*	*0.02*	*-0.06*	*0.01*	*-0.02*	*0.00*		***0.01***	*-0.01*
Cm-243	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A

Spent Fuel Building Center Column, S101, South Face									
Radio-nuclide	9801-0-S101-SFCC-01-							Average of 1st Three Samples (H3 Only), Average of 1st Inside and 1st Outside Samples	Average of All CC Samples
	C1 (0-2")	C2 (2-4")	C3 (4-6")	C4 (6-8")	C5 (11.5-13.5")	C6 (13.5-15.5")			
	ρCi/g	ρCi/g	ρCi/g	ρCi/g	ρCi/g	ρCi/g		ρCi/g	ρCi/g
H-3	*-0.77*	*0.06*	*0.41*	*0.06*	*-0.54*	*-0.57*		***-0.10***	*-0.23*
C-14	6.85	N/A	N/A	N/A	N/A	N/A		**6.85**	6.85
Mn-54	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A
Fe-55	-0.96	N/A	N/A	N/A	N/A	N/A		***-0.96***	*-0.96*
Co-60	*0.00*	*-0.01*	*-0.02*	*0.00*	*0.00*	*0.00*		*0.00*	***0.00***
Ni-63	*-0.79*	N/A	N/A	N/A	N/A	N/A		*-0.79*	*-0.79*
Sr-90	*0.00*	N/A	N/A	N/A	N/A	N/A		*0.00*	0.00
Nb-94	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A
Tc-99	*0.68*	N/A	N/A	N/A	N/A	N/A		*0.68*	0.68
Ag-108m	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A
Cs-134	*0.00*	*0.02*	*0.04*	*0.00*	*0.02*	*0.01*		*0.00*	***0.02***
Cs-137	*-0.01*	*0.00*	*-0.02*	*-0.03*	*0.00*	*0.01*		*0.00*	***-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	N/A		N/A	N/A
Pu-239	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
Am-241	*0.00*	*-0.03*	*0.05*	*0.02*	*-0.01*	*0.02*		*0.01*	***0.01***
Cm-243	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A

Crane Footings East Side, U100 South Face									
Radio-nuclide	9801-U-100-					Average of 1st Three Samples (H3 Only), Average of 1st Inside and 1st Outside Samples		Average of All CC Samples	
	C1 (0-2")	C2 (2-4")	C3 (4-6")	C4 (10-12")					
	pCi/g	pCi/g	pCi/g	pCi/g		pCi/g		pCi/g	
H-3	No detectable in these concrete cores								
C-14									
Mn-54									
Fe-55									
Co-60									
Ni-63									
Sr-90									
Nb-94									
Tc-99									
Ag-108m									
Cs-134									
Cs-137									
Eu-152									
Eu-154									
Eu-155									
Pu-238									
Pu-239									
Pu-241									
Am-241									
Cm-243									

Crane Footings East Side, U101 East Face								
Radio-nuclide	9801-U-101-						Average of 1st Three Samples (H3 Only), Average of 1st Inside and 1st Outside Samples	Average of All CC Samples
	C1 (0-2")	C2 (2-4")	C3 (4-6")	C4 (6-8")	C5 (8-10")			
	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g		pCi/g	pCi/g
H-3	Removed during D&D							
C-14								
Mn-54								
Fe-55								
Co-60								
Ni-63								
Sr-90								
Nb-94								
Tc-99								
Ag-108m								
Cs-134								
Cs-137								
Eu-152								
Eu-154								
Eu-155								
Pu-238								
Pu-239								
Pu-241								
Am-241								
Cm-243								

Crane Footings East Side, U106 North Face						
Radio-nuclide	9801-U-106-			Average of 1st Three Samples (H3 Only), Average of 1st Inside and 1st Outside Samples		
	C1 (0-2")	C2 (2-4")			Average of All CC Samples	
	ρCi/g	ρCi/g		ρCi/g	ρCi/g	
H-3	No detectable for these concrete cores					
C-14						
Mn-54						
Fe-55						
Co-60						
Ni-63						
Sr-90						
Nb-94						
Tc-99						
Ag-108m						
Cs-134						
Cs-137						
Eu-152						
Eu-154						
Eu-155						
Pu-238						
Pu-239						
Pu-241						
Am-241						
Cm-243						

Crane Footings East Side, U108 South Face								
Radio-nuclide	9801-U-108-						Average of 1st Three Samples (H3 Only), Average of 1st Inside and 1st Outside Samples	Average of All CC Samples
	C1 (0-2")	C2 (2-4")	C3 (4-6")	C4 (5-7")	C5 (7-9")			
	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g		pCi/g	pCi/g
H-3	No detectable for these concrete cores							
C-14								
Mn-54								
Fe-55								
Co-60								
Ni-63								
Sr-90								
Nb-94								
Tc-99								
Ag-108m								
Cs-134								
Cs-137								
Eu-152								
Eu-154								
Eu-155								
Pu-238								
Pu-239								
Pu-241								
Am-241								
Cm-243								

Compilation of B Switchgear Building Wall Concrete Core (CC) Samples

Radionuclide	Average All Samples	Average of 1st Inside and 1st Outside Samples	Average of I/S & O/S 1st Two Core Wafers (for H-3 only)
	pCi/g	pCi/g	pCi/g
H-3	N/A	N/A	N/A
C-14	N/A	N/A	N/A
Mn-54	N/A	N/A	N/A
Fe-55	N/A	N/A	N/A
Co-60	6.10E-03	**1.22E-02**	N/A
Ni-63	N/A	N/A	N/A
Sr-90	7.10E-03	**1.57E-02**	N/A
Nb-94	N/A	N/A	N/A
Tc-99	N/A	N/A	N/A
Ag-108m	N/A	N/A	N/A
Cs-134	1.83E-02	**2.11E-02**	N/A
Cs-137	N/A	N/A	N/A
Eu-152	N/A	N/A	N/A
Eu-154	N/A	N/A	N/A
Eu-155	N/A	N/A	N/A
Pu-238	N/A	N/A	N/A
Pu-239	N/A	N/A	N/A
Pu-241	5.82E+00	**4.85E+00**	N/A
Am-241	3.04E-02	**2.54E-02**	N/A
Cm-243	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 less then Detectable Activity are shown as reported values**
3. **N/A - Samples not analyzed for these radionuclides**
4. **Bold Font Value used in Calculation**

"B Switchgear" Wall Characterization Samples

Wall Samples	Wall Sample # 9202-0000-132					Wall Sample # 9202-0000-134					Wall Sample # 9202-0000-136				
	Inside Sample			Outside Samp		Inside Sample			Outside Samp		Inside Sample		Outside Samp		
Radionuclide	9202-0000-132-C-1C-01	9202-0000-132-C-1C-02	9202-0000-132-C-3C-03	9202-0000-132-C-5C-04	9202-0000-132-C-5C-05	9202-0000-134-C-1C-01	9202-0000-134-C-1C-02	9202-0000-134-C-2C-03	9202-0000-134-C-3C-04	9202-0000-134-C-3C-05	9202-0000-136-C-1C-01	9202-0000-136-C-1C-02	9202-0000-136-C-2C-03	9202-0000-136-C-4C-04	9202-0000-136-C-4C-05
	pCi/g	pCi/g	pCi/g	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	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	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	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	N/A	N/A	N/A
Co-60	*-0.01*	*0.01*	*0.01*	*0.00*	*0.01*	*0.00*	*0.00*	*0.01*	*0.01*	*0.02*	*0.02*	*0.00*	*0.00*	*0.02*	0.04
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	N/A	N/A	N/A
Sr-90	*0.00*	*0.01*	*-0.02*	*0.00*	0.17	*0.00*	*0.00*	*0.00*	*0.02*	*-0.01*	*0.00*	*0.00*	*0.00*	*0.01*	*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	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	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	N/A	N/A	N/A
Cs-134	0.03	0.05	*0.02*	0.03	0.05	*0.01*	*0.03*	*-0.01*	*0.00*	0.02	*0.00*	*-0.01*	*0.02*	*0.02*	*0.01*
Cs-137	N/A	N/A	N/A	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-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	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	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	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	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	N/A	N/A	N/A
Pu-241	N/A	N/A	N/A	N/A	*1.83*	N/A	N/A	N/A	N/A	*2.09*	N/A	N/A	N/A	N/A	11.80
Am-241	N/A	N/A	N/A	N/A	*-0.05*	N/A	N/A	N/A	N/A	*-0.01*	N/A	N/A	N/A	N/A	*0.09*
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	N/A	N/A	N/A

"B Switchgear" Wall Characterization Samples

Wall Samples	Wall Sample # 9202-0000-137					Wall Sample # 9202-0000-138				
	Inside Sample			Outside Samp		Inside Sample			Outside Samp	
Radionuclide	9202-0000-137-C-1C-01	9202-0000-137-C-1C-02	9202-0000-137-C-1C-03	9202-0000-137-C-3C-04	9202-0000-137-C-3C-05	9202-0000-138-C-1C-01	9202-0000-138-C-1C-02	9202-0000-138-C-3C-03	9202-0000-138-C-5C-04	9202-0000-138-C-5C-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	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	0.04	*-0.01*	*0.01*	*-0.02*	*-0.01*	*0.00*	*0.02*	*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	*-0.01*	*-0.01*	*0.00*	*0.00*	*0.01*	*0.00*	*-0.01*	*0.00*	0.01	*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	*0.03*	*0.02*	*0.00*	*0.00*	*0.02*	*0.01*	*0.04*	*0.02*	*0.01*	*0.02*
Cs-137	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
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	11.20	N/A	N/A	N/A	N/A	*2.16*
Am-241	N/A	N/A	N/A	N/A	0.13	N/A	N/A	N/A	N/A	*0.00*
Cm-243	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Compilation of B Switchgear Building Floor Concrete Core (CC) Samples

Radionuclide	Average All Samples	Average of 1st Inside and 1st Outside Samples	Average of I/S & O/S 1st Two Core Wafers (for H-3 only)	Comments:
	pCi/g	pCi/g	pCi/g	
H-3	*<2 SIG*	*<2 SIG*	N/A	
C-14	*<2 SIG*	*<2 SIG*	N/A	
Mn-54	*<2 SIG*	*<2 SIG*	N/A	
Fe-55	*<2 SIG*	*<2 SIG*	N/A	
Co-60	1.45E-03	**4.82E-03**	N/A	
Ni-63	*<2 SIG*	*<2 SIG*	N/A	
Sr-90	*-5.41E-04*	*-6.59E-04*	N/A	
Nb-94	*3.16E-02*	*3.16E-02*	N/A	False Positive
Tc-99	2.02E-01	**2.02E-01**	N/A	
Ag-108m	*<2 SIG*	*<2 SIG*	N/A	
Cs-134	*<2 SIG*	*<2 SIG*	N/A	
Cs-137	6.40E-03	**1.70E-02**	N/A	
Eu-152	*<2 SIG*	*<2 SIG*	N/A	
Eu-154	*<2 SIG*	*<2 SIG*	N/A	
Eu-155	*7.70E-02*	*7.70E-02*	N/A	False Positive
Pu-238	*<2 SIG*	*<2 SIG*	N/A	
Pu-239	*<2 SIG*	*<2 SIG*	N/A	
Pu-241	3.85E+00	**3.85E+00**	N/A	
Am-241	*<2 SIG*	*<2 SIG*	N/A	
Cm-243	*<2 SIG*	*<2 SIG*	N/A	

Notes:

1. **Sample Results in Italic Font are <Detectable Activity (i.e. < 2sigma error)**
2. **N/A - Samples not analyzed for these radionuclides**
3. **Bold Font Value used in Calculation**
4. **False Positive - Data was evaluated, identified as a False Positive, and the data was excluded.**

Floor Samples	Floor Sample # 9202-0000-133					Floor Sample # 9202-0000-135					Floor Sample # 9202-0000-139				
	Inside Sample			Outside Samp		Inside Sample			Outside Samp		Inside Sample			Outside Samp	
Radionuclide	9202-0000-133-C-1C-01	9202-0000-133-C-1C-02	9202-0000-133-C-3C-03	9202-0000-133-C-6C-04	9202-0000-133-C-6C-05	9202-0000-135-C-1C-01	9202-0000-135-C-1C-02	9202-0000-135-C-5C-03	9202-0000-135-C-10C-04	9202-0000-135-C-10C-05	9202-0000-139-C-1C-01	9202-0000-139-C-1C-02	9202-0000-139-C-6C-03	9202-0000-139-C-8C-04	9202-0000-139-C-8C-05
	pCi/g	pCi/g	pCi/g	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 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*
C-14	N/A	N/A	N/A	N/A	*<2 Sig*	N/A	N/A	N/A	N/A	*<2 Sig*	N/A	N/A	N/A	N/A	*<2 Sig*
Mn-54	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*
Fe-55	N/A	N/A	N/A	N/A	*<2 Sig*	N/A	N/A	N/A	N/A	*<2 Sig*	N/A	N/A	N/A	N/A	*<2 Sig*
Co-60	*-0.01*	*0.01*	*0.00*	*-0.01*	*0.00*	0.06	*-0.01*	*0.00*	*0.01*	*-0.01*	*-0.01*	*-0.02*	*0.00*	*0.00*	*0.00*
Ni-63	N/A	N/A	N/A	N/A	*<2 Sig*	N/A	N/A	N/A	N/A	*<2 Sig*	N/A	N/A	N/A	N/A	*<2 Sig*
Sr-90	*0.00*	*-0.01*	0.02	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.01*	*0.00*	*0.00*	*-0.01*	*-0.02*
Nb-94	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	0.03	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*
Tc-99	N/A	N/A	N/A	N/A	0.19	N/A	N/A	N/A	N/A	0.27	N/A	N/A	N/A	N/A	0.15
Ag-108m	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*
Cs-134	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*
Cs-137	*0.01*	*0.00*	*0.00*	*0.00*	*0.00*	0.07	*0.00*	*-0.01*	*0.00*	*0.02*	*0.00*	*0.02*	*-0.01*	*0.01*	*0.00*
Eu-152	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<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*	*<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*	*<2 Sig*	*<2 Sig*	0.08	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*
Pu-238	N/A	N/A	N/A	N/A	*<2 Sig*	N/A	N/A	N/A	N/A	*<2 Sig*	N/A	N/A	N/A	N/A	N/A
Pu-239	N/A	N/A	N/A	N/A	*<2 Sig*	N/A	N/A	N/A	N/A	*<2 Sig*	N/A	N/A	N/A	N/A	N/A
Pu-241	N/A	N/A	N/A	N/A	*-3.74*	N/A	N/A	N/A	N/A	*1.90*	N/A	N/A	N/A	N/A	13.40
Am-241	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*	*<2 Sig*
Cm-243	N/A	N/A	N/A	N/A	*<2 Sig*	N/A	N/A	N/A	N/A	*<2 Sig*	N/A	N/A	N/A	N/A	<2 Sig

Compilation of Containment Mat Sump Concrete Core (CC) Samples

Radionuclide	Average All Samples	Average of 1st Inside and 1st Outside Samples	Average of I/S & O/S 1st Two Core Wafers (for H-3 only)
	pCi/g	pCi/g	pCi/g
H-3	**1.53E+00**	1.10E+00	N/A
C-14	N/A	N/A	N/A
Mn-54	N/A	N/A	N/A
Fe-55	N/A	N/A	N/A
Co-60	N/A	N/A	N/A
Ni-63	N/A	N/A	N/A
Sr-90	*-3.70E-03*	*-1.49E-03*	N/A
Nb-94	N/A	N/A	N/A
Tc-99	N/A	N/A	N/A
Ag-108m	N/A	N/A	N/A
Cs-134	1.66E-02	**1.74E-02**	N/A
Cs-137	1.97E-02	**2.85E-02**	N/A
Eu-152	6.44E-02	**6.44E-02**	N/A
Eu-154	N/A	N/A	N/A
Eu-155	N/A	N/A	N/A
Pu-238	N/A	N/A	N/A
Pu-239	N/A	N/A	N/A
Pu-241	N/A	N/A	N/A
Am-241	N/A	N/A	N/A
Cm-243	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 less then Detectable Activity are shown as reported values**
3. **N/A - Samples not analyzed for these radionuclides**
4. **Bold Font Value used in Calculation**

	Sample # 9801-0000-002			Sample # 9801-0000-003			Sample # 9801-0000-004		
Radionuclide	9801-0280-002-01C	9801-0280-002-02C	9801-0280-002-03C	9801-0280-003-01C	9801-0280-003-02C	9801-0280-003-03C	9801-0280-004-01C	9801-0280-004-02C	9801-0280-004-03C
	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g
H-3	*0.58*	2.85	*1.82*	*0.89*	*0.60*	*1.03*	*1.06*	3.73	*1.23*
C-14	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
Fe-55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Co-60	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ni-63	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*	0.02	*-0.02*	*-0.01*	*-0.01*	*-0.01*	*-0.01*
Nb-94	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
Ag-108m	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cs-134	0.03	*0.01*	*0.02*	*0.01*	*0.03*	0.03	*-0.01*	*0.01*	0.02
Cs-137	*0.03*	*-0.01*	*0.00*	0.05	*0.01*	*0.01*	0.04	*0.01*	0.04
Eu-152	N/A	N/A	N/A	N/A	N/A	N/A	0.06	N/A	N/A
Eu-154	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
Pu-238	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
Pu-241	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
Cm-243	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Files

Attachment 3

Containment Structures Dimensions

Dimension Calculations for Various Structures

Item	Description	Dia in m	Height in m	Height Below Water Table in m	Length in m	Width in m	Volume in cu m	Surface Area in sq m	Surface Area/Volume 1/m	Weight of Concrete g (150#/cu ft)	Volume in cu yds	Weight in lbs	Weight in tons
1	**Incore Sump Area Volume**												
2	Incore upper area	8	1.52	1.52			70				92.12	373,080	
3	Incore Lower Area	5	4.57	4.57			85				111.70	452,389	
4	Incore Tunnel area		3.05	3.05	6.38	3.05	59				77.47	313,750	
5	Incore Tube	2	4.88	4.88			13				16.76	67,858	
6	Total fill needed						228				298.04	1,207,078	
8													
9	**Fuel Pool**												
10	Outside Wall Dimensions		10.21	1.83	14.94	14.63	2,231				2,918.22		
11	Inside Wall Dimensions		10.21	1.83	11.28	10.97	1,264				1,652.67		
12	Volume of Concrete in the Walls						968			2.32E+09	1,265.55	5,125,498	2,563
13	Base Mat Volume		1.83	1.83	14.94	14.63	400			9.60E+08	522.67	2,116,799	1,058
14	Total Concrete volume of SFP						1,367			3.29E+09	1,788.22	7,242,297	3,621
15													
16	**Service Building East Wall**												
17	Dimensions of Wall		2.74	2.74	55.47	0.67	102	382.43	3.75	2.45E+08	133.47	540,540	270
18	Soils behind wall at 1.5:1 slope		7.16		25.91	10.74	997				1,303.92	4,824,515	2,412
19	Totals						1,099				1,437.39	5,365,055	2,683
20													
21	**PAB Northwest Wall**												
22	Dimensions of Wall		8.31	2.74	2.69	0.46	10	22.35	2.19	2.46E+07	13.37	54,139	27
23													
24	**Containment Concrete Volumes**												
25	Containment Dome Volume												
26	Dome Concrete is 2' 6" thick												
27	Dome Inside Dimensions	41					18,240						
28	Dome Outside Dimentsions	43					20,342						
29	Dome Concrete Volume						2,103				2,750.10	11,137,922	5,569
30													
31	**Containment Wall Volume from el. 21' 0" to 121' 0" (100**												
32	Concrete is 4' 6" thick												
33	Inside Wall Volume	41	30.48				40,532						
34	Outside Wall Volume	44	30.48				46,117						

Dimension Calculations for Various Structures

Item	Description	Dia in m	Height in m	Height Below Water Table in m	Length in m	Width in m	Volume in cu m	Surface Area in sq m	Surface Area/Volume 1/m	Weight of Concrete g (150#/cu ft)	Volume in cu yds	Weight in lbs	Weight in tons
35	Containment Wall Volume from el. 21' 0" to 121' 0" (100 ft)						5,584				7,304.20	29,582,008	14,791
36													
37	**Containment Lower Wall Volume from el 17' 6" to 21' 0"**												
38	Concrete is 4' 6" thick												
39	Inside Wall Volume	41	1.07				1,419						
40	Outside Wall Volume	44	1.07				1,614						
41	Containment Lower Wall Volume from el 17' 6" to 21' 0"						195				255.65	1,035,370	518
42													
43	**Containment Volume to be Removed**												
44	Totals						7,883				10,309.95	41,755,301	20,878
45													
46	**Containment Dome Surface Area**	43						2,860.26					
47													
48	**Containment Barrel Surface Area from el 21' 0" to 121' 0"**	44	30.48					4,202.83					
49													
50	Total Containment Outside Surface Area							7,063.10					
51													
52	**Containment Inside Volume Requiring Type B Fill from el - 0' 6" to el 21' 6"**	41	5.49				7,296				9,542.58	38,647,462	19,324
53	**Waste Disposal Building**												
54	Height Below Water Table		1.83	1.83	16.76	0.91	28	95.32	3.40	6.74E+07	36.67	148,500	74
	Note:												
	Highlighted cells were used in the Basement Fill calculation sheets												

Item No.	Description	Units	Measurement	Height in ft	Length in ft	Width in ft	Area in sq ft	Volume in cu ft	Volume in cu cm	Volume in cu yd	Weight in lb	Number of Trucks @ 42,000 lb
1	**Cable Vault Concrete**											
2	Referecne drawing 16103-50086 sh 3, FC-35E											
3	Referecne drawing 16103-50086 sh 4, FC-35F											
4	Arc of Cable vault at Cntmnt outer wall	degrees	58.7									
5	Radius from RPV to Containment outer wall	ft	72.0									
6	**Cable Vault Cntmnt Wall from el -0' 6" to el 5' 0"**											
7	Radius from RPV to Cable Vault inner wall outside surface from el -0' 6" to el 5' 0"	ft	73.0									
8	Radius from RPV to Cable Vault outer wall inside surface from el -0' 6" to el 5' 6"	ft	86.7									
9	Radius from RPV to Cable Vault outer wall outside surface from el -0' 6" to el 5' 6"	ft	87.2									
10	Cable Vault Cntmnt Wall Thickness from el -0' 6" to el 4' 2"	ft	1.0			1.0						
11	Cable Vault Cntmnt Wall Height from el -0' 6" to el 4' 2"	ft	4.7	4.7								
12	Cable Vault Cntmnt Wall Length from el -0' 6" to el 4' 2"	ft	74.8		74.8							
13	Cable Vault Cntmnt Wall Area from el -0' 6" to el 4' 2"			4.7	74.8		349.3					
14	Cable Vault Cntmnt Wall Volume from el -0' 6" to el 4' 2"			4.7	74.8	1.0		349.3	9,891,755	12.9		
15	Cable Vault Cntmnt Wall Weight from el -0' 6" to el 4' 2"	lb/cu ft	150.0								52,399	1.2

Item No.	Description	Units	Measurement	Height in ft	Length in ft	Width in ft	Area in sq ft	Volume in cu ft	Volume in cu cm	Volume in cu yd	Weight in lb	Number of Trucks @ 42,000 lb
16	**Cable Vault Outer Wall from Bedrock to el 5' 6"**											
17	Cable Vault Outer Wall Height from Bedrock to el 5' 6"	ft	6.0	6.0								
18	Cable Vault Outer Wall Length from Bedrock to el 5' 6"	ft	89.1		89.1							
19	Cable Vault Outer Wall Width from Bedrock to el 5' 6"	ft	1.5			1.5						
20	Cable Vault Outer Wall Area from Bedrock to el 5' 6"			6.0	89.1		534.4					
21	Cable Vault Outer Wall Volume from Bedrock to el 5' 6"			6.0	89.1	1.5		801.6	22,698,432	29.7		
22	Cable Vault Outer Wall Weight from Bedrock to el 5' 6"	lb/cu ft	150.0								120,238	2.9
23	**Cable Vault Floor at el 5' 6"**											
24	Cable Vault Floor Height at el 5' 6" from outer wall 4.17' towards cntmnt	ft	1.3	1.3								
25	Cable Vault Floor Width at el 5' 6" from outer wall 4.17' towards cntmnt	ft	4.2		4.2							
26	Cable Vault Floor Height at el 5' 6" outer wall from 4.17' towards cntmnt to cntmnt outer wall	ft	1.0	1.0								
27	Cable Vault Floor Width at el 5' 6" outer wall from 4.17' towards cntmnt to cntmnt outer wall	ft	11.1		11.1							
28	Cable Vault Total Floor width at el 5' 6"	ft	15.3									
29	Cable Vault Floor Length at el 5' 6"	ft	82.0									
30	Cable Vault Floor Top and Bottom Surface Area at el 5' 6"				82.0	15.3	1,256.3					

Item No.	Description	Units	Measurement	Height in ft	Length in ft	Width in ft	Area in sq ft	Volume in cu ft	Volume in cu cm	Volume in cu yd	Weight in lb	Number of Trucks @ 42,000 lb
31	Cable Vault Floor Volume at el 5' 6"							1,364.1	38,628,303	50.5		
32	Cable Vault Floor Weight at el 5' 6"	lb/cu ft	150.0								204,622	4.9
33	**Cable Vault Outer Wall from el 5' 6" to el 22' 0"**											
34	Cable Vault Outer Wall Height from el 5' 6" to el 22' 0"	ft	16.5	16.5								
35	Cable Vault Outer Wall Length from el 5' 6" to el 22' 0"	ft	89.9		89.9							
36	Cable Vault Outer Wall Width from el 5' 6" to el 22' 0"	ft	1.2			1.2						
37	Cable Vault Outer Wall Area from el 5' 6" to el 22' 0"			16.5	89.9		1,482.8					
38	Cable Vault Outer Wall Volume from el 5' 6" to el 22' 0"			16.5	89.9	1.2		1,734.8	49,125,052	64.3		
39	Cable Vault Outer Wall Weight from el 5' 6" to el 22' 0"	lb/cu ft	150.0								260,226	6.2
40	Totals							4,249.9	120,343,542	157.4	637,485	15
	Soil under Cable Vault between Bedrock and el 4' 2"											
	Volume of Soil			4.7	81.9	15.3		5,865.7	166,098,397	217.2		
	Weight of soil	lb/cu ft	105								615,901	14.7
	Note:											
	Highlighted cells were used in the Basement Fill calculation sheets											

Containment Mat Sump

Item No.	Description	Units	cu m	m		
1	Containment Mat Sump 5 - 8' lengths of 72" ID Reinf. Concrete Pipe, 7" Thk. Wall, T&G Mortar Joints					
2	Reference Dwg. 16103-56025, FC-60B					
3	**Calculate Volume of Concrete**					
4	VI = Inside Volume in cu ft					
5	VI = pi x (DxD)/4 x H					
6	Inside Diameter in ft	6				
7	Height in ft	40				
8	VI	1,131	32.03			
9	VO = Outside Volume in cu ft					
10	VO = pi x (DxD)/4 x H					
11	Outside Diameter in ft	7.17				
12	Height in ft	40				
13	VO	1,614	45.70			
14	VC = Volume of Concrete in cu ft					
15	**VC = VO - VI**	**483**	13.67			
	Thickness of Concrete			0.18		
	Length of Concrete			6.32		
16	**Calculate the Volume of Concrete Below the Water Table of el. 10 ft.**					
17	Bottom of Mat Sump is el. -28.5 ft					
18	Height of Concrete Below the Water Table in ft	38.5				
19	VCBW = Volume of Concrete Below the Water Table					
20	VI	1,089	30.83			
21	VO	1,553	43.98			
22	**VCBW = VO - VI**	**464**	13.15			
			13.20			
23	**Volume of Sediment in Bottom of the Mat Sump**					
24	Divers reported approximately 2-3 inches of sediment in the Mat Sump					
25	VS = Volume of Sediment in cu ft					
26	VS = pi x (DxD)/4 x H					
27	Inside Diameter in ft	6				
28	Height in ft	0.25				
29	**VS**	**7.1**	0.20			
30	**Volume of Water in the Containment Mat Sump**					

Containment Mat Sump

Item No.	Description	Units	cu m	m		
31	VCBW x 7.48052 gals/cu ft = Gallons	3,475				
32	Volume of Water in Liters = 3.7854l/gal	13,153				
33	Porosity of backfill from LTP is 0.35					
34	**Gallons of water in Mat Sump @ 0.35 porosity**	**1,216**				
35	**Liters of Water in the Mat Sump @ 0.35 porosity**	**4,603**				
	Note:					
	Highlighted cells were used in the Basement Fill calculation sheets					

Spent Fuel Building and Yard Crane Foundations and Footings

Yard Crane Foundation No.	Description	Foundation/Footing Bottom el. in ft	Foundation/Footing Top el. In ft	Saturated Zone Top el. in ft	Saturated Zone Depth in ft	North - South Length in ft	East - West Width in ft	Saturated Zone Volume in cu ft	Saturated Zone Surface Area in sq ft	Depth in M	North - South Length in M	East - West Width in M	Saturated Volume in Cu M	Saturated Zone Surface Area in Sq M	Surface Area to Volume Ratio 1/M
	Cnmt Foyer	14	21.50	18.00	4.00	34.00	26.50	3604.00	1,385	1.22	10.36	8.08	102.05	32	0.32
U108	Northwest Foundation	16.08	19.08	18.00	1.92	3.00	4.00	23.04	39	0.59	0.91	1.22	0.65	4	5.54
	Footing	19.08	22.48	18.00	0.00	2.17	5.00	0.00	11	0.00	0.66	1.52	0.00	1	0.00
U1071/2	Northwest Foundation	12.83	18.08	18.00	5.17	2.00	2.00	20.68	45	1.58	0.61	0.61	0.59	4	7.20
	Footing	18.08	20.50	18.00	0.00			0.00	0	0.00	0.00	0.00	0.00	0	0.00
U106	Northwest Foundation	13.67	15.80	18.00	2.13	4.00	6.00	51.12	67	0.65	1.22	1.83	1.45	6	4.27
	Footing	15.80	22.50	18.00	2.20	2.17	4.17	19.91	37	0.67	0.66	1.27	0.56	3	6.09
U103	West Foundation	15.42	17.42	18.00	2.00	4.00	6.00	48.00	64	0.61	1.22	1.83	1.36	6	4.37
	Footing	17.42	22.50	18.00	0.58	2.17	4.17	5.25	16	0.18	0.66	1.27	0.15	2	10.25
U100	Southwest Foundation	15.00	18.00	18.00	3.00	13.00	11.00	429.00	287	0.91	3.96	3.35	12.15	27	2.19
	Footing	NA		18.00	0.00			0.00	0	0.00	0.00	0.00	0.00	0	0.00
S113	Northeast Foundation	15.00	18.00	18.00	3.00	6.00	4.00	72.00	84	0.91	1.83	1.22	2.04	8	3.83
	Footing	18.00	22.50	18.00	0.00	2.00	2.00	0.00	4	0.00	0.61	0.61	0.00	0	0.00
S100	Southeast Foundation	15.00	18.00	18.00	3.00	9.00	9.00	243.00	189	0.91	2.74	2.74	6.88	18	2.55
	Footing	NA	0.00	18.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	0	0.00
R113	Center North Foundation	14.00	18.00	18.00	4.00	8.00	6.00	192.00	160	1.22	2.44	1.83	5.44	15	2.73
	Footing	18.00	22.50	18.00	0.00	4.17	2.17	0.00	9	0.00	1.27	0.66	0.00	1	0.00
R112	Center North Foundation	12.25	17.50	18.00	5.75	6.25	6.00	215.63	178	1.75	1.91	1.83	6.11	17	2.71
	Footing														
R110	Center Foundation	16.10	19.10	18.00	1.90	4.00	6.00	45.60	62	0.58	1.22	1.83	1.29	6	4.46
	Footing	19.10	22.60	18.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	0	0.00
R109	Center South Foundation	15.00	19.00	18.00	3.00	8.00	6.00	144.00	132	0.91	2.44	1.83	4.08	12	3.01
	Footing	19.00	22.42	18.00	0.00	2.17	4.17	0.00	9	0.00	0.66	1.27	0.00	1	0.00
R100	Center South Foundation	15.00	18.00	18.00	3.00	14.50	12.50	543.75	343	0.91	4.42	3.81	15.40	32	2.07

Spent Fuel Building and Yard Crane Foundations and Footings

Yard Crane Foundation No.	Description	Foundation/Footing Bottom el. in ft	Foundation/Footing Top el. In ft	Saturated Zone Top el. in ft	Saturated Zone Depth in ft	North - South Length in ft	East - West Width in ft	Saturated Zone Volume in cu ft	Saturated Zone Surface Area in sq ft	Depth in M	North - South Length in M	East - West Width in M	Saturated Volume in Cu M	Saturated Zone Surface Area in Sq M	Surface Area to Volume Ratio 1/M
	Footing	NA												0	
R, S, U 100	South End of SFB	15.00	18.00	18.00	3.00	58.75	2.00	352.50	482	0.91	17.91	0.61	9.98	45	4.49
S102	Center Center Foundation	2.00	4.00	18.00	2.00	4.50	4.60	41.40	57	0.61	1.37	1.40	1.17	5	4.53
	Footing	4.00	20.50	18.00	14.00	2.50	2.33	81.55	141	4.27	0.76	0.71	2.31	13	5.68
S101	South Center Foundation	2.09	4.22	18.00	2.13	4.00	4.00	34.08	50	0.65	1.22	1.22	0.97	5	4.82
	Footing	4.22	20.50	18.00	13.78	2.33	3.00	96.32	154	4.20	0.71	0.91	2.73	14	5.24
R101	Southwest Foundation	-13.50	-11.50	18.00	2.00	5.50	7.00	77.00	89	0.61	1.68	2.13	2.18	8	3.77
	Footing	-11.50	21.50	18.00	29.50	2.33	4.42	303.81	409	8.99	0.71	1.35	8.60	38	4.41
R102	West Center Foundation	-4.67	-2.67	18.00	2.00	7.00	8.50	119.00	122	0.61	2.13	2.59	3.37	11	3.35
	Footing	-2.67	20.50	18.00	20.67	2.67	4.33	238.97	301	6.30	0.81	1.32	6.77	28	4.13
R103	Northwest Foundation	3.75	6.67	18.00	2.92	5.00	7.50	109.50	111	0.89	1.52	2.29	3.10	10	3.31
	Footing	6.67	20.42	18.00	11.33	2.67	4.25	128.57	168	3.45	0.81	1.30	3.64	16	4.29
					100.33	38.50	49.93	1230.20	1,600	3.06	1.17	1.52	3.48	14.87	4.27
NOTES:										1.91	1.19	1.52	3.45		4.35
Reference	FC-29A, B, C	FC-31A, B,C,D		FC-39A		FC-50A, B, C				6.27	3.90	4.99			4.30
Drawings	16103-50069	16103-50073		16103-50109		16103-56017									
	Note:														
	Highlighted cells were used in the Basement Fill calculation sheets														

B Switchgear Building Dimensions

Item No.	Description	Units	Results	Concrete Below the Water Table, el. 10 ft
1	Calculate the Volume of Concrete in "B" Swgr			
2	Bottom el. 9' 0"			
3	Floor Thickness 4' 6"			
4	Lean Concrete thickness Below Floor 4"			
5	Demolished to el. 17' 6"			
6	Reference Dwg 16103-50101 sh 4			
	SUMMARY			
7	**Total Concrete Volume of "B" Swgr Bldg**	**cu ft**	**12,072**	**2,894**
8	**cu ft x 28316.8 cu cm /sq ft**	**cu cm**	**341,839,938**	**81,951,085**
9	**Total Concrete Inside Surface Area of "B" Swgr Bldg.**	**sq ft**	**2,944**	**0**
10	**sq ft x 929.03 sq cm /sq ft**	**sq cm**	**2,735,436**	**0**
11	**Total "B" Swgr Bldg. Concrete Outside Surface Area**	**sq ft**	**3,018**	**2,472**
12	**sq ft x 929.03 sq cm /sq ft**	**sq cm**	**2,804,008**	**2,296,990**
13	**Volume of all Remaining Concrete in "B" Swgr Bldg**			
14	Floor Concrete Volume			
15	Floor thickness 4' 6" + 4" =	ft	4.8	1.33
16	Floor Length	ft	64.0	
17	Floor Width	ft	34.0	
18	Volume of Concrete in Floor	cu ft	10,517	2,894
19	cu ft x 28316.8 cu cm /sq ft	cu cm	297,817,225	81,951,085
20	East Wall Concrete Volume			
21	Wall Thickness	ft	2.0	
22	Wall Length	ft	64.0	
23	Wall Height	ft	4.0	
24	East Wall Concrete Volume	cu ft	512	0
25	cu ft x 28316.8 cu cm /sq ft	cu cm	14,498,202	0
26	West Wall Concrete Volume			
27	Wall Thickness	ft	2.0	
28	Wall Length	ft	64.0	
29	Wall Height	ft	4.0	
30	West Wall Concrete Volume	cu ft	512	0
31	cu ft x 28316.8 cu cm /sq ft	cu cm	14,498,202	0
32	North Wall Concrete Volume			
33	Wall Thickness	ft	2.0	
34	Wall Length	ft	30.0	
35	Wall Height	ft	4.0	
36	North Wall Concrete Volume	cu ft	240	0
37	cu ft x 28316.8 cu cm /sq ft	cu cm	6,796,032	0
38	South Wall Concrete Volume			
39	Wall Thickness	ft	2.0	

B Switchgear Building Dimensions

Item No.	Description	Units	Results	Concrete Below the Water Table, el. 10 ft
40	Wall Length	ft	30.0	
41	Wall Height	ft	4.0	
42	South Wall Concrete Volume	cu ft	240	0
43	cu ft x 28316.8 cu cm /sq ft	cu cm	6,796,032	0
44	East Wall of South Ramp Concrete Volume			
45	Wall Thickness	ft	1.0	
46	Wall Length	ft	5.0	
47	Wall Height	ft	1.5	
48	East Wall of South Ramp Concrete Volume	cu ft	8	0
49	cu ft x 28316.8 cu cm /sq ft	cu cm	212,376	0
50	South Wall of South Ramp Concrete Volume			
51	Wall Thickness	ft	1.0	
52	Wall Length	ft	9.0	
53	Wall Height	ft	0.8	
54	South Wall of South Ramp Concrete Volume	cu ft	7	0
55	cu ft x 28316.8 cu cm /sq ft	cu cm	191,138	0
56	Floor of South Ramp Concrete Volume			
57	Floor Thickness	ft	1.0	
58	Floor Length	ft	9.1	
59	Floor Width	ft	4.0	
60	Floor of South Ramp Concrete Volume	cu ft	36	0
61	cu ft x 28316.8 cu cm /sq ft	cu cm	1,030,732	0
62				
57	**Total Concrete Volume of "B" Swgr Bldg**	**cu ft**	**12,072**	**2,894**
58	**cu ft x 28316.8 cu cm /sq ft**	**cu cm**	**341,839,938**	**81,951,085**
59	**Concrete Inside Surface Area of the "B" Swgr Bldg.**			
60	Floor Concrete Inside Surface Area			
61	Floor Length	ft	64.0	
62	Floor Width	ft	34.0	
63	Floor Concrete Inside Surface Area	sq ft	2,176	0
64	sq ft x 929.03 sq cm /sq ft	sq cm	2,021,569	0
65	East Wall Concrete Inside Surface Area			
66	Wall Length	ft	60.0	
67	Wall Height	ft	4.0	
68	East Wall Concrete Inside Surface Area	sq ft	240	0
69	sq ft x 929.03 sq cm /sq ft	sq cm	222,967	0
70	West Wall Concrete Inside Surface Area			
71	Wall Length	ft	60.0	
72	Wall Height	ft	4.0	
73	West Wall Concrete Inside Surface Area	sq ft	240	0
74	sq ft x 929.03 sq cm /sq ft	sq cm	222,967	0

B Switchgear Building Dimensions

Item No.	Description	Units	Results	Concrete Below the Water Table, el. 10 ft
75	North Wall Concrete Inside Surface Area			
76	Wall Length	ft	30.0	
77	Wall Height	ft	4.0	
78	North Wall Concrete Inside Surface Area	sq ft	120	0
79	sq ft x 929.03 sq cm /sq ft	sq cm	111,484	0
80	South Wall Concrete Inside Surface Area			
81	Wall Length	ft	30.0	
82	Wall Height	ft	4.0	
83	South Wall Concrete Inside Surface Area	sq ft	120	0
84	sq ft x 929.03 sq cm /sq ft	sq cm	111,484	0
85	North Wall of South Ramp Concrete Inside Surface Area			
86	Wall Length	ft	33.0	
87	Wall Height	ft	4.0	
88	North Wall of South Ramp Concrete Inside Surface Area	sq ft	132	0
89	sq ft x 929.03 sq cm /sq ft	sq cm	122,632	0
90	East Wall of South Ramp Concrete Inside Surface Area			
91	Wall Length	ft	4.0	
92	Wall Height	ft	1.5	
93	East Wall of South Ramp Concrete Inside Surface Area	sq ft	6	0
94	sq ft x 929.03 sq cm /sq ft	sq cm	5,574	0
95	South Wall of South Ramp Concrete Inside Surface Area			
96	Wall Length	ft	8.0	
97	Wall Height	ft	0.8	
98	South Wall of South Ramp Concrete Inside Surface Area	sq ft	6	0
99	sq ft x 929.03 sq cm /sq ft	sq cm	5,574	0
100	Floor Concrete of South Ramp Inside Surface Area			
101	Floor Length	ft	9.1	
102	Floor Width	ft	4.0	
103	Floor Concrete of South Ramp Inside Surface Area	sq ft	36	0
104	sq ft x 929.03 sq cm /sq ft	sq cm	33,817	0
105	**Total Concrete Inside Surface Area of "B" Swgr Bldg.**	**sq ft**	**2,944**	**0**
106	**sq ft x 929.03 sq cm /sq ft**	**sq cm**	**2,735,436**	**0**
107	**Concrete Outside Surface Area of "B" Swgr Bldg.**			
108	Floor Concrete Outside Surface Area			
109	Floor Length	ft	64.0	
110	Floor Width	ft	34.0	
111	Floor Concrete Outside Surface Area	sq ft	2,176	2,176
112	sq ft x 929.03 sq cm /sq ft	sq cm	2,021,569	2,021,569
113	East Wall Concrete Outside Surface Area			
114	Wall Length	ft	64.0	
115	Wall Height	ft	4.8	

B Switchgear Building Dimensions

Item No.	Description	Units	Results	Concrete Below the Water Table, el. 10 ft
116	East Wall Concrete Outside Surface Area	sq ft	309	117
117	sq ft x 929.03 sq cm /sq ft	sq cm	287,182	108,808
118	West Wall Concrete Outside Surface Area			
119	Wall Length	ft	64.0	
120	Wall Height	ft	4.8	
121	West Wall Concrete Outside Surface Area	sq ft	309	117
122	sq ft x 929.03 sq cm /sq ft	sq cm	287,182	108,808
123	North Wall Concrete Surface Area Inside			
124	Wall Length	ft	34.0	
125	Wall Height	ft	4.8	
126	North Wall Concrete Surface Area Inside	sq ft	164	62
127	sq ft x 929.03 sq cm /sq ft	sq cm	152,565	57,804
128	East Wall Concrete Outside Surface Area of South Ramp			
129	Wall Length	ft	5.0	
130	Wall Height	ft	1.5	
131	East Wall Concrete Outside Surface Area of South Ramp	sq ft	8	0
132	sq ft x 929.03 sq cm /sq ft	sq cm	6,968	0
133	South Wall of South Ramp Concrete Outside Surface Area			
134	Wall Length	ft	9.0	
135	Wall Height	ft	0.8	
136	South Wall of South Ramp Concrete Inside Surface Area	sq ft	7	0
137	sq ft x 929.03 sq cm /sq ft	sq cm	6,271	0
138	Floor Concrete of South Ramp Outside Surface Area			
139	Floor Length	ft	9.1	
140	Floor Width	ft	5.0	
141	Floor Concrete of South Ramp Outside Surface Area	sq ft	46	0
142	sq ft x 929.03 sq cm /sq ft	sq cm	42,271	0
143	**Total "B" Swgr Bldg. Concrete Outside Surface Area**	**sq ft**	**3,018**	**2,472**
144	**sq ft x 929.03 sq cm /sq ft**	**sq cm**	**2,804,008**	**2,296,990**
145	**Soil Fill Volume for "B" Swgr Bldg**			
146	**Fill from el 13' 6" to 17' 6"**			
147	Inside Length	ft	60.0	
148	Inside Width	ft	30.0	
149	Height	ft	4.0	
150	Soil Fill Volume for "B" Swgr Bldg to el 17' 6"	cu ft	7,200	0
151	cu ft x 28316.8 cu cm /sq ft	cu cm	203,880,960	0
152	Fill South Ramp Area to el 17' 6"			
153	Inside Length	ft	9.0	
154	Inside Width	ft	4.0	

B Switchgear Building Dimensions

Item No.	Description	Units	Results	Concrete Below the Water Table, el. 10 ft
155	Height	ft	0.8	
156	Volume of Soil to fill to el 17' 6"	cu ft	27	0
157	cu ft x 28316.8 cu cm /sq ft	cu cm	764,554	0
158	**Fill from el 17' 6" to 21' 6"**			
159	Length	ft	69.0	
160	Width	ft	34.0	
161	Height	ft	4.0	
162	Volume of Soil to fill to el 17' 6"	cu ft	9,384	0
163	cu ft x 28316.8 cu cm /sq ft	cu cm	265,724,851	0
164	**Summary**			
165	**Soil Fill Volume to el 17' 6"**	**cu ft**	**7,227**	0
166	**cu ft x 28316.8 cu cm /sq ft**	**cu cm**	**204,645,514**	0
167	**Soil Fill Volume fropm el 17' 6" to 21' 6"**	**cu ft**	**9,384**	0
168	**cu ft x 28316.8 cu cm /sq ft**	**cu cm**	**265,724,851**	0
169	**Total Soil Backfill Volume**	**cu ft**	**470,370,364.8**	0
170	**cu ft x 28316.8 cu cm /sq ft**	**cu cm**	**675,015,878.4**	0

File 4

Attachment 4

Containment Basement Fill Model Sample Data

Containment Basement Fill Model Sample Data Index

File Number	Sample Location Description	Sample Identification	CY ID
1	B SWGR Bldg	9202-0000-132, 133, 134, 135, 136, 137, 138, 139	CY-031 2257
2	Cable Vault	3107-0000-187, 188, 189, 190, 191	CY-035 2510
3	Cable Vault	3107-0000-194, 195, 196, 197, 198, 199	
4	Cable Vault and Service Bldg	3107-0000-192, 193 5000-0000-103, 104, 105, 106	
5	Containment Mat and Wall	3100-0000-175, 176, 177, 178, 179, 180, 181, 182, 183, 184	CY-031 2261
6	Containment Mat Below Liner Concrete Cores (CC)	3100-0000-190, 191, 192, 193, 194, 195, 196, 197, 200, 201, 202, 203	
7	Containment Mat Below Liner CC	3100-0000-198, 199	
8	Containment Mat Sump	9801-0280-002, 003, 004	CY-034 2483
9	Incore Area Floor	3002-0000-187	CY-031 2262
10	Incore Area Floor	3002-0000-188	
11	Incore Area Wall	3002-0000-189	
12	Incore Area Wall	3002-0000-191	
13	Service Bldg	2228-22, 23	
14	Service Bldg	5000-107, 108	
15	Spent Fuel Bldg. (SFB) CC	9801-SFB-01, FOY-01, SFB-02	
16	SFB Footings CC	9801-R-101, S-101	
17	SFB Yard Footings CC	9801-U-100, 101, 106, 108	
18	Spent Fuel Pool (SFP) CC	1000-0000-115, 116, 120, 123, 125, 126	
19	SFP CC	1000-0000-118, 122, 124	
20	SFP CC	1000-0000-119, 121	
21	SFP CC East Wall	1000-0000-117	
22	Waste Disposal Bldg	6000-0000-100, 101, 102, 103	

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

NUCLEAR PLANT RECORDS TRANSMITTAL		NPR USE ONLY CONTROL NO. g U.N. NO. 2257
DEPARTMENT OF ORIGIN **Site Closure**	RECORDS CLASSIFICATION (SEE INSTRUCTIONS): ☐ CONFIDENTIAL ☐ SAFEGUARDS ☐ QA RECORD	DATE: **5/30/06**
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: B Switchgear Building 13'-6" Elevation Instrument Calibration Lab, Survey / Sampling Work Plan SSWP Number BCY-SSWP-04-12-002.

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: 5/30/06	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)
5/30/06	C4-031			

Survey/Sampling Work Plan - SSWP

GENERAL SECTION

SSWP №: BCY-SSWP-04-12-002

Survey Unit №: 9202-0000

Type of Survey: Radiological Assessment

Area Description: "B" Switchgear Building 13'-6" Elevation (Instrument Calibration Lab)

DATA QUALITY OBJECTIVES (DQO)

1.0 STATE THE PROBLEM

The problem: To complete the radiological characterization of the concrete walls and soil outside and underneath the concrete for use as input to the final radiological assessment of the building.

Stakeholders: The primary stakeholders interested in the answer to this problem are the Connecticut Yankee Site Closure Group and the Demolition Contractor.

The Planning Team: The planning team consisted of the Connecticut Yankee Site Closure Group. The decision maker was the Site Closure Technical Support Manager with input from FSS personnel.

Schedule: Approximately two (2) working days are projected to write this SSWP and stage necessary equipment. Onsite survey activities are expected to take two (2) days. Laboratory analysis and evaluation of the data are expected to take fourteen (14) days.

Resources: Health physics technicians to provide radiological coverage, obtain soil samples and maintain chain-of-custody of samples; an FSS Engineer to manage field implementation of the plan and coordinate activities; Laborers and an operator to obtain concrete cores. Ancillary support will be needed from the off-site laboratory for soil and concrete sample preparation and radionuclide specific analysis.

2.0 IDENTIFY THE DECISION

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

Principal Study Question: How deep and to what concentration does tritium, strontium-90 and plant related gamma emitting radionuclides penetrate the concrete walls and soil below 17' 6" boundary?

Alternate Actions: Perform additional sampling; and no action.

The Decision (1): Determine if the contamination levels in the concrete and the soil are low enough to allow the soil and concrete to be left in place.

3.0 IDENTIFY THE INPUTS TO THE DECISION

Historical Source of Contamination: This area has typically been a non-contaminated area.

Characterization Data: Characterization of the sub 13' 6" soils was performed in 2003. The concrete cores were saved but not analyzed. Soil samples indicated both Cs-137 and Co-60 at concentrations well below the 10 mrem/y DCGL. The soil samples were not analyzed for H-3 or Sr-90.

Information Needed: Additional measurements of concrete and soil are needed to identify and determine the presence, concentration and extent of those radionuclides that could potentially be present and available for transfer into the groundwater.

Source of the Information: The sources for the information to resolve the decision include historical records, the results of previous characterization data and new data collection.

The Haddam Neck License Termination Plan (LTP) provides additional guidance for the radiological aspects of this project.

Basis for the Action Level: The action levels will be 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.

Table 1 – Analytic matrix for soil.

The sensitivity or minimum detectable concentration (MDC) for the soil is set at 12.5% of the target value which is acceptable by the LTP and reasonable given the very low values for the target level.

RADIONUCLIDE	Base Case Soil DCGL (pCi/g)	Target Level 8 mrem TEDE DCGL (pCi/g)	Required MDC (pCi/g)
Co-60	3.81E+00	1.22E+00	1.52E-01
Cs-134	4.67E+00	1.49E+00	1.87E-01
Cs-137	7.91E+00	2.53E+00	3.16E-01
Sr-90	1.55E+00	4.96E-01	6.20E-02
H-3	4.12E+02	1.32E+02	1.65E+01

Table 2 – Analytic matrix for concrete.

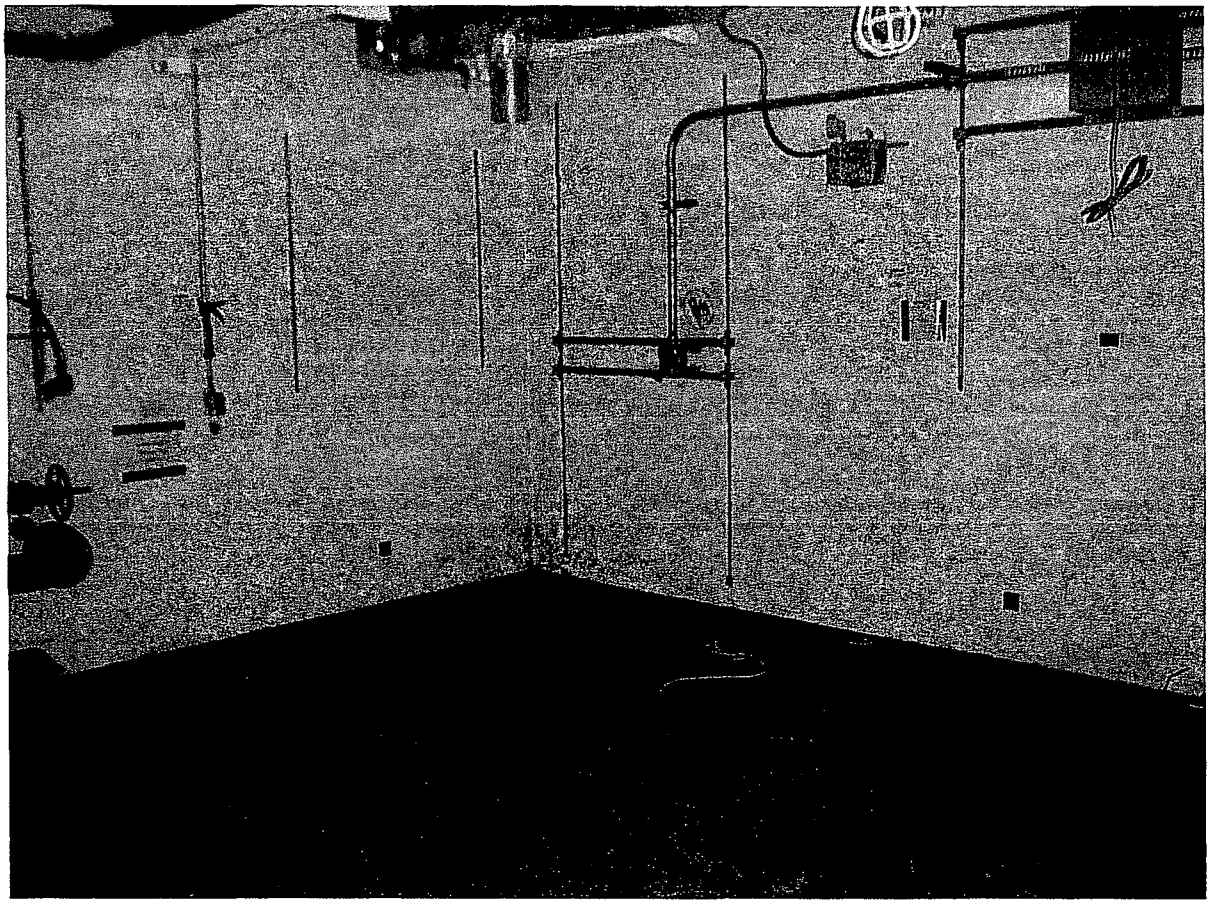
The sensitivity or minimum detectable concentration (MDC) for the concrete is set at 25% of the target value which is acceptable by the LTP and reasonable given the very low values for the target level.

RADIONUCLIDE	Target Level 2 mrem (pCi/g)	Required MDC (pCi/g)
H-3	7.86E+00	1.97E+00
Sr-90	1.51E-01	3.77E-02
Cs-137	5.48E+00	1.37E-00

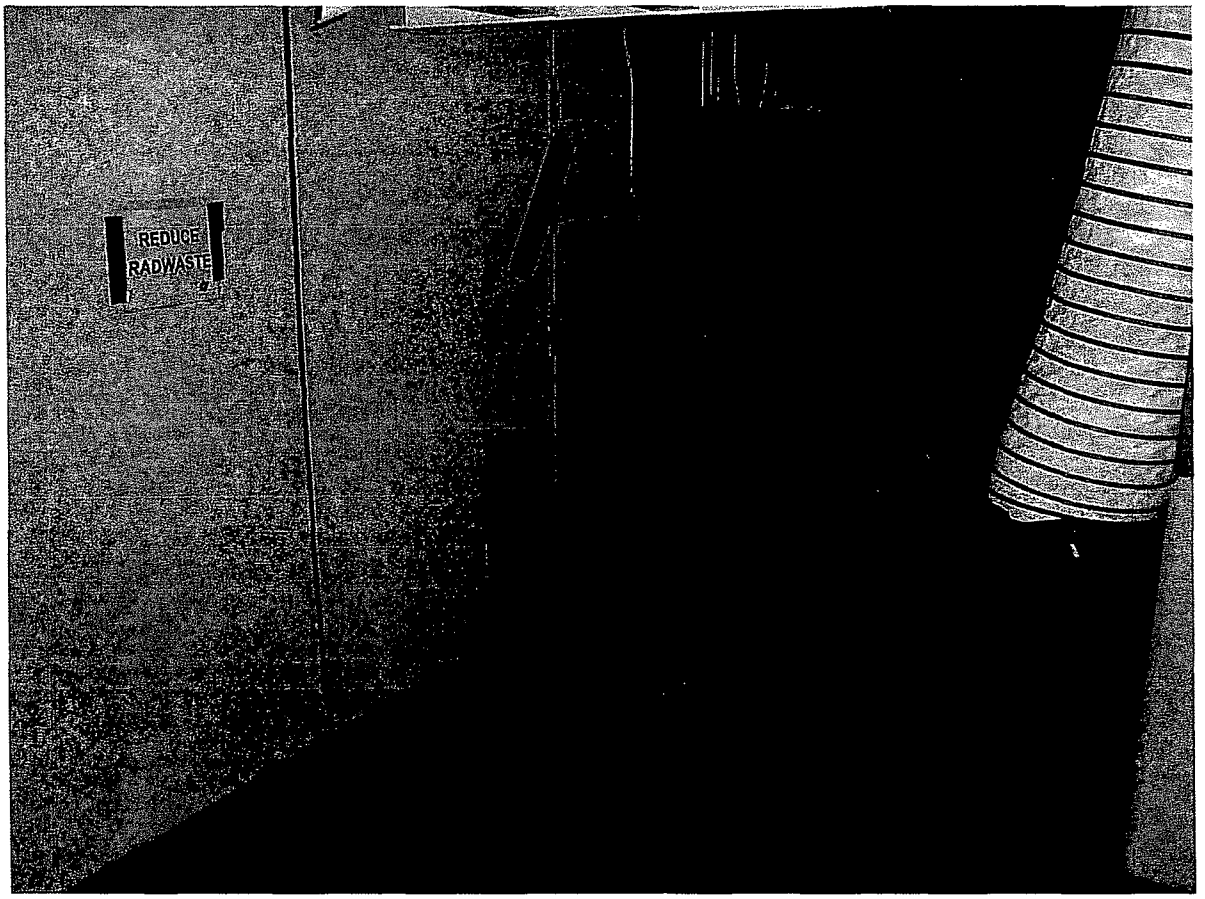
4.0 DEFINE THE BOUNDARIES OF THE SURVEY.

Boundaries of the survey: The boundaries of the survey are the bottom floor (13'-6" elevation). Pictures 1 and 2 show the rooms as of 1/20/2005.

Picture 1 – View of the northeast corner



Picture 2 – View facing southeast wall by the sump



Temporal boundaries: Survey will be performed during normal working hours.

Constraints: No drilling into the soil on the west side of the building to avoid damage to the underground storage tanks.

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: If radionuclide concentrations are less than the target level, then no additional action is required. Otherwise perform additional sampling to bound the elevated area(s).

6.0 SPECIFY TOLERABLE LIMITS ON DECISION ERRORS

There are no limits on decision errors for remedial action surveys.

7.0 OPTIMIZE DESIGN

Type of Statistical Test: Laboratory results will be directly compared to the target level values in Tables 1 and 2 in conjunction with the unity rule.

Number of Samples and Locations: Five (5) soils and eight (8) concrete cores will be collected.

Hard-to-Detect Radionuclide Analyses: All concrete wafers will be analyzed for tritium as well as strontium-90. One soil total and one concrete wafer from each core will be analyzed for all Hard-to-detect radionuclides.

DQO STEPS COMPLETE (signature signifies affirmative response)

R Bollenbeck 1/20/05

Site Closure Radiological Engineer/Date

GENERAL INSTRUCTIONS

1. Characterization activities will be performed under WP&IR number 24265-000-GEN-5000-00137-000.
2. Analysis and measurements will meet the sensitivity requirements provided in Table 1 and Table 2 to this SSWP.
3. Samples will be controlled using Chain of Custody (COC) in accordance with procedure RPM 5.1-5, "*Chain of Custody for Final Status Survey Samples.*"
4. 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 3.

Table 3 – Sample Measurement Location (SML)

Structure	SML	TYPE	Concrete and Soil Designation
Service Bldg	132	Concrete	9202-0000-132
Service Bldg	133	Concrete and Soil	9202-0000-133
Service Bldg	134	Concrete	9202-0000-134
Service Bldg	135	Concrete and Soil	9202-0000-135
Service Bldg	136	Concrete	9202-0000-136
Service Bldg	137	Concrete and Soil	9202-0000-137
Service Bldg	138	Concrete and Soil	9202-0000-138
Service Bldg	139	Concrete and Soil	9202-0000-138

   b. Concrete Cores
      (1). Obtain a concrete sample approximately 3 - 4 feet above the floor at SMLs 132, 134, 136, 137 and 138 by attaching the drill rig to by bolt.
      (2). Drill all the way through the concrete to soil.
      (3). Identify the inside of the room by placing a "T" or arrow on the core, place into a double plastic bag and seal tightly to maintain moisture content.
      (4). 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.
      (5). Obtain a concrete sample through the floor at SMLs 133, 135 and 139 by attaching the drill rig to by bolt.
      (6). Drill all the way through the concrete.
      (7). Identify the inside of the room by placing a "T" or arrow on the core, place into a double plastic bag and seal tightly to maintain moisture content.
      (8). 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.
   c. Soil samples
      (1). Obtain a single grab soil sample at wall SML numbers 137 and 138 if possible. If present, attempt to drill through the sheet pile and obtain a sample beyond the sheet pile.
      (2). Obtain soil samples to bedrock or refusal at the floor SMLs.
      (3). Homogenize sub slab samples over a four foot length.

(4). Label in accordance with designation number provided in Table 2 followed by an "S". Add a "01", "02", etc. for the sub slab composite samples.

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). Cut two approximately 1 inch wafers from each end of the concrete cores and one approximately 1 inch wafer from the middle.

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

f. Generate a COC for samples being analyzed.

(1). The media code is "CT" for concrete and "TS" for soil. The sample type code is "CR" for core or "G" for grab and the container type is "BP" for plastic bag.

(2). The analysis codes are "CHGAM", "Sr-90" and "H-3"for all samples with the exception of the first wafer ("outside") from each concrete SML which shall have the code "CHALL".

(3). The deepest soil sample shall have the code "CHALL".

(4). Identify the Turn-around-time (TAT) as 30 days on the COC.

(5). Record the LTP QA purchase order on the COC.

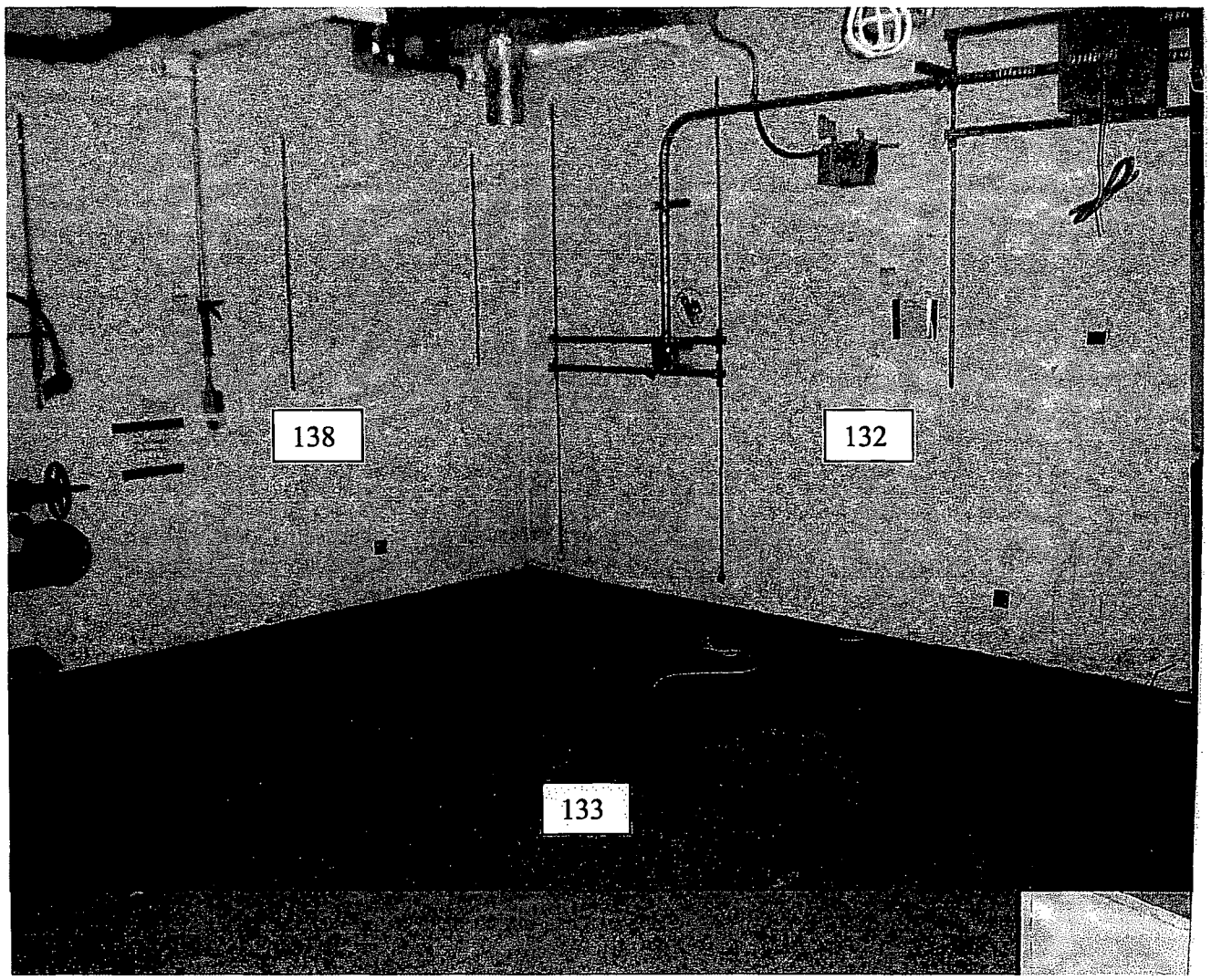
3. Evaluate the data and determine appropriate actions.

Prepared by_____ Date 1/20/05
Site Closure Radiological Engineer

Reviewed by_____ Date 1/20/05

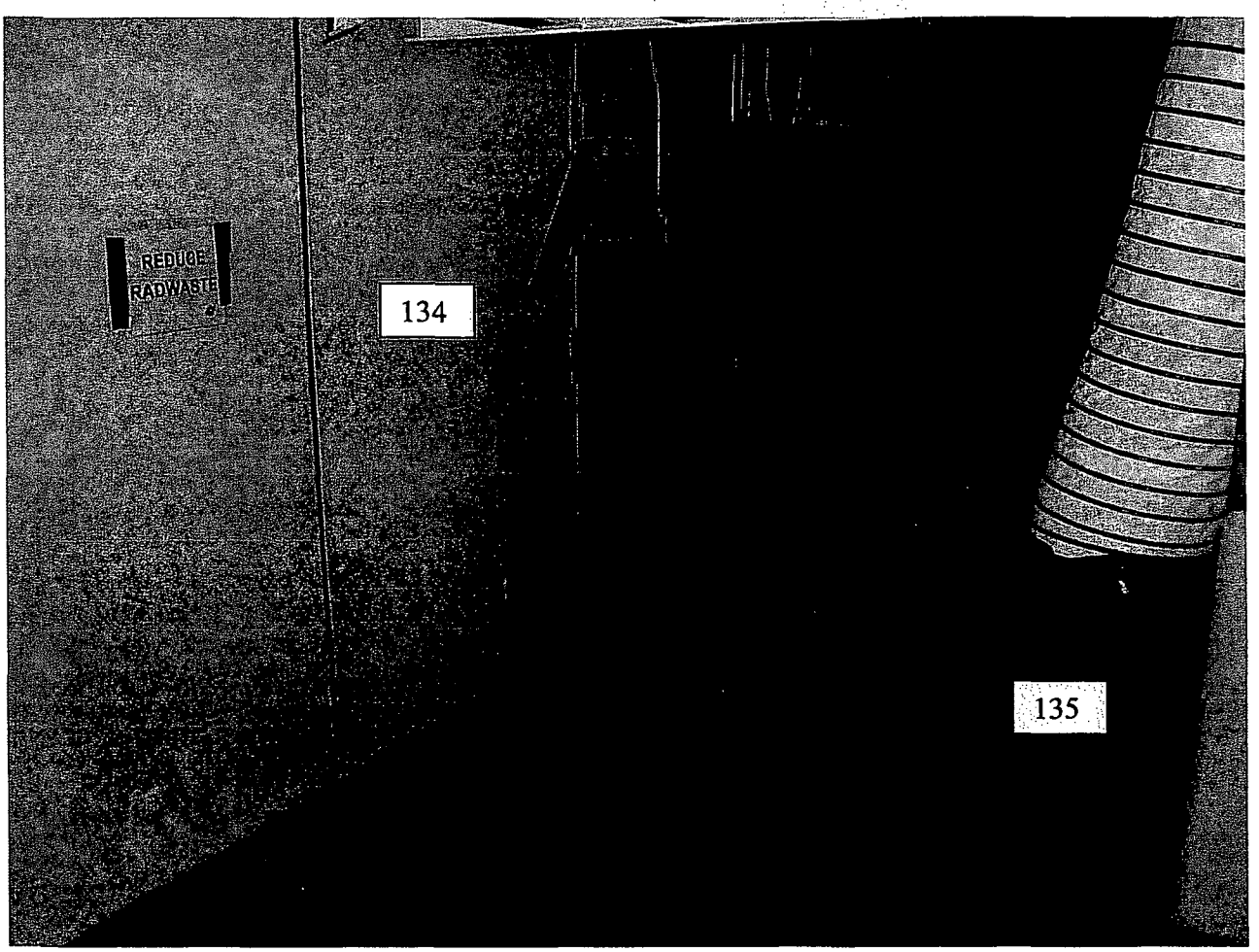
Survey/Sampling Work Plan – SSWP

Attachment 1 – Sample Location Map



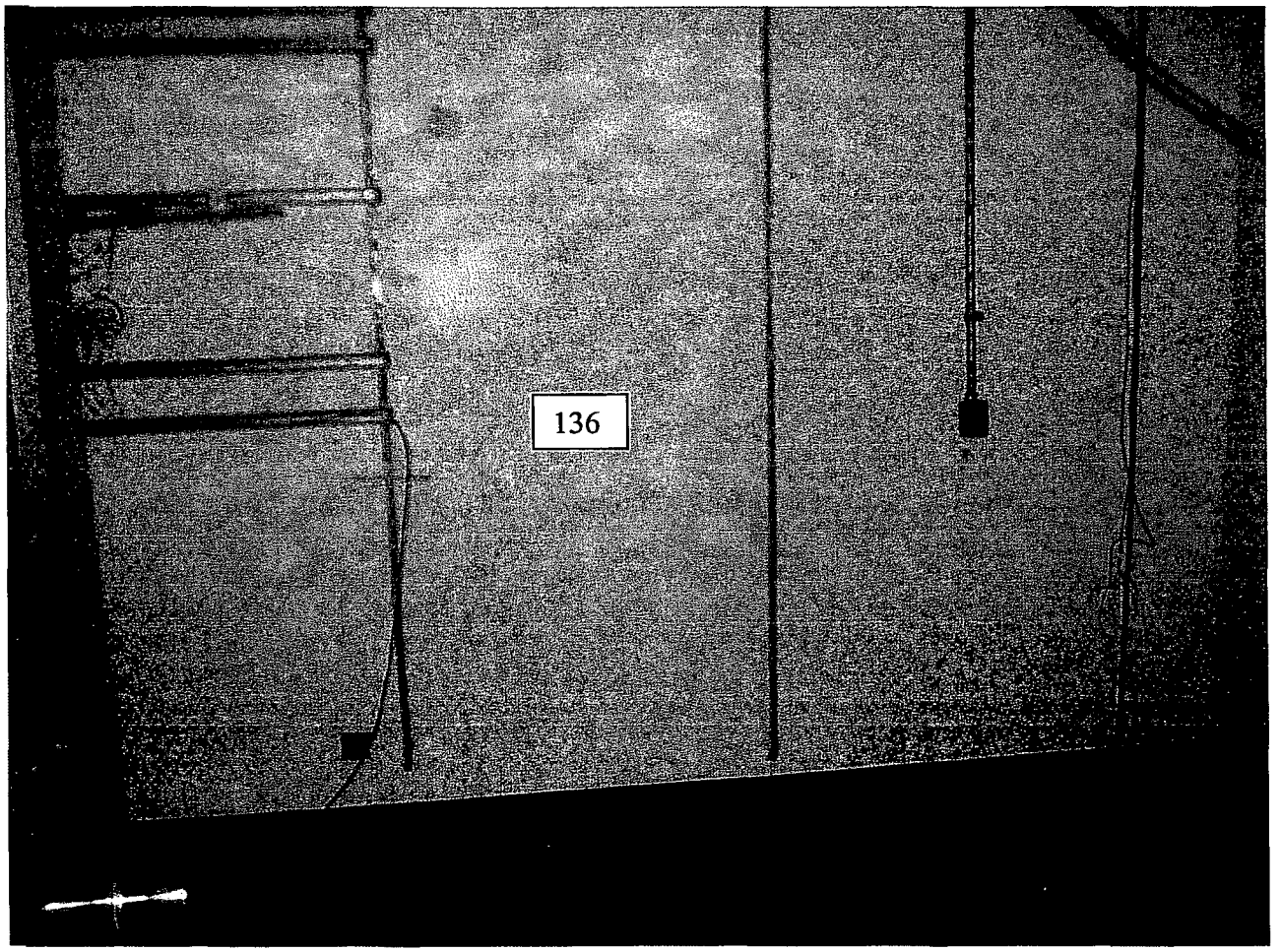
Survey/Sampling Work Plan – SSWP

Attachment 1 – Sample Location Map



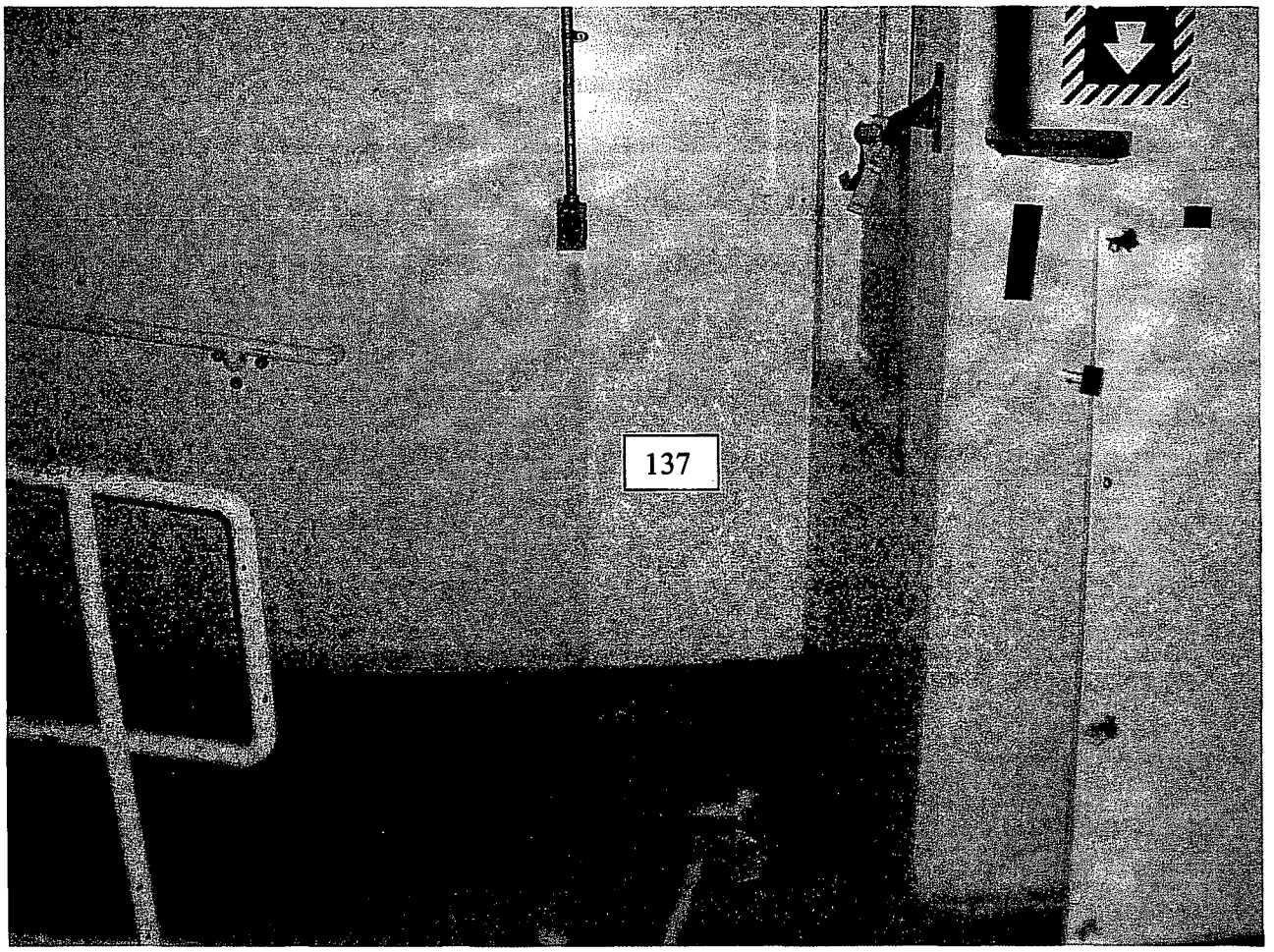
Survey/Sampling Work Plan – SSWP

Attachment 1 – Sample Location Map



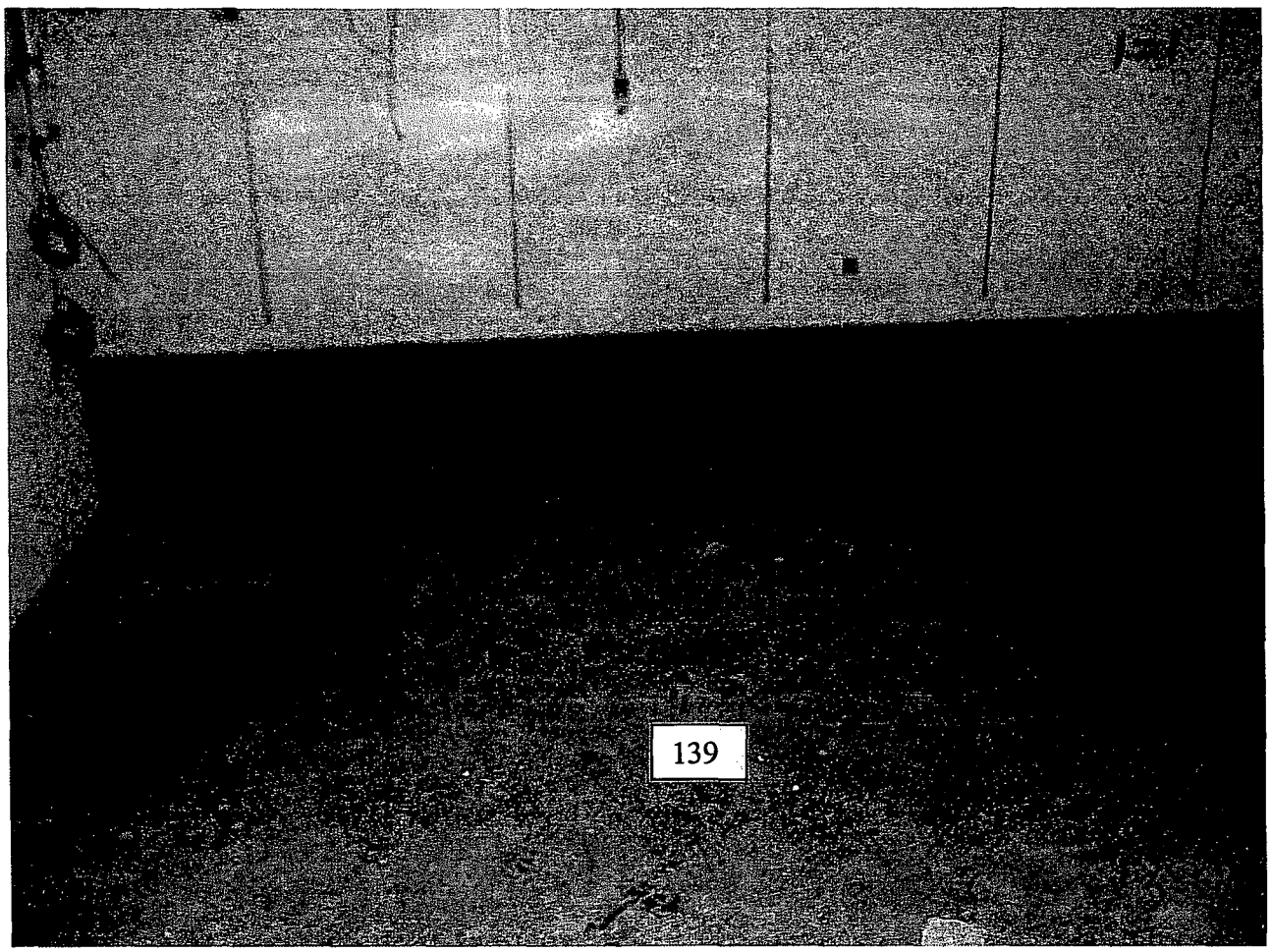
Survey/Sampling Work Plan – SSWP

Attachment 1 – Sample Location Map



Survey/Sampling Work Plan – SSWP

Attachment 1 – Sample Location Map



ATTACHMENT F-3
DAILY BRIEFING CHECKLIST

WP&IR No.: 24265-000-GEN-5000-00137-000 Date: 1/25/05
Cognizant Supervisor: P Hollenbeck
HP Brief Performed by: N/A RWP: 5103 RSR: N/A
Work Briefing by: P Hollenbeck

WORK SCOPE: **Decon of coring equipment in containment. Decon of exterior surfaces for PCB removal and loose surface contamination.**

Potential Safety Hazards: **None**

Identify any hazardous materials: **None**

Special Tools or Materials: **Citrus King decon solution**

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	☐	Marked "BLACK" for removal
☐	Housekeeping	☐	Chemical Consumable	☐	Other _____

SPECIAL SAFETY CONSIDERATIONS:
Dispose of used rags in a container marked as PCB and DAW

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 implementing Department Manager or Job Supervisor.

Work Observation shall be performed in accordance with ADM 1.1-255 "Self Assessment and Station Work Observation."

ATTACHMENT F-5
PRE-JOB BRIEFING ATTENDANCE SHEET

WP&IR No. 24265-000-GEN-5000-00137-000

Page 2 of 2

DATE: 1/25/05

NAME *(Print Clearly)*	NAME *(Print Clearly)*
Collin Bourne	
Martin Bachner	
Philip Jasmlavic	
Don Johnson	

ATTACHMENT F-3
DAILY BRIEFING CHECKLIST

WP&IR No.: 24265-000-GEN-5000-00137-000 Date: 1/25/05
Cognizant Supervisor: P Hollenbeck
HP Brief Performed by: N/A RWP: 5103 RSR: N/A
Work Briefing by: P Hollenbeck

WORK SCOPE: **Concrete coring and soil sampling in the B- Switchgear Building under SSWP 04-12-002.**

Potential Safety Hazards: **Excavation and demolition work nearby**

Identify any hazardous materials: **None**

Special Tools or Materials: **Coring drill and direct push sampler**

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	☐	Marked "BLACK" for removal
☐	Housekeeping	☐	Chemical Consumable	☐	Other _____

SPECIAL SAFETY CONSIDERATIONS:
Work gloves may be worn when augering

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 implementing Department Manager or Job Supervisor.

Work Observation shall be performed in accordance with ADM 1.1-255 "Self Assessment and Station Work Observation."

ATTACHMENT F-5
PRE-JOB BRIEFING ATTENDANCE SHEET

WP&IR No. 24265-000-GEN-5000-00137-000

DATE: 1/25/05

NAME *(Print Clearly)*	NAME *(Print Clearly)*
PHilip Jasutavic	
Collin Fourne	
Martin Bachner	

Daily Survey Journal

Survey Area Name: B Switchgear
Survey Area #: 9202
Survey Unit #: 0000
WP&IR #: 24265-GEN-5000-00137-000

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 ISC Radiological Engineer or the Site Radiological Release Supervisor.

2) All documentation will be complete and legible.

TIME	NOTES FOR SAMPLING DATE (January 25, 2005)
0715	Briefed M. Bachner, C. Bourne and P. Jasmlavic on SSWP activities. First thing is to get coring equipment, labeled drum, vacuum and power generator over to building. Contacted Dave Kachiniski to turn on lights in bottom floor of building.
0800	Notified of incident with vacuum tipping over in cart while being transferred to B Switchgear. Contacted Lew Dickerson who recommended we survey exterior of vacuum and cart because it was reported that there was a powder seen when the vacuum tipped. Vacuum and cart surveyed clean. Contacted Lew with survey results. He stated an informational CR would be written.
0930	Briefed on getting coring equipment out of containment. Equipment is in PCB storage area. Contacted Linda Sasser for decon technique. We will use Citrus King.
1130	Equipment out of PCB area in Containment Foyer until we can get it to the Sea/Land Container.
1230	Equipment is out and stored in the Sea/Land Container.
1300	Talked with Lew. He said the CR won't be written.
1330	Setting up in B Switchgear basement.
1500	Started coring.
1600	Collected 9202-0000-133-C-1C.

Completed by: Pete Hollenbeck Date: 1/25/05

ATTACHMENT F-3
DAILY BRIEFING CHECKLIST

WP&IR No.: 24265-000-GEN-5000-00137-000 Date: 2/9/05
Cognizant Supervisor: J Grinley
HP Brief Performed by: N/A RWP: 5121-1 RSR: 04-04
Work Briefing by: P Hollenbeck

WORK SCOPE: **Concrete coring and soil sampling in the B- Switchgear Building under SSWP 04-12-002.**

Potential Safety Hazards: **Excavation and demolition work nearby. Noise, water and cold.**

Identify any hazardous materials: **None**

Special Tools or Materials: **Coring drill and direct push sampler**

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	☐	Marked "BLACK" for removal
☒	Housekeeping	☐	Chemical Consumable	☐	Other _____

SPECIAL SAFETY CONSIDERATIONS:
Work gloves and hearing protection to be worn when augering

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 implementing Department Manager or Job Supervisor.

Work Observation shall be performed in accordance with ADM 1.1-255 "Self Assessment and Station Work Observation."

ATTACHMENT F-5
PRE-JOB BRIEFING ATTENDANCE SHEET

WP&IR No. 24265-000-GEN-5000-00137-000

DATE: 2/9/05

NAME *(Print Clearly)*	NAME *(Print Clearly)*
JOE GIOELLA	
Diana L Masenchik	
Don Johnson	
Martin Bachner	

ATTACHMENT E
JOB SAFETY ANALYSIS

Sheet 1 of 2

WP&IR No.: 24265-000-GEN-5000-00137-000 Date: 2/9/05

Additional items may be added to address unique conditions.

*	ELECTRICAL	*	LINEAR MOTION	*	HEAT SOURCES	*	TOXIC/PATHOGENIC
	Exposed Conductors		Vehicles		Electrical Equipment		Acetone
	Batteries		Forklifts	X	Motors		Freon
	Transformers	X	Carts/Dollies		Steam Systems		Carbon Monoxide
	Capacitors		Crane Loads		Turbines		Carbon Dioxide
X	Lighting		Obstructions		Heaters (Electrical)		Lead
	High Lines		Presses		Diesels		Solvents
	Wiring		Shears/Punches		Compressors		Cleaning Agents
	Switch Gear	X	Power Tools		Boilers		Asbestos
	Underground Wires		Trip Valves		Exhaust Piping		Pesticides
	Cable Runs		Doors/Gates		Friction		Insecticides
	Service Outlets		Hatches		Chemical Reaction		Bacteria
X	Extension Cords		Crane Travel		Welding		Sodium Hypochlorite
	Welding Leads		Air Actuators		Grinding		Hydrazine
	Instrumentation		Traveling Screens		Cutting		Chromates
X	Motors		Compactors		Solar		Boiler Chemicals
	Heaters		"V" Belts		Heat Treating		Welding Fumes
X	Power Tools				Pump Heat		Sand Blasting
	Test Equipment				Heat Lamps		Acids
	Heat Trace			X	Lighting		Caustic
	Crane Bus Boxes	*	GRAVITY-MASS FALLS		Heat Trace		Anti Freeze
			Falling Objects				Paint
		X	Lifting				Adhesives
*	PRESSURE		Railings Removed				Silica
	Gas Bottles		Floor Blocks Out			*	EXPLOSIVES
	Hydraulics		Grating Removed	*	COMBUSTIBLES		Dusts
	Pressurized Systems		Pits		Rags/Paper		Hydrogen
	Fire Fighting Equip.		Excavations		Cardboard		Battery Banks
	Air Hoses		Canal		Plastic		Gases
	Pressure Vessel		Cavity		Propane		Electrical Squibs
	Stressed Members		Jacks		Diesel fuel		Charges
	Springs		Lifts		Oil	*	MISCELLANEOUS
	Chemical Reactions		Cranes		Solvents	X	Sharp Edges
			Slings		Grease	X	Noise
*	ROTATIONAL MOTION		Hoists		Acetylene		Drowning
	Fan Rotors Blades		Scaffolds		Hydrogen		Cryogenics
	Pulleys		Ladders		Paint	X	Ice/Snow
	Gears	X	Slipping/ripping		Adhesives		Wind
	Winches		Human Effort		Alcohols	X	Water
X	Motors						Oxygen
	Turbines			*	OTHER		Cramped Work Area
	Pumps						
	Shafts						
	Couplings						
X	Power Tooll						

ATTACHMENT E
JOB SAFETY ANALYSIS

Sheet 2 of 2

HOUSEKEEPING TO BE MAINTAINED AT ALL TIMES

WALKWAYS WILL BE KEPT CLEAR OF HOSES, EXTENSION CORDS, WELDING LEADS, TOOLS AND PARTS

CAUTION

Caution shall be taken when removing and cutting components to verify and stabilize any loose or potentially loose components.

This consideration should also take into account the potential for a change in structural integrity of the remaining structure or component.

					PPE
X	What's the worst that can go wrong? Has your planning addressed it?			X	Hard Hats
	RIGGING AND SCAFFOLDING			X	Eye Protection
				X	Hearing Protection
	Floor Openings				Welding Leathers
	Railings			X	Bad Back Precautions
	Kickboards				Life Vests
X	Work Area Isolated (Rope Off)				Safety Belts/harness
	Warning Signs			X	Gloves TYPE WORK/LEATHER
	Rigging				Respirator TYPE
X	Work Area Access				
	Ladders		Scaffolds		
	Condor		Work Platform		CHEMICAL PROTECTION
X	Communications				Eye Wash Located
	Hand Signals		Radio		Bacteria Controls
	Escape Path Planned				
	Welding Screens				
	Special Procedure				
	OTHER				
	Ventilation (Fans-Blowers)				
	Heat Stress (Time Limits)				
X	Lighting (Additional)				
	Low Voltage Lights				
X	Ground Fault Interrupt				
	Block Equipment Prevent Movement				
	Safety Cans (All Flammables)				

ADDITIONAL

I have reviewed and understand all safety controls:

Job Supervisor: J. Grinley

Date: 2/9/05

Daily Survey Journal

Survey Area Name: B Switchgear
Survey Area #: 9202
Survey Unit #: 0000
WP&IR #: 24265-GEN-5000-00137-000

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 ISC Radiological Engineer or the Site Radiological Release Supervisor.

2) All documentation will be complete and legible.

TIME	NOTES FOR SAMPLING DATE (February 9, 2005)
0715	Briefed D. Johnson, M. Bachner, J. Gioella and D. Maserchik on SSWP activities.
0900	Continued coring on floor location 135
1300	Started coring on wall location 134.
1445	Started coring on wall location 132.
1530	Broke transmission on drill machine. Coring terminated.
1540	Brought drill machine out to replace transmission.

Completed by: Pete Hollenbeck Date: 2/9/05

ATTACHMENT F-3
DAILY BRIEFING CHECKLIST

WP&IR No.: 24265-000-GEN-5000-00137-000 Date: 2/10/05
Cognizant Supervisor: P. Hollenbeck
HP Brief Performed by: D. Johnson RWP: 5121-1 RSR: 04-04
Work Briefing by: P. Hollenbeck

WORK SCOPE: **Core boring in the "B" Switchgear Building lower level (Old Cal Lab).**

Potential Safety Hazards: **Drilling, noise, electrical, water, Tripping, Snow**

Identify any hazardous materials: **None**

Special Tools or Materials: **Drilling Rig**

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	☐	Marked "BLACK" for removal
☒	Housekeeping	☐	Chemical Consumable	☐	Other _____

SPECIAL SAFETY CONSIDERATIONS:
Work gloves and Hearing Protection to be worn when drilling and handling equipment; Watch your footing when walking in the snow.

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 implementing Department Manager or Job Supervisor.

Work Observation shall be performed in accordance with ADM 1.1-255 "Self Assessment and Station Work Observation."

ATTACHMENT E
JOB SAFETY ANALYSIS

Sheet 1 of 2

WP&IR No.: 24265-000-GEN-5000-00137-000 Date: 2/10/05

Additional items may be added to address unique conditions.

*	ELECTRICAL	*	LINEAR MOTION	*	HEAT SOURCES	*	TOXIC/PATHOGENIC
	Exposed Conductors		Vehicles		Electrical Equipment		Acetone
	Batteries		Forklifts	X	Motors		Freon
	Transformers	X	Carts/Dollies		Steam Systems		Carbon Monoxide
	Capacitors		Crane Loads		Turbines		Carbon Dioxide
X	Lighting		Obstructions		Heaters (Electrical)		Lead
	High Lines		Presses		Diesels		Solvents
	Wiring		Shears/Punches		Compressors		Cleaning Agents
	Switch Gear	X	Power Tools		Boilers		Asbestos
	Underground Wires		Trip Valves		Exhaust Piping		Pesticides
	Cable Runs		Doors/Gates		Friction		Insecticides
	Service Outlets		Hatches		Chemical Reaction		Bacteria
X	Extension Cords		Crane Travel		Welding		Sodium Hypochlorite
	Welding Leads		Air Actuators		Grinding		Hydrazine
	Instrumentation		Traveling Screens		Cutting		Chromates
X	Motors		Compactors		Solar		Boiler Chemicals
	Heaters		"V" Belts		Heat Treating		Welding Fumes
X	Power Tools				Pump Heat		Sand Blasting
	Test Equipment				Heat Lamps		Acids
	Heat Trace			X	Lighting		Caustic
	Crane Bus Boxes	*	GRAVITY-MASS FALLS		Heat Trace		Anti Freeze
			Falling Objects				Paint
		X	Lifting				Adhesives
*	PRESSURE		Railings Removed				Silica
	Gas Bottles		Floor Blocks Out			*	EXPLOSIVES
	Hydraulics		Grating Removed	*	COMBUSTIBLES		Dusts
	Pressurized Systems		Pits		Rags/Paper		Hydrogen
	Fire Fighting Equip.		Excavations		Cardboard		Battery Banks
	Air Hoses		Canal		Plastic		Gases
	Pressure Vessel		Cavity		Propane		Electrical Squibs
	Stressed Members		Jacks		Diesel fuel		Charges
	Springs		Lifts		Oil	*	MISCELLANEOUS
	Chemical Reactions		Cranes		Solvents	X	Sharp Edges
			Slings		Grease	X	Noise
*	ROTATIONAL MOTION		Hoists		Acetylene		Drowning
	Fan Rotors Blades		Scaffolds		Hydrogen		Cryogenics
	Pulleys		Ladders		Paint	X	Ice/Snow
	Gears	X	Slipping/ripping		Adhesives		Wind
	Winches		Human Effort		Alcohols	X	Water
X	Motors						Oxygen
	Turbines			*	OTHER		Cramped Work Area
	Pumps						
	Shafts						
	Couplings						
X	Power Tooll						

ATTACHMENT E
JOB SAFETY ANALYSIS

Sheet 2 of 2

HOUSEKEEPING TO BE MAINTAINED AT ALL TIMES

WALKWAYS WILL BE KEPT CLEAR OF HOSES, EXTENSION CORDS, WELDING LEADS, TOOLS AND PARTS

CAUTION

Caution shall be taken when removing and cutting components to verify and stabilize any loose or potentially loose components.

This consideration should also take into account the potential for a change in structural integrity of the remaining structure or component.

					PPE
X	What's the worst that can go wrong? Has your planning addressed it?			X	Hard Hats
	RIGGING AND SCAFFOLDING			X	Eye Protection
				X	Hearing Protection
	Floor Openings				Welding Leathers
	Railings			X	Bad Back Precautions
	Kickboards				Life Vests
X	Work Area Isolated (Rope Off)				Safety Belts/harness
	Warning Signs			X	Gloves TYPE WORK/LEATHER
	Rigging				Respirator TYPE
X	Work Area Access				
	Ladders		Scaffolds		
	Condor		Work Platform		CHEMICAL PROTECTION
X	Communications				Eye Wash Located
	Hand Signals		Radio		Bacteria Controls
	Escape Path Planned				
	Welding Screens				
	Special Procedure				
	OTHER				
	Ventilation (Fans-Blowers)				
	Heat Stress (Time Limits)				
X	Lighting (Additional)				
	Low Voltage Lights				
X	Ground Fault Interrupt				
	Block Equipment Prevent Movement				
	Safety Cans (All Flammables)				

	ADDITIONAL

I have reviewed and understand all safety controls:

Job Supervisor: J. Grinley

Date: 2/10/05

ATTACHMENT F-5
PRE-JOB BRIEFING ATTENDANCE SHEET

WP&IR No. 24265-000-GEN-5000-00137-000

DATE: 2/10/05

NAME *(Print Clearly)*	NAME *(Print Clearly)*
TED SOELLNER	
Martin Bachner	
Diana Masenghink	
Don Johnson	

Peter D. Hollenbeck

From: Cheryl Jones [cj@mail.gel.com]
Sent: Wednesday, March 09, 2005 9:16 AM
To: Peter D. Hollenbeck
Subject: Re: Modified chain of custody forms

Pete,
I will include a copy of the revised COCs in the data package along with a brief summary in the Items of Note section of the General Narrative. The samples originally indicated for CHALL on the COCs had just been started for the HTD isotopes and were stopped. CY will not incur any cost for those tests canceled. The gamma, Sr-90 and H3 tests will be continued.
Concerning the addition of the tests to the 5th wafer in each set, we will need to extend the due date. We are one week into the 30 day TAT you requested and therefore will extend the due date one week to 4/9/05.

Please let me know if you have any questions.
Thank you,
Cheryl

"Peter D. Hollenbeck" wrote:

> Good morning-
> This e-mail is to document our conversation of yesterday (3/8/05).
> An error was discovered on chain of custody form numbers: 2005-00042 through 2005-00045.
> These COCs listed concrete wafers for analysis. The analysis code CHALL was incorrectly placed against the 1st wafer
> from each core instead of the last or 5th wafer.
> Attached are the modified COCs. You may use them as is or you may modify the originals at your lab in a similar manner.
> I apologize for the inconvenience. If you have any further questions, please call me.
> Pete

--
Cheryl A. Jones
Project Manager - Federal Division
General Engineering Laboratories, LLC.
2040 Savage Road
Charleston, S.C. 29407
(843) 556-8171 x 4243

Connecticut Yankee Atomic Power Company

362 Injun Hollow Road, East Hampton, CT 06424
860-267-2556

Chain of Custody Form

No. 2005-00042

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. ☐ 15 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
9202-0000-133-C-1C-01	1/27/05	0855	CT	CR	BP	X	X	X	X	RH	3/8/05	1"	
9202-0000-133-C-1C-02	1/27/05	0855	CT	CR	BP	X	X	X				1"	
9202-0000-133-C-3C-03	1/31/05	1410	CT	CR	BP	X	X	X				2"	
9202-0000-133-C-6C-04	2/8/05	1450	CT	CR	BP	X	X	X				2"	
9202-0000-133-C-6C-05	2/8/05	1450	CT	CR	BP	X	X	X	X	RH	3/8/05	2"	
9202-0000-138-C-1C-01	2/10/05	1100	CT	CR	BP	X	X	X	X	RH	3/8/05	1"	
9202-0000-138-C-1C-02	2/10/05	1100	CT	CR	BP	X	X	X				1"	
9202-0000-138-C-3C-03	2/10/05	1130	CT	CR	BP	X	X	X				1"	
9202-0000-138-C-5C-04	2/10/05	1145	CT	CR	BP	X	X	X				4"	
9202-0000-138-C-5C-05	2/10/05	1145	CT	CR	BP	X	X	X	X	RH	3/8/05	3.5"	

NOTES: PO #: 002332 MSR #: 05-0800 ☒ LTP QA ☐ Radwaste QA ☐ Non QA

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

Bill of Lading #
7922 1886 4548

Internal Container Temp.: ____ Deg. C

Custody Sealed? Y ☑ N ☐

Custody Seal Intact? Y ☑ N ☐

1) Relinquished By [signature]	Date/Time 3/2/05 1055	2) Received By	Date/Time
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. 2005-00043

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. ☐ 15 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
9202-0000-135-C-1C-01	2/8/05	1540	CT	CR	BP	~~X~~	~~X~~	~~X~~	~~X~~	PH	3/8/05	1"	
9202-0000-135-C-1C-02	2/8/05	1540	CT	CR	BP	X	X	X				1"	
9202-0000-135-C-5C-03	2/9/05	0935	CT	CR	BP	X	X	X				2"	
9202-0000-135-C-10C-04	2/9/05	1100	CT	CR	BP	X	X	X				2"	
9202-0000-135-C-10C-05	2/9/05	1100	CT	CR	BP	~~X~~	~~X~~	~~X~~	X	PH	3/8/05	2"	
9202-0000-134-C-1C-01	2/9/05	1300	CT	CR	BP	~~X~~	~~X~~	~~X~~	~~X~~	PH	3/8/05	1"	
9202-0000-134-C-1C-02	2/9/05	1300	CT	CR	BP	X	X	X				1"	
9202-0000-134-C-2C-03	2/9/05	1320	CT	CR	BP	X	X	X				1"	
9202-0000-134-C-3C-04	2/9/05	1335	CT	CR	BP	X	X	X				1"	
9202-0000-134-C-3C-05	2/9/05	1335	CT	CR	BP	~~X~~	~~X~~	~~X~~	X	PH	3/8/05	1"	

NOTES: PO #: 002332 MSR #: 05-0800 ☒ LTP QA ☐ Radwaste QA ☐ Non QA

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

Bill of Lading #
7922 1886 4548

Internal Container Temp.: ____ Deg. C

Custody Sealed?
Y ☑ N ☐

Custody Seal Intact?
Y ☑ N ☐

1) Relinquished By [signature]	Date/Time 3/2/05 1055	2) Received By	Date/Time
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. 2005-00044

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. ☐ 15 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
9202-0000-132-C-1C-01	2/9/05	1455	CT	CR	BP	X	X	X	~~X~~	PH	3/8/05	1"	
9202-0000-132-C-1C-02	2/9/05	1455	CT	CR	BP	X	X	X				1"	
9202-0000-132-C-3C-03	2/9/05	1535	CT	CR	BP	X	X	X				1"	
9202-0000-132-C-5C-04	2/10/05	1015	CT	CR	BP	X	X	X				1.5"	
9202-0000-132-C-5C-05	2/10/05	1015	CT	CR	BP	~~X~~	~~X~~	~~X~~	X			1.5"	
9202-0000-136-C-1C-01	2/14/05	1050	CT	CR	BP	X	X	X	~~X~~	PH	3/8/05	1"	
9202-0000-136-C-1C-02	2/14/05	1050	CT	CR	BP	X	X	X				1"	
9202-0000-136-C-2C-03	2/14/05	1110	CT	CR	BP	X	X	X				1"	
9202-0000-136-C-4C-04	2/14/05	1340	CT	CR	BP	X	X	X				2"	
9202-0000-136-C-4C-05	2/14/05	1340	CT	CR	BP	~~X~~	~~X~~	~~X~~	X	PH	3/8/05	2"	

NOTES: PO #: 002332 MSR #: 05-0800 ☒ LTP QA ☐ Radwaste QA ☐ Non QA

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

Bill of Lading #
7922 1886 4548

Internal Container Temp.: ____ Deg. C

Custody Sealed?
Y ☑ N ☐

Custody Seal Intact?
Y ☑ N ☐

1) Relinquished By [signature]	Date/Time 3/2/05 1055	2) Received By	Date/Time
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. 2005-00045

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. ☐ 15 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
9202-0000-139-C-1C-01	2/15/05	1000	CT	CR	BP	X	X	X	~~X~~	PH	3/8/05	1"	
9202-0000-139-C-1C-02	2/15/05	1000	CT	CR	BP	X	X	X				1"	
9202-0000-139-C-6C-03	2/15/05	1500	CT	CR	BP	X	X	X				2"	
9202-0000-139-C-8C-04	2/15/05	1540	CT	CR	BP	X	X	X				2"	
9202-0000-139-C-8C-05	2/15/05	1540	CT	CR	BP	~~X~~	~~X~~	~~X~~	X	PH	3/8/05	2"	
9202-0000-137-C-1C-01	2/14/05	1525	CT	CR	BP	X	X	X	~~X~~	PH	3/8/05	1"	
9202-0000-137-C-1C-02	2/14/05	1525	CT	CR	BP	X	X	X				1"	
9202-0000-137-C-1C-03	2/14/05	1525	CT	CR	BP	X	X	X				1"	
9202-0000-137-C-3C-04	2/15/05	0820	CT	CR	BP	X	X	X				1.5"	
9202-0000-137-C-3C-05	2/15/05	0820	CT	CR	BP	~~X~~	~~X~~	~~X~~	X	PH	3/8/05	1.5"	

NOTES: PO #: 002332 MSR #: 05-0800 ☒ LTP QA ☐ Radwaste QA ☐ Non QA

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

Bill of Lading #
7922188645 48

Internal Container Temp.: ____ Deg. C

Custody Sealed?
Y ☒ N ☐

Custody Seal Intact?
Y ☒ N ☐

1) Relinquished By [signature] Date/Time 3/2/05 1055	2) Received By Date/Time
3) Relinquished By Date/Time	4) Received By Date/Time
5) Relinquished By Date/Time	6) Received By Date/Time

Peter D. Hollenbeck

From: Cheryl Jones [cj@mail.gel.com]
Sent: Friday, March 11, 2005 9:21 AM
To: Peter D. Hollenbeck
Subject: MSR#05-0800 Concrete Volume

Pete,

We have one sample (9202-0000-134-C-3C-05) that we do not have a raw aliquot remaining for the wet tests, which are C14, H3 and Tc99. We will be unable to report results for these three analyses. Please let me know if you have any questions.

Thank you,
Cheryl

--
Cheryl A. Jones
Project Manager - Federal Division
General Engineering Laboratories, LLC.
2040 Savage Road
Charleston, S.C. 29407
(843) 556-8171 x 4243

Subsurface Soil / Concrete Characterization Data

12/8/2004

Sample Number	Descriptive Location	Map Location Number	Surface Depth (ft)	Depth below surface(ft)	Nuclide	Activity (pCi/gram)	Error (1 s)	25 mrem DCGL (pCi/g)	Fraction of 25 mrem DCGL	10 mrem DCGL (pCi/g)	Fraction of 10 mrem DCGL
9801-0000-124-C-01	"B" Switchgear Bldg 13'-6" elev.	124	1	4	Cs-137	1.45E-01	1.83E-02	7.91	0.02	3.16	0.05
9801-0000-125-C-01	"B" Switchgear Bldg 13'-6" elev.	125	1	4	Co-60	8.77E-02	1.41E-02	3.81	0.02	1.52	0.06
9801-0000-126-C-01	"B" Switchgear Bldg 13'-6" elev.	126	1	4	Co-60			3.81	0.00	1.52	0.00
9801-0000-126-C-01	"B" Switchgear Bldg 13'-6" elev.	126	1	4	Cs-137			7.91	0.00	3.16	0.00
9801-0000-127-C-01	"B" Switchgear Bldg 13'-6" elev.	127	1	4	Co-60	1.00E-01	1.90E-02	3.81	0.03	1.52	0.07
9801-0000-127-C-01	"B" Switchgear Bldg 13'-6" elev.	127	1	4	Cs-137	1.70E-01	2.83E-02	7.91	0.02	3.16	0.05
9801-0000-128-C-01	"B" Switchgear Bldg 13'-6" elev.	128	1	4	ND			N/A	N/A	N/A	N/A
9801-0000-129-C-01	"B" Switchgear Bldg 13'-6" elev.	129	1	4	Cs-137	7.21E-02	2.26E-02	7.91	0.01	3.16	0.02
9801-0000-130-C-01	"B" Switchgear Bldg 13'-6" elev.	130	1	4	Co-60			3.81	0.00	1.52	0.00
9801-0000-130-C-01	"B" Switchgear Bldg 13'-6" elev.	130	1	4	Cs-137			7.91	0.00	3.16	0.00
9801-0000-131-C-01	"B" Switchgear Bldg 13'-6" elev.	131	1	4	Co-60			3.81	0.00	1.52	0.00
9801-0000-131-C-01	"B" Switchgear Bldg 13'-6" elev.	131	1	4	Cs-137			7.91	0.00	3.16	0.00

ND = Not Detected
N/A = Not Applicable
NL = Not Listed
IV = Insufficient Volume
Bold = Up-Dated Results

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

March 28, 2005

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

Re: Soils and Concrete PO# 002332
Work Order: 131691
SDG: MSR# 05-0800

Dear Mr. Hollenbeck:

General Engineering Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on March 3, 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: 2005-00046
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: Soils
PO# 002332
Work Order: 131691
SDG: MSR #05-0800

131691001	9202-0000-133-S-01
131691002	9202-0000-133-S-02
131691003	9202-0000-133-S-03
131691004	9202-0000-135-S-01
131691005	9202-0000-137-S-01
131691006	9202-0000-138-S-01
131691007	9202-0000-139-S-01

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GENERAL NARRATIVE

CASE NARRATIVE
For
CONNECTICUT YANKEE
RE: Soils
PO# 002332
Work Order: 131691
SDG: MSR #05-0800

March 28, 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 Soil Project for work order 131691 arrived at General Engineering Laboratories, LLC, (GEL) in Charleston, South Carolina March 3, 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
131691001	9202-0000-133-S-01
131691002	9202-0000-133-S-02
131691003	9202-0000-133-S-03
131691004	9202-0000-135-S-01
131691005	9202-0000-137-S-01
131691006	9202-0000-138-S-01
131691007	9202-0000-139-S-01

Items of Note:
No 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:
One soil samples was analyzed for CHALL and six samples were analyzed for CHGAM, Tritium, 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 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

Chain of Custody Form

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

No. 2005-00046
131691

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. ☐ 15 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
9202-0000-133-S-01	2/16/05	0845	TS	G	BP	X	X	X					
9202-0000-133-S-02	2/16/05	1045	TS	G	BP	X	X	X					
9202-0000-133-S-03	2/16/05	1115	TS	G	BP				X				
9202-0000-135-S-01	2/16/05	1545	TS	G	BP	X	X	X					
9202-0000-137-S-01	2/16/05	1510	TS	G	BP	X	X	X					
9202-0000-138-S-01	2/16/05	1345	TS	G	BP	X	X	X					
9202-0000-139-S-01	2/16/05	1420	TS	G	BP	X	X	X					

NOTES: PO #: 002332 MSR #: 05- 0800 ☒ LTP QA ☐ Radwaste QA ☐ Non QA

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

Bill of Lading #
7914 9346 5022

Internal Container Temp.: ____ Deg. C

Custody Sealed?
Y ☑ N ☐

Custody Seal Intact?
Y ☑ N ☐

1) Relinquished By [signature] Date/Time 3/2/05 1055	2) Received By M. Smith Date/Time 3/3/05 9:30
3) Relinquished By Date/Time	4) Received By Date/Time
5) Relinquished By Date/Time	6) Received By Date/Time

5

COOLER RECEIPT CHECKLIST

Figure 1. Sample Check-in List

Date/Time Received: 3/03/05

SDG#: MSR# 05-0800

Work Order Number: 1316911

Shipping Container ID: 7914 9346 5022 Chain of Custody # 2005-00046

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 11C
5. Vermiculite/packing materials is: NONE Samples Wet [✓] Dry [ ]
6. Number of samples in shipping container: 7
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: M. Smith Date: 3/03/05

Telephoned to: _____ On _____ By _____

SAMPLE RECEIPT & REVIEW FORM

GENERAL ENGINEERING LABORATORIES, LLC

Client: Connecticut Yankee	PM use only SDG/ARCOC/Work Order: 131691
Date Received: 3/03/05	PM(A) Review (ensure non-conforming items are resolved prior to signing):
Received By: M. Smith	3/3/05

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

PM (or PMA) review of Receiving Rad classification: CAY Initials 3/3/05 Date:

RADIOLOGICAL ANALYSIS

Radiochemistry Case Narrative
Connecticut Yankee Atomic Power Co. (YANK)
SDG MSR#05-0800

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:	412128
Prep Batch Number:	406343
Dry Soil Prep GL-RAD-A-021 Batch Number:	406337

Sample ID	Client ID
131691003	9202-0000-133-S-03
1200814027	Method Blank (MB)
1200814028	131691003(9202-0000-133-S-03) Sample Duplicate (DUP)
1200814029	131691003(9202-0000-133-S-03) Matrix Spike (MS)
1200814030	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: 131691003 (9202-0000-133-S-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
Batch was reprepped due to the blank having no tracer yield.

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:	409820
Prep Batch Number:	406343
Dry Soil Prep GL-RAD-A-021 Batch Number:	406337

Sample ID	Client ID
131691003	9202-0000-133-S-03
1200808499	Method Blank (MB)
1200808500	131691003(9202-0000-133-S-03) Sample Duplicate (DUP)
1200808501	131691003(9202-0000-133-S-03) Matrix Spike (MS)
1200808502	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: 131691003 (9202-0000-133-S-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.

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-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:	409821
Prep Batch Number:	406343
Dry Soil Prep GL-RAD-A-021 Batch Number:	406337

Sample ID	Client ID
131691003	9202-0000-133-S-03
1200808503	Method Blank (MB)
1200808504	131691003(9202-0000-133-S-03) Sample Duplicate (DUP)
1200808505	131691003(9202-0000-133-S-03) Matrix Spike (MS)
1200808506	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# 6.

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: 131691003 (9202-0000-133-S-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.

Manual Integration
Manual integration of alpha spectroscopy spectrum 1200808505 (9202-0000-133-S-03) was performed to fully separate counts in Regions of Interest which would have been biased.

Qualifier information
Manual qualifiers were not required.

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:	406824
Prep Batch Number:	406337

Sample ID	**Client ID**
131691001	9202-0000-133-S-01
131691002	9202-0000-133-S-02
131691003	9202-0000-133-S-03
131691004	9202-0000-135-S-01
131691005	9202-0000-137-S-01
131691006	9202-0000-138-S-01
131691007	9202-0000-139-S-01
1200801328	Method Blank (MB)
1200801329	131691001(9202-0000-133-S-01) Sample Duplicate (DUP)

1200801330 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: 131691001 (9202-0000-133-S-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 low abundance.	Cesium-134	131691002
			131691003
			131691004
			131691006
		Thallium-208	131691004
UI	Data rejected due to no valid peak.	Bismuth-212	131691001

		Europium-155	131691006
			131691007

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:	406923
Prep Batch Number:	406343
Dry Soil Prep GL-RAD-A-021 Batch Number:	406337

Sample ID	**Client ID**
131691001	9202-0000-133-S-01
131691002	9202-0000-133-S-02
131691003	9202-0000-133-S-03
131691004	9202-0000-135-S-01
131691005	9202-0000-137-S-01
131691006	9202-0000-138-S-01
131691007	9202-0000-139-S-01
1200801595	Method Blank (MB)
1200801596	131691001(9202-0000-133-S-01).Sample Duplicate (DUP)
1200801597	131691001(9202-0000-133-S-01) Matrix Spike (MS)
1200801598	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: 131691001 (9202-0000-133-S-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:	**Liquid Scint Tc99, Solid-ALL FSS**
Analytical Method:	DOE EML HASL-300, Tc-02-RC Modified
Analytical Batch Number:	409273

Sample ID	Client ID
131691003	9202-0000-133-S-03
1200807178	Method Blank (MB)
1200807179	132450002(9801-0000-0157C) Sample Duplicate (DUP)
1200807180	132450002(9801-0000-0157C) Matrix Spike (MS)
1200807181	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# 11.

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: 132450002 (9801-0000-0157C).

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:	407185
Prep Batch Number:	406343
Dry Soil Prep GL-RAD-A-021 Batch Number:	406337

Sample ID	Client ID
131691003	9202-0000-133-S-03
1200802258	Method Blank (MB)
1200802261	Laboratory Control Sample (LCS)
1200804899	131691003(9202-0000-133-S-03) Sample Duplicate (DUP)
1200804900	131691003(9202-0000-133-S-03) 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-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: 131691003 (9202-0000-133-S-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 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:	407187
Prep Batch Number:	406343
Dry Soil Prep GL-RAD-A-021 Batch Number:	406337

Sample ID	Client ID
131691003	9202-0000-133-S-03
1200802268	Method Blank (MB)
1200802271	Laboratory Control Sample (LCS)
1200804897	131691003(9202-0000-133-S-03) Sample Duplicate (DUP)
1200804898	131691003(9202-0000-133-S-03) 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-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: 131691003 (9202-0000-133-S-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:	**LSC, Tritium Dist, Solid-HTD2,ALL FSS**
Analytical Method:	EPA 906.0 Modified
Analytical Batch Number:	409871

Sample ID	Client ID
131691001	9202-0000-133-S-01
131691002	9202-0000-133-S-02
131691003	9202-0000-133-S-03
131691004	9202-0000-135-S-01
131691005	9202-0000-137-S-01
131691006	9202-0000-138-S-01
131691007	9202-0000-139-S-01
1200808782	Method Blank (MB)
1200808783	131691001(9202-0000-133-S-01) Sample Duplicate (DUP)

1200808784	131691001(9202-0000-133-S-01) Matrix Spike (MS)
1200808785	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: 131691001 (9202-0000-133-S-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 All,FSS**
Analytical Method:	EPA EERF C-01 Modified
Analytical Batch Number:	407148

Sample ID	Client ID
131691003	9202-0000-133-S-03
1200802144	Method Blank (MB)
1200802145	131693030(9202-0000-136-C-4C-05) Sample Duplicate (DUP)
1200802146	131693030(9202-0000-136-C-4C-05) Matrix Spike (MS)
1200802147	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# 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: 131693030 (9202-0000-136-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
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: Heather G Chacon 4/1/05

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#05-0800 GEL Work Order: 131691

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.
R Sample results are rejected due to sample preservation with HCl.
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 PO# 002332

Report Date: March 31, 2005

Client Sample ID:	9202-0000-133-S-01	Project:	YANK01204
Sample ID:	131691001	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	16-FEB-05		
Receive Date:	03-MAR-05		
Collector:	Client		
Moisture:	9.3%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Gamma Spec Analysis											
Gamma,Solid-FSS GAM & ALL FSS											
Actinium-228		0.387	+/-0.162	0.0604	+/-0.158	0.133	pCi/g		MJH1 03/07/05	1825	406824
Americium-241	U	-0.0659	+/-0.0785	0.0668	+/-0.077	0.140	pCi/g				
Bismuth-212	UUI	0.00	+/-0.269	0.121	+/-0.264	0.265	pCi/g				
Bismuth-214		0.479	+/-0.0896	0.0349	+/-0.0878	0.0747	pCi/g				
Cesium-134	U	0.0354	+/-0.0319	0.0214	+/-0.0313	0.0463	pCi/g				
Cesium-137	U	0.0136	+/-0.0217	0.0142	+/-0.0213	0.0312	pCi/g				
Cobalt-60	U	-0.00734	+/-0.021	0.0168	+/-0.0206	0.0382	pCi/g				
Europium-152	U	-0.00317	+/-0.0503	0.0434	+/-0.0493	0.0925	pCi/g				
Europium-154	U	0.0369	+/-0.0646	0.059	+/-0.0633	0.130	pCi/g				
Europium-155	U	0.0559	+/-0.0539	0.0543	+/-0.0528	0.113	pCi/g				
Lead-212		0.473	+/-0.0664	0.0266	+/-0.0651	0.0559	pCi/g				
Lead-214		0.516	+/-0.0822	0.0325	+/-0.0806	0.0692	pCi/g				
Manganese-54	U	-0.0147	+/-0.0176	0.0131	+/-0.0172	0.0293	pCi/g				
Niobium-94	U	0.00493	+/-0.0176	0.0157	+/-0.0173	0.034	pCi/g				
Potassium-40		9.50	+/-1.07	0.177	+/-1.05	0.399	pCi/g				
Radium-226		0.479	+/-0.0896	0.0349	+/-0.0878	0.0747	pCi/g				
Silver-108m	U	-0.00974	+/-0.0159	0.0137	+/-0.0156	0.0295	pCi/g				
Thallium-208		0.141	+/-0.0399	0.0156	+/-0.0391	0.0339	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid-ALL FSS											
Strontium-90	U	0.00487	+/-0.00836	0.00807	+/-0.00836	0.0172	pCi/g		LCW1 03/27/05	2343	406923
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid-HTD2,ALL FSS											
Tritium	U	1.78	+/-6.69	5.55	+/-6.69	11.5	pCi/g		ATH1 03/30/05	1245	409871

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	DLD1	03/04/05	0526	406343
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DLD1	03/03/05	1651	406337

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: March 31, 2005

Client Sample ID: 9202–0000–133–S–01
Sample ID: 131691001

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
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–ALL FSS	115	(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 PO# 002332

Report Date: March 31, 2005

Client Sample ID:	9202–0000–133–S–02	Project:	YANK01204
Sample ID:	131691002	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	16–FEB–05		
Receive Date:	03–MAR–05		
Collector:	Client		
Moisture:	10.6%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Gamma Spec Analysis											
Gamma,Solid–FSS GAM & ALL FSS											
Actinium–228		0.854	+/–0.211	0.0788	+/–0.206	0.170	pCi/g		MJH1 03/07/05	1825	406824
Americium–241	U	–0.0235	+/–0.109	0.105	+/–0.107	0.217	pCi/g				
Bismuth–212		0.551	+/–0.288	0.163	+/–0.282	0.350	pCi/g				
Bismuth–214		0.877	+/–0.138	0.0399	+/–0.136	0.085	pCi/g				
Cesium–134	UUI	0.00	+/–0.057	0.0312	+/–0.0559	0.0659	pCi/g				
Cesium–137	U	–0.00883	+/–0.0232	0.0199	+/–0.0228	0.0429	pCi/g				
Cobalt–60	U	0.0119	+/–0.0282	0.0252	+/–0.0276	0.0549	pCi/g				
Europium–152	U	0.0282	+/–0.0678	0.0625	+/–0.0664	0.131	pCi/g				
Europium–154	U	–0.0376	+/–0.0817	0.0667	+/–0.0801	0.146	pCi/g				
Europium–155	U	0.0329	+/–0.0911	0.0691	+/–0.0893	0.143	pCi/g				
Lead–212		0.792	+/–0.0979	0.0399	+/–0.096	0.0828	pCi/g				
Lead–214		1.04	+/–0.148	0.0423	+/–0.145	0.0891	pCi/g				
Manganese–54	U	–0.0275	+/–0.0237	0.018	+/–0.0232	0.0393	pCi/g				
Niobium–94	U	0.00499	+/–0.0222	0.0199	+/–0.0217	0.0425	pCi/g				
Potassium–40		14.0	+/–1.74	0.186	+/–1.70	0.418	pCi/g				
Radium–226		0.877	+/–0.138	0.0399	+/–0.136	0.085	pCi/g				
Silver–108m	U	0.00214	+/–0.0227	0.020	+/–0.0222	0.0424	pCi/g				
Thallium–208		0.271	+/–0.0582	0.0213	+/–0.057	0.0454	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid–ALL FSS											
Strontium–90	U	0.00304	+/–0.00719	0.00701	+/–0.00719	0.015	pCi/g		LCW1 03/27/05	2345	406923
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid–HTD2,ALL FSS											
Tritium	U	0.962	+/–6.67	5.56	+/–6.67	11.6	pCi/g		ATH1 03/30/05	1317	409871

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	DLD1	03/04/05	0527	406343
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	DLD1	03/03/05	1651	406337

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: March 31, 2005

Client Sample ID: 9202–0000–133–S–02
Sample ID: 131691002

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	114	(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 PO# 002332

Report Date: March 31, 2005

Client Sample ID:	9202–0000–133–S–03	Project:	YANK01204
Sample ID:	131691003	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	16–FEB–05		
Receive Date:	03–MAR–05		
Collector:	Client		
Moisture:	9.89%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Alpha Spec Analysis											
Alphaspec Am241, Cm, Solid ALL FSS											
Americium–241	U	0.054	+/–0.0933	0.0604	+/–0.0936	0.193	pCi/g		BJB1 03/30/05	0938	412128
Curium–242	U	0.0241	+/–0.0639	0.0362	+/–0.064	0.158	pCi/g				
Curium–243/244	U	–0.00638	+/–0.0125	0.0303	+/–0.0125	0.133	pCi/g				
Alphaspec Pu, Solid–ALL FSS											
Plutonium–238	U	0.0234	+/–0.0458	0.00	+/–0.0459	0.0633	pCi/g		BJB1 03/22/05	0828	409820
Plutonium–239/240	U	0.0532	+/–0.0815	0.0461	+/–0.0817	0.155	pCi/g				
Liquid Scint Pu241, Solid–ALL FSS											
Plutonium–241	U	–0.107	+/–6.80	5.71	+/–6.80	11.7	pCi/g		BJB1 03/25/05	0623	409821
Rad Gamma Spec Analysis											
Gamma,Solid–FSS GAM & ALL FSS											
Actinium–228		0.417	+/–0.205	0.0895	+/–0.201	0.190	pCi/g		MJH1 03/07/05	2048	406824
Americium–241	U	0.0597	+/–0.107	0.076	+/–0.105	0.156	pCi/g				
Bismuth–212		0.650	+/–0.412	0.184	+/–0.404	0.389	pCi/g				
Bismuth–214		0.607	+/–0.141	0.0477	+/–0.138	0.0997	pCi/g				
Cesium–134	UUI	0.00	+/–0.0433	0.0301	+/–0.0425	0.0634	pCi/g				
Cesium–137	U	0.024	+/–0.0392	0.0229	+/–0.0384	0.0483	pCi/g				
Cobalt–60	U	0.00627	+/–0.0361	0.029	+/–0.0354	0.0626	pCi/g				
Europium–152	U	0.0295	+/–0.0787	0.0612	+/–0.0771	0.127	pCi/g				
Europium–154	U	0.0681	+/–0.108	0.0897	+/–0.106	0.192	pCi/g				
Europium–155	U	0.0555	+/–0.0732	0.0532	+/–0.0718	0.109	pCi/g				
Lead–212		0.588	+/–0.0945	0.0325	+/–0.0926	0.067	pCi/g				
Lead–214		0.602	+/–0.135	0.0432	+/–0.133	0.0896	pCi/g				
Manganese–54	U	0.0352	+/–0.0335	0.0271	+/–0.0328	0.0571	pCi/g				
Niobium–94	U	0.0308	+/–0.0298	0.024	+/–0.0292	0.0504	pCi/g				
Potassium–40		17.9	+/–1.75	0.256	+/–1.72	0.558	pCi/g				
Radium–226		0.607	+/–0.141	0.0477	+/–0.138	0.0997	pCi/g				
Silver–108m	U	–0.0114	+/–0.0267	0.0199	+/–0.0261	0.0416	pCi/g				
Thallium–208		0.216	+/–0.0611	0.0221	+/–0.0599	0.0465	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid–ALL FSS											
Strontium–90	U	0.0034	+/–0.00993	0.00976	+/–0.00993	0.0209	pCi/g		LCW1 03/27/05	2345	406923
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid–HTD2,ALL FSS											
Tritium	U	4.12	+/–7.03	5.74	+/–7.03	11.9	pCi/g		ATH1 03/30/05	1349	409871
Liquid Scint C14, Solid All,FSS											

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Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: March 31, 2005

Client Sample ID: 9202–0000–133–S–03
Sample ID: 131691003

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Liquid Scintillation Analysis											
Liquid Scint C14, Solid All,FSS											
Carbon–14	U	–0.04	+/–0.0899	0.0761	+/–0.0899	0.154	pCi/g		EGD1 03/19/05	0247	407148
Liquid Scint Fe55, Solid–ALL FSS											
Iron–55	U	–35.9	+/–59.9	41.0	+/–59.9	83.8	pCi/g		DAJ1 03/30/05	0531	407185
Liquid Scint Ni63, Solid–ALL FSS											
Nickel–63	U	–3.49	+/–8.66	7.36	+/–8.66	15.1	pCi/g		DAJ1 03/29/05	0924	407187
Liquid Scint Tc99, Solid–ALL FSS											
Technetium–99		0.460	+/–0.179	0.139	+/–0.179	0.285	pCi/g		DAJ1 03/21/05	0731	409273

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	DLD1	03/04/05	0527	406343
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	DLD1	03/03/05	1651	406337

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL–300, Am–05–RC Modified
2	DOE EML HASL–300, Am–05–RC Modified
3	DOE EML HASL–300, Pu–11–RC Modified
4	DOE EML HASL–300, Pu–11–RC Modified
5	EML HASL 300, 4.5.2.3
6	EPA 905.0 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 EML HASL–300, Tc–02–RC Modified
12	DOE EML HASL–300, Tc–02–RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium–243	Alphaspec Am241, Cm, Solid ALL	77	(25%–125%)
Plutonium–242	Alphaspec Pu, Solid–ALL FSS	91	(15%–125%)
Carrier/Tracer Recovery	Liquid Scint Pu241, Solid–ALL FS	89	
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	84	(25%–125%)

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Project: Soils PO# 002332

Report Date: March 31, 2005

Client Sample ID: 9202–0000–133–S–03
Sample ID: 131691003

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Carrier/Tracer Recovery		Liquid Scint Fe55, Solid–ALL FS			87						
Carrier/Tracer Recovery		Liquid Scint Ni63, Solid–ALL FS			81						
Carrier/Tracer Recovery		Liquid Scint Tc99, Solid–ALL FS			75						

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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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Project: Soils PO# 002332

Report Date: March 31, 2005

Client Sample ID:	9202-0000-135-S-01	Project:	YANK01204
Sample ID:	131691004	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	16-FEB-05		
Receive Date:	03-MAR-05		
Collector:	Client		
Moisture:	2.79%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Gamma Spec Analysis											
Gamma,Solid-FSS GAM & ALL FSS											
Actinium-228		0.346	+/-0.166	0.0554	+/-0.163	0.117	pCi/g		MJH1 03/07/05	2049	406824
Americium-241	U	-0.00988	+/-0.0642	0.0464	+/-0.063	0.0954	pCi/g				
Bismuth-212	U	0.272	+/-0.262	0.131	+/-0.257	0.274	pCi/g				
Bismuth-214		0.264	+/-0.0946	0.0324	+/-0.0927	0.0673	pCi/g				
Cesium-134	UUI	0.00	+/-0.043	0.0207	+/-0.0422	0.0432	pCi/g				
Cesium-137	U	-0.00122	+/-0.0217	0.0167	+/-0.0212	0.0349	pCi/g				
Cobalt-60	U	-0.000725	+/-0.0273	0.0213	+/-0.0268	0.0451	pCi/g				
Europium-152	U	0.0177	+/-0.0561	0.0428	+/-0.0549	0.0883	pCi/g				
Europium-154	U	-0.0547	+/-0.0768	0.0569	+/-0.0752	0.121	pCi/g				
Europium-155	U	0.0788	+/-0.0575	0.0432	+/-0.0563	0.0884	pCi/g				
Lead-212		0.332	+/-0.0712	0.0215	+/-0.0698	0.0444	pCi/g				
Lead-214		0.352	+/-0.0847	0.0285	+/-0.083	0.0589	pCi/g				
Manganese-54	U	0.0056	+/-0.0245	0.019	+/-0.0241	0.0397	pCi/g				
Niobium-94	U	-0.00105	+/-0.0214	0.0165	+/-0.021	0.0343	pCi/g				
Potassium-40		5.31	+/-0.749	0.175	+/-0.734	0.376	pCi/g				
Radium-226		0.264	+/-0.0946	0.0324	+/-0.0927	0.0673	pCi/g				
Silver-108m	U	-0.00708	+/-0.0191	0.014	+/-0.0187	0.0291	pCi/g				
Thallium-208	UUI	0.00	+/-0.0385	0.023	+/-0.0377	0.0473	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid-ALL FSS											
Strontium-90		0.0907	+/-0.0239	0.0148	+/-0.0241	0.0326	pCi/g		LCW1 03/29/05	1801	406923
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid-HTD2,ALL FSS											
Tritium	U	-1.11	+/-6.59	5.57	+/-6.59	11.6	pCi/g		ATH1 03/30/05	1624	409871

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	DLD1	03/04/05	0527	406343
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DLD1	03/03/05	1651	406337

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: March 31, 2005

Client Sample ID: 9202–0000–135–S–01
Sample ID: 131691004

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	80	(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 PO# 002332

Report Date: March 31, 2005

Client Sample ID:	9202–0000–137–S–01	Project:	YANK01204
Sample ID:	131691005	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	16–FEB–05		
Receive Date:	03–MAR–05		
Collector:	Client		
Moisture:	2.32%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Gamma Spec Analysis											
Gamma,Solid–FSS GAM & ALL FSS											
Actinium–228		0.261	+/–0.174	0.0491	+/–0.171	0.109	pCi/g		MJH1 03/07/05	1826	406824
Americium–241	U	–0.0181	+/–0.0745	0.0637	+/–0.073	0.133	pCi/g				
Bismuth–212		0.302	+/–0.220	0.101	+/–0.216	0.224	pCi/g				
Bismuth–214		0.358	+/–0.0794	0.0331	+/–0.0778	0.0708	pCi/g				
Cesium–134	U	0.0339	+/–0.0195	0.0196	+/–0.0191	0.0424	pCi/g				
Cesium–137	U	–0.00441	+/–0.0183	0.0153	+/–0.0179	0.0333	pCi/g				
Cobalt–60	U	0.00166	+/–0.0166	0.0143	+/–0.0163	0.0328	pCi/g				
Europium–152	U	0.00656	+/–0.0468	0.0433	+/–0.0459	0.0919	pCi/g				
Europium–154	U	–0.0207	+/–0.049	0.0384	+/–0.048	0.0882	pCi/g				
Europium–155	U	–0.00261	+/–0.048	0.0448	+/–0.0471	0.0937	pCi/g				
Lead–212		0.304	+/–0.0465	0.0232	+/–0.0455	0.0489	pCi/g				
Lead–214		0.411	+/–0.0751	0.033	+/–0.0736	0.0699	pCi/g				
Manganese–54	U	0.00264	+/–0.017	0.0146	+/–0.0167	0.032	pCi/g				
Niobium–94	U	0.0123	+/–0.0163	0.015	+/–0.016	0.0325	pCi/g				
Potassium–40		5.19	+/–0.712	0.123	+/–0.698	0.289	pCi/g				
Radium–226		0.358	+/–0.0794	0.0331	+/–0.0778	0.0708	pCi/g				
Silver–108m	U	–0.000793	+/–0.0153	0.0136	+/–0.015	0.0293	pCi/g				
Thallium–208		0.106	+/–0.0361	0.0145	+/–0.0354	0.0314	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid–ALL FSS											
Strontium–90	U	–0.00258	+/–0.0138	0.0142	+/–0.0138	0.0297	pCi/g		LCW1 03/27/05	2346	406923
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid–HTD2,ALL FSS											
Tritium	U	2.42	+/–5.96	4.91	+/–5.96	10.2	pCi/g		ATH1 03/30/05	1656	409871

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	DLD1	03/04/05	0527	406343
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	DLD1	03/03/05	1651	406337

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: March 31, 2005

Client Sample ID: 9202–0000–137–S–01
Sample ID: 131691005

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	87	(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.
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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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Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: March 31, 2005

Client Sample ID:	9202–0000–138–S–01	Project:	YANK01204
Sample ID:	131691006	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	16–FEB–05		
Receive Date:	03–MAR–05		
Collector:	Client		
Moisture:	2.97%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Gamma Spec Analysis											
Gamma,Solid–FSS GAM & ALL FSS											
Actinium–228		0.344	+/–0.0853	0.0235	+/–0.0836	0.0494	pCi/g		MJH1 03/07/05	1949	406824
Americium–241	U	0.00605	+/–0.0492	0.0486	+/–0.0482	0.0997	pCi/g				
Bismuth–212		0.238	+/–0.107	0.0514	+/–0.105	0.108	pCi/g				
Bismuth–214		0.380	+/–0.0484	0.0126	+/–0.0474	0.0262	pCi/g				
Cesium–134	UUI	0.00	+/–0.0144	0.00866	+/–0.0141	0.018	pCi/g				
Cesium–137	U	0.00642	+/–0.0135	0.00672	+/–0.0132	0.014	pCi/g				
Cobalt–60	U	–0.00082	+/–0.00833	0.00703	+/–0.00817	0.015	pCi/g				
Europium–152	U	–0.00787	+/–0.0213	0.0181	+/–0.0209	0.0373	pCi/g				
Europium–154	U	0.0027	+/–0.0239	0.0206	+/–0.0234	0.0437	pCi/g				
Europium–155	UUI	0.00	+/–0.038	0.0205	+/–0.0373	0.042	pCi/g				
Lead–212		0.320	+/–0.0384	0.0106	+/–0.0376	0.0217	pCi/g				
Lead–214		0.402	+/–0.0518	0.0132	+/–0.0507	0.0272	pCi/g				
Manganese–54	U	0.00724	+/–0.00768	0.00686	+/–0.00753	0.0144	pCi/g				
Niobium–94	U	0.00475	+/–0.0103	0.0063	+/–0.0101	0.0131	pCi/g				
Potassium–40		5.36	+/–0.536	0.0638	+/–0.525	0.137	pCi/g				
Radium–226		0.380	+/–0.0484	0.0126	+/–0.0474	0.0262	pCi/g				
Silver–108m	U	0.0003	+/–0.00671	0.00609	+/–0.00658	0.0126	pCi/g				
Thallium–208		0.121	+/–0.021	0.00656	+/–0.0206	0.0137	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid–ALL FSS											
Strontium–90	U	–0.00203	+/–0.00932	0.00968	+/–0.00932	0.0207	pCi/g		LCW1 03/27/05	2346	406923
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid–HTD2,ALL FSS											
Tritium	U	6.59	+/–6.78	5.44	+/–6.78	11.3	pCi/g		ATH1 03/30/05	1728	409871

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	DLD1	03/04/05	0527	406343
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	DLD1	03/03/05	1651	406337

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: March 31, 2005

Client Sample ID: 9202–0000–138–S–01
Sample ID: 131691006

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	89	(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 PO# 002332

Report Date: March 31, 2005

Client Sample ID:	9202-0000-139-S-01	Project:	YANK01204
Sample ID:	131691007	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	16-FEB-05		
Receive Date:	03-MAR-05		
Collector:	Client		
Moisture:	64.1%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Gamma Spec Analysis											
Gamma,Solid-FSS GAM & ALL FSS											
Actinium-228		0.723	+/-0.174	0.0435	+/-0.170	0.0921	pCi/g		MJH1 03/07/05	1949	406824
Americium-241	U	0.000622	+/-0.0208	0.0174	+/-0.0204	0.0354	pCi/g				
Bismuth-212		0.578	+/-0.259	0.101	+/-0.254	0.211	pCi/g				
Bismuth-214		0.859	+/-0.117	0.0251	+/-0.115	0.0522	pCi/g				
Cesium-134	U	0.0152	+/-0.0302	0.0171	+/-0.0296	0.0356	pCi/g				
Cesium-137	U	0.0171	+/-0.0213	0.0127	+/-0.0209	0.0267	pCi/g				
Cobalt-60	U	0.00848	+/-0.0186	0.0161	+/-0.0182	0.0342	pCi/g				
Europium-152	U	0.0086	+/-0.0368	0.0308	+/-0.036	0.0637	pCi/g				
Europium-154	U	-0.0257	+/-0.0532	0.0407	+/-0.0522	0.0867	pCi/g				
Europium-155	UUI	0.00	+/-0.0544	0.0257	+/-0.0533	0.0526	pCi/g				
Lead-212		0.596	+/-0.0639	0.0161	+/-0.0627	0.0331	pCi/g				
Lead-214		0.866	+/-0.104	0.0231	+/-0.102	0.0477	pCi/g				
Manganese-54	U	0.00701	+/-0.017	0.0144	+/-0.0166	0.0301	pCi/g				
Niobium-94	U	0.00306	+/-0.0149	0.0126	+/-0.0146	0.0263	pCi/g				
Potassium-40		9.19	+/-0.815	0.145	+/-0.799	0.309	pCi/g				
Radium-226		0.859	+/-0.117	0.0251	+/-0.115	0.0522	pCi/g				
Silver-108m	U	0.0082	+/-0.0136	0.0114	+/-0.0134	0.0237	pCi/g				
Thallium-208		0.231	+/-0.0452	0.0135	+/-0.0443	0.0281	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid-ALL FSS											
Strontium-90	U	-0.00584	+/-0.0108	0.0115	+/-0.0108	0.0244	pCi/g		LCW1 03/27/05	2346	406923
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid-HTD2,ALL FSS											
Tritium	U	2.17	+/-7.04	5.83	+/-7.04	12.1	pCi/g		ATH1 03/30/05	1800	409871

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	DLD1	03/04/05	0527	406343
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DLD1	03/03/05	1651	406337

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: March 31, 2005

Client Sample ID: 9202–0000–139–S–01
Sample ID: 131691007

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	81	(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.

QUALITY CONTROL DATA

GENERAL ENGINEERING LABORATORIES, LLC

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

QC Summary

Report Date: April 1, 2005

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

Contact: Mr. Pete Hollenbeck

Workorder: 131691

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Alpha Spec										
Batch 409820										
QC1200808500 131691003 DUP										
Plutonium-238	U	0.0234	U	-0.0378	pCi/g	N/A		(0% - 100%)	BJB1	03/22/05 08:28
	Uncert:	+/-0.0458		+/-0.0302						
	TPU:	+/-0.0459		+/-0.0305						
Plutonium-239/240	U	0.0532	U	-0.00629	pCi/g	N/A		(0% - 100%)		
	Uncert:	+/-0.0815		+/-0.0123						
	TPU:	+/-0.0817		+/-0.0124						
QC1200808502 LCS										
Plutonium-238			U	0.0335	pCi/g			(75%-125%)		
	Uncert:			+/-0.0628						
	TPU:			+/-0.0629						
Plutonium-239/240	9.30			9.50	pCi/g		102	(75%-125%)		
	Uncert:			+/-0.898						
	TPU:			+/-1.30						
QC1200808499 MB										
Plutonium-238			U	-0.0112	pCi/g					
	Uncert:			+/-0.0155						
	TPU:			+/-0.0155						
Plutonium-239/240			U	-0.00465	pCi/g					
	Uncert:			+/-0.0518						
	TPU:			+/-0.0518						
QC1200808501 131691003 MS										
Plutonium-238	U	0.0234	U	0.120	pCi/g			(75%-125%)		
	Uncert:	+/-0.0458		+/-0.146						
	TPU:	+/-0.0459		+/-0.147						
Plutonium-239/240	9.30 U	0.0532		9.26	pCi/g		99	(75%-125%)		
	Uncert:	+/-0.0815		+/-1.14						
	TPU:	+/-0.0817		+/-1.57						
Batch 409821										
QC1200808504 131691003 DUP										
Plutonium-241	U	-0.107	U	-1.94	pCi/g	N/A		(0% - 100%)	BJB1	03/25/05 07:27
	Uncert:	+/-6.80		+/-6.42						
	TPU:	+/-6.80		+/-6.42						
QC1200808506 LCS										
Plutonium-241	134			114	pCi/g		85	(75%-125%)		03/25/05 08:30
	Uncert:			+/-9.51						
	TPU:			+/-14.1						
QC1200808503 MB										
Plutonium-241			U	-1.85	pCi/g					03/25/05 06:55
	Uncert:			+/-5.81						
	TPU:			+/-5.81						
QC1200808505 131691003 MS										
Plutonium-241	136 U	-0.107		110	pCi/g		81	(75%-125%)		03/25/05 07:58
	Uncert:	+/-6.80		+/-9.02						

QC Summary

Workorder: 131691

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Alpha Spec										
Batch 409821										
	TPU:	+/-6.80		+/-13.9						
Batch 412128										
QC1200814028 131691003 DUP										
Americium-241	U	0.054	U	-0.006	pCi/g	N/A		(0% - 100%)	BJB1	03/30/05 09:38
	Uncert:	+/-0.0933		+/-0.0667						
	TPU:	+/-0.0936		+/-0.0667						
Curium-242	U	0.0241	U	-0.0172	pCi/g	N/A		(0% - 100%)		
	Uncert:	+/-0.0639		+/-0.0239						
	TPU:	+/-0.064		+/-0.024						
Curium-243/244	U	-0.00638	U	0.0229	pCi/g	N/A		(0% - 100%)		
	Uncert:	+/-0.0125		+/-0.0607						
	TPU:	+/-0.0125		+/-0.0608						
QC1200814030 LCS										
Americium-241	10.7			9.61	pCi/g		90	(75%-125%)		
	Uncert:			+/-0.963						
	TPU:			+/-1.52						
Curium-242			U	0.00	pCi/g					
	Uncert:			+/-0.0496						
	TPU:			+/-0.0496						
Curium-243/244	13.1			11.0	pCi/g		84	(75%-125%)		
	Uncert:			+/-1.03						
	TPU:			+/-1.69						
QC1200814027 MB										
Americium-241			U	0.0497	pCi/g					
	Uncert:			+/-0.0981						
	TPU:			+/-0.0983						
Curium-242			U	-0.0134	pCi/g					
	Uncert:			+/-0.0185						
	TPU:			+/-0.0186						
Curium-243/244			U	-0.0132	pCi/g					
	Uncert:			+/-0.0184						
	TPU:			+/-0.0184						
QC1200814029 131691003 MS										
Americium-241	10.7 U	0.054		9.31	pCi/g		87	(75%-125%)		
	Uncert:	+/-0.0933		+/-1.02						
	TPU:	+/-0.0936		+/-1.56						
Curium-242	U	0.0241	U	0.00	pCi/g					
	Uncert:	+/-0.0639		+/-0.0676						
	TPU:	+/-0.064		+/-0.0676						
Curium-243/244	13.2 U	-0.00638		11.8	pCi/g		89	(75%-125%)		
	Uncert:	+/-0.0125		+/-1.15						
	TPU:	+/-0.0125		+/-1.90						
Rad Gamma Spec										
Batch 406824										
QC1200801329 131691001 DUP										
Actinium-228		0.387		0.539	pCi/g	33		(0% - 100%)	MJH1	03/08/05 07:08
	Uncert:	+/-0.162		+/-0.130						
	TPU:	+/-0.158		+/-0.127						

QC Summary

Workorder: 131691

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch 406824											
Americium-241	U	-0.0659	U	-0.0488	pCi/g	N/A		(0% - 100%)			
	Uncert:	+/-0.0785		+/-0.0948							
	TPU:	+/-0.077		+/-0.0929							
Bismuth-212	UUI	0.00		0.244	pCi/g	50		(0% - 100%)			
	Uncert:	+/-0.269		+/-0.127							
	TPU:	+/-0.264		+/-0.124							
Bismuth-214		0.479		0.550	pCi/g	14		(0% - 100%)			
	Uncert:	+/-0.0896		+/-0.0797							
	TPU:	+/-0.0878		+/-0.0781							
Cesium-134	U	0.0354	U	0.0288	pCi/g	20		(0% - 100%)			
	Uncert:	+/-0.0319		+/-0.0199							
	TPU:	+/-0.0313		+/-0.0195							
Cesium-137	U	0.0136	U	0.0118	pCi/g	15		(0% - 100%)			
	Uncert:	+/-0.0217		+/-0.0218							
	TPU:	+/-0.0213		+/-0.0213							
Cobalt-60	U	-0.00734	U	-0.00686	pCi/g	N/A		(0% - 100%)			
	Uncert:	+/-0.021		+/-0.0153							
	TPU:	+/-0.0206		+/-0.015							
Europium-152	U	-0.00317	U	-0.02	pCi/g	N/A		(0% - 100%)			
	Uncert:	+/-0.0503		+/-0.0367							
	TPU:	+/-0.0493		+/-0.036							
Europium-154	U	0.0369	U	0.0102	pCi/g	113		(0% - 100%)			
	Uncert:	+/-0.0646		+/-0.0421							
	TPU:	+/-0.0633		+/-0.0412							
Europium-155	U	0.0559	U	0.0165	pCi/g	109		(0% - 100%)			
	Uncert:	+/-0.0539		+/-0.0396							
	TPU:	+/-0.0528		+/-0.0388							
Lead-212		0.473		0.416	pCi/g	13		(0% - 100%)			
	Uncert:	+/-0.0664		+/-0.0553							
	TPU:	+/-0.0651		+/-0.0542							
Lead-214		0.516		0.571	pCi/g	10		(0% - 20%)			
	Uncert:	+/-0.0822		+/-0.0779							
	TPU:	+/-0.0806		+/-0.0764							
Manganese-54	U	-0.0147	U	0.00512	pCi/g	N/A		(0% - 100%)			
	Uncert:	+/-0.0176		+/-0.0146							
	TPU:	+/-0.0172		+/-0.0143							
Niobium-94	U	0.00493	U	0.00856	pCi/g	54		(0% - 100%)			
	Uncert:	+/-0.0176		+/-0.0118							
	TPU:	+/-0.0173		+/-0.0115							
Potassium-40		9.50		9.62	pCi/g	1		(0% - 20%)			
	Uncert:	+/-1.07		+/-0.985							
	TPU:	+/-1.05		+/-0.965							
Radium-226		0.479		0.550	pCi/g	14		(0% - 100%)			
	Uncert:	+/-0.0896		+/-0.0797							
	TPU:	+/-0.0878		+/-0.0781							
Silver-108m	U	-0.00974	U	-0.0096	pCi/g	N/A		(0% - 100%)			
	Uncert:	+/-0.0159		+/-0.0111							
	TPU:	+/-0.0156		+/-0.0109							

QC Summary

Workorder: 131691

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 406824										
Thallium-208		0.141		0.161	pCi/g	14		(0% - 100%)		
	Uncert:	+/-0.0399		+/-0.0332						
	TPU:	+/-0.0391		+/-0.0326						
QC1200801330 LCS										
Actinium-228			U	0.0986	pCi/g					03/07/05 19:46
	Uncert:			+/-0.360						
	TPU:			+/-0.353						
Americium-241	23.4			23.1	pCi/g		99	(75%-125%)		
	Uncert:			+/-2.16						
	TPU:			+/-2.12						
Bismuth-212			U	0.178	pCi/g					
	Uncert:			+/-0.609						
	TPU:			+/-0.597						
Bismuth-214			U	0.0444	pCi/g					
	Uncert:			+/-0.193						
	TPU:			+/-0.189						
Cesium-134			U	-0.0132	pCi/g					
	Uncert:			+/-0.0929						
	TPU:			+/-0.0911						
Cesium-137	9.09			9.38	pCi/g		103	(75%-125%)		
	Uncert:			+/-0.983						
	TPU:			+/-0.963						
Cobalt-60	13.0			13.3	pCi/g		102	(75%-125%)		
	Uncert:			+/-0.845						
	TPU:			+/-0.828						
Europium-152			U	0.0343	pCi/g					
	Uncert:			+/-0.193						
	TPU:			+/-0.189						
Europium-154			U	0.0661	pCi/g					
	Uncert:			+/-0.179						
	TPU:			+/-0.175						
Europium-155			U	0.0175	pCi/g					
	Uncert:			+/-0.201						
	TPU:			+/-0.197						
Lead-212			U	0.0909	pCi/g					
	Uncert:			+/-0.106						
	TPU:			+/-0.104						
Lead-214			U	-0.0394	pCi/g					
	Uncert:			+/-0.142						
	TPU:			+/-0.139						
Manganese-54			U	0.00579	pCi/g					
	Uncert:			+/-0.0943						
	TPU:			+/-0.0924						
Niobium-94			U	0.00985	pCi/g					
	Uncert:			+/-0.0719						
	TPU:			+/-0.0704						
Potassium-40			U	0.480	pCi/g					
	Uncert:			+/-0.615						

QC Summary

Workorder: 131691

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch 406824											
	TPU:			+/-0.602							
Radium-226			U	0.0444	pCi/g			(75%-125%)			
	Uncert:			+/-0.193							
	TPU:			+/-0.189							
Silver-108m			U	0.0188	pCi/g						
	Uncert:			+/-0.077							
	TPU:			+/-0.0755							
Thallium-208			U	-0.00702	pCi/g						
	Uncert:			+/-0.0743							
	TPU:			+/-0.0728							
QC1200801328 MB											
Actinium-228			U	0.0387	pCi/g					03/07/05	18:27
	Uncert:			+/-0.0528							
	TPU:			+/-0.0518							
Americium-241			U	-0.0605	pCi/g						
	Uncert:			+/-0.071							
	TPU:			+/-0.0696							
Bismuth-212			U	0.0141	pCi/g						
	Uncert:			+/-0.109							
	TPU:			+/-0.107							
Bismuth-214			U	-0.0129	pCi/g						
	Uncert:			+/-0.031							
	TPU:			+/-0.0303							
Cesium-134			U	0.0203	pCi/g						
	Uncert:			+/-0.0165							
	TPU:			+/-0.0162							
Cesium-137			U	-0.008	pCi/g						
	Uncert:			+/-0.0163							
	TPU:			+/-0.016							
Cobalt-60			U	-0.00224	pCi/g						
	Uncert:			+/-0.0121							
	TPU:			+/-0.0119							
Europium-152			U	-0.013	pCi/g						
	Uncert:			+/-0.0387							
	TPU:			+/-0.0379							
Europium-154			U	0.0184	pCi/g						
	Uncert:			+/-0.0392							
	TPU:			+/-0.0384							
Europium-155			U	0.0387	pCi/g						
	Uncert:			+/-0.0392							
	TPU:			+/-0.0384							
Lead-212			U	0.0174	pCi/g						
	Uncert:			+/-0.0238							
	TPU:			+/-0.0234							
Lead-214			U	0.00804	pCi/g						
	Uncert:			+/-0.0275							
	TPU:			+/-0.027							
Manganese-54			U	-0.000198	pCi/g						

QC Summary

Workorder: 131691

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 406824										
	Uncert:			+/-0.0135						
	TPU:			+/-0.0132						
Niobium-94			U	-0.00341	pCi/g					
	Uncert:			+/-0.0137						
	TPU:			+/-0.0135						
Potassium-40			U	0.0885	pCi/g					
	Uncert:			+/-0.163						
	TPU:			+/-0.160						
Radium-226			U	-0.0129	pCi/g					
	Uncert:			+/-0.031						
	TPU:			+/-0.0303						
Silver-108m			U	0.00656	pCi/g					
	Uncert:			+/-0.0131						
	TPU:			+/-0.0128						
Thallium-208			U	0.00693	pCi/g					
	Uncert:			+/-0.0161						
	TPU:			+/-0.0158						
Rad Gas Flow										
Batch 406923										
QC1200801596 131691001 DUP										
Strontium-90	U	0.00487	U	0.0102	pCi/g	0		(0% - 100%)	CW1	03/27/05 23:47
	Uncert:	+/-0.00836		+/-0.0132						
	TPU:	+/-0.00836		+/-0.0132						
QC1200801598 LCS										
Strontium-90	1.39			1.27	pCi/g		91	(75%-125%)		03/28/05 10:48
	Uncert:			+/-0.0737						
	TPU:			+/-0.0877						
QC1200801595 MB										
Strontium-90			U	-0.0136	pCi/g					03/27/05 23:46
	Uncert:			+/-0.00876						
	TPU:			+/-0.00877						
QC1200801597 131691001 MS										
Strontium-90	2.93 U	0.00487		2.28	pCi/g		77	(75%-125%)		03/28/05 10:48
	Uncert:	+/-0.00836		+/-0.139						
	TPU:	+/-0.00836		+/-0.161						
Rad Liquid Scintillation										
Batch 407148										
QC1200802145 131693030 DUP										
Carbon-14	U	-0.0492	U	-0.0818	pCi/g	N/A		(0% - 100%)	EGD1	03/19/05 16:41
	Uncert:	+/-0.0901		+/-0.0913						
	TPU:	+/-0.0901		+/-0.0913						
QC1200802147 LCS										
Carbon-14	7.30			7.23	pCi/g		99	(75%-125%)		03/19/05 19:46
	Uncert:			+/-0.180						
	TPU:			+/-0.212						
QC1200802144 MB										
Carbon-14			U	-0.0357	pCi/g					03/19/05 15:08
	Uncert:			+/-0.0928						

QC Summary

Workorder: 131691

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Liquid Scintillation										
Batch 407148										
	TPU:			+/-0.0928						
QC1200802146 131693030 MS										
Carbon-14	7.22 U	-0.0492		7.06	pCi/g		98	(75%-125%)		03/19/05 18:13
	Uncert:	+/-0.0901		+/-0.178						
	TPU:	+/-0.0901		+/-0.209						
Batch 407185										
QC1200804899 131691003 DUP										
Iron-55	U	-35.9	U	8.77	pCi/g	N/A		(0% - 100%)	DAJ1	03/30/05 10:49
	Uncert:	+/-59.9		+/-55.1						
	TPU:	+/-59.9		+/-55.1						
QC1200802261 LCS										
Iron-55	412			401	pCi/g		97	(75%-125%)		03/30/05 11:53
	Uncert:			+/-58.9						
	TPU:			+/-63.3						
QC1200802258 MB										
Iron-55			U	-16.1	pCi/g					03/30/05 10:17
	Uncert:			+/-52.9						
	TPU:			+/-52.9						
QC1200804900 131691003 MS										
Iron-55	459 U	-35.9		407	pCi/g		89	(75%-125%)		03/30/05 11:21
	Uncert:	+/-59.9		+/-64.3						
	TPU:	+/-59.9		+/-68.7						
Batch 407187										
QC1200804897 131691003 DUP										
Nickel-63	U	-3.49	U	-5.24	pCi/g	N/A		(0% - 100%)	DAJ1	03/29/05 17:09
	Uncert:	+/-8.66		+/-8.42						
	TPU:	+/-8.66		+/-8.43						
QC1200802271 LCS										
Nickel-63	757			735	pCi/g		97	(75%-125%)		03/29/05 18:43
	Uncert:			+/-20.3						
	TPU:			+/-51.8						
QC1200802268 MB										
Nickel-63			U	-6.84	pCi/g					03/29/05 16:23
	Uncert:			+/-8.46						
	TPU:			+/-8.47						
QC1200804898 131691003 MS										
Nickel-63	824 U	-3.49		795	pCi/g		96	(75%-125%)		03/29/05 17:56
	Uncert:	+/-8.66		+/-21.7						
	TPU:	+/-8.66		+/-56.9						
Batch 409273										
QC1200807179 132450002 DUP										
Technetium-99		0.402		0.459	pCi/g	13		(0% - 100%)	DAJ1	03/21/05 17:54
	Uncert:	+/-0.205		+/-0.187						
	TPU:	+/-0.206		+/-0.188						
QC1200807181 LCS										
Technetium-99	14.9			14.3	pCi/g		96	(75%-125%)		03/21/05 19:30
	Uncert:			+/-0.356						
	TPU:			+/-0.503						
QC1200807178 MB										

QC Summary

Workorder: 131691

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Liquid Scintillation										
Batch 409273										
Technetium-99			U	0.123	pCi/g					
	Uncert:			+/-0.134						
	TPU:			+/-0.134						
QC1200807180 132450002 MS										
Technetium-99	16.4	0.402		15.4	pCi/g		91	(75%-125%)		03/21/05 18:42
	Uncert:	+/-0.205		+/-0.446						
	TPU:	+/-0.206		+/-0.588						
Batch 409871										
QC1200808783 131691001 DUP										
Tritium	U	1.78	U	4.60	pCi/g	0		(0% - 100%)	ATH1	03/31/05 01:59
	Uncert:	+/-6.69		+/-7.48						
	TPU:	+/-6.69		+/-7.48						
QC1200808785 LCS										
Tritium	73.5			74.8	pCi/g		102	(75%-125%)		03/31/05 03:03
	Uncert:			+/-9.17						
	TPU:			+/-9.26						
QC1200808782 MB										
Tritium			U	6.17	pCi/g					03/31/05 01:27
	Uncert:			+/-6.48						
	TPU:			+/-6.48						
QC1200808784 131691001 MS										
Tritium	80.0 U	1.78		72.2	pCi/g		88	(75%-125%)		03/31/05 02:31
	Uncert:	+/-6.69		+/-9.54						
	TPU:	+/-6.69		+/-9.62						

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.

QC Summary

Workorder: 131691

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.

9202-0000-133-S-01	MSR#05-0800	131691001	406824	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.387	0.162	PCI/G	0		3/3/2005	38415.71319	6:25	0.133	PCI/G	0.0604	PCI/G	1	9.3	201	G	PCI/G	PR	
9202-0000-133-S-01	MSR#05-0800	131691001	406824	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0659	0.0785	PCI/G	0	U	3/3/2005	38415.71319	6:25	0.14	PCI/G	0.0668	PCI/G	1	9.3	201	G	PCI/G	PR	
9202-0000-133-S-01	MSR#05-0800	131691001	406824	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0	0.269	PCI/G	0	UUI	3/3/2005	38415.71319	6:25	0.265	PCI/G	0.121	PCI/G	1	9.3	201	G	PCI/G	PR	
9202-0000-133-S-01	MSR#05-0800	131691001	406824	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.479	0.0896	PCI/G	0		3/3/2005	38415.71319	6:25	0.0747	PCI/G	0.0349	PCI/G	1	9.3	201	G	PCI/G	PR	
9202-0000-133-S-01	MSR#05-0800	131691001	406824	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0354	0.0319	PCI/G	0	U	3/3/2005	38415.71319	6:25	0.0463	PCI/G	0.0214	PCI/G	1	9.3	201	G	PCI/G	PR	
9202-0000-133-S-01	MSR#05-0800	131691001	406824	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.0136	0.0217	PCI/G	0	U	3/3/2005	38415.71319	6:25	0.0312	PCI/G	0.0142	PCI/G	1	9.3	201	G	PCI/G	PR	
9202-0000-133-S-01	MSR#05-0800	131691001	406824	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.00734	0.021	PCI/G	0	U	3/3/2005	38415.71319	6:25	0.0382	PCI/G	0.0168	PCI/G	1	9.3	201	G	PCI/G	PR	
9202-0000-133-S-01	MSR#05-0800	131691001	406824	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.00317	0.0503	PCI/G	0	U	3/3/2005	38415.71319	6:25	0.0925	PCI/G	0.0434	PCI/G	1	9.3	201	G	PCI/G	PR	
9202-0000-133-S-01	MSR#05-0800	131691001	406824	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0369	0.0646	PCI/G	0	U	3/3/2005	38415.71319	6:25	0.13	PCI/G	0.059	PCI/G	1	9.3	201	G	PCI/G	PR	
9202-0000-133-S-01	MSR#05-0800	131691001	406824	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0559	0.0539	PCI/G	0	U	3/3/2005	38415.71319	6:25	0.113	PCI/G	0.0543	PCI/G	1	9.3	201	G	PCI/G	PR	
9202-0000-133-S-01	MSR#05-0800	131691001	406824	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.473	0.0664	PCI/G	0		3/3/2005	38415.71319	6:25	0.0559	PCI/G	0.0266	PCI/G	1	9.3	201	G	PCI/G	PR	
9202-0000-133-S-01	MSR#05-0800	131691001	406824	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.516	0.0822	PCI/G	0		3/3/2005	38415.71319	6:25	0.0692	PCI/G	0.0325	PCI/G	1	9.3	201	G	PCI/G	PR	
9202-0000-133-S-01	MSR#05-0800	131691001	406824	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.0147	0.0176	PCI/G	0	U	3/3/2005	38415.71319	6:25	0.0293	PCI/G	0.0131	PCI/G	1	9.3	201	G	PCI/G	PR	
9202-0000-133-S-01	MSR#05-0800	131691001	406824	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00493	0.0176	PCI/G	0	U	3/3/2005	38415.71319	6:25	0.034	PCI/G	0.0157	PCI/G	1	9.3	201	G	PCI/G	PR	
9202-0000-133-S-01	MSR#05-0800	131691001	406824	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	9.5	1.07	PCI/G	0		3/3/2005	38415.71319	6:25	0.399	PCI/G	0.177	PCI/G	1	9.3	201	G	PCI/G	PR	
9202-0000-133-S-01	MSR#05-0800	131691001	406824	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.479	0.0896	PCI/G	0		3/3/2005	38415.71319	6:25	0.0747	PCI/G	0.0349	PCI/G	1	9.3	201	G	PCI/G	PR	
9202-0000-133-S-01	MSR#05-0800	131691001	406824	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00974	0.0159	PCI/G	0	U	3/3/2005	38415.71319	6:25	0.0295	PCI/G	0.0137	PCI/G	1	9.3	201	G	PCI/G	PR	
9202-0000-133-S-01	MSR#05-0800	131691001	406923	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00487	0.00836	PCI/G	0	U	4/3/2005	38414.03264	11:43	0.0172	PCI/G	0.00807	PCI/G	1	9.3	12.4	G	PCI/G	PR	
9202-0000-133-S-01	MSR#05-0800	131691001	406824	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.141	0.0399	PCI/G	0		3/3/2005	38415.71319	6:25	0.0339	PCI/G	0.0156	PCI/G	1	9.3	201	G	PCI/G	PR	
9202-0000-133-S-01	MSR#05-0800	131691001	409871	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	1.78	6.69	PCI/G	0	U		30/03/2005	12:45	11.5	PCI/G	5.55	PCI/G	1	9.3	2.04	G	PCI/G	PR	
9202-0000-133-S-02	MSR#05-0800	131691002	406824	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.854	0.211	PCI/G	0		3/3/2005	38415.71319	6:25	0.17	PCI/G	0.0788	PCI/G	1	11	198	G	PCI/G	PR	
9202-0000-133-S-02	MSR#05-0800	131691002	406824	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0235	0.109	PCI/G	0	U	3/3/2005	38415.71319	6:25	0.217	PCI/G	0.105	PCI/G	1	11	198	G	PCI/G	PR	
9202-0000-133-S-02	MSR#05-0800	131691002	406824	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.551	0.288	PCI/G	0		3/3/2005	38415.71319	6:25	0.35	PCI/G	0.163	PCI/G	1	11	198	G	PCI/G	PR	
9202-0000-133-S-02	MSR#05-0800	131691002	406824	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.877	0.138	PCI/G	0		3/3/2005	38415.71319	6:25	0.085	PCI/G	0.0399	PCI/G	1	11	198	G	PCI/G	PR	
9202-0000-133-S-02	MSR#05-0800	131691002	406824	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0	0.057	PCI/G	0	UUI	3/3/2005	38415.71319	6:25	0.0659	PCI/G	0.0312	PCI/G	1	11	198	G	PCI/G	PR	
9202-0000-133-S-02	MSR#05-0800	131691002	406824	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.00883	0.0232	PCI/G	0	U	3/3/2005	38415.71319	6:25	0.0429	PCI/G	0.0199	PCI/G	1	11	198	G	PCI/G	PR	
9202-0000-133-S-02	MSR#05-0800	131691002	406824	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0119	0.0282	PCI/G	0	U	3/3/2005	38415.71319	6:25	0.0549	PCI/G	0.0252	PCI/G	1	11	198	G	PCI/G	PR	
9202-0000-133-S-02	MSR#05-0800	131691002	406824	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0282	0.0678	PCI/G	0	U	3/3/2005	38415.71319	6:25	0.131	PCI/G	0.0625	PCI/G	1	11	198	G	PCI/G	PR	
9202-0000-133-S-02	MSR#05-0800	131691002	406824	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0376	0.0817	PCI/G	0	U	3/3/2005	38415.71319	6:25	0.146	PCI/G	0.0667	PCI/G	1	11	198	G	PCI/G	PR	
9202-0000-133-S-02	MSR#05-0800	131691002	406824	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0329	0.0911	PCI/G	0	U	3/3/2005	38415.71319	6:25	0.143	PCI/G	0.0691	PCI/G	1	11	198	G	PCI/G	PR	
9202-0000-133-S-02	MSR#05-0800	131691002	406824	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.792	0.0979	PCI/G	0		3/3/2005	38415.71319	6:25	0.0828	PCI/G	0.0399	PCI/G	1	11	198	G	PCI/G	PR	
9202-0000-133-S-02	MSR#05-0800	131691002	406824	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	1.04	0.148	PCI/G	0		3/3/2005	38415.71319	6:25	0.0891	PCI/G	0.0423	PCI/G	1	11	198	G	PCI/G	PR	
9202-0000-133-S-02	MSR#05-0800	131691002	406824	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.0275	0.0237	PCI/G	0	U	3/3/2005	38415.71319	6:25	0.0393	PCI/G	0.018	PCI/G	1	11	198	G	PCI/G	PR	
9202-0000-133-S-02	MSR#05-0800	131691002	406824	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00499	0.0222	PCI/G	0	U	3/3/2005	38415.71319	6:25	0.0425	PCI/G	0.0199	PCI/G	1	11	198	G	PCI/G	PR	
9202-0000-133-S-02	MSR#05-0800	131691002	406824	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	14	1.74	PCI/G	0		3/3/2005	38415.71319	6:25	0.418	PCI/G	0.186	PCI/G	1	11	198	G	PCI/G	PR	
9202-0000-133-S-02	MSR#05-0800	131691002	406824	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.877	0.138	PCI/G	0		3/3/2005	38415.71319	6:25	0.085	PCI/G	0.0399	PCI/G	1	11	198	G	PCI/G	PR	
9202-0000-133-S-02	MSR#05-0800	131691002	406824	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00214	0.0227	PCI/G	0	U	3/3/2005	38415.71319	6:25	0.0424	PCI/G	0.02	PCI/G	1	11	198	G	PCI/G	PR	
9202-0000-133-S-02	MSR#05-0800	131691002	406923	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00304	0.00719	PCI/G	0	U	4/3/2005	38414.10208	11:45	0.015	PCI/G	0.00701	PCI/G	1	11	12.7	G	PCI/G	PR	
9202-0000-133-S-02	MSR#05-0800	131691002	406824	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.271	0.0582	PCI/G	0		3/3/2005	38415.71319	6:25	0.0454	PCI/G	0.0213	PCI/G	1	11	198	G	PCI/G	PR	
9202-0000-133-S-02	MSR#05-0800	131691002	409871	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	0.962	6.67	PCI/G	0	U		30/03/2005	1:17	11.6	PCI/G	5.56	PCI/G	1	11	1.98	G	PCI/G	PR	
9202-0000-133-S-03	MSR#05-0800	131691003	406824	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.417	0.205	PCI/G	0		3/3/2005	38415.71319	8:48	0.19	PCI/G	0.0895	PCI/G	1	9.9	21.2	G	PCI/G	PR	
9202-0000-133-S-03	MSR#05-0800	131691003	406824	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0597	0.107	PCI/G	0	U	3/3/2005	38415.71319	8:48	0.156	PCI/G	0.076	PCI/G	1	9.9	21.2	G	PCI/G	PR	
9202-0000-133-S-03	MSR#05-0800	131691003	412128	14596-10-2	Americium-241	TRG 1	UAM05RCM	AM05RCM	REG	0.054	0.0933	PCI/G	0	U	4/3/2005	38414.10417	9:38	0.193	PCI/G	0.0604	PCI/G	1	9.9	0.255	G	PCI/G	PR	
9202-0000-133-S-03	MSR#05-0800	131691003	406824	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.65	0.412	PCI/G	0		3/3/2005	38415.71319	8:48	0.389	PCI/G	0.184	PCI/G	1	9.9	21.2	G	PCI/G	PR	
9202-0000-133-S-03	MSR#05-0800	131691003	406824	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.607	0.141	PCI/G	0		3/3/2005	38415.71319	8:48	0.0997	PCI/G	0.0477	PCI/G	1	9.9	21.2	G	PCI/G	PR	
9202-0000-133-S-03	MSR#05-0800	131691003	407148	14762-75-5	Carbon-14	TRG 5	ULSC	LSC	REG	-0.04	0.0899	PCI/G	0	U		19/03/2005	2:47	0.154	PCI/G	0.0761	PCI/G	1	9.9	9.3	G	PCI/G	PR	
9202-0000-133-S-03	MSR#05-0800	131691003	406824	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0	0.0433	PCI/G	0	UUI	3/3/2005	38415.71319	8:48	0.0634	PCI/G	0.0301	PCI/G	1	9.9	21.2	G	PCI/G	PR	
9202-0000-133-S-03	MSR#05-0800	131691003	406824	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.024	0.0392	PCI/G	0	U	3/3/2005	38415.71319	8:48	0.0483	PCI/G	0.0229	PCI/G	1	9.9	21.2	G	PCI/G	PR	
9202-0000-133-S-03	MSR#05-0800	131691003	406824	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.00627	0.0361	PCI/G	0	U	3/3/2005	38415.71319	8:48	0.0626	PCI/G	0.029	PCI/G	1	9.9	21.2	G	PCI/G	PR	
9202-0000-133-S-03	MSR#05-0800	131691003	412128	OER-100-93	Curium-242	TRG 1	UAM05RCM	AM05RCM	REG	0.0241	0.0639	PCI/G	0	U	4/3/2005	38414.10417	9:38	0.158	PCI/G	0.0362	PCI/G	1	9.9	0.255	G	PCI/G	PR	
9202-0000-133-S-03	MSR#05-0800	131691003	412128	OER-101-57	Curium-243/244	TRG 1	UAM05RCM	AM05RCM	REG	-0.00638	0.0125	PCI/G	0	U	4/3/2005	38414.10417	9:38	0.133	PCI/G	0.0303	PCI/G	1	9.9	0.255	G	PCI/G	PR	
9202-0000-133-S-03	MSR#05-0800	131691003	406824	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0295	0.0787	PCI/G	0	U	3/3/2005	38415.71319	8:48	0.127	PCI/G	0.0612	PCI/G	1	9.9	21.2	G	PCI/G	PR	
9202-0000-133-S-03	MSR#05-0800	131691003	406824	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0681	0.108	PCI/G	0	U	3/3/2005	38415.71319	8:48	0.192	PCI/G	0.0897	PCI/G	1	9.9	21.2	G	PCI/G	PR	
9202-0000-133-S-03	MSR#05-0800	131691003	406824	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0555	0.0732	PCI/G	0	U	3/3/2005	38415.71319	8:48	0.109	PCI/G	0.0532	PCI/G	1	9.9	21.2	G	PCI/G	PR	
9202-0000-133-S-03	MSR#05-0800	131691003	407185	14681-59-5	Iron-55	TRG 26	ULSC	LSC	REG	-35.9	59.9	PCI/G	0	U	4/3/2005	38414.10417	5:31	83.8	PCI/G	41	PCI/G	1	9.9	0.177	G	PCI/G	PR	
9202-0000-133-S-03	MSR#05-0800	131691003	406824	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.588	0.0945	PCI/G	0		3/3/2005	38415.71319	8:48	0.067	PCI/G	0.0325	PCI/G	1	9.9	21.2	G	PCI/G	PR	
9202-0000-133-S-03	MSR#05-0800	131691003	406824	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.602	0.135	PCI/G	0		3/3/2005	38415.71319	8:48	0.0896	PCI/G	0.0432	PCI/G	1	9.9	21.2	G	PCI/G	PR	
9202-0000-133-S-03	MSR#05-0800	131691003	406824	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0352	0.0335	PCI/G	0	U	3/3/2005	38415.71319	8:48	0.0571	PCI/G	0.0271	PCI/G	1	9.9	21.2	G	PCI/G	PR	
9202-0000-133-S-03	MSR#05-0800	131691003	407187	13781-37-8	Nickel-63	TRG 30	ULSC	LSC	REG	-3.49	8.66	PCI/G	0	U	4/3/2005	38414.10347	9:24	15.1	PCI/G	7.36	PCI/G	1	9.9	0.177	G	PCI/G	PR	
9202-0000-133-S-03	MSR#05-0800	131691003	406824	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0308	0.0298	PCI/G	0	U	3/3/2005	38415.71319	8:48	0.0504	PCI/G	0.024	PCI/G	1	9.9	21.2	G	PCI/G	PR	
9202-0000-133-S-03	MSR#05-0800	131691003	409820	13981-16-3	Plutonium-238	TRG 32	UPU11RCM	PU11RCM	REG	0.0234	0.0458	PCI/G	0	U	4/3/2005	38414.09861	8:28	0.0633	PCI/G	0	PCI/G	1	9.9	0.255	G	PCI/G	PR	
9202-0000-133-S-03	MSR#05-0800	131691003	409820	OER-100-70	Plutonium-239/240	TRG 32	UPU11RCM	PU11RCM	REG	0.0532	0.0815	PCI/G	0	U	4/3/2005	38414.09861	8:28	0.155	PCI/G	0.0461	PCI/G	1	9.9	0.255	G	PCI/G	PR	
9202-0000-133-S-03	MSR#05-0800	131691003	409821	14119-32-5	Plutonium-241	TRG 36	UPU11RCM	PU11RCM	REG	-0.107	6.8	PCI/G	0	U	4/3/2005	38414.10069	6:23	11.7	PCI/G	5.71	PCI/G	1	9.9	0.513	G	PCI/G	PR	
9202-0000-133-S-03	MSR#05-0800	131691003	406824	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	17.9	1.75	PCI/G	0		3/3/2005	38415.71319	8:48	0.558	PCI/G	0.256	PCI/G	1	9.9	21.2	G	PCI/G	PR	
9202-0000-133-S-03	MSR#05-0800	131691003	406824	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.607	0.141	PCI/G	0		3/3/2005	38415.71319	8:48	0.0997	PCI/G	0.0477	PCI/G	1	9.9	21.2	G	PCI/G	PR	
9202-0000-133-S-03	MSR#05-0800	131691003	406824	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.0114	0.0267	PCI/G	0	U	3/3/2005	38415.71319	8:48	0.0416	PCI/G	0.0199	PCI/G	1	9.9	21.2	G	PCI/G	PR	
9202-0000-133-S-03	MSR#05-0800	131691003	406923	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.0034	0.00993	PCI/G	0	U	4/3/2005	38414.10208	11:45	0.0209	PCI/G	0.00976	PCI/G	1	9.9	12.3	G	PCI/G	PR	
9202-0000-133-S-03	MSR#05-0800	131691003	409273	14133-76-7	Technetium-99	TRG 46	UTC02RCM	TC02RCM	REG	0.46	0.179	PCI/G	0			21/03/2005	7:31	0.285	PCI/G	0.139	PCI/G	1	9.9	7.06	G	PCI/G	PR	
9202-0000-133-S-03	MSR#05-0800	131691003	406824	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.216	0.0611	PCI/G	0		3/3/2005	38415.71319	8:48	0.0465	PCI/G	0.0221	PCI/G	1	9.9	21.2	G	PCI/G	PR	
9202-0000-133-S-03	MSR#05-0800	131691003	409871	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	4.12	7.03	PCI/G	0	U		30/03/2005	1:49	11.9	PCI/G	5.74	PCI/G	1	9.9	1.96	G	PCI/G	PR	
9202-0000-135-S-01	MSR#05-0800	131691004	406824	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.346	0.166	PCI/G	0		3/3/2005	38415.71319	8:49	0.117	PCI/G	0.0554	PCI/G	1	2.8	24.3	G	PCI/G	PR	
9202-0000-135-S-01	MSR#05-0800	131691004	406824	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.00988	0.0642	PCI/G	0	U	3/3/2005	38415.71319	8:49	0.0954	PCI/G	0.0464	PCI/G	1	2.8	24.3	G	PCI/G	PR	
9202-0000-135-S-01	MSR#05-0800	131691004	406824	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.272	0.262	PCI/G	0	U	3/3/2005	38415.71319	8:49	0.274	PCI/G	0.131	PCI/G	1	2.8	24.3	G	PCI/G	PR	
9202-0000-135-S-01	MSR#05-0800	131691004	406824	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.264	0.0946	PCI/G	0		3/3/2005	38415.71319	8:49	0.0673	PCI/G	0.0324	PCI/G	1	2.8	24.3	G	PCI/G	PR	
9202-0000-135-S-01	MSR#05-0800	131691004	406824	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0	0.043	PCI/G	0	UUI	3/3/2005	38415.71319	8:49	0.0432	PCI/G	0.0207	PCI/G	1	2.8	24.3	G	PCI/G	PR	
9202-0000-135-S-01	MSR#05-0800	131691004	406824	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.00122	0.0217	PCI/G	0	U	3/3/2005	38415.71319	8:49	0.0349	PCI/G	0.0167	PCI/G	1	2.8	24.3	G	PCI/G	PR	
9202-0000-135-S-01	MSR#05-0800	131691004	406824	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.000725	0.0273	PCI/G	0	U	3/3/2005	38415.71319	8:49	0.0451	PCI/G	0.0213	PCI/G	1	2.8	24.3	G	PCI/G	PR	
9202-0000-135-S-01	MSR#05-0800	131691004	406824	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0177	0.0561	PCI/G	0	U	3/3/2005	38415.71319	8:49	0.0883	PCI/G	0.0428	PCI/G	1	2.8	24.3	G	PCI/G	PR	
9202-0000-135-S-01	MSR#05-0800	131691004	406824	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0547	0.0768	PCI/G	0	U	3/3/2005	38415.71319	8:49	0.121	PCI/G	0.0569	PCI/G	1	2.8	24.3	G	PCI/G	PR	
9202-0000-135-S-01	MSR#05-0800	131691004	406824	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0788	0.0575	PCI/G	0	U	3/3/2005	38415.71319	8:49	0.0884	PCI/G	0.0432	PCI/G	1	2.8	24.3	G	PCI/G	PR	
9202-0000-135-S-01	MSR#05-0800	131691004	406824	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.332	0.0712	PCI/G	0		3/3/2005	38415.71319	8:49	0.0444	PCI/G	0.0215	PCI/G	1	2.8	24.3	G	PCI/G	PR	
9202-0000-135-S-01	MSR#05-0800	131691004	406824	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.352	0.0847	PCI/G	0		3/3/2005	38415.71319	8:49	0.0589	PCI/G	0.0285	PCI/G	1	2.8	24.3	G	PCI/G	PR	
9202-0000-135-S-01	MSR#05-0800	131691004	406824	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0056	0.0245	PCI/G	0	U	3/3/2005	38415.71319	8:49	0.0397	PCI/G	0.019	PCI/G	1	2.8	24.3	G	PCI/G	PR	
9202-0000-135-S-01	MSR#05-0800	131691004	406824	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.00105	0.0214	PCI/G	0	U	3/3/2005	38415.71319	8:49	0.0343	PCI/G	0.0165	PCI/G	1	2.8	24.3	G	PCI/G	PR	
9202-0000-135-S-01	MSR#05-0800	131691004	406824	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	5.31	0.749	PCI/G	0		3/3/2005	38415.71319	8:49	0.376	PCI/G	0.175	PCI/G	1	2.8	24.3	G	PCI/G	PR	
9202-0000-135-S-01	MSR#05-0800	131691004	406824	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.264	0.0946	PCI/G	0		3/3/2005	38415.71319	8:49	0.0673	PCI/G	0.0324	PCI/G	1	2.8	24.3	G	PCI/G	PR	

9202-0000-135-S-01	MSR#05-0800	131691004	406824	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00708	0.0191	PCI/G	0	U	3/3/2005	38415.71319	8:49	0.0291	PCI/G	0.014	PCI/G	1	2.8	24.3	G	PCI/G		PR	
9202-0000-135-S-01	MSR#05-0800	131691004	406923	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.0907	0.0239	PCI/G	0		4/3/2005	38414.10347	6:01	0.0326	PCI/G	0.0148	PCI/G	1	2.8	8	G	PCI/G		PR	
9202-0000-135-S-01	MSR#05-0800	131691004	406824	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0	0.0385	PCI/G	0	UUI	3/3/2005	38415.71319	8:49	0.0473	PCI/G	0.023	PCI/G	1	2.8	24.3	G	PCI/G		PR	
9202-0000-135-S-01	MSR#05-0800	131691004	409871	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-1.11	6.59	PCI/G	0	U		30/03/2005	4:24	11.6	PCI/G	5.57	PCI/G	1	2.8	2.01	G	PCI/G		PR	
9202-0000-137-S-01	MSR#05-0800	131691005	406824	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.261	0.174	PCI/G	0		3/3/2005	38415.71319	6:26	0.109	PCI/G	0.0491	PCI/G	1	2.3	202	G	PCI/G		PR	
9202-0000-137-S-01	MSR#05-0800	131691005	406824	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0181	0.0745	PCI/G	0	U	3/3/2005	38415.71319	6:26	0.133	PCI/G	0.0637	PCI/G	1	2.3	202	G	PCI/G		PR	
9202-0000-137-S-01	MSR#05-0800	131691005	406824	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.302	0.22	PCI/G	0		3/3/2005	38415.71319	6:26	0.224	PCI/G	0.101	PCI/G	1	2.3	202	G	PCI/G		PR	
9202-0000-137-S-01	MSR#05-0800	131691005	406824	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.358	0.0794	PCI/G	0		3/3/2005	38415.71319	6:26	0.0708	PCI/G	0.0331	PCI/G	1	2.3	202	G	PCI/G		PR	
9202-0000-137-S-01	MSR#05-0800	131691005	406824	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0339	0.0195	PCI/G	0	U	3/3/2005	38415.71319	6:26	0.0424	PCI/G	0.0196	PCI/G	1	2.3	202	G	PCI/G		PR	
9202-0000-137-S-01	MSR#05-0800	131691005	406824	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.00441	0.0183	PCI/G	0	U	3/3/2005	38415.71319	6:26	0.0333	PCI/G	0.0153	PCI/G	1	2.3	202	G	PCI/G		PR	
9202-0000-137-S-01	MSR#05-0800	131691005	406824	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.00166	0.0166	PCI/G	0	U	3/3/2005	38415.71319	6:26	0.0328	PCI/G	0.0143	PCI/G	1	2.3	202	G	PCI/G		PR	
9202-0000-137-S-01	MSR#05-0800	131691005	406824	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.00656	0.0468	PCI/G	0	U	3/3/2005	38415.71319	6:26	0.0919	PCI/G	0.0433	PCI/G	1	2.3	202	G	PCI/G		PR	
9202-0000-137-S-01	MSR#05-0800	131691005	406824	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0207	0.049	PCI/G	0	U	3/3/2005	38415.71319	6:26	0.0882	PCI/G	0.0384	PCI/G	1	2.3	202	G	PCI/G		PR	
9202-0000-137-S-01	MSR#05-0800	131691005	406824	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	-0.00261	0.048	PCI/G	0	U	3/3/2005	38415.71319	6:26	0.0937	PCI/G	0.0448	PCI/G	1	2.3	202	G	PCI/G		PR	
9202-0000-137-S-01	MSR#05-0800	131691005	406824	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.304	0.0465	PCI/G	0		3/3/2005	38415.71319	6:26	0.0489	PCI/G	0.0232	PCI/G	1	2.3	202	G	PCI/G		PR	
9202-0000-137-S-01	MSR#05-0800	131691005	406824	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.411	0.0751	PCI/G	0		3/3/2005	38415.71319	6:26	0.0699	PCI/G	0.033	PCI/G	1	2.3	202	G	PCI/G		PR	
9202-0000-137-S-01	MSR#05-0800	131691005	406824	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.00264	0.017	PCI/G	0	U	3/3/2005	38415.71319	6:26	0.032	PCI/G	0.0146	PCI/G	1	2.3	202	G	PCI/G		PR	
9202-0000-137-S-01	MSR#05-0800	131691005	406824	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0123	0.0163	PCI/G	0	U	3/3/2005	38415.71319	6:26	0.0325	PCI/G	0.015	PCI/G	1	2.3	202	G	PCI/G		PR	
9202-0000-137-S-01	MSR#05-0800	131691005	406824	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	5.19	0.712	PCI/G	0		3/3/2005	38415.71319	6:26	0.289	PCI/G	0.123	PCI/G	1	2.3	202	G	PCI/G		PR	
9202-0000-137-S-01	MSR#05-0800	131691005	406824	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.358	0.0794	PCI/G	0		3/3/2005	38415.71319	6:26	0.0708	PCI/G	0.0331	PCI/G	1	2.3	202	G	PCI/G		PR	
9202-0000-137-S-01	MSR#05-0800	131691005	406824	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.000793	0.0153	PCI/G	0	U	3/3/2005	38415.71319	6:26	0.0293	PCI/G	0.0136	PCI/G	1	2.3	202	G	PCI/G		PR	
9202-0000-137-S-01	MSR#05-0800	131691005	406923	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.00258	0.0138	PCI/G	0	U	4/3/2005	38414.10208	11:46	0.0297	PCI/G	0.0142	PCI/G	1	2.3	12.8	G	PCI/G		PR	
9202-0000-137-S-01	MSR#05-0800	131691005	406824	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.106	0.0361	PCI/G	0		3/3/2005	38415.71319	6:26	0.0314	PCI/G	0.0145	PCI/G	1	2.3	202	G	PCI/G		PR	
9202-0000-137-S-01	MSR#05-0800	131691005	409871	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	2.42	5.96	PCI/G	0	U		30/03/2005	4:56	10.2	PCI/G	4.91	PCI/G	1	2.3	1.99	G	PCI/G		PR	
9202-0000-138-S-01	MSR#05-0800	131691006	406824	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.344	0.0853	PCI/G	0		3/3/2005	38415.71319	7:49	0.0494	PCI/G	0.0235	PCI/G	1	3	190	G	PCI/G		PR	
9202-0000-138-S-01	MSR#05-0800	131691006	406824	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.00605	0.0492	PCI/G	0	U	3/3/2005	38415.71319	7:49	0.0997	PCI/G	0.0486	PCI/G	1	3	190	G	PCI/G		PR	
9202-0000-138-S-01	MSR#05-0800	131691006	406824	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.238	0.107	PCI/G	0		3/3/2005	38415.71319	7:49	0.108	PCI/G	0.0514	PCI/G	1	3	190	G	PCI/G		PR	
9202-0000-138-S-01	MSR#05-0800	131691006	406824	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.38	0.0484	PCI/G	0		3/3/2005	38415.71319	7:49	0.0262	PCI/G	0.0126	PCI/G	1	3	190	G	PCI/G		PR	
9202-0000-138-S-01	MSR#05-0800	131691006	406824	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0	0.0144	PCI/G	0	UUI	3/3/2005	38415.71319	7:49	0.018	PCI/G	0.00866	PCI/G	1	3	190	G	PCI/G		PR	
9202-0000-138-S-01	MSR#05-0800	131691006	406824	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.00642	0.0135	PCI/G	0	U	3/3/2005	38415.71319	7:49	0.014	PCI/G	0.00672	PCI/G	1	3	190	G	PCI/G		PR	
9202-0000-138-S-01	MSR#05-0800	131691006	406824	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.00082	0.00833	PCI/G	0	U	3/3/2005	38415.71319	7:49	0.015	PCI/G	0.00703	PCI/G	1	3	190	G	PCI/G		PR	
9202-0000-138-S-01	MSR#05-0800	131691006	406824	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.00787	0.0213	PCI/G	0	U	3/3/2005	38415.71319	7:49	0.0373	PCI/G	0.0181	PCI/G	1	3	190	G	PCI/G		PR	
9202-0000-138-S-01	MSR#05-0800	131691006	406824	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0027	0.0239	PCI/G	0	U	3/3/2005	38415.71319	7:49	0.0437	PCI/G	0.0206	PCI/G	1	3	190	G	PCI/G		PR	
9202-0000-138-S-01	MSR#05-0800	131691006	406824	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0	0.038	PCI/G	0	UUI	3/3/2005	38415.71319	7:49	0.042	PCI/G	0.0205	PCI/G	1	3	190	G	PCI/G		PR	
9202-0000-138-S-01	MSR#05-0800	131691006	406824	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.32	0.0384	PCI/G	0		3/3/2005	38415.71319	7:49	0.0217	PCI/G	0.0106	PCI/G	1	3	190	G	PCI/G		PR	
9202-0000-138-S-01	MSR#05-0800	131691006	406824	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.402	0.0518	PCI/G	0		3/3/2005	38415.71319	7:49	0.0272	PCI/G	0.0132	PCI/G	1	3	190	G	PCI/G		PR	
9202-0000-138-S-01	MSR#05-0800	131691006	406824	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.00724	0.00768	PCI/G	0	U	3/3/2005	38415.71319	7:49	0.0144	PCI/G	0.00686	PCI/G	1	3	190	G	PCI/G		PR	
9202-0000-138-S-01	MSR#05-0800	131691006	406824	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00475	0.0103	PCI/G	0	U	3/3/2005	38415.71319	7:49	0.0131	PCI/G	0.0063	PCI/G	1	3	190	G	PCI/G		PR	
9202-0000-138-S-01	MSR#05-0800	131691006	406824	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	5.36	0.536	PCI/G	0		3/3/2005	38415.71319	7:49	0.137	PCI/G	0.0638	PCI/G	1	3	190	G	PCI/G		PR	
9202-0000-138-S-01	MSR#05-0800	131691006	406824	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.38	0.0484	PCI/G	0		3/3/2005	38415.71319	7:49	0.0262	PCI/G	0.0126	PCI/G	1	3	190	G	PCI/G		PR	
9202-0000-138-S-01	MSR#05-0800	131691006	406824	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.0003	0.00671	PCI/G	0	U	3/3/2005	38415.71319	7:49	0.0126	PCI/G	0.00609	PCI/G	1	3	190	G	PCI/G		PR	
9202-0000-138-S-01	MSR#05-0800	131691006	406923	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.00203	0.00932	PCI/G	0	U	4/3/2005	38414.10208	11:46	0.0207	PCI/G	0.00968	PCI/G	1	3	12.1	G	PCI/G		PR	
9202-0000-138-S-01	MSR#05-0800	131691006	406824	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.121	0.021	PCI/G	0		3/3/2005	38415.71319	7:49	0.0137	PCI/G	0.00656	PCI/G	1	3	190	G	PCI/G		PR	
9202-0000-138-S-01	MSR#05-0800	131691006	409871	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	6.59	6.78	PCI/G	0	U		30/03/2005	5:28	11.3	PCI/G	5.44	PCI/G	1	3	2.07	G	PCI/G		PR	
9202-0000-139-S-01	MSR#05-0800	131691007	406824	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.723	0.174	PCI/G	0		3/3/2005	38415.71319	7:49	0.0921	PCI/G	0.0435	PCI/G	1	64	113	G	PCI/G		PR	
9202-0000-139-S-01	MSR#05-0800	131691007	406824	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.000622	0.0208	PCI/G	0	U	3/3/2005	38415.71319	7:49	0.0354	PCI/G	0.0174	PCI/G	1	64	113	G	PCI/G		PR	
9202-0000-139-S-01	MSR#05-0800	131691007	406824	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.578	0.259	PCI/G	0		3/3/2005	38415.71319	7:49	0.211	PCI/G	0.101	PCI/G	1	64	113	G	PCI/G		PR	
9202-0000-139-S-01	MSR#05-0800	131691007	406824	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.859	0.117	PCI/G	0		3/3/2005	38415.71319	7:49	0.0522	PCI/G	0.0251	PCI/G	1	64	113	G	PCI/G		PR	
9202-0000-139-S-01	MSR#05-0800	131691007	406824	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0152	0.0302	PCI/G	0	U	3/3/2005	38415.71319	7:49	0.0356	PCI/G	0.0171	PCI/G	1	64	113	G	PCI/G		PR	
9202-0000-139-S-01	MSR#05-0800	131691007	406824	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.0171	0.0213	PCI/G	0	U	3/3/2005	38415.71319	7:49	0.0267	PCI/G	0.0127	PCI/G	1	64	113	G	PCI/G		PR	
9202-0000-139-S-01	MSR#05-0800	131691007	406824	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.00848	0.0186	PCI/G	0	U	3/3/2005	38415.71319	7:49	0.0342	PCI/G	0.0161	PCI/G	1	64	113	G	PCI/G		PR	
9202-0000-139-S-01	MSR#05-0800	131691007	406824	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0086	0.0368	PCI/G	0	U	3/3/2005	38415.71319	7:49	0.0637	PCI/G	0.0308	PCI/G	1	64	113	G	PCI/G		PR	
9202-0000-139-S-01	MSR#05-0800	131691007	406824	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0257	0.0532	PCI/G	0	U	3/3/2005	38415.71319	7:49	0.0867	PCI/G	0.0407	PCI/G	1	64	113	G	PCI/G		PR	
9202-0000-139-S-01	MSR#05-0800	131691007	406824	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0	0.0544	PCI/G	0	UUI	3/3/2005	38415.71319	7:49	0.0526	PCI/G	0.0257	PCI/G	1	64	113	G	PCI/G		PR	
9202-0000-139-S-01	MSR#05-0800	131691007	406824	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.596	0.0639	PCI/G	0		3/3/2005	38415.71319	7:49	0.0331	PCI/G	0.0161	PCI/G	1	64	113	G	PCI/G		PR	
9202-0000-139-S-01	MSR#05-0800	131691007	406824	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.866	0.104	PCI/G	0		3/3/2005	38415.71319	7:49	0.0477	PCI/G	0.0231	PCI/G	1	64	113	G	PCI/G		PR	
9202-0000-139-S-01	MSR#05-0800	131691007	406824	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.00701	0.017	PCI/G	0	U	3/3/2005	38415.71319	7:49	0.0301	PCI/G	0.0144	PCI/G	1	64	113	G	PCI/G		PR	
9202-0000-139-S-01	MSR#05-0800	131691007	406824	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00306	0.0149	PCI/G	0	U	3/3/2005	38415.71319	7:49	0.0263	PCI/G	0.0126	PCI/G	1	64	113	G	PCI/G		PR	
9202-0000-139-S-01	MSR#05-0800	131691007	406824	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	5.19	0.815	PCI/G	0		3/3/2005	38415.71319	7:49	0.309	PCI/G	0.145	PCI/G	1	64	113	G	PCI/G		PR	
9202-0000-139-S-01	MSR#05-0800	131691007	406824	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.859	0.117	PCI/G	0		3/3/2005	38415.71319	7:49	0.0522	PCI/G	0.0251	PCI/G	1	64	113	G	PCI/G		PR	
9202-0000-139-S-01	MSR#05-0800	131691007	406824	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.0082	0.0136	PCI/G	0	U	3/3/2005	38415.71319	7:49	0.0237	PCI/G	0.0114	PCI/G	1	64	113	G	PCI/G		PR	
9202-0000-139-S-01	MSR#05-0800	131691007	406923	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.00584	0.0108	PCI/G	0	U	4/3/2005	38414.10208	11:46	0.0244	PCI/G	0.0115	PCI/G	1	64	12.9	G	PCI/G		PR	
9202-0000-139-S-01	MSR#05-0800	131691007	406824	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.231	0.0452	PCI/G	0		3/3/2005	38415.71319	7:49	0.0281	PCI/G	0.0135	PCI/G	1	64	113	G	PCI/G		PR	
9202-0000-139-S-01	MSR#05-0800	131691007	409871	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	2.17	7.04	PCI/G	0	U		30/03/2005	6:00	12.1	PCI/G	5.83	PCI/G	1	64	1.94	G	PCI/G		PR	
	MSR#05-0800	1200801328	406824	14331-83-0	Actinium-228	TRG	U	HASL300	LB1	0.0387	0.0528	PCI/G	0	U		7/3/2005	6:27	0.115	PCI/G	0.0511	PCI/G	1	0	200	G	PCI/G		PR	
	MSR#05-0800	1200801328	406824	14596-10-2	Americium-241	TRG	U	HASL300	LB1	-0.0605	0.071	PCI/G	0	U		7/3/2005	6:27	0.117	PCI/G	0.0549	PCI/G	1	0	200	G	PCI/G		PR	
	MSR#05-0800	1200801328	406824	14913-49-6	Bismuth-212	TRG	U	HASL300	LB1	0.0141	0.109	PCI/G	0	U		7/3/2005	6:27	0.214	PCI/G	0.0946	PCI/G	1	0	200	G	PCI/G		PR	
	MSR#05-0800	1200801328	406824	14733-03-0	Bismuth-214	TRG	U	HASL300	LB1	-0.0129	0.031	PCI/G	0	U		7/3/2005	6:27	0.0559	PCI/G	0.0252	PCI/G	1	0	200	G	PCI/G		PR	
	MSR#05-0800	1200801328	406824	13967-70-9	Cesium-134	TRG	U	HASL300	LB1	0.0203	0.0165	PCI/G	0	U		7/3/2005	6:27	0.0376	PCI/G	0.0169	PCI/G	1	0	200	G	PCI/G		PR	
	MSR#05-0800	1200801328	406824	10045-97-3	Cesium-137	TRG	U	HASL300	LB1	-0.008	0.0163	PCI/G	0	U		7/3/2005	6:27	0.0291	PCI/G	0.0129	PCI/G	1	0	200	G	PCI/G		PR	
	MSR#05-0800	1200801328	406824	10198-40-0	Cobalt-60	TRG	U	HASL300	LB1	-0.00224	0.0121	PCI/G	0	U		7/3/2005	6:27	0.024	PCI/G	0.00951	PCI/G	1	0	200	G	PCI/G		PR	
	MSR#05-0800	1200801328	406824	14683-23-9	Europium-152	TRG	U	HASL300	LB1	-0.013	0.0387	PCI/G	0	U		7/3/2005	6:27	0.0739	PCI/G	0.0339	PCI/G	1	0	200	G	PCI/G		PR	
	MSR#05-0800	1200801328	406824	15585-10-1	Europium-154	TRG	U	HASL300	LB1	0.0184	0.0392	PCI/G	0	U		7/3/2005	6:27	0.0867	PCI/G	0.0366	PCI/G	1	0	200	G	PCI/G		PR	
	MSR#05-0800	1200801328	406824	14391-16-3	Europium-155	TRG	U	HASL300	LB1	0.0387	0.0392	PCI/G	0	U		7/3/2005	6:27	0.0669	PCI/G	0.0312	PCI/G	1	0	200	G	PCI/G		PR	
	MSR#05-0800	1200801328	406824	15092-94-1	Lead-212	TRG	U	HASL300	LB1	0.0174	0.0238	PCI/G	0	U		7/3/2005	6:27	0.0474	PCI/G	0.0223	PCI/G	1	0	200	G	PCI/G		PR	
	MSR#05-0800	1200801328	406824	15067-28-4	Lead-214	TRG	U	HASL300	LB1	0.00804	0.0275	PCI/G	0	U		7/3/2005	6:27	0.0559	PCI/G	0.0257	PCI/G	1	0	200	G	PCI/G		PR	
	MSR#05-0800	1200801328	406824	13966-31-9	Manganese-54	TRG	U	HASL300	LB1	-0.000198	0.0135	PCI/G	0	U		7/3/2005	6:27	0.027	PCI/G	0.0118	PCI/G	1	0	200	G	PCI/G		PR	
	MSR#05-0800	1200801328	406824	14681-63-1	Niobium-94	TRG	U	HASL300	LB1	-0.00341	0.0137	PCI/G	0	U		7/3/2005	6:27	0.0253	PCI/G	0.0112	PCI/G	1	0	200	G	PCI/G		PR	
	MSR#05-0800	1200801328	406824	13966-00-2	Potassium-40	TRG	U	HASL300	LB1	0.0885	0.163	PCI/G	0	U		7/3/2005	6:27	0.212	PCI/G	0.0814	PCI/G	1	0	200	G	PCI/G		PR	
	MSR#05-0800	1200801328	406824	13982-63-3	Radium-226	TRG	U	HASL300	LB1	-0.0129	0.031	PCI/G	0	U		7/3/2005	6:27	0.0559	PCI/G	0.0252	PCI/G	1	0	200	G	PCI/G		PR	
	MSR#05-0800	1200801328	406824	14391-65-2	Silver-108m	TRG	U	HASL300	LB1	0.00656	0.0131	PCI/G	0	U		7/3/2005	6:27	0.0271	PCI/G	0.0123	PCI/G	1	0	200	G	PCI/G		PR	
	MSR#05-0800	1200801328	406824	14913-50-9	Thallium-208	TRG	U	HASL300	LB1	0.00693	0.0161	PCI/G	0	U		7/3/2005	6:27	0.0324	PCI/G	0.0147	PCI/G	1	0	200	G	PCI/G		PR	
9202-0000-133-S-01	MSR#05-0800	1200801329	406824	14331-83-0	Actinium-228	TRG	U	HASL300	LR1	0.539	0.13	PCI/G	0			8/3/2005	7:08	0.0801	PCI/G	0.0372	PCI/G	1	9.3	201	G	PCI/G	0.38	7	PR
9202-0000-133-S-01	MSR#05-0800	1200801329	406824	14596-10-2	Americium-241	TRG	U	HASL300	LR1	-0.0488	0.0948	PCI/G	0	U		8/3/2005	7:08	0.172	PCI/G	0.083	PCI/G	1	9.3	201	G	PCI/G	-0.0	659	PR
9202-0000-133-S-01	MSR#05-0800	1200801329	406824	14913-49-6	Bismuth-212	TRG	U	HASL300	LR1	0.244	0.127	PCI/G	0			8/3/2005	7:08	0.168	PCI/G	0.0783	PCI/G	1	9.3	201	G	PCI/G	0.00	PR	
9202-0000-133-S-01	MSR#05-0800	1200801329	406824	14733-03-0	Bismuth-214	TRG	U	HASL300	LR1	0.55	0.0797	PCI/G	0			8/3/2005	7:08	0.0421	PCI/G	0.0198	PCI/G	1	9.3	201	G	PCI/G	0.47	9	PR

9202-0000-133-S-01	MSR#05-0800	1200801329	406824	13967-70-9	Cesium-134	TRG	U	HASL300	LR1	0.0288	0.0199	PCI/G	0	U		8/3/2005	7:08	0.0321	PCI/G	0.0152	PCI/G	1	9.3	201	G		PCI/G	0.03		54	PR	
9202-0000-133-S-01	MSR#05-0800	1200801329	406824	10045-97-3	Cesium-137	TRG	U	HASL300	LR1	0.0118	0.0218	PCI/G	0	U		8/3/2005	7:08	0.0244	PCI/G	0.0115	PCI/G	1	9.3	201	G		PCI/G	0.01		36	PR	
9202-0000-133-S-01	MSR#05-0800	1200801329	406824	10198-40-0	Cobalt-60	TRG	U	HASL300	LR1	-0.00686	0.0153	PCI/G	0	U		8/3/2005	7:08	0.027	PCI/G	0.0124	PCI/G	1	9.3	201	G		PCI/G	-0.0		0734	PR	
9202-0000-133-S-01	MSR#05-0800	1200801329	406824	14683-23-9	Europium-152	TRG	U	HASL300	LR1	-0.02	0.0367	PCI/G	0	U		8/3/2005	7:08	0.0645	PCI/G	0.0308	PCI/G	1	9.3	201	G		PCI/G	-0.0		0317	PR	
9202-0000-133-S-01	MSR#05-0800	1200801329	406824	15585-10-1	Europium-154	TRG	U	HASL300	LR1	0.0102	0.0421	PCI/G	0	U		8/3/2005	7:08	0.0799	PCI/G	0.0369	PCI/G	1	9.3	201	G		PCI/G	0.03		69	PR	
9202-0000-133-S-01	MSR#05-0800	1200801329	406824	14391-16-3	Europium-155	TRG	U	HASL300	LR1	0.0165	0.0396	PCI/G	0	U		8/3/2005	7:08	0.0796	PCI/G	0.0386	PCI/G	1	9.3	201	G		PCI/G	0.05		59	PR	
9202-0000-133-S-01	MSR#05-0800	1200801329	406824	15092-94-1	Lead-212	TRG	U	HASL300	LR1	0.416	0.0553	PCI/G	0			8/3/2005	7:08	0.0367	PCI/G	0.0177	PCI/G	1	9.3	201	G		PCI/G	0.47		3	PR	
9202-0000-133-S-01	MSR#05-0800	1200801329	406824	15067-28-4	Lead-214	TRG	U	HASL300	LR1	0.571	0.0779	PCI/G	0			8/3/2005	7:08	0.0488	PCI/G	0.0234	PCI/G	1	9.3	201	G		PCI/G	0.51		6	PR	
9202-0000-133-S-01	MSR#05-0800	1200801329	406824	13966-31-9	Manganese-54	TRG	U	HASL300	LR1	0.00512	0.0146	PCI/G	0	U		8/3/2005	7:08	0.0242	PCI/G	0.0114	PCI/G	1	9.3	201	G		PCI/G	-0.0		147	PR	
9202-0000-133-S-01	MSR#05-0800	1200801329	406824	14681-63-1	Niobium-94	TRG	U	HASL300	LR1	0.00856	0.0118	PCI/G	0	U		8/3/2005	7:08	0.0228	PCI/G	0.0108	PCI/G	1	9.3	201	G		PCI/G	0.00		493	PR	
9202-0000-133-S-01	MSR#05-0800	1200801329	406824	13966-00-2	Potassium-40	TRG	U	HASL300	LR1	9.62	0.985	PCI/G	0			8/3/2005	7:08	0.239	PCI/G	0.108	PCI/G	1	9.3	201	G		PCI/G	9.50		PR		
9202-0000-133-S-01	MSR#05-0800	1200801329	406824	13982-63-3	Radium-226	TRG	U	HASL300	LR1	0.55	0.0797	PCI/G	0			8/3/2005	7:08	0.0421	PCI/G	0.0198	PCI/G	1	9.3	201	G		PCI/G	0.47		9	PR	
9202-0000-133-S-01	MSR#05-0800	1200801329	406824	14391-65-2	Silver-108m	TRG	U	HASL300	LR1	-0.0096	0.0111	PCI/G	0	U		8/3/2005	7:08	0.0202	PCI/G	0.00954	PCI/G	1	9.3	201	G		PCI/G	-0.0		0974	PR	
9202-0000-133-S-01	MSR#05-0800	1200801329	406824	14913-50-9	Thallium-208	TRG	U	HASL300	LR1	0.161	0.0332	PCI/G	0			8/3/2005	7:08	0.025	PCI/G	0.0118	PCI/G	1	9.3	201	G		PCI/G	0.14		1	PR	
	MSR#05-0800	1200801330	406824	14331-83-0	Actinium-228	TRG	U	HASL300	BS1	0.0986	0.36	PCI/G	0	U		7/3/2005	7:46	0.633	PCI/G	0.304	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-0800	1200801330	406824	14596-10-2	Americium-241	TRG	U	HASL300	BS1	23.1	2.16	PCI/G	0			7/3/2005	7:46	0.555	PCI/G	0.271	PCI/G	1	0	100	G	23	.4	PCI/G		PR		
	MSR#05-0800	1200801330	406824	14913-49-6	Bismuth-212	TRG	U	HASL300	BS1	0.178	0.609	PCI/G	0	U		7/3/2005	7:46	1.06	PCI/G	0.504	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-0800	1200801330	406824	14733-03-0	Bismuth-214	TRG	U	HASL300	BS1	0.0444	0.193	PCI/G	0	U		7/3/2005	7:46	0.276	PCI/G	0.133	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-0800	1200801330	406824	13967-70-9	Cesium-134	TRG	U	HASL300	BS1	-0.0132	0.0929	PCI/G	0	U		7/3/2005	7:46	0.156	PCI/G	0.0743	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-0800	1200801330	406824	10045-97-3	Cesium-137	TRG	U	HASL300	BS1	9.38	0.983	PCI/G	0			7/3/2005	7:46	0.142	PCI/G	0.0681	PCI/G	1	0	100	G	9.	09	PCI/G		PR		
	MSR#05-0800	1200801330	406824	10198-40-0	Cobalt-60	TRG	U	HASL300	BS1	13.3	0.845	PCI/G	0			7/3/2005	7:46	0.133	PCI/G	0.0616	PCI/G	1	0	100	G	13	.0	PCI/G		PR		
	MSR#05-0800	1200801330	406824	14683-23-9	Europium-152	TRG	U	HASL300	BS1	0.0343	0.193	PCI/G	0	U		7/3/2005	7:46	0.332	PCI/G	0.16	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-0800	1200801330	406824	15585-10-1	Europium-154	TRG	U	HASL300	BS1	0.0661	0.179	PCI/G	0	U		7/3/2005	7:46	0.326	PCI/G	0.15	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-0800	1200801330	406824	14391-16-3	Europium-155	TRG	U	HASL300	BS1	0.0175	0.201	PCI/G	0	U		7/3/2005	7:46	0.345	PCI/G	0.167	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-0800	1200801330	406824	15092-94-1	Lead-212	TRG	U	HASL300	BS1	0.0909	0.106	PCI/G	0	U		7/3/2005	7:46	0.19	PCI/G	0.0917	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-0800	1200801330	406824	15067-28-4	Lead-214	TRG	U	HASL300	BS1	-0.0394	0.142	PCI/G	0	U		7/3/2005	7:46	0.239	PCI/G	0.115	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-0800	1200801330	406824	13966-31-9	Manganese-54	TRG	U	HASL300	BS1	0.00579	0.0943	PCI/G	0	U		7/3/2005	7:46	0.158	PCI/G	0.0759	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-0800	1200801330	406824	14681-63-1	Niobium-94	TRG	U	HASL300	BS1	0.00985	0.0719	PCI/G	0	U		7/3/2005	7:46	0.124	PCI/G	0.0591	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-0800	1200801330	406824	13966-00-2	Potassium-40	TRG	U	HASL300	BS1	0.48	0.615	PCI/G	0	U		7/3/2005	7:46	1.19	PCI/G	0.549	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-0800	1200801330	406824	13982-63-3	Radium-226	TRG	U	HASL300	BS1	0.0444	0.193	PCI/G	0	U		7/3/2005	7:46	0.276	PCI/G	0.133	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-0800	1200801330	406824	14391-65-2	Silver-108m	TRG	U	HASL300	BS1	0.0188	0.077	PCI/G	0	U		7/3/2005	7:46	0.13	PCI/G	0.0627	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-0800	1200801330	406824	14913-50-9	Thallium-208	TRG	U	HASL300	BS1	-0.00702	0.0743	PCI/G	0	U		7/3/2005	7:46	0.128	PCI/G	0.0612	PCI/G	1	0	100	G		PCI/G			PR		
	MSR#05-0800	1200801595	406923	10098-97-2	Strontium-90	TRG	U	E905M	LB1	-0.0136	0.00876	PCI/G	0	U		27/03/2005	11:46	0.021	PCI/G	0.01	PCI/G	1	0	12.9	G		PCI/G			PR		
9202-0000-133-S-01	MSR#05-0800	1200801596	406923	10098-97-2	Strontium-90	TRG	U	E905M	LR1	0.0102	0.0132	PCI/G	0	U		27/03/2005	11:47	0.0267	PCI/G	0.0126	PCI/G	1	9.3	12.6	G		PCI/G	0.00		487	PR	
9202-0000-133-S-01	MSR#05-0800	1200801597	406923	10098-97-2	Strontium-90	TRG	U	E905M	MS1	2.28	0.139	PCI/G	0			28/03/2005	10:48	0.0519	PCI/G	0.023	PCI/G	1	9.3	6.16	G	2.	93	PCI/G	2.93	PR		
	MSR#05-0800	1200801598	406923	10098-97-2	Strontium-90	TRG	U	E905M	BS1	1.27	0.0737	PCI/G	0			28/03/2005	10:48	0.0284	PCI/G	0.0127	PCI/G	1	0	12.9	G	1.	39	PCI/G		PR		
	MSR#05-0800	1200802144	407148	14762-75-5	Carbon-14	TRG	U	LSC	LB1	-0.0357	0.0928	PCI/G	0	U		19/03/2005	3:08	0.159	PCI/G	0.0784	PCI/G	1	0	9	G		PCI/G			PR		
9202-0000-136-C-4C-05	MSR#05-0800	1200802145	407148	14762-75-5	Carbon-14	TRG	U	LSC	LR1	-0.0818	0.0913	PCI/G	0	U		19/03/2005	4:41	0.158	PCI/G	0.0779	PCI/G	1	7.4	9.06	G		PCI/G	-0.0		492	PR	
9202-0000-136-C-4C-05	MSR#05-0800	1200802146	407148	14762-75-5	Carbon-14	TRG	U	LSC	MS1	7.06	0.178	PCI/G	0			19/03/2005	6:13	0.158	PCI/G	0.0776	PCI/G	1	7.4	9.1	G	7.	22	PCI/G	7.17	PR		
	MSR#05-0800	1200802147	407148	14762-75-5	Carbon-14	TRG	U	LSC	BS1	7.23	0.18	PCI/G	0			19/03/2005	7:46	0.158	PCI/G	0.0776	PCI/G	1	0	9	G	7.	30	PCI/G		PR		
	MSR#05-0800	1200802258	407185	14681-59-5	Iron-55	TRG	U	LSC	LB1	-16.1	52.9	PCI/G	0	U		30/03/2005	10:17	73.4	PCI/G	36	PCI/G	1	0	0.198	G		PCI/G			PR		
	MSR#05-0800	1200802261	407185	14681-59-5	Iron-55	TRG	U	LSC	BS1	401	58.9	PCI/G	0			30/03/2005	11:53	70.9	PCI/G	34.7	PCI/G	1	0	0.198	G	41	2	PCI/G		PR		
	MSR#05-0800	1200802268	407187	13781-37-8	Nickel-63	TRG	U	LSC	LB1	-6.84	8.46	PCI/G	0	U		29/03/2005	4:23	14.9	PCI/G	7.27	PCI/G	1	0	0.198	G		PCI/G			PR		
	MSR#05-0800	1200802271	407187	13781-37-8	Nickel-63	TRG	U	LSC	BS1	735	20.3	PCI/G	0			29/03/2005	6:43	13.9	PCI/G	6.77	PCI/G	1	0	0.198	G	75	7	PCI/G		PR		
9202-0000-133-S-03	MSR#05-0800	1200804897	407187	13781-37-8	Nickel-63	TRG	U	LSC	LR1	-5.24	8.42	PCI/G	0	U		29/03/2005	5:09	14.7	PCI/G	7.2	PCI/G	1	9.9	0.178	G		PCI/G	-3.4		9	PR	
9202-0000-133-S-03	MSR#05-0800	1200804898	407187	13781-37-8	Nickel-63	TRG	U	LSC	MS1	795	21.7	PCI/G	0			29/03/2005	5:56	14.7	PCI/G	7.19	PCI/G	1	9.9	0.182	G	82	4	PCI/G	821	PR		
9202-0000-133-S-03	MSR#05-0800	1200804899	407185	14681-59-5	Iron-55	TRG	U	LSC	LR1	8.77	55.1	PCI/G	0	U		30/03/2005	10:49	75.9	PCI/G	37.2	PCI/G	1	9.9	0.178	G		PCI/G	-35.		9	PR	
9202-0000-133-S-03	MSR#05-0800	1200804900	407185	14681-59-5	Iron-55	TRG	U	LSC	MS1	407	64.3	PCI/G	0			30/03/2005	11:21	78.2	PCI/G	38.3	PCI/G	1	9.9	0.182	G	45	9	PCI/G	423	PR		
	MSR#05-0800	1200807178	409273	14133-76-7	Technetium-99	TRG	U	TC02RCM	LB1	0.123	0.134	PCI/G	0	U		21/03/2005	5:06	0.224	PCI/G	0.109	PCI/G	1	0	7.92	G		PCI/G			PR		
	MSR#05-0800	1200807181	409273	14133-76-7	Technetium-99	TRG	U	TC02RCM	BS1	14.3	0.356	PCI/G	0			21/03/2005	7:30	0.217	PCI/G	0.106	PCI/G	1	0	7.92	G	14	.9	PCI/G		PR		
	MSR#05-0800	1200808499	409820	13981-16-3	Plutonium-238	TRG	U	PU11RCM	LB1	-0.0112	0.0155	PCI/G	0	U		22/03/2005	8:28	0.138	PCI/G	0.0375	PCI/G	1	0	0.257	G		PCI/G			PR		
	MSR#05-0800	1200808499	409820	OER-100-70	Plutonium-239/240	TRG	U	PU11RCM	LB1	-0.00465	0.0518	PCI/G	0	U		22/03/2005	8:28	0.182	PCI/G	0.0593	PCI/G	1	0	0.257	G		PCI/G			PR		
9202-0000-133-S-03	MSR#05-0800	1200808500	409820	13981-16-3	Plutonium-238	TRG	U	PU11RCM	LR1	-0.0378	0.0302	PCI/G	0	U		22/03/2005	8:28	0.218	PCI/G	0.0732	PCI/G	1	9.9	0.255	G		PCI/G	0.02		34	PR	
9202-0000-133-S-03	MSR#05-0800	1200808500	409820	OER-100-70	Plutonium-239/240	TRG	U	PU11RCM	LR1	-0.00629	0.0123	PCI/G	0	U		22/03/2005	8:28	0.131	PCI/G	0.0299	PCI/G	1	9.9	0.255	G		PCI/G	0.05		32	PR	
9202-0000-133-S-03	MSR#05-0800	1200808501	409820	13981-16-3	Plutonium-238	TRG	U	PU11RCM	MS1	0.12	0.146	PCI/G	0	U		22/03/2005	8:28	0.243	PCI/G	0.0722	PCI/G	1	9.9	0.257	G		PCI/G			PR		
9202-0000-133-S-03	MSR#05-0800	1200808501	409820	OER-100-70	Plutonium-239/240	TRG	U	PU11RCM	MS1	9.26	1.14	PCI/G	0			22/03/2005	8:28	0.243	PCI/G	0.0721	PCI/G	1	9.9	0.257	G	9.	30	PCI/G	9.35	PR		
	MSR#05-0800	1200808502	409820	13981-16-3	Plutonium-238	TRG	U	PU11RCM	BS1	0.0335	0.0628	PCI/G	0	U		22/03/2005	8:28	0.131	PCI/G	0.0355	PCI/G	1	0	0.257	G		PCI/G			PR		
	MSR#05-0800	1200808502	409820	OER-100-70	Plutonium-239/240	TRG	U	PU11RCM	BS1	9.5	0.898	PCI/G	0			22/03/2005	8:28	0.16	PCI/G	0.0502	PCI/G	1	0	0.257	G	9.	30	PCI/G		PR		
	MSR#05-0800	1200808503	409821	14119-32-5	Plutonium-241	TRG	U	PU11RCM	LB1	-1.85	5.81	PCI/G	0	U		25/03/2005	6:55	10.1	PCI/G	4.92	PCI/G	1	0	0.513	G		PCI/G			PR		
9202-0000-133-S-03	MSR#05-0800	1200808504	409821	14119-32-5	Plutonium-241	TRG	U	PU11RCM	LR1	-1.94	6.42	PCI/G	0	U		25/03/2005	7:27	11.2	PCI/G	5.44	PCI/G	1	9.9	0.511	G		PCI/G	-0.1		07	PR	
9202-0000-133-S-03	MSR#05-0800	1200808505	409821	14119-32-5	Plutonium-241	TRG	U	PU11RCM	MS1	110	9.02	PCI/G	0			25/03/2005	7:58	10.5	PCI/G	5.08	PCI/G	1	9.9	0.507	G	13	6	PCI/G	136	PR		
	MSR#05-0800	1200808506	409821	14119-32-5	Plutonium-241	TRG	U	PU11RCM	BS1	114	9.51	PCI/G	0			25/03/2005	8:30	11.1	PCI/G	5.39	PCI/G	1	0	0.513	G	13	4	PCI/G		PR		
	MSR#05-0800	1200808782	409871	10028-17-8	Tritium	TRG	U	E906.0	LB1	6.17	6.48	PCI/G	0	U		31/03/2005	1:27	10.8	PCI/G	5.21	PCI/G	1	0	2.12	G		PCI/G			PR		
9202-0000-133-S-01	MSR#05-0800	1200808783	409871	10028-17-8	Tritium	TRG	U	E906.0	LR1	4.6	7.48	PCI/G	0	U		31/03/2005	1:59	12.7	PCI/G	6.1	PCI/G	1	9.3	1.99	G		PCI/G	1.78		PR		
9202-0000-133-S-01	MSR#05-0800	1200808784	409871	10028-17-8	Tritium	TRG	U	E906.0	MS1	72.2	9.54	PCI/G	0			31/03/2005	2:31	11.8	PCI/G	5.67	PCI/G	1	9.3	1.96	G	80	.0	PCI/G	81.8	PR		
	MSR#05-0800	1200808785	409871	10028-17-8	Tritium	TRG	U	E906.0	BS1	74.8	9.17	PCI/G	0			31/03/2005	3:03	11	PCI/G	5.31	PCI/G	1	0	2.12	G	73	.5	PCI/G		PR		
	MSR#05-0800	1200814027	412128	14596-10-2	Americium-241	TRG	U	AM05RCM	LB1	0.0497	0.0981	PCI/G	0	U		30/03/2005	9:38	0.215	PCI/G	0.0703	PCI/G	1	0	0.255	G		PCI/G			PR		
	MSR#05-0800	1200814027	412128	OER-100-93	Curium-242	TRG	U	AM05RCM	LB1	-0.0134	0.0185	PCI/G	0	U		30/03/2005	9:38	0.165	PCI/G	0.0449	PCI/G	1	0	0.255	G		PCI/G			PR		
	MSR#05-0800	1200814027	412128	OER-101-57	Curium-243/244	TRG	U	AM05RCM	LB1	-0.0132	0.0184	PCI/G	0	U		30/03/2005	9:38	0.164	PCI/G	0.0445	PCI/G	1	0	0.255	G		PCI/G			PR		
9202-0000-133-S-03	MSR#05-0800	1200814028	412128	14596-10-2	Americium-241	TRG	U	AM05RCM	LR2	-0.006	0.0667	PCI/G	0	U		30/03/2005	9:38	0.234	PCI/G	0.0765	PCI/G	1	9.9	0.253	G		PCI/G	0.05		4	PR	
9202-0000-133-S-03	MSR#05-0800	1200814028	412128	OER-100-93	Curium-242	TRG	U	AM05RCM	LR2	-0.0172	0.0239	PCI/G	0	U		30/03/2005	9:38	0.213	PCI/G	0.0579	PCI/G	1	9.9	0.253	G		PCI/G	0.02		41	PR	
9202-0000-133-S-03	MSR#05-0800	1200814028	412128	OER-101-57	Curium-243/244	TRG	U	AM05RCM	LR2	0.0229	0.0607	PCI/G	0	U		30/03/2005	9:38	0.15	PCI/G	0.0343	PCI/G	1	9.9	0.253	G		PCI/G	-0.0		0638	PR	
9202-0000-133-S-03	MSR#05-0800	1200814029	412128	14596-10-2	Americium-241	TRG	U	AM05RCM	MS2	9.31	1.02	PCI/G	0			30/03/2005	9:38	0.192	PCI/G	0.0569	PCI/G	1	9.9	0.255	G	10	.7	PCI/G	10.8	PR		
9202-0000-133-S-03	MSR#05-0800	1200814029	412128	OER-100-93	Curium-242	TRG	U	AM05RCM	MS2	0	0.0676	PCI/G	0	U		30/03/2005	9:38	0.0935	PCI/G	0	PCI/G	1	9.9	0.255	G		PCI/G			PR		
9202-0000-133-S-03	MSR#05-0800	1200814029	412128	OER-101-57	Curium-243/244	TRG	U	AM05RCM	MS2	11.8	1.15	PCI/G	0			30/03/2005	9:38	0.144	PCI/G	0.033	PCI/G	1	9.9	0.255	G	13	.2	PCI/G	13.2	PR		
	MSR#05-0800	1200814030	412128	14596-10-2	Americium-241	TRG	U	AM05RCM	BS1	9.61	0.963	PCI/G	0			30/03/2005	9:38	0.167	PCI/G	0.0495	PCI/G	1	0	0.255	G	10	.7	PCI/G		PR		
	MSR#05-0800	1200814030	412128	OER-100-93	Curium-242	TRG	U	AM05RCM	BS1	0	0.0496	PCI/G	0	U		30/03/2005	9:38	0.0686	PCI/G	0	PCI/G	1	0	0.255	G		PCI/G			PR		
	MSR#05-0800	1200814030	412128	OER-101-57	Curium-243/244	TRG	U	AM05RCM	BS1	11	1.03	PCI/G	0			30/03/2005	9:38	0.0679	PCI/G	0	PCI/G	1	0	0.255	G	13	.1	PCI/G		PR		

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

April 11, 2004

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

Re: Concrete PO# 002332
Work Order: 131693
SDG: MSR#05-0800

Dear Mr. Hollenbeck:

General Engineering Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on March 3, 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: 2005-00042, 2005-00043, 2005-00044, and 2005-00045
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: 131693

131693001	9202-0000-133-C-1C-01	131693021	9202-0000-132-C-1C-01
131693002	9202-0000-133-C-1C-02	131693022	9202-0000-132-C-1C-02
131693003	9202-0000-133-C-3C-03	131693023	9202-0000-132-C-3C-03
131693004	9202-0000-133-C-6C-04	131693024	9202-0000-132-C-5C-04
131693005	9202-0000-133-C-6C-05	131693025	9202-0000-132-C-5C-05
131693006	9202-0000-138-C-1C-01	131693026	9202-0000-136-C-1C-01
131693007	9202-0000-138-C-1C-02	131693027	9202-0000-136-C-1C-02
131693008	9202-0000-138-C-3C-03	131693028	9202-0000-136-C-2C-03
131693009	9202-0000-138-C-5C-04	131693029	9202-0000-136-C-4C-04
131693010	9202-0000-138-C-5C-05	131693030	9202-0000-136-C-4C-05
131693011	9202-0000-135-C-1C-01	131693031	9202-0000-139-C-1C-01
131693012	9202-0000-135-C-1C-02	131693032	9202-0000-139-C-1C-02
131693013	9202-0000-135-C-5C-03	131693033	9202-0000-139-C-6C-03
131693014	9202-0000-135-C-10C-04	131693034	9202-0000-139-C-8C-04
131693015	9202-0000-135-C-10C-05	131693035	9202-0000-139-C-8C-05
131693016	9202-0000-134-C-1C-01	131693036	9202-0000-137-C-1C-01
131693017	9202-0000-134-C-1C-02	131693037	9202-0000-137-C-1C-02
131693018	9202-0000-134-C-2C-03	131693038	9202-0000-137-C-1C-03
131693019	9202-0000-134-C-3C-04	131693039	9202-0000-137-C-3C-04
131693020	9202-0000-134-C-3C-05	131693040	9202-0000-137-C-3C-05

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GENERAL NARRATIVE

CASE NARRATIVE
For
CONNECTICUT YANKEE
RE: Concrete
PO# 002332
Work Order: 131693

April 11, 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 March 3, 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
131693001	9202-0000-133-C-1C-01
131693002	9202-0000-133-C-1C-02
131693003	9202-0000-133-C-3C-03
131693004	9202-0000-133-C-6C-04
131693005	9202-0000-133-C-6C-05
131693006	9202-0000-138-C-1C-01
131693007	9202-0000-138-C-1C-02
131693008	9202-0000-138-C-3C-03
131693009	9202-0000-138-C-5C-04
131693010	9202-0000-138-C-5C-05
131693011	9202-0000-135-C-1C-01
131693012	9202-0000-135-C-1C-02

131693013	9202-0000-135-C-5C-03
131693014	9202-0000-135-C-10C-04
131693015	9202-0000-135-C-10C-05
131693016	9202-0000-134-C-1C-01
131693017	9202-0000-134-C-1C-02
131693018	9202-0000-134-C-2C-03
131693019	9202-0000-134-C-3C-04
131693020	9202-0000-134-C-3C-05
131693021	9202-0000-132-C-1C-01
131693022	9202-0000-132-C-1C-02
131693023	9202-0000-132-C-3C-03
131693024	9202-0000-132-C-5C-04
131693025	9202-0000-132-C-5C-05
131693026	9202-0000-136-C-1C-01
131693027	9202-0000-136-C-1C-02
131693028	9202-0000-136-C-2C-03
131693029	9202-0000-136-C-4C-04
131693030	9202-0000-136-C-4C-05
131693031	9202-0000-139-C-1C-01
131693032	9202-0000-139-C-1C-02
131693033	9202-0000-139-C-6C-03
131693034	9202-0000-139-C-8C-04
131693035	9202-0000-139-C-8C-05
131693036	9202-0000-137-C-1C-01
131693037	9202-0000-137-C-1C-02
131693038	9202-0000-137-C-1C-03
131693039	9202-0000-137-C-3C-04
131693040	9202-0000-137-C-3C-05

Items of Note:

GEL was notified by Pete Hollenbeck of CYAPCO on March 8, 2005 that the samples requiring CHALL were incorrectly marked on the original Chain of Custody. Corrected Chain of Custody's were received by GEL and are included in this data package. The turnaround time was extended by one week to account for the change in tests.

Due to a laboratory error, the entire volume of sample #9202-000-134-c-3c-05 (131693020) was thermally dried. Therefore, GEL will not be reporting results for Tc-99, C-14, and H_3.

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:

Thirty-two concrete samples were analyzed for CHGAM, Sr-90, and H_3. Eight 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, 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. 2005-00042

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

Priority: ☒ 30 D. ☐ 15 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
9202-0000-133-C-1C-01	1/27/05	0855	CT	CR	BP	X	X	X	~~X~~	PH	3/8/05	1"	
9202-0000-133-C-1C-02	1/27/05	0855	CT	CR	BP	X	X	X				1"	
9202-0000-133-C-3C-03	1/31/05	1410	CT	CR	BP	X	X	X				2"	
9202-0000-133-C-6C-04	2/8/05	1450	CT	CR	BP	X	X	X				2"	
9202-0000-133-C-6C-05	2/8/05	1450	CT	CR	BP	~~X~~	~~X~~	~~X~~	X			2"	
9202-0000-138-C-1C-01	2/10/05	1100	CT	CR	BP	X	X	X	~~X~~	PH	3/8/05	1"	
9202-0000-138-C-1C-02	2/10/05	1100	CT	CR	BP	X	X	X				1"	
9202-0000-138-C-3C-03	2/10/05	1130	CT	CR	BP	X	X	X				1"	
9202-0000-138-C-5C-04	2/10/05	1145	CT	CR	BP	X	X	X				4"	
9202-0000-138-C-5C-05	2/10/05	1145	CT	CR	BP	~~X~~	~~X~~	~~X~~	X	PH	3/8/05	3.5"	

NOTES: PO #: 002332 MSR #: 05-0800 ☒ LTP QA ☐ Radwaste QA ☐ Non QA

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

Bill of Lading #
7922 1886 4548

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]	3/2/05 1055		
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. 2005-00043

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

Priority: ☒ 30 D. ☐ 15 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
9202-0000-135-C-1C-01	2/8/05	1540	CT	CR	BP	X	X	X	~~X~~	PH	3/8/05	1"	
9202-0000-135-C-1C-02	2/8/05	1540	CT	CR	BP	X	X	X				1"	
9202-0000-135-C-5C-03	2/9/05	0935	CT	CR	BP	X	X	X				2"	
9202-0000-135-C-10C-04	2/9/05	1100	CT	CR	BP	X	X	X				2"	
9202-0000-135-C-10C-05	2/9/05	1100	CT	CR	BP	~~X~~	~~X~~	~~X~~	X	PH	3/8/05	2"	
9202-0000-134-C-1C-01	2/9/05	1300	CT	CR	BP	X	X	X	~~X~~			1"	
9202-0000-134-C-1C-02	2/9/05	1300	CT	CR	BP	X	X	X				1"	
9202-0000-134-C-2C-03	2/9/05	1320	CT	CR	BP	X	X	X				1"	
9202-0000-134-C-3C-04	2/9/05	1335	CT	CR	BP	X	X	X				1"	
9202-0000-134-C-3C-05	2/9/05	1335	CT	CR	BP	~~X~~	~~X~~	~~X~~	X	PH	3/8/05	1"	

NOTES: PO #: 002332 MSR #: 05-0800 ☒ LTP QA ☐ Radwaste QA ☐ Non QA

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

Bill of Lading #
7922 1886 4548

Internal Container Temp.: ____ Deg. C

Custody Sealed?
Y ☑ N ☐

Custody Seal Intact?
Y ☑ N ☐

1) Relinquished By [signature]	Date/Time 3/2/05 1055	2) Received By	Date/Time
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. 2005-00044

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

Priority: ☒ 30 D. ☐ 15 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
9202-0000-132-C-1C-01	2/9/05	1455	CT	CR	BP	X	X	X	~~X~~	PH	3/8/05	1"	
9202-0000-132-C-1C-02	2/9/05	1455	CT	CR	BP	X	X	X				1"	
9202-0000-132-C-3C-03	2/9/05	1535	CT	CR	BP	X	X	X				1"	
9202-0000-132-C-5C-04	2/10/05	1015	CT	CR	BP	X	X	X				1.5"	
9202-0000-132-C-5C-05	2/10/05	1015	CT	CR	BP	~~X~~	~~X~~	~~X~~	X	PH	3/8/05	1.5"	
9202-0000-136-C-1C-01	2/14/05	1050	CT	CR	BP	X	X	X	~~X~~	PH	3/8/05	1"	
9202-0000-136-C-1C-02	2/14/05	1050	CT	CR	BP	X	X	X				1"	
9202-0000-136-C-2C-03	2/14/05	1110	CT	CR	BP	X	X	X				1"	
9202-0000-136-C-4C-04	2/14/05	1340	CT	CR	BP	X	X	X				2"	
9202-0000-136-C-4C-05	2/14/05	1340	CT	CR	BP	~~X~~	~~X~~	~~X~~	X	PH	3/8/05	2"	

NOTES: PO #: 002332 MSR #: 05-0800 ☒ LTP QA ☐ Radwaste QA ☐ Non QA

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

Bill of Lading #
7922 1886 4548

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]	3/2/05 1055		
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. 2005-00045

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

Priority: ☒ 30 D. ☐ 15 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
9202-0000-139-C-1C-01	2/15/05	1000	CT	CR	BP	X	X	X	~~X~~	PH	3/8/05	1"	
9202-0000-139-C-1C-02	2/15/05	1000	CT	CR	BP	X	X	X				1"	
9202-0000-139-C-6C-03	2/15/05	1500	CT	CR	BP	X	X	X				2"	
9202-0000-139-C-8C-04	2/15/05	1540	CT	CR	BP	X	X	X				2"	
9202-0000-139-C-8C-05	2/15/05	1540	CT	CR	BP	~~X~~	~~X~~	~~X~~	X	PH	3/8/05	2"	
9202-0000-137-C-1C-01	2/14/05	1525	CT	CR	BP	X	X	X	~~X~~	PH	3/8/05	1"	
9202-0000-137-C-1C-02	2/14/05	1525	CT	CR	BP	X	X	X				1"	
9202-0000-137-C-1C-03	2/14/05	1525	CT	CR	BP	X	X	X				1"	
9202-0000-137-C-3C-04	2/15/05	0820	CT	CR	BP	X	X	X				1.5"	
9202-0000-137-C-3C-05	2/15/05	0820	CT	CR	BP	~~X~~	~~X~~	~~X~~	X	PH	3/8/05	1.5"	

NOTES: PO #: 002332 MSR #: 05-0800 ☒ LTP QA ☐ Radwaste QA ☐ Non QA

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

Bill of Lading #
7922 1886 4548

Internal Container Temp.: ____ Deg. C

Custody Sealed?
Y ☒ N ☐

Custody Seal Intact?
Y ☒ N ☐

1) Relinquished By [signature] Date/Time 3/2/05 1055	2) Received By Date/Time
3) Relinquished By Date/Time	4) Received By Date/Time
5) Relinquished By Date/Time	6) Received By Date/Time

Subject: Re: Modified chain of custody forms
Date: Wed, 09 Mar 2005 09:16:11 -0500
From: Cheryl Jones <cj@mail.gel.com>
To: "Peter D. Hollenbeck" <Hollenbeck@CYAPCO.com>

Pete,

I will include a copy of the revised COCs in the data package along with a brief summary in the Items of Note section of the General Narrative. The samples originally indicated for CHALL on the COCs had just been started for the HTD isotopes and were stopped. CY will not incur any cost for those tests canceled. The gamma, Sr-90 and H3 tests will be continued.

Concerning the addition of the tests to the 5th wafer in each set, we will need to extend the due date. We are one week into the 30 day TAT you requested and therefore will extend the due date one week to 4/9/05.

Please let me know if you have any questions.
Thank you,
Cheryl

"Peter D. Hollenbeck" wrote:

> Good morning-
>
> This e-mail is to document our conversation of yesterday (3/8/05).
>
> An error was discovered on chain of custody form numbers: 2005-00042 through 2005-00045.
>
> These COCs listed concrete wafers for analysis. The analysis code CHALL was incorrectly placed against the 1st wafer
>
> from each core instead of the last or 5th wafer.
>
> Attached are the modified COCs. You may use them as is or you may modify the originals at your lab in a similar manner.
>
> I apologize for the inconvenience. If you have any further questions, please call me.
>
> Pete

--
Cheryl A. Jones
Project Manager - Federal Division
General Engineering Laboratories, LLC.
2040 Savage Road
Charleston, S.C. 29407
(843) 556-8171 x 4243

Subject: Modified chain of custody forms
Date: Wed, 9 Mar 2005 08:46:40 -0500
From: "Peter D. Hollenbeck" <Hollenbeck@CYAPCO.com>
To: <cj@mail.gel.com>

Good morning-

This e-mail is to document our conversation of yesterday (3/8/05).

An error was discovered on chain of custody form numbers: 2005-00042 through 2005-00045.

These COCs listed concrete wafers for analysis. The analysis code CHALL was incorrectly placed against the 1st wafer from each core instead of the last or 5th wafer.

Attached are the modified COCs. You may use them as is or you may modify the originals at your lab in a similar manner.

I apologize for the inconvenience. If you have any further questions, please call me.

Pete

Revised COCs on 3-8-05.pdf	**Name:** Revised COCs on 3-8-05.pdf **Type:** Acrobat (application/pdf) **Encoding:** base64 **Description:** Revised COCs on 3-8-05.pdf

Chain of Custody Form

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

No. 2005-00042

131693'/.

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. ☐ 15 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
9202-0000-133-C-1C-01	1/27/05	0855	CT	CR	BP				X			1"	
9202-0000-133-C-1C-02	1/27/05	0855	CT	CR	BP	X	X	X				1"	
9202-0000-133-C-3C-03	1/31/05	1410	CT	CR	BP	X	X	X				2"	
9202-0000-133-C-6C-04	2/8/05	1450	CT	CR	BP	X	X	X				2"	
9202-0000-133-C-6C-05	2/8/05	1450	CT	CR	BP	X	X	X				2"	
9202-0000-138-C-1C-01	2/10/05	1100	CT	CR	BP				X			1"	
9202-0000-138-C-1C-02	2/10/05	1100	CT	CR	BP	X	X	X				1"	
9202-0000-138-C-3C-03	2/10/05	1130	CT	CR	BP	X	X	X				1"	
9202-0000-138-C-5C-04	2/10/05	1145	CT	CR	BP	X	X	X				4"	
9202-0000-138-C-5C-05	2/10/05	1145	CT	CR	BP	X	X	X				3.5"	

NOTES: PO #: 002332 MSR #: 05-0800 ☒ LTP QA ☐ Radwaste QA ☐ Non QA

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

Bill of Lading #
7922 1886 4548

Internal Container Temp.: ____ Deg. C

Custody Sealed? Y ☑ N ☐
Custody Seal Intact? Y ☑ N ☐

1) Relinquished By [signature] Date/Time 3/2/05 1055	2) Received By [signature] Date/Time 3/3/05 9:50
3) Relinquished By Date/Time	4) Received By Date/Time
5) Relinquished By Date/Time	6) Received By Date/Time

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Chain of Custody Form

No. 2005-00043

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

Priority: ☒ 30 D. ☐ 15 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
9202-0000-135-C-1C-01	2/8/05	1540	CT	CR	BP				X			1"	
9202-0000-135-C-1C-02	2/8/05	1540	CT	CR	BP	X	X	X				1"	
9202-0000-135-C-5C-03	2/9/05	0935	CT	CR	BP	X	X	X				2"	
9202-0000-135-C-10C-04	2/9/05	1100	CT	CR	BP	X	X	X				2"	
9202-0000-135-C-10C-05	2/9/05	1100	CT	CR	BP	X	X	X				2"	
9202-0000-134-C-1C-01	2/9/05	1300	CT	CR	BP				X			1"	
9202-0000-134-C-1C-02	2/9/05	1300	CT	CR	BP	X	X	X				1"	
9202-0000-134-C-2C-03	2/9/05	1320	CT	CR	BP	X	X	X				1"	
9202-0000-134-C-3C-04	2/9/05	1335	CT	CR	BP	X	X	X				1"	
9202-0000-134-C-3C-05	2/9/05	1335	CT	CR	BP	X	X	X				1"	

NOTES: PO #: 002332 MSR #: 05-0800 ☒ LTP QA ☐ Radwaste QA ☐ Non QA

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

Bill of Lading #
7922 1886 4548

Internal Container Temp.: ____ Deg. C

Custody Sealed? Y ☑ N ☐

Custody Seal Intact? Y ☑ N ☐

1) Relinquished By [signature] Date/Time 3/2/05 1055	2) Received By M. Smith Date/Time 3/3/05 9:50
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. 2005-00044

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. ☐ 15 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
9202-0000-132-C-1C-01	2/9/05	1455	CT	CR	BP				X			1"	
9202-0000-132-C-1C-02	2/9/05	1455	CT	CR	BP	X	X	X				1"	
9202-0000-132-C-3C-03	2/9/05	1535	CT	CR	BP	X	X	X				1"	
9202-0000-132-C-5C-04	2/10/05	1015	CT	CR	BP	X	X	X				1.5"	
9202-0000-132-C-5C-05	2/10/05	1015	CT	CR	BP	X	X	X				1.5"	
9202-0000-136-C-1C-01	2/14/05	1050	CT	CR	BP				X			1"	
9202-0000-136-C-1C-02	2/14/05	1050	CT	CR	BP	X	X	X				1"	
9202-0000-136-C-2C-03	2/14/05	1110	CT	CR	BP	X	X	X				1"	
9202-0000-136-C-4C-04	2/14/05	1340	CT	CR	BP	X	X	X				2"	
9202-0000-136-C-4C-05	2/14/05	1340	CT	CR	BP	X	X	X				2"	

NOTES: PO #: 002332 MSR #: 05-0800 ☒ LTP QA ☐ Radwaste QA ☐ Non QA

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

Bill of Lading #
7922 1886 4548

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]	3/2/05 1055	M. Smith	3/3/05 9:50
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. 2005-00045

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. ☐ 15 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
9202-0000-139-C-1C-01	2/15/05	1000	CT	CR	BP				X			1"	
9202-0000-139-C-1C-02	2/15/05	1000	CT	CR	BP	X	X	X				1"	
9202-0000-139-C-6C-03	2/15/05	1500	CT	CR	BP	X	X	X				2"	
9202-0000-139-C-8C-04	2/15/05	1540	CT	CR	BP	X	X	X				2"	
9202-0000-139-C-8C-05	2/15/05	1540	CT	CR	BP	X	X	X				2"	
9202-0000-137-C-1C-01	2/14/05	1525	CT	CR	BP				X			1"	
9202-0000-137-C-1C-02	2/14/05	1525	CT	CR	BP	X	X	X				1"	
9202-0000-137-C-1C-03	2/14/05	1525	CT	CR	BP	X	X	X				1"	
9202-0000-137-C-3C-04	2/15/05	0820	CT	CR	BP	X	X	X				1.5"	
9202-0000-137-C-3C-05	2/15/05	0820	CT	CR	BP	X	X	X				1.5"	

NOTES: PO #: 002332 MSR #: 05-0800 ☒ LTP QA ☐ Radwaste QA ☐ Non QA

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

Bill of Lading #
7922188 4548

Internal Container Temp.: ____ Deg. C

Custody Sealed?
Y ☒ N ☐

Custody Seal Intact?
Y ☒ N ☐

1) Relinquished By [signature] Date/Time 3/2/05 1055	2) Received By M. Smith 3/3/05 Date/Time 9:50
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: 3/3/05

SDG#: MSR#05-0800

Work Order Number: 131693

Shipping Container ID: 7922 1886 4548 Chain of Custody # 2005-00042-45

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 11C
5. Vermiculite/packing materials is: None Wet [ ] Dry [✓] Sample
6. Number of samples in shipping container: 4D
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: M. Smith Date: 3/3/05

Telephoned to: _____ On _____ By _____

SAMPLE RECEIPT & REVIEW FORM

GENERAL ENGINEERING LABORATORIES, LLC

PM use only

Client: Connecticut Yankee	SDG/ARCOC/Work Order: 131693
Date Received: 3/3/05	PM(A) Review (ensure non-conforming items are resolved prior to signing):
Received By: M. Smith	3/3/05

	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 Coolant # ice bags blue ice dry ice none other(describ 11 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				

Radiological Information	Non-RAD	RAD	RADII	RSO RAD Receipt #
What is the radiological classification of the samples?		✓		Comments:
Radioactivity Screening Results (maximum observed CPM)	3DCPM			*If > x2 area background is observed on a non-radioactive sample, contac the RSO to investigate.

PM (or PMA) review of Receiving Rad classification: _____ Initials 3/3/05 Date:

RADIOLOGICAL ANALYSIS

Radiochemistry Case Narrative
Connecticut Yankee Atomic Power Co. (YANK)
SDG MSR#05-0800

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:	412129
Prep Batch Number:	406350
Dry Soil Prep GL-RAD-A-021 Batch Number:	406349

Sample ID	Client ID
131693005	9202-0000-133-C-6C-05
131693010	9202-0000-138-C-5C-05
131693015	9202-0000-135-C-10C-05
131693020	9202-0000-134-C-3C-05
131693025	9202-0000-132-C-5C-05
131693030	9202-0000-136-C-4C-05
131693035	9202-0000-139-C-8C-05
131693040	9202-0000-137-C-3C-05
1200814039	Method Blank (MB)
1200814040	131693005(9202-0000-133-C-6C-05) Sample Duplicate (DUP)
1200814041	131693005(9202-0000-133-C-6C-05) Matrix Spike (MS)
1200814042	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: 131693005 (9202-0000-133-C-6C-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
Samples 131693010 (9202-0000-138-C-5C-05) and 131693030 (9202-0000-136-C-4C-05) were 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.

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:	412132
Prep Batch Number:	406350
Dry Soil Prep GL-RAD-A-021 Batch Number:	406349

Sample ID	Client ID
131693005	9202-0000-133-C-6C-05
131693010	9202-0000-138-C-5C-05
131693015	9202-0000-135-C-10C-05
131693020	9202-0000-134-C-3C-05
131693025	9202-0000-132-C-5C-05
131693030	9202-0000-136-C-4C-05
131693035	9202-0000-139-C-8C-05
131693040	9202-0000-137-C-3C-05
1200814047	Method Blank (MB)
1200814048	131693005(9202-0000-133-C-6C-05) Sample Duplicate (DUP)
1200814049	131693005(9202-0000-133-C-6C-05) Matrix Spike (MS)
1200814050	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: 131693005 (9202-0000-133-C-6C-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
Sample 131693020 (9202-0000-134-C-3C-05) 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.

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-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:	412133
Prep Batch Number:	406350
Dry Soil Prep GL-RAD-A-021 Batch Number:	406349

Sample ID	Client ID
131693005	9202-0000-133-C-6C-05
131693010	9202-0000-138-C-5C-05
131693015	9202-0000-135-C-10C-05

131693020	9202-0000-134-C-3C-05
131693025	9202-0000-132-C-5C-05
131693030	9202-0000-136-C-4C-05
131693035	9202-0000-139-C-8C-05
131693040	9202-0000-137-C-3C-05
1200814051	Method Blank (MB)
1200814052	131693005(9202-0000-133-C-6C-05) Sample Duplicate (DUP)
1200814053	131693005(9202-0000-133-C-6C-05) Matrix Spike (MS)
1200814054	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# 6.

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: 131693005 (9202-0000-133-C-6C-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.

Manual Integration
Manual integrations of alpha spectroscopy spectra 1200814053 (9202-0000-133-C-6C-05), 131693005 (9202-0000-

133-C-6C-05), and 131693035 (9202-0000-139-C-8C-05) were performed to fully separate counts in Regions of Interest which would have been biased.

Qualifier information
Manual qualifiers were not required.

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:	406667
Prep Batch Number:	406344

Sample ID	Client ID
131693001	9202-0000-133-C-1C-01
131693002	9202-0000-133-C-1C-02
131693003	9202-0000-133-C-3C-03
131693004	9202-0000-133-C-6C-04
131693005	9202-0000-133-C-6C-05
131693006	9202-0000-138-C-1C-01
131693007	9202-0000-138-C-1C-02
131693008	9202-0000-138-C-3C-03
131693009	9202-0000-138-C-5C-04
131693010	9202-0000-138-C-5C-05
131693011	9202-0000-135-C-1C-01
131693012	9202-0000-135-C-1C-02
131693013	9202-0000-135-C-5C-03
131693014	9202-0000-135-C-10C-04
131693015	9202-0000-135-C-10C-05
131693016	9202-0000-134-C-1C-01
131693017	9202-0000-134-C-1C-02
131693018	9202-0000-134-C-2C-03
131693019	9202-0000-134-C-3C-04
131693020	9202-0000-134-C-3C-05
1200800984	Method Blank (MB)
1200800985	131693001(9202-0000-133-C-1C-01) Sample Duplicate (DUP)
1200800986	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: 131693001 (9202-0000-133-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 1200800984 (MB) was recounted due to analyst 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 low abundance.	Actinium-228	131693011
		Bismuth-214	1200800985
			131693001
			131693004
			131693014
		Lead-212	131693011
		Thallium-208	131693004
			131693007

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:	406668
Prep Batch Number:	406349

Sample ID	Client ID
131693021	9202-0000-132-C-1C-01
131693022	9202-0000-132-C-1C-02
131693023	9202-0000-132-C-3C-03
131693024	9202-0000-132-C-5C-04
131693025	9202-0000-132-C-5C-05
131693026	9202-0000-136-C-1C-01
131693027	9202-0000-136-C-1C-02

131693028	9202-0000-136-C-2C-03
131693029	9202-0000-136-C-4C-04
131693030	9202-0000-136-C-4C-05
131693031	9202-0000-139-C-1C-01
131693032	9202-0000-139-C-1C-02
131693033	9202-0000-139-C-6C-03
131693034	9202-0000-139-C-8C-04
131693035	9202-0000-139-C-8C-05
131693036	9202-0000-137-C-1C-01
131693037	9202-0000-137-C-1C-02
131693038	9202-0000-137-C-1C-03
131693039	9202-0000-137-C-3C-04
131693040	9202-0000-137-C-3C-05
1200800987	Method Blank (MB)
1200800988	131693021(9202-0000-132-C-1C-01) Sample Duplicate (DUP)
1200800989	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: 131693021 (9202-0000-132-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
U	Result not detected above the detection limit	Cobalt-60	131693035
UI	Data rejected due to low abundance.	Bismuth-214	131693025
			131693036
		Cesium-134	131693039
		Cobalt-60	131693035
		Europium-154	131693023
		Thallium-208	131693023
			131693027
			131693034
UI	Data rejected due to no valid peak.	Bismuth-212	131693023

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:	414102
Prep Batch Number:	406347
Dry Soil Prep GL-RAD-A-021 Batch Number:	406344

Sample ID	Client ID
131693019	9202-0000-134-C-3C-04
131693033	9202-0000-139-C-6C-03
1200818670	Method Blank (MB)
1200818671	131693033(9202-0000-139-C-6C-03) Sample Duplicate (DUP)
1200818672	131693033(9202-0000-139-C-6C-03) Matrix Spike (MS)
1200818673	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: 131693033 (9202-0000-139-C-6C-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 were reprepped 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-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:	414564
Prep Batch Number:	406347
Dry Soil Prep GL-RAD-A-021 Batch Number:	406344

Sample ID	Client ID
131693001	9202-0000-133-C-1C-01
131693002	9202-0000-133-C-1C-02
131693003	9202-0000-133-C-3C-03
131693004	9202-0000-133-C-6C-04
131693005	9202-0000-133-C-6C-05
131693006	9202-0000-138-C-1C-01
131693007	9202-0000-138-C-1C-02
131693008	9202-0000-138-C-3C-03
131693009	9202-0000-138-C-5C-04
131693010	9202-0000-138-C-5C-05
131693011	9202-0000-135-C-1C-01
131693012	9202-0000-135-C-1C-02

131693013	9202-0000-135-C-5C-03
131693014	9202-0000-135-C-10C-04
131693015	9202-0000-135-C-10C-05
131693016	9202-0000-134-C-1C-01
131693017	9202-0000-134-C-1C-02
131693018	9202-0000-134-C-2C-03
131693020	9202-0000-134-C-3C-05
131693021	9202-0000-132-C-1C-01
1200819797	Method Blank (MB)
1200819798	131693018(9202-0000-134-C-2C-03) Sample Duplicate (DUP)
1200819799	131693018(9202-0000-134-C-2C-03) Matrix Spike (MS)
1200819800	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: 131693018 (9202-0000-134-C-2C-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 were reprepped due to high blank activity.

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-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:	414565
Prep Batch Number:	406350
Dry Soil Prep GL-RAD-A-021 Batch Number:	406349

Sample ID	Client ID
131693022	9202-0000-132-C-1C-02
131693023	9202-0000-132-C-3C-03
131693024	9202-0000-132-C-5C-04
131693025	9202-0000-132-C-5C-05
131693026	9202-0000-136-C-1C-01
131693027	9202-0000-136-C-1C-02
131693028	9202-0000-136-C-2C-03
131693029	9202-0000-136-C-4C-04
131693030	9202-0000-136-C-4C-05
131693031	9202-0000-139-C-1C-01
131693032	9202-0000-139-C-1C-02
131693034	9202-0000-139-C-8C-04
131693035	9202-0000-139-C-8C-05
131693036	9202-0000-137-C-1C-01
131693037	9202-0000-137-C-1C-02
131693038	9202-0000-137-C-1C-03
131693039	9202-0000-137-C-3C-04
131693040	9202-0000-137-C-3C-05
1200819801	Method Blank (MB)
1200819802	131693028(9202-0000-136-C-2C-03) Sample Duplicate (DUP)
1200819803	131693028(9202-0000-136-C-2C-03) Matrix Spike (MS)
1200819804	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: 131693028 (9202-0000-136-C-2C-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 were reprepped due to high blank activity.

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:	409273

Sample ID	Client ID
131693005	9202-0000-133-C-6C-05
131693010	9202-0000-138-C-5C-05
131693015	9202-0000-135-C-10C-05
131693025	9202-0000-132-C-5C-05
131693030	9202-0000-136-C-4C-05
131693035	9202-0000-139-C-8C-05
131693040	9202-0000-137-C-3C-05
1200807178	Method Blank (MB)
1200807179	132450002(9801-0000-0157C) Sample Duplicate (DUP)
1200807180	132450002(9801-0000-0157C) Matrix Spike (MS)
1200807181	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# 11.

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: 132450002 (9801-0000-0157C).

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:	407185
Prep Batch Number:	406350
Dry Soil Prep GL-RAD-A-021 Batch Number:	406349

Sample ID	Client ID
131693005	9202-0000-133-C-6C-05
131693010	9202-0000-138-C-5C-05
131693015	9202-0000-135-C-10C-05
131693020	9202-0000-134-C-3C-05
131693025	9202-0000-132-C-5C-05
131693030	9202-0000-136-C-4C-05
131693035	9202-0000-139-C-8C-05
131693040	9202-0000-137-C-3C-05
1200802258	Method Blank (MB)
1200802261	Laboratory Control Sample (LCS)
1200804899	131691003(9202-0000-133-S-03) Sample Duplicate (DUP)
1200804900	131691003(9202-0000-133-S-03) 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-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: 131691003 (9202-0000-133-S-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 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:	407187
Prep Batch Number:	406350
Dry Soil Prep GL-RAD-A-021 Batch Number:	406349

Sample ID	Client ID
131693005	9202-0000-133-C-6C-05
131693010	9202-0000-138-C-5C-05
131693015	9202-0000-135-C-10C-05
131693020	9202-0000-134-C-3C-05
131693025	9202-0000-132-C-5C-05
131693030	9202-0000-136-C-4C-05
131693035	9202-0000-139-C-8C-05
131693040	9202-0000-137-C-3C-05
1200802268	Method Blank (MB)
1200802271	Laboratory Control Sample (LCS)
1200804897	131691003(9202-0000-133-S-03) Sample Duplicate (DUP)
1200804898	131691003(9202-0000-133-S-03) 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-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: 131691003 (9202-0000-133-S-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:	**LSC, Tritium Dist, Solid-HTD2,ALL FSS**
Analytical Method:	EPA 906.0 Modified
Analytical Batch Number:	409871

Sample ID	**Client ID**
131693001	9202-0000-133-C-1C-01
131693002	9202-0000-133-C-1C-02
131693003	9202-0000-133-C-3C-03
131693004	9202-0000-133-C-6C-04
131693005	9202-0000-133-C-6C-05
131693006	9202-0000-138-C-1C-01
131693007	9202-0000-138-C-1C-02
131693008	9202-0000-138-C-3C-03
131693009	9202-0000-138-C-5C-04
131693010	9202-0000-138-C-5C-05
131693011	9202-0000-135-C-1C-01
131693012	9202-0000-135-C-1C-02
131693013	9202-0000-135-C-5C-03
1200808782	Method Blank (MB)
1200808783	131691001(9202-0000-133-S-01) Sample Duplicate (DUP)
1200808784	131691001(9202-0000-133-S-01) Matrix Spike (MS)
1200808785	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: 131691001 (9202-0000-133-S-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:	409925

Sample ID	Client ID
131693014	9202-0000-135-C-10C-04
131693015	9202-0000-135-C-10C-05
131693016	9202-0000-134-C-1C-01
131693017	9202-0000-134-C-1C-02
131693018	9202-0000-134-C-2C-03
131693019	9202-0000-134-C-3C-04
131693021	9202-0000-132-C-1C-01
131693022	9202-0000-132-C-1C-02
131693023	9202-0000-132-C-3C-03
131693024	9202-0000-132-C-5C-04
131693025	9202-0000-132-C-5C-05
131693026	9202-0000-136-C-1C-01
131693027	9202-0000-136-C-1C-02

131693028	9202-0000-136-C-2C-03
131693029	9202-0000-136-C-4C-04
1200808786	Method Blank (MB)
1200808787	131693014(9202-0000-135-C-10C-04) Sample Duplicate (DUP)
1200808788	131693014(9202-0000-135-C-10C-04) Matrix Spike (MS)
1200808789	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: 131693014 (9202-0000-135-C-10C-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 131693016 (9202-0000-134-C-1C-01), 131693018 (9202-0000-134-C-2C-03), 131693019 (9202-0000-134-C-3C-04), 131693021 (9202-0000-132-C-1C-01), 131693022 (9202-0000-132-C-1C-02), 131693023 (9202-0000-132-C-3C-03), 131693024 (9202-0000-132-C-5C-04), and 131693025 (9202-0000-132-C-5C-05) were recounted due to high MDAs.
Samples 1200808786 (MB), 1200808787 (9202-0000-135-C-10C-04), 1200808788 (9202-0000-135-C-10C-04), 131693016 (9202-0000-134-C-1C-01), 131693018 (9202-0000-134-C-2C-03), 131693019 (9202-0000-134-C-3C-04), 131693021 (9202-0000-132-C-1C-01), 131693022 (9202-0000-132-C-1C-02), 131693023 (9202-0000-132-C-3C-03), 131693024 (9202-0000-132-C-5C-04), 131693025 (9202-0000-132-C-5C-05), and 131693029 (9202-0000-136-C-4C-04) 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.

Method/Analysis Information

Product:	**LSC, Tritium Dist, Solid-HTD2,ALL FSS**
Analytical Method:	EPA 906.0 Modified
Analytical Batch Number:	409926

Sample ID	Client ID
131693030	9202-0000-136-C-4C-05
131693031	9202-0000-139-C-1C-01
131693032	9202-0000-139-C-1C-02
131693033	9202-0000-139-C-6C-03
131693034	9202-0000-139-C-8C-04
131693035	9202-0000-139-C-8C-05
131693036	9202-0000-137-C-1C-01
131693037	9202-0000-137-C-1C-02
131693038	9202-0000-137-C-1C-03
131693039	9202-0000-137-C-3C-04
131693040	9202-0000-137-C-3C-05
1200808790	Method Blank (MB)
1200808791	131693030(9202-0000-136-C-4C-05) Sample Duplicate (DUP)
1200808792	131693030(9202-0000-136-C-4C-05) Matrix Spike (MS)
1200808793	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: 131693030 (9202-0000-136-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
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 All,FSS**
Analytical Method:	EPA EERF C-01 Modified
Analytical Batch Number:	407148

Sample ID	**Client ID**
131693005	9202-0000-133-C-6C-05
131693010	9202-0000-138-C-5C-05
131693015	9202-0000-135-C-10C-05
131693025	9202-0000-132-C-5C-05
131693030	9202-0000-136-C-4C-05
131693035	9202-0000-139-C-8C-05
131693040	9202-0000-137-C-3C-05
1200802144	Method Blank (MB)
1200802145	131693030(9202-0000-136-C-4C-05) Sample Duplicate (DUP)
1200802146	131693030(9202-0000-136-C-4C-05) Matrix Spike (MS)
1200802147	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# 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: 131693030 (9202-0000-136-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
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: 4/Terrell G Clerson 4/11/05

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#05-0800 GEL Work Order: 131693

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.
R Sample results are rejected due to sample preservation with HCl.
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 PO# 002332

Report Date: April 11, 2005

Client Sample ID:	9202–0000–133–C–1C–01	Project:	YANK01204
Sample ID:	131693001	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	27–JAN–05		
Receive Date:	03–MAR–05		
Collector:	Client		
Moisture:	4.64%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Gamma Spec Analysis											
Gamma,Solid–FSS GAM & ALL FSS											
Actinium–228		0.262	+/–0.134	0.0614	+/–0.131	0.137	pCi/g		JPH1 03/09/05	1009	406667
Americium–241	U	0.0435	+/–0.0714	0.0641	+/–0.0699	0.136	pCi/g				
Bismuth–212	U	0.0665	+/–0.179	0.132	+/–0.176	0.293	pCi/g				
Bismuth–214	UUI	0.00	+/–0.0879	0.060	+/–0.0861	0.126	pCi/g				
Cesium–134	U	0.00233	+/–0.0223	0.0192	+/–0.0218	0.0426	pCi/g				
Cesium–137	U	0.0123	+/–0.0198	0.0184	+/–0.0194	0.0402	pCi/g				
Cobalt–60	U	–0.00718	+/–0.0294	0.0199	+/–0.0288	0.0453	pCi/g				
Europium–152	U	0.0581	+/–0.0663	0.0454	+/–0.065	0.0975	pCi/g				
Europium–154	U	–0.0331	+/–0.075	0.0588	+/–0.0735	0.133	pCi/g				
Europium–155	U	0.00547	+/–0.0466	0.0427	+/–0.0457	0.0905	pCi/g				
Lead–212		0.258	+/–0.0794	0.0303	+/–0.0778	0.0637	pCi/g				
Lead–214		0.301	+/–0.0738	0.0328	+/–0.0723	0.0705	pCi/g				
Manganese–54	U	0.0157	+/–0.0141	0.0168	+/–0.0138	0.0375	pCi/g				
Niobium–94	U	0.00472	+/–0.0169	0.015	+/–0.0165	0.0331	pCi/g				
Potassium–40		5.70	+/–0.811	0.110	+/–0.795	0.276	pCi/g				
Radium–226		0.199	+/–0.0879	0.0279	+/–0.0861	0.0617	pCi/g				
Silver–108m	U	–0.000739	+/–0.0184	0.0157	+/–0.018	0.034	pCi/g				
Thallium–208		0.0795	+/–0.0381	0.0178	+/–0.0373	0.0389	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid–ALL FSS											
Strontium–90	U	0.0034	+/–0.00586	0.00549	+/–0.00586	0.0114	pCi/g		LCW1 04/09/05	1139	414564
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid–HTD2,ALL FSS											
Tritium	U	1.87	+/–7.03	5.83	+/–7.03	12.1	pCi/g		ATH1 03/30/05	1832	409871

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	03/07/05	1024	406347
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	DLD1	03/03/05	1550	406344

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: April 11, 2005

Client Sample ID: 9202–0000–133–C–1C–01
Sample ID: 131693001

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	55	(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 PO# 002332

Report Date: April 11, 2005

Client Sample ID:	9202–0000–133–C–1C–02	Project:	YANK01204
Sample ID:	131693002	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	27–JAN–05		
Receive Date:	03–MAR–05		
Collector:	Client		
Moisture:	4.62%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Gamma Spec Analysis											
Gamma,Solid–FSS GAM & ALL FSS											
Actinium–228		0.356	+/–0.113	0.0465	+/–0.111	0.106	pCi/g		JPH1 03/09/05	1010	406667
Americium–241	U	0.0476	+/–0.0765	0.0659	+/–0.075	0.139	pCi/g				
Bismuth–212		0.290	+/–0.318	0.106	+/–0.311	0.236	pCi/g				
Bismuth–214		0.269	+/–0.0702	0.028	+/–0.0688	0.0613	pCi/g				
Cesium–134	U	0.00514	+/–0.0181	0.016	+/–0.0178	0.0357	pCi/g				
Cesium–137	U	0.00422	+/–0.0175	0.0155	+/–0.0171	0.0342	pCi/g				
Cobalt–60	U	0.00887	+/–0.0172	0.016	+/–0.0169	0.0369	pCi/g				
Europium–152	U	0.0397	+/–0.0484	0.0379	+/–0.0474	0.0819	pCi/g				
Europium–154	U	0.0147	+/–0.048	0.043	+/–0.0471	0.0994	pCi/g				
Europium–155	U	0.0117	+/–0.0439	0.0422	+/–0.043	0.089	pCi/g				
Lead–212		0.238	+/–0.0574	0.0248	+/–0.0562	0.0525	pCi/g				
Lead–214		0.198	+/–0.0629	0.0283	+/–0.0616	0.061	pCi/g				
Manganese–54	U	0.0159	+/–0.0168	0.0161	+/–0.0165	0.0358	pCi/g				
Niobium–94	U	0.00109	+/–0.017	0.0147	+/–0.0167	0.0321	pCi/g				
Potassium–40		6.15	+/–0.842	0.122	+/–0.825	0.293	pCi/g				
Radium–226		0.269	+/–0.0702	0.028	+/–0.0688	0.0613	pCi/g				
Silver–108m	U	0.00976	+/–0.0132	0.0128	+/–0.013	0.028	pCi/g				
Thallium–208		0.114	+/–0.0356	0.0138	+/–0.0349	0.0306	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid–ALL FSS											
Strontium–90	U	–0.0123	+/–0.0111	0.0114	+/–0.0111	0.0238	pCi/g		LCW1 04/09/05	1139	414564
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid–HTD2,ALL FSS											
Tritium	U	–0.833	+/–6.71	5.66	+/–6.71	11.8	pCi/g		ATH1 03/30/05	1904	409871

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	03/07/05	1024	406347
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	DLD1	03/03/05	1550	406344

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: April 11, 2005

Client Sample ID: 9202–0000–133–C–1C–02
Sample ID: 131693002

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	36	(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.

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: April 11, 2005

Client Sample ID:	9202–0000–133–C–3C–03	Project:	YANK01204
Sample ID:	131693003	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	31–JAN–05		
Receive Date:	03–MAR–05		
Collector:	Client		
Moisture:	5.07%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Gamma Spec Analysis											
Gamma,Solid–FSS GAM & ALL FSS											
Actinium–228		0.259	+/–0.107	0.0546	+/–0.105	0.121	pCi/g		JPH1 03/09/05	1010	406667
Americium–241	U	–0.0109	+/–0.0261	0.0212	+/–0.0256	0.0441	pCi/g				
Bismuth–212	U	0.197	+/–0.156	0.148	+/–0.152	0.320	pCi/g				
Bismuth–214		0.283	+/–0.0699	0.0307	+/–0.0685	0.0662	pCi/g				
Cesium–134	U	0.0142	+/–0.0207	0.0189	+/–0.0203	0.0412	pCi/g				
Cesium–137	U	–0.00447	+/–0.0177	0.0124	+/–0.0173	0.0276	pCi/g				
Cobalt–60	U	0.00415	+/–0.0206	0.0179	+/–0.0202	0.0403	pCi/g				
Europium–152	U	0.027	+/–0.0429	0.0404	+/–0.042	0.0861	pCi/g				
Europium–154	U	–0.038	+/–0.0499	0.0358	+/–0.0489	0.084	pCi/g				
Europium–155	U	0.0322	+/–0.0536	0.0398	+/–0.0526	0.0828	pCi/g				
Lead–212		0.271	+/–0.0487	0.0206	+/–0.0478	0.0435	pCi/g				
Lead–214		0.252	+/–0.067	0.0317	+/–0.0657	0.0672	pCi/g				
Manganese–54	U	0.00977	+/–0.0161	0.0126	+/–0.0158	0.0284	pCi/g				
Niobium–94	U	–0.00988	+/–0.0176	0.014	+/–0.0172	0.0305	pCi/g				
Potassium–40		5.88	+/–0.774	0.132	+/–0.759	0.309	pCi/g				
Radium–226		0.283	+/–0.0699	0.0307	+/–0.0685	0.0662	pCi/g				
Silver–108m	U	–0.0132	+/–0.0154	0.0125	+/–0.0151	0.0271	pCi/g				
Thallium–208		0.0689	+/–0.0359	0.0151	+/–0.0352	0.0328	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid–ALL FSS											
Strontium–90		0.0171	+/–0.0073	0.00622	+/–0.00732	0.0129	pCi/g		LCW1 04/09/05	1140	414564
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid–HTD2,ALL FSS											
Tritium	U	4.49	+/–7.07	5.76	+/–7.07	12.0	pCi/g		ATH1 03/30/05	1936	409871

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	03/07/05	1024	406347
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	DLD1	03/03/05	1550	406344

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: April 11, 2005

Client Sample ID: 9202–0000–133–C–3C–03
Sample ID: 131693003

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	78	(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.

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: April 11, 2005

Client Sample ID:	9202-0000-133-C-6C-04	Project:	YANK01204
Sample ID:	131693004	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	08-FEB-05		
Receive Date:	03-MAR-05		
Collector:	Client		
Moisture:	5.9%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Gamma Spec Analysis											
Gamma,Solid-FSS GAM & ALL FSS											
Actinium-228		0.349	+/-0.199	0.0595	+/-0.195	0.136	pCi/g		JPH1 03/09/05	1011	406667
Americium-241	U	-0.000428	+/-0.0271	0.0249	+/-0.0265	0.0525	pCi/g				
Bismuth-212	U	0.249	+/-0.225	0.142	+/-0.221	0.316	pCi/g				
Bismuth-214	UUI	0.00	+/-0.0932	0.0715	+/-0.0914	0.150	pCi/g				
Cesium-134	U	0.0121	+/-0.0273	0.0248	+/-0.0268	0.0546	pCi/g				
Cesium-137	U	-0.00072	+/-0.0237	0.0208	+/-0.0232	0.0456	pCi/g				
Cobalt-60	U	-0.00708	+/-0.0244	0.0167	+/-0.0239	0.0398	pCi/g				
Europium-152	U	-0.0197	+/-0.0501	0.0423	+/-0.0491	0.0919	pCi/g				
Europium-154	U	0.0146	+/-0.0715	0.0541	+/-0.0701	0.126	pCi/g				
Europium-155	U	-0.0155	+/-0.0474	0.0408	+/-0.0464	0.0861	pCi/g				
Lead-212		0.320	+/-0.0581	0.0249	+/-0.0569	0.053	pCi/g				
Lead-214		0.332	+/-0.0743	0.0332	+/-0.0728	0.0716	pCi/g				
Manganese-54	U	0.00685	+/-0.0246	0.0189	+/-0.0241	0.0423	pCi/g				
Niobium-94	U	-0.0146	+/-0.0187	0.0146	+/-0.0183	0.0329	pCi/g				
Potassium-40		5.29	+/-0.889	0.169	+/-0.871	0.402	pCi/g				
Radium-226		0.282	+/-0.0932	0.032	+/-0.0914	0.0708	pCi/g				
Silver-108m	U	0.0145	+/-0.017	0.016	+/-0.0166	0.035	pCi/g				
Thallium-208	UUI	0.00	+/-0.0402	0.0332	+/-0.0394	0.0701	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid-ALL FSS											
Strontium-90	U	-0.00324	+/-0.0041	0.00415	+/-0.0041	0.00863	pCi/g		LCW1 04/09/05	1140	414564
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid-HTD2,ALL FSS											
Tritium	U	2.64	+/-6.99	5.76	+/-6.99	12.0	pCi/g		ATH1 03/30/05	2008	409871

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	03/07/05	1024	406347
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DLD1	03/03/05	1550	406344

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: April 11, 2005

Client Sample ID: 9202–0000–133–C–6C–04
Sample ID: 131693004

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	98	(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 PO# 002332

Report Date: April 11, 2005

Client Sample ID:	9202-0000-133-C-6C-05	Project:	YANK01204
Sample ID:	131693005	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	08-FEB-05		
Receive Date:	03-MAR-05		
Collector:	Client		
Moisture:	4.98%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Alpha Spec Analysis												
Alphaspec Am241, Cm, Solid ALL FSS												
Americium-241	U	-0.0527	+/-0.0651	0.0885	+/-0.0651	0.251	pCi/g		BJB1	04/04/05	1354	412129
Curium-242	U	0.0278	+/-0.103	0.0886	+/-0.103	0.271	pCi/g					
Curium-243/244	U	0.0552	+/-0.166	0.157	+/-0.166	0.389	pCi/g					
Alphaspec Pu, Solid-ALL FSS												
Plutonium-238	U	-0.0202	+/-0.052	0.0708	+/-0.0521	0.201	pCi/g		BJB1	04/02/05	1112	412132
Plutonium-239/240	U	0.000877	+/-0.0477	0.050	+/-0.0477	0.159	pCi/g					
Liquid Scint Pu241, Solid-ALL FSS												
Plutonium-241	U	-3.74	+/-5.72	4.90	+/-5.73	10.1	pCi/g		BJB1	04/05/05	0753	412133
Rad Gamma Spec Analysis												
Gamma,Solid-FSS GAM & ALL FSS												
Actinium-228		0.243	+/-0.110	0.0428	+/-0.108	0.0934	pCi/g		JPH1	03/09/05	1012	406667
Americium-241	U	0.0227	+/-0.0857	0.0733	+/-0.0839	0.153	pCi/g					
Bismuth-212		0.320	+/-0.196	0.0978	+/-0.192	0.211	pCi/g					
Bismuth-214		0.191	+/-0.0697	0.0228	+/-0.0683	0.0489	pCi/g					
Cesium-134	U	-0.00331	+/-0.0146	0.0123	+/-0.0143	0.0268	pCi/g					
Cesium-137	U	0.00428	+/-0.0122	0.011	+/-0.0119	0.024	pCi/g					
Cobalt-60	U	-0.00268	+/-0.0142	0.0117	+/-0.0139	0.0264	pCi/g					
Europium-152	U	-0.0199	+/-0.0394	0.0335	+/-0.0386	0.0711	pCi/g					
Europium-154	U	-0.00266	+/-0.0394	0.0334	+/-0.0386	0.0746	pCi/g					
Europium-155	U	0.0138	+/-0.0478	0.0439	+/-0.0469	0.0916	pCi/g					
Lead-212		0.295	+/-0.0487	0.0202	+/-0.0477	0.0424	pCi/g					
Lead-214		0.266	+/-0.064	0.0246	+/-0.0627	0.0523	pCi/g					
Manganese-54	U	-0.00399	+/-0.0154	0.0128	+/-0.0151	0.0278	pCi/g					
Niobium-94	U	0.0074	+/-0.0126	0.0115	+/-0.0124	0.0248	pCi/g					
Potassium-40		5.57	+/-0.688	0.117	+/-0.674	0.262	pCi/g					
Radium-226		0.191	+/-0.0697	0.0228	+/-0.0683	0.0489	pCi/g					
Silver-108m	U	0.00571	+/-0.0131	0.011	+/-0.0128	0.0235	pCi/g					
Thallium-208		0.0832	+/-0.0308	0.0113	+/-0.0302	0.0245	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid-ALL FSS												
Strontium-90	U	-0.00138	+/-0.00714	0.00698	+/-0.00714	0.0144	pCi/g		LCW1	04/09/05	1140	414564
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid-HTD2,ALL FSS												
Tritium	U	2.78	+/-6.51	5.35	+/-6.51	11.1	pCi/g		ATH1	03/30/05	2040	409871
Liquid Scint C14, Solid All,FSS												

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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: April 11, 2005

Client Sample ID: 9202–0000–133–C–6C–05
Sample ID: 131693005

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Liquid Scintillation Analysis											
Liquid Scint C14, Solid All,FSS											
Carbon–14	U	–0.0214	+/–0.0915	0.0771	+/–0.0915	0.157	pCi/g		EGD1 03/19/05	0419	407148
Liquid Scint Fe55, Solid–ALL FSS											
Iron–55	U	–11.3	+/–57.0	38.7	+/–57.0	79.0	pCi/g		DAJ1 03/30/05	0603	407185
Liquid Scint Ni63, Solid–ALL FSS											
Nickel–63	U	0.112	+/–8.18	6.86	+/–8.18	14.1	pCi/g		DAJ1 03/29/05	1010	407187
Liquid Scint Tc99, Solid–ALL FSS											
Technetium–99	U	0.191	+/–0.146	0.118	+/–0.146	0.242	pCi/g		DAJ1 03/21/05	0819	409273

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	03/07/05	1024	406347
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	DLD1	03/03/05	1550	406344

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 905.0 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 EML HASL–300, Tc–02–RC Modified
12	DOE EML HASL–300, Tc–02–RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium–243	Alphaspec Am241, Cm, Solid ALL	94	(25%–125%)
Carrier/Tracer Recovery	Alphaspec Pu, Solid–ALL FSS	99	
Carrier/Tracer Recovery	Liquid Scint Pu241, Solid–ALL FS	107	
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	69	(25%–125%)

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: April 11, 2005

Client Sample ID: 9202–0000–133–C–6C–05
Sample ID: 131693005

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Carrier/Tracer Recovery		Liquid Scint Fe55, Solid–ALL FS			89						
Carrier/Tracer Recovery		Liquid Scint Ni63, Solid–ALL FS			81						
Carrier/Tracer Recovery		Liquid Scint Tc99, Solid–ALL FS			88						

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.
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Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: April 11, 2005

Client Sample ID:	9202-0000-138-C-1C-01	Project:	YANK01204
Sample ID:	131693006	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	10-FEB-05		
Receive Date:	03-MAR-05		
Collector:	Client		
Moisture:	4.16%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Gamma Spec Analysis											
Gamma,Solid-FSS GAM & ALL FSS											
Actinium-228		0.399	+/-0.129	0.0552	+/-0.127	0.124	pCi/g		JPH1 03/09/05	1128	406667
Americium-241	U	0.0557	+/-0.0974	0.0857	+/-0.0955	0.179	pCi/g				
Bismuth-212	U	0.201	+/-0.285	0.138	+/-0.279	0.304	pCi/g				
Bismuth-214		0.356	+/-0.0978	0.0297	+/-0.0958	0.0654	pCi/g				
Cesium-134	U	0.0103	+/-0.0225	0.0204	+/-0.0221	0.0448	pCi/g				
Cesium-137	U	0.0178	+/-0.0302	0.0186	+/-0.0295	0.0407	pCi/g				
Cobalt-60	U	0.00202	+/-0.0195	0.0168	+/-0.0191	0.0388	pCi/g				
Europium-152	U	0.0295	+/-0.0548	0.0505	+/-0.0537	0.108	pCi/g				
Europium-154	U	0.0142	+/-0.073	0.0637	+/-0.0715	0.141	pCi/g				
Europium-155	U	0.0516	+/-0.0609	0.0579	+/-0.0597	0.121	pCi/g				
Lead-212		0.410	+/-0.069	0.0295	+/-0.0676	0.0624	pCi/g				
Lead-214		0.325	+/-0.0998	0.0343	+/-0.0978	0.0735	pCi/g				
Manganese-54	U	0.00774	+/-0.0207	0.0185	+/-0.0203	0.0407	pCi/g				
Niobium-94	U	-0.00712	+/-0.0193	0.0161	+/-0.0189	0.0352	pCi/g				
Potassium-40		6.82	+/-1.02	0.188	+/-0.996	0.428	pCi/g				
Radium-226		0.356	+/-0.0978	0.0297	+/-0.0958	0.0654	pCi/g				
Silver-108m	U	-0.00723	+/-0.0178	0.0147	+/-0.0174	0.0319	pCi/g				
Thallium-208		0.134	+/-0.0431	0.0203	+/-0.0423	0.0438	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid-ALL FSS											
Strontium-90	U	-0.00071	+/-0.00692	0.00674	+/-0.00692	0.014	pCi/g		LCW1 04/09/05	1247	414564
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid-HTD2,ALL FSS											
Tritium	U	2.83	+/-6.97	5.74	+/-6.97	11.9	pCi/g		ATH1 03/30/05	2112	409871

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	03/07/05	1024	406347
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DLD1	03/03/05	1550	406344

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: April 11, 2005

Client Sample ID: 9202–0000–138–C–1C–01
Sample ID: 131693006

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	59	(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

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362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: April 11, 2005

Client Sample ID:	9202-0000-138-C-1C-02	Project:	YANK01204
Sample ID:	131693007	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	10-FEB-05		
Receive Date:	03-MAR-05		
Collector:	Client		
Moisture:	4.54%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Gamma Spec Analysis											
Gamma,Solid-FSS GAM & ALL FSS											
Actinium-228		0.255	+/-0.121	0.0556	+/-0.119	0.124	pCi/g		JPH1 03/09/05	1221	406667
Americium-241	U	0.00911	+/-0.0782	0.0564	+/-0.0766	0.120	pCi/g				
Bismuth-212	U	0.269	+/-0.164	0.162	+/-0.160	0.349	pCi/g				
Bismuth-214		0.231	+/-0.0883	0.0272	+/-0.0866	0.0597	pCi/g				
Cesium-134	U	0.036	+/-0.0416	0.0192	+/-0.0408	0.0421	pCi/g				
Cesium-137	U	0.00597	+/-0.0191	0.0153	+/-0.0188	0.0337	pCi/g				
Cobalt-60	U	0.0155	+/-0.0187	0.0181	+/-0.0184	0.0412	pCi/g				
Europium-152	U	0.00721	+/-0.0504	0.039	+/-0.0494	0.0842	pCi/g				
Europium-154	U	-0.0297	+/-0.058	0.0446	+/-0.0569	0.103	pCi/g				
Europium-155	U	0.0359	+/-0.0453	0.0447	+/-0.0444	0.0939	pCi/g				
Lead-212		0.239	+/-0.059	0.0307	+/-0.0578	0.0643	pCi/g				
Lead-214		0.323	+/-0.0723	0.029	+/-0.0709	0.0624	pCi/g				
Manganese-54	U	-0.00378	+/-0.0213	0.0175	+/-0.0209	0.0385	pCi/g				
Niobium-94	U	-0.01	+/-0.0172	0.0136	+/-0.0168	0.030	pCi/g				
Potassium-40		5.89	+/-0.853	0.138	+/-0.836	0.326	pCi/g				
Radium-226		0.231	+/-0.0883	0.0272	+/-0.0866	0.0597	pCi/g				
Silver-108m	U	0.00971	+/-0.0154	0.0146	+/-0.0151	0.0316	pCi/g				
Thallium-208	UUI	0.00	+/-0.0331	0.0277	+/-0.0325	0.0583	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid-ALL FSS											
Strontium-90	U	-0.00857	+/-0.00651	0.00671	+/-0.00651	0.0139	pCi/g		LCW1 04/09/05	1247	414564
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid-HTD2,ALL FSS											
Tritium	U	-1.27	+/-6.41	5.43	+/-6.41	11.3	pCi/g		ATH1 03/30/05	2144	409871

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	03/07/05	1024	406347
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DLD1	03/03/05	1550	406344

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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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: April 11, 2005

Client Sample ID: 9202–0000–138–C–1C–02
Sample ID: 131693007

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	72	(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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Certificate of Analysis

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Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: April 11, 2005

Client Sample ID:	9202-0000-138-C-3C-03	Project:	YANK01204
Sample ID:	131693008	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	10-FEB-05		
Receive Date:	03-MAR-05		
Collector:	Client		
Moisture:	6.3%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Gamma Spec Analysis											
Gamma,Solid-FSS GAM & ALL FSS											
Actinium-228		0.446	+/-0.142	0.0711	+/-0.139	0.158	pCi/g		JPH1 03/09/05	1221	406667
Americium-241	U	0.0114	+/-0.109	0.0892	+/-0.107	0.187	pCi/g				
Bismuth-212		0.335	+/-0.282	0.136	+/-0.277	0.303	pCi/g				
Bismuth-214		0.328	+/-0.112	0.0343	+/-0.110	0.0751	pCi/g				
Cesium-134	U	0.0216	+/-0.0262	0.0247	+/-0.0257	0.0538	pCi/g				
Cesium-137	U	-0.0172	+/-0.0285	0.0184	+/-0.0279	0.0405	pCi/g				
Cobalt-60	U	0.0091	+/-0.0288	0.0249	+/-0.0282	0.0557	pCi/g				
Europium-152	U	0.00996	+/-0.0685	0.0534	+/-0.0671	0.114	pCi/g				
Europium-154	U	0.00519	+/-0.0935	0.0673	+/-0.0917	0.151	pCi/g				
Europium-155	U	0.0214	+/-0.067	0.0612	+/-0.0656	0.128	pCi/g				
Lead-212		0.395	+/-0.0737	0.0304	+/-0.0722	0.0641	pCi/g				
Lead-214		0.340	+/-0.103	0.0358	+/-0.101	0.0768	pCi/g				
Manganese-54	U	0.00341	+/-0.031	0.0234	+/-0.0304	0.0509	pCi/g				
Niobium-94	U	0.007	+/-0.0245	0.0211	+/-0.024	0.0455	pCi/g				
Potassium-40		7.78	+/-1.07	0.216	+/-1.05	0.490	pCi/g				
Radium-226		0.328	+/-0.112	0.0343	+/-0.110	0.0751	pCi/g				
Silver-108m	U	-0.00212	+/-0.0231	0.0199	+/-0.0226	0.0425	pCi/g				
Thallium-208		0.153	+/-0.0425	0.0196	+/-0.0417	0.0428	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid-ALL FSS											
Strontium-90	U	-0.000608	+/-0.00614	0.00599	+/-0.00614	0.0125	pCi/g		LCW1 04/09/05	1247	414564
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid-HTD2,ALL FSS											
Tritium	U	5.25	+/-6.64	5.37	+/-6.64	11.2	pCi/g		ATH1 03/30/05	2216	409871

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	03/07/05	1024	406347
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DLD1	03/03/05	1550	406344

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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Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: April 11, 2005

Client Sample ID: 9202–0000–138–C–3C–03
Sample ID: 131693008

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	66	(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 PO# 002332

Report Date: April 11, 2005

Client Sample ID:	9202–0000–138–C–5C–04	Project:	YANK01204
Sample ID:	131693009	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	10–FEB–05		
Receive Date:	03–MAR–05		
Collector:	Client		
Moisture:	7.12%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Gamma Spec Analysis											
Gamma,Solid–FSS GAM & ALL FSS											
Actinium–228		0.381	+/–0.186	0.0504	+/–0.182	0.114	pCi/g		JPH1 03/09/05	1222	406667
Americium–241	U	0.0238	+/–0.0292	0.0248	+/–0.0286	0.0516	pCi/g				
Bismuth–212	U	0.263	+/–0.248	0.132	+/–0.243	0.289	pCi/g				
Bismuth–214		0.380	+/–0.0933	0.0337	+/–0.0914	0.0729	pCi/g				
Cesium–134	U	0.00935	+/–0.026	0.0199	+/–0.0255	0.0436	pCi/g				
Cesium–137	U	–0.00121	+/–0.021	0.0176	+/–0.0206	0.0384	pCi/g				
Cobalt–60	U	–0.0102	+/–0.0201	0.0151	+/–0.0197	0.0352	pCi/g				
Europium–152	U	0.00295	+/–0.0499	0.0443	+/–0.0489	0.0944	pCi/g				
Europium–154	U	0.0206	+/–0.0698	0.0608	+/–0.0684	0.135	pCi/g				
Europium–155	U	0.0125	+/–0.0478	0.0433	+/–0.0468	0.0902	pCi/g				
Lead–212		0.343	+/–0.0586	0.0276	+/–0.0575	0.0578	pCi/g				
Lead–214		0.309	+/–0.0959	0.0293	+/–0.094	0.0628	pCi/g				
Manganese–54	U	–0.0268	+/–0.0221	0.0151	+/–0.0217	0.0337	pCi/g				
Niobium–94	U	–0.01	+/–0.0203	0.0161	+/–0.0199	0.035	pCi/g				
Potassium–40		7.00	+/–1.01	0.155	+/–0.993	0.361	pCi/g				
Radium–226		0.380	+/–0.0933	0.0337	+/–0.0914	0.0729	pCi/g				
Silver–108m	U	–0.00497	+/–0.0184	0.0156	+/–0.018	0.0334	pCi/g				
Thallium–208		0.137	+/–0.0465	0.0175	+/–0.0455	0.038	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid–ALL FSS											
Strontium–90	U	0.00984	+/–0.00637	0.00562	+/–0.00637	0.0117	pCi/g		LCW1 04/09/05	1247	414564
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid–HTD2,ALL FSS											
Tritium	U	5.59	+/–6.67	5.38	+/–6.67	11.2	pCi/g		ATH1 03/30/05	2247	409871

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	03/07/05	1024	406347
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	DLD1	03/03/05	1550	406344

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: April 11, 2005

Client Sample ID: 9202–0000–138–C–5C–04
Sample ID: 131693009

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	64	(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 PO# 002332

Report Date: April 11, 2005

Client Sample ID:	9202-0000-138-C-5C-05	Project:	YANK01204
Sample ID:	131693010	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	10-FEB-05		
Receive Date:	03-MAR-05		
Collector:	Client		
Moisture:	5.8%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Alpha Spec Analysis											
Alphaspec Am241, Cm, Solid ALL FSS											
Americium-241	U	-0.00423	+/-0.047	0.0539	+/-0.0471	0.165	pCi/g		BJB1 04/05/05	1228	412129
Curium-242	U	-0.0128	+/-0.0552	0.043	+/-0.0552	0.158	pCi/g				
Curium-243/244	U	-0.0247	+/-0.0513	0.0727	+/-0.0514	0.203	pCi/g				
Alphaspec Pu, Solid-ALL FSS											
Plutonium-238	U	-0.107	+/-0.0656	0.122	+/-0.0668	0.302	pCi/g		BJB1 04/02/05	1112	412132
Plutonium-239/240	U	-0.0308	+/-0.0247	0.0597	+/-0.0249	0.177	pCi/g				
Liquid Scint Pu241, Solid-ALL FSS											
Plutonium-241	U	2.16	+/-6.57	5.45	+/-6.57	11.2	pCi/g		BJB1 04/05/05	0825	412133
Rad Gamma Spec Analysis											
Gamma,Solid-FSS GAM & ALL FSS											
Actinium-228		0.284	+/-0.154	0.0824	+/-0.151	0.183	pCi/g		JPH1 03/09/05	1222	406667
Americium-241	U	-0.0314	+/-0.0299	0.0226	+/-0.0293	0.0479	pCi/g				
Bismuth-212		0.460	+/-0.379	0.141	+/-0.371	0.317	pCi/g				
Bismuth-214		0.320	+/-0.112	0.0329	+/-0.110	0.0731	pCi/g				
Cesium-134	U	0.0178	+/-0.0379	0.0255	+/-0.0372	0.0562	pCi/g				
Cesium-137	U	-0.00613	+/-0.0215	0.0181	+/-0.0211	0.0406	pCi/g				
Cobalt-60	U	0.00277	+/-0.026	0.0226	+/-0.0255	0.0521	pCi/g				
Europium-152	U	0.0129	+/-0.0559	0.0498	+/-0.0548	0.107	pCi/g				
Europium-154	U	-0.0271	+/-0.0756	0.0569	+/-0.0741	0.132	pCi/g				
Europium-155	U	0.0329	+/-0.0607	0.0407	+/-0.0595	0.0863	pCi/g				
Lead-212		0.306	+/-0.0602	0.0269	+/-0.059	0.0572	pCi/g				
Lead-214		0.306	+/-0.0942	0.0328	+/-0.0923	0.0712	pCi/g				
Manganese-54	U	0.0036	+/-0.0258	0.0224	+/-0.0253	0.0497	pCi/g				
Niobium-94	U	-0.00813	+/-0.0213	0.0176	+/-0.0209	0.0392	pCi/g				
Potassium-40		5.73	+/-0.997	0.180	+/-0.977	0.429	pCi/g				
Radium-226		0.320	+/-0.112	0.0329	+/-0.110	0.0731	pCi/g				
Silver-108m	U	-0.0103	+/-0.0173	0.0135	+/-0.0169	0.030	pCi/g				
Thallium-208		0.101	+/-0.0571	0.0195	+/-0.056	0.0429	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid-ALL FSS											
Strontium-90	U	-0.00137	+/-0.00421	0.00417	+/-0.00421	0.00874	pCi/g		LCW1 04/09/05	1247	414564
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid-HTD2,ALL FSS											
Tritium	U	3.38	+/-5.77	4.71	+/-5.77	9.79	pCi/g		ATH1 03/30/05	2319	409871
Liquid Scint C14, Solid All,FSS											

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: April 11, 2005

Client Sample ID: 9202–0000–138–C–5C–05
Sample ID: 131693010

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Liquid Scintillation Analysis											
Liquid Scint C14, Solid All,FSS											
Carbon–14	U	–0.0206	+/–0.0913	0.0769	+/–0.0913	0.156	pCi/g		EGD1 03/19/05	0551	407148
Liquid Scint Fe55, Solid–ALL FSS											
Iron–55	U	12.9	+/–56.4	37.9	+/–56.4	77.3	pCi/g		DAJ1 03/30/05	0635	407185
Liquid Scint Ni63, Solid–ALL FSS											
Nickel–63	U	–2.68	+/–7.57	6.42	+/–7.57	13.2	pCi/g		DAJ1 03/29/05	1057	407187
Liquid Scint Tc99, Solid–ALL FSS											
Technetium–99	U	0.0934	+/–0.138	0.114	+/–0.138	0.233	pCi/g		DAJ1 03/21/05	0907	409273

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	03/07/05	1024	406347
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	DLD1	03/03/05	1550	406344

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 905.0 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 EML HASL–300, Tc–02–RC Modified
12	DOE EML HASL–300, Tc–02–RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium–243	Alphaspec Am241, Cm, Solid ALL	99	(25%–125%)
Carrier/Tracer Recovery	Alphaspec Pu, Solid–ALL FSS	102	
Carrier/Tracer Recovery	Liquid Scint Pu241, Solid–ALL FS	91	
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	79	(25%–125%)

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Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: April 11, 2005

Client Sample ID: 9202-0000-138-C-5C-05
Sample ID: 131693010

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Carrier/Tracer Recovery		Liquid Scint Fe55, Solid-ALL FS			92						
Carrier/Tracer Recovery		Liquid Scint Ni63, Solid-ALL FS			83						
Carrier/Tracer Recovery		Liquid Scint Tc99, Solid-ALL FS			81						

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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Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: April 11, 2005

Client Sample ID:	9202–0000–135–C–1C–01	Project:	YANK01204
Sample ID:	131693011	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	08–FEB–05		
Receive Date:	03–MAR–05		
Collector:	Client		
Moisture:	4.32%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Gamma Spec Analysis											
Gamma,Solid–FSS GAM & ALL FSS											
Actinium–228	UUI	0.00	+/–0.121	0.105	+/–0.119	0.221	pCi/g		JPH1 03/09/05	1539	406667
Americium–241	U	–0.0584	+/–0.074	0.0587	+/–0.0725	0.124	pCi/g				
Bismuth–212	U	0.197	+/–0.217	0.120	+/–0.213	0.264	pCi/g				
Bismuth–214		0.184	+/–0.0619	0.0282	+/–0.0606	0.0616	pCi/g				
Cesium–134	U	0.0127	+/–0.0212	0.0194	+/–0.0208	0.0424	pCi/g				
Cesium–137		0.0701	+/–0.0416	0.0167	+/–0.0408	0.0363	pCi/g				
Cobalt–60	U	0.0576	+/–0.0357	0.0319	+/–0.035	0.0687	pCi/g				
Europium–152	U	0.0253	+/–0.0439	0.0408	+/–0.0431	0.0873	pCi/g				
Europium–154	U	0.0252	+/–0.0587	0.053	+/–0.0575	0.119	pCi/g				
Europium–155	U	0.0221	+/–0.0491	0.0458	+/–0.0481	0.0961	pCi/g				
Lead–212	UUI	0.00	+/–0.0542	0.048	+/–0.0531	0.0986	pCi/g				
Lead–214		0.327	+/–0.075	0.0247	+/–0.0735	0.0536	pCi/g				
Manganese–54	U	–1.340E–05	+/–0.0215	0.0183	+/–0.0211	0.040	pCi/g				
Niobium–94	U	0.00388	+/–0.0174	0.0154	+/–0.017	0.0335	pCi/g				
Potassium–40		5.73	+/–0.891	0.175	+/–0.873	0.398	pCi/g				
Radium–226		0.184	+/–0.0619	0.0282	+/–0.0606	0.0616	pCi/g				
Silver–108m	U	–0.00392	+/–0.0163	0.0138	+/–0.016	0.0298	pCi/g				
Thallium–208		0.088	+/–0.0288	0.0169	+/–0.0283	0.0367	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid–ALL FSS											
Strontium–90	U	0.000684	+/–0.00712	0.00687	+/–0.00712	0.0143	pCi/g		LCW1 04/09/05	1247	414564
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid–HTD2,ALL FSS											
Tritium	U	3.81	+/–6.73	5.50	+/–6.73	11.4	pCi/g		ATH1 03/30/05	2351	409871

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	03/07/05	1024	406347
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	DLD1	03/03/05	1550	406344

The following Analytical Methods were performed

Method	Description

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Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: April 11, 2005

Client Sample ID: 9202–0000–135–C–1C–01
Sample ID: 131693011

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	65	(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 PO# 002332

Report Date: April 11, 2005

Client Sample ID:	9202-0000-135-C-1C-02	Project:	YANK01204
Sample ID:	131693012	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	08-FEB-05		
Receive Date:	03-MAR-05		
Collector:	Client		
Moisture:	4.26%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Gamma Spec Analysis											
Gamma,Solid-FSS GAM & ALL FSS											
Actinium-228		0.319	+/-0.117	0.0414	+/-0.115	0.0908	pCi/g		JPH1 03/09/05	1526	406667
Americium-241	U	0.0062	+/-0.0539	0.0463	+/-0.0529	0.0969	pCi/g				
Bismuth-212		0.309	+/-0.192	0.0896	+/-0.188	0.196	pCi/g				
Bismuth-214		0.189	+/-0.0675	0.0255	+/-0.0661	0.0545	pCi/g				
Cesium-134	U	-0.000416	+/-0.0165	0.0137	+/-0.0161	0.0298	pCi/g				
Cesium-137	U	-0.00197	+/-0.0165	0.0139	+/-0.0162	0.0299	pCi/g				
Cobalt-60	U	-0.00785	+/-0.0179	0.0139	+/-0.0176	0.0308	pCi/g				
Europium-152	U	-0.0148	+/-0.0387	0.0326	+/-0.038	0.0695	pCi/g				
Europium-154	U	-0.0171	+/-0.0462	0.0362	+/-0.0453	0.0805	pCi/g				
Europium-155	U	0.047	+/-0.0564	0.0383	+/-0.0552	0.0803	pCi/g				
Lead-212		0.346	+/-0.0548	0.0194	+/-0.0537	0.0409	pCi/g				
Lead-214		0.254	+/-0.0648	0.0263	+/-0.0635	0.0557	pCi/g				
Manganese-54	U	0.00656	+/-0.0152	0.0132	+/-0.0149	0.0287	pCi/g				
Niobium-94	U	0.00165	+/-0.0153	0.0131	+/-0.015	0.0281	pCi/g				
Potassium-40		5.85	+/-0.717	0.116	+/-0.702	0.261	pCi/g				
Radium-226		0.189	+/-0.0675	0.0255	+/-0.0661	0.0545	pCi/g				
Silver-108m	U	0.000523	+/-0.0171	0.0127	+/-0.0167	0.0269	pCi/g				
Thallium-208		0.0915	+/-0.0271	0.0134	+/-0.0266	0.0288	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid-ALL FSS											
Strontium-90	U	0.00364	+/-0.00505	0.00469	+/-0.00505	0.00978	pCi/g		LCW1 04/09/05	1247	414564
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid-HTD2,ALL FSS											
Tritium	U	2.19	+/-6.52	5.39	+/-6.52	11.2	pCi/g		ATH1 03/31/05	0023	409871

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	03/07/05	1024	406347
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DLD1	03/03/05	1550	406344

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: April 11, 2005

Client Sample ID: 9202–0000–135–C–1C–02
Sample ID: 131693012

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	82	(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 PO# 002332

Report Date: April 11, 2005

Client Sample ID:	9202-0000-135-C-5C-03	Project:	YANK01204
Sample ID:	131693013	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	09-FEB-05		
Receive Date:	03-MAR-05		
Collector:	Client		
Moisture:	5.18%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Gamma Spec Analysis											
Gamma,Solid-FSS GAM & ALL FSS											
Actinium-228		0.288	+/-0.149	0.0664	+/-0.146	0.146	pCi/g		JPH1 03/09/05	1527	406667
Americium-241	U	-0.0465	+/-0.103	0.0807	+/-0.101	0.172	pCi/g				
Bismuth-212	U	0.186	+/-0.165	0.0953	+/-0.162	0.217	pCi/g				
Bismuth-214		0.260	+/-0.0753	0.0267	+/-0.0738	0.059	pCi/g				
Cesium-134	U	0.00421	+/-0.0185	0.0161	+/-0.0181	0.036	pCi/g				
Cesium-137	U	-0.0149	+/-0.0183	0.014	+/-0.0179	0.0312	pCi/g				
Cobalt-60	U	-0.000333	+/-0.0199	0.0166	+/-0.0195	0.0382	pCi/g				
Europium-152	U	0.0122	+/-0.0482	0.0423	+/-0.0473	0.0908	pCi/g				
Europium-154	U	-0.0345	+/-0.0485	0.0341	+/-0.0475	0.0821	pCi/g				
Europium-155	U	0.0064	+/-0.0464	0.0445	+/-0.0455	0.0942	pCi/g				
Lead-212		0.314	+/-0.0581	0.0228	+/-0.057	0.0486	pCi/g				
Lead-214		0.292	+/-0.0712	0.0306	+/-0.0697	0.0656	pCi/g				
Manganese-54	U	-0.000573	+/-0.0206	0.0172	+/-0.0202	0.0379	pCi/g				
Niobium-94	U	0.00486	+/-0.0201	0.0156	+/-0.0197	0.034	pCi/g				
Potassium-40		5.43	+/-0.795	0.142	+/-0.780	0.336	pCi/g				
Radium-226		0.260	+/-0.0753	0.0267	+/-0.0738	0.059	pCi/g				
Silver-108m	U	0.00694	+/-0.0149	0.0139	+/-0.0146	0.0303	pCi/g				
Thallium-208		0.0801	+/-0.0369	0.0143	+/-0.0361	0.0316	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid-ALL FSS											
Strontium-90	U	-0.0022	+/-0.00538	0.00534	+/-0.00538	0.0111	pCi/g		LCW1 04/09/05	1247	414564
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid-HTD2,ALL FSS											
Tritium	U	5.84	+/-6.59	5.31	+/-6.60	11.0	pCi/g		ATH1 03/31/05	0055	409871

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	03/07/05	1024	406347
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DLD1	03/03/05	1550	406344

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: April 11, 2005

Client Sample ID: 9202–0000–135–C–5C–03
Sample ID: 131693013

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	72	(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 PO# 002332

Report Date: April 11, 2005

Client Sample ID:	9202-0000-135-C-10C-04	Project:	YANK01204
Sample ID:	131693014	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	09-FEB-05		
Receive Date:	03-MAR-05		
Collector:	Client		
Moisture:	6.06%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Gamma Spec Analysis											
Gamma,Solid-FSS GAM & ALL FSS											
Actinium-228		0.362	+/-0.146	0.0772	+/-0.143	0.171	pCi/g		JPH1 03/09/05	1528	406667
Americium-241	U	0.00257	+/-0.0337	0.0264	+/-0.033	0.0552	pCi/g				
Bismuth-212		0.564	+/-0.370	0.147	+/-0.362	0.327	pCi/g				
Bismuth-214	UUI	0.00	+/-0.0986	0.0766	+/-0.0966	0.160	pCi/g				
Cesium-134	U	-0.002	+/-0.0256	0.0213	+/-0.0251	0.0475	pCi/g				
Cesium-137	U	-0.00059	+/-0.0219	0.0187	+/-0.0214	0.0413	pCi/g				
Cobalt-60	U	0.00719	+/-0.0204	0.0184	+/-0.020	0.0431	pCi/g				
Europium-152	U	-0.013	+/-0.057	0.0474	+/-0.0559	0.102	pCi/g				
Europium-154	U	-0.00229	+/-0.0621	0.0522	+/-0.0609	0.121	pCi/g				
Europium-155	U	0.0389	+/-0.0539	0.0511	+/-0.0528	0.107	pCi/g				
Lead-212		0.367	+/-0.0664	0.0294	+/-0.0651	0.0621	pCi/g				
Lead-214		0.337	+/-0.0846	0.0353	+/-0.0829	0.0759	pCi/g				
Manganese-54	U	0.00603	+/-0.0217	0.019	+/-0.0213	0.0424	pCi/g				
Niobium-94	U	0.0172	+/-0.0235	0.0215	+/-0.023	0.0466	pCi/g				
Potassium-40		5.72	+/-0.972	0.176	+/-0.953	0.414	pCi/g				
Radium-226		0.329	+/-0.0986	0.0376	+/-0.0966	0.0821	pCi/g				
Silver-108m	U	0.0089	+/-0.0178	0.0186	+/-0.0175	0.0401	pCi/g				
Thallium-208		0.107	+/-0.0438	0.0181	+/-0.0429	0.0399	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid-ALL FSS											
Strontium-90	U	0.000714	+/-0.00512	0.00493	+/-0.00512	0.0102	pCi/g		LCW1 04/09/05	2212	414564
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid-HTD2,ALL FSS											
Tritium	U	-3.39	+/-7.47	6.46	+/-7.47	13.6	pCi/g		ATH1 04/05/05	1846	409925

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	03/07/05	1024	406347
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DLD1	03/03/05	1550	406344

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: April 11, 2005

Client Sample ID: 9202–0000–135–C–10C–04
Sample ID: 131693014

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

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

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

Notes:
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- B Target analyte was detected in the sample as well as the associated blank.
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- 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 PO# 002332

Report Date: April 11, 2005

Client Sample ID:	9202-0000-135-C-10C-05	Project:	YANK01204
Sample ID:	131693015	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	09-FEB-05		
Receive Date:	03-MAR-05		
Collector:	Client		
Moisture:	7.72%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Alpha Spec Analysis											
Alphaspec Am241, Cm, Solid ALL FSS											
Americium-241	U	0.0784	+/-0.108	0.0712	+/-0.108	0.206	pCi/g		BJB1 04/04/05	1354	412129
Curium-242	U	0.0536	+/-0.106	0.0759	+/-0.106	0.232	pCi/g				
Curium-243/244	U	0.037	+/-0.153	0.151	+/-0.153	0.365	pCi/g				
Alphaspec Pu, Solid-ALL FSS											
Plutonium-238	U	-0.0227	+/-0.0222	0.0371	+/-0.0223	0.105	pCi/g		BJB1 04/02/05	1112	412132
Plutonium-239/240	U	-0.017	+/-0.0292	0.0321	+/-0.0292	0.0945	pCi/g				
Liquid Scint Pu241, Solid-ALL FSS											
Plutonium-241	U	1.90	+/-6.48	5.38	+/-6.48	11.1	pCi/g		BJB1 04/05/05	0856	412133
Rad Gamma Spec Analysis											
Gamma,Solid-FSS GAM & ALL FSS											
Actinium-228		0.390	+/-0.209	0.0632	+/-0.204	0.144	pCi/g		JPH1 03/09/05	1529	406667
Americium-241	U	0.0872	+/-0.106	0.0907	+/-0.104	0.191	pCi/g				
Bismuth-212	U	0.276	+/-0.225	0.165	+/-0.220	0.363	pCi/g				
Bismuth-214		0.317	+/-0.0842	0.0286	+/-0.0826	0.0644	pCi/g				
Cesium-134	U	0.0176	+/-0.0286	0.0258	+/-0.0281	0.0566	pCi/g				
Cesium-137	U	0.0185	+/-0.0253	0.0233	+/-0.0248	0.0509	pCi/g				
Cobalt-60	U	-0.00733	+/-0.0182	0.0136	+/-0.0178	0.0337	pCi/g				
Europium-152	U	-0.00201	+/-0.0634	0.0532	+/-0.0621	0.114	pCi/g				
Europium-154	U	-0.0103	+/-0.0739	0.0608	+/-0.0724	0.139	pCi/g				
Europium-155	U	0.00247	+/-0.0604	0.0558	+/-0.0592	0.118	pCi/g				
Lead-212		0.325	+/-0.0574	0.0282	+/-0.0562	0.060	pCi/g				
Lead-214		0.268	+/-0.099	0.0404	+/-0.097	0.0866	pCi/g				
Manganese-54	U	0.00145	+/-0.0228	0.0191	+/-0.0223	0.043	pCi/g				
Niobium-94	U	-0.0129	+/-0.0223	0.0175	+/-0.0218	0.0387	pCi/g				
Potassium-40		5.55	+/-0.895	0.196	+/-0.877	0.458	pCi/g				
Radium-226		0.317	+/-0.0842	0.0286	+/-0.0826	0.0644	pCi/g				
Silver-108m	U	-0.0066	+/-0.0237	0.019	+/-0.0233	0.041	pCi/g				
Thallium-208		0.117	+/-0.0508	0.0188	+/-0.0498	0.0416	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid-ALL FSS											
Strontium-90	U	-0.00256	+/-0.00609	0.00604	+/-0.00609	0.0126	pCi/g		LCW1 04/09/05	2212	414564
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid-HTD2,ALL FSS											
Tritium	U	4.53	+/-7.73	6.24	+/-7.73	13.2	pCi/g		ATH1 04/05/05	1902	409925
Liquid Scint C14, Solid All,FSS											

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Project: Soils PO# 002332

Report Date: April 11, 2005

Client Sample ID: 9202–0000–135–C–10C–05
Sample ID: 131693015

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Liquid Scintillation Analysis											
Liquid Scint C14, Solid All,FSS											
Carbon–14	U	–0.0263	+/–0.0926	0.0781	+/–0.0926	0.159	pCi/g		EGD1 03/19/05	0724	407148
Liquid Scint Fe55, Solid–ALL FSS											
Iron–55	U	–20.3	+/–55.2	37.4	+/–55.2	76.4	pCi/g		DAJ1 03/30/05	0707	407185
Liquid Scint Ni63, Solid–ALL FSS											
Nickel–63	U	–7.44	+/–7.93	6.84	+/–7.94	14.0	pCi/g		DAJ1 03/29/05	1143	407187
Liquid Scint Tc99, Solid–ALL FSS											
Technetium–99	U	0.266	+/–0.181	0.145	+/–0.181	0.298	pCi/g		DAJ1 03/21/05	0955	409273

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	03/07/05	1024	406347
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	DLD1	03/03/05	1550	406344

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 905.0 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 EML HASL–300, Tc–02–RC Modified
12	DOE EML HASL–300, Tc–02–RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium–243	Alphaspec Am241, Cm, Solid ALL	92	(25%–125%)
Carrier/Tracer Recovery	Alphaspec Pu, Solid–ALL FSS	90	
Carrier/Tracer Recovery	Liquid Scint Pu241, Solid–ALL FS	94	
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	62	(25%–125%)

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Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: April 11, 2005

Client Sample ID: 9202-0000-135-C-10C-05
Sample ID: 131693015

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Carrier/Tracer Recovery		Liquid Scint Fe55, Solid-ALL FS			96						
Carrier/Tracer Recovery		Liquid Scint Ni63, Solid-ALL FS			82						
Carrier/Tracer Recovery		Liquid Scint Tc99, Solid-ALL FS			72						

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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Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: April 11, 2005

Client Sample ID:	9202-0000-134-C-1C-01	Project:	YANK01204
Sample ID:	131693016	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	09-FEB-05		
Receive Date:	03-MAR-05		
Collector:	Client		
Moisture:	3.63%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Gamma Spec Analysis											
Gamma,Solid-FSS GAM & ALL FSS											
Actinium-228		0.271	+/-0.120	0.0559	+/-0.118	0.126	pCi/g		JPH1 03/09/05	1530	406667
Americium-241	U	-0.0273	+/-0.0729	0.0608	+/-0.0714	0.129	pCi/g				
Bismuth-212	U	0.200	+/-0.334	0.115	+/-0.327	0.257	pCi/g				
Bismuth-214		0.271	+/-0.0665	0.0319	+/-0.0652	0.0695	pCi/g				
Cesium-134	U	0.0145	+/-0.0239	0.0217	+/-0.0234	0.0475	pCi/g				
Cesium-137	U	-0.00419	+/-0.0177	0.015	+/-0.0174	0.0333	pCi/g				
Cobalt-60	U	0.00152	+/-0.0194	0.0165	+/-0.019	0.0383	pCi/g				
Europium-152	U	-0.0396	+/-0.0492	0.0402	+/-0.0482	0.0868	pCi/g				
Europium-154	U	0.0803	+/-0.0758	0.0602	+/-0.0743	0.135	pCi/g				
Europium-155	U	0.0133	+/-0.0497	0.0463	+/-0.0487	0.0975	pCi/g				
Lead-212		0.343	+/-0.0614	0.0241	+/-0.0602	0.0512	pCi/g				
Lead-214		0.303	+/-0.0769	0.0317	+/-0.0753	0.0681	pCi/g				
Manganese-54	U	0.0224	+/-0.0193	0.0188	+/-0.0189	0.0413	pCi/g				
Niobium-94	U	0.00879	+/-0.0175	0.016	+/-0.0172	0.035	pCi/g				
Potassium-40		5.57	+/-0.813	0.175	+/-0.797	0.403	pCi/g				
Radium-226		0.271	+/-0.0665	0.0319	+/-0.0652	0.0695	pCi/g				
Silver-108m	U	-0.00924	+/-0.0168	0.0136	+/-0.0165	0.0297	pCi/g				
Thallium-208		0.0602	+/-0.0384	0.0157	+/-0.0377	0.0344	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid-ALL FSS											
Strontium-90	U	0.00135	+/-0.00574	0.00549	+/-0.00574	0.0114	pCi/g		LCW1 04/09/05	2213	414564
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid-HTD2,ALL FSS											
Tritium	U	-3.36	+/-7.86	6.73	+/-7.87	14.0	pCi/g		ATH1 04/08/05	0033	409925

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	03/07/05	1024	406347
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DLD1	03/03/05	1550	406344

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: April 11, 2005

Client Sample ID: 9202–0000–134–C–1C–01
Sample ID: 131693016

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	70	(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 PO# 002332

Report Date: April 11, 2005

Client Sample ID:	9202–0000–134–C–1C–02	Project:	YANK01204
Sample ID:	131693017	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	09–FEB–05		
Receive Date:	03–MAR–05		
Collector:	Client		
Moisture:	4.8%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Gamma Spec Analysis											
Gamma,Solid–FSS GAM & ALL FSS											
Actinium–228		0.375	+/–0.155	0.0632	+/–0.152	0.141	pCi/g		JPH1 03/09/05	1532	406667
Americium–241	U	–0.0443	+/–0.0976	0.0632	+/–0.0956	0.134	pCi/g				
Bismuth–212	U	0.288	+/–0.275	0.132	+/–0.270	0.291	pCi/g				
Bismuth–214		0.279	+/–0.0818	0.0289	+/–0.0802	0.0637	pCi/g				
Cesium–134	U	0.0329	+/–0.0445	0.0213	+/–0.0436	0.0468	pCi/g				
Cesium–137	U	0.00146	+/–0.0182	0.0157	+/–0.0179	0.0349	pCi/g				
Cobalt–60	U	0.00446	+/–0.0181	0.0159	+/–0.0177	0.0374	pCi/g				
Europium–152	U	–0.0549	+/–0.0545	0.0409	+/–0.0535	0.0885	pCi/g				
Europium–154	U	0.00572	+/–0.0494	0.0425	+/–0.0484	0.0999	pCi/g				
Europium–155	U	–0.0167	+/–0.0493	0.0445	+/–0.0484	0.094	pCi/g				
Lead–212		0.348	+/–0.0611	0.0227	+/–0.0598	0.0486	pCi/g				
Lead–214		0.306	+/–0.0817	0.0313	+/–0.0801	0.0675	pCi/g				
Manganese–54	U	0.0313	+/–0.0197	0.019	+/–0.0193	0.0419	pCi/g				
Niobium–94	U	0.00683	+/–0.0195	0.0172	+/–0.0191	0.0374	pCi/g				
Potassium–40		5.80	+/–0.857	0.118	+/–0.840	0.291	pCi/g				
Radium–226		0.279	+/–0.0818	0.0289	+/–0.0802	0.0637	pCi/g				
Silver–108m	U	–0.00181	+/–0.0146	0.0128	+/–0.0143	0.0281	pCi/g				
Thallium–208		0.114	+/–0.0395	0.0141	+/–0.0387	0.0315	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid–ALL FSS											
Strontium–90	U	0.00336	+/–0.00676	0.0064	+/–0.00676	0.0132	pCi/g		LCW1 04/09/05	2213	414564
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid–HTD2,ALL FSS											
Tritium	U	–0.496	+/–7.49	6.32	+/–7.49	13.3	pCi/g		ATH1 04/05/05	1936	409925

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	03/07/05	1024	406347
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	DLD1	03/03/05	1550	406344

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: April 11, 2005

Client Sample ID: 9202–0000–134–C–1C–02
Sample ID: 131693017

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	68	(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 PO# 002332

Report Date: April 11, 2005

Client Sample ID:	9202-0000-134-C-2C-03	Project:	YANK01204
Sample ID:	131693018	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	09-FEB-05		
Receive Date:	03-MAR-05		
Collector:	Client		
Moisture:	5.47%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Gamma Spec Analysis											
Gamma,Solid-FSS GAM & ALL FSS											
Actinium-228	U	0.0634	+/-0.176	0.0705	+/-0.172	0.156	pCi/g		JPH1 03/09/05	1533	406667
Americium-241	U	-0.0386	+/-0.0923	0.0832	+/-0.0905	0.175	pCi/g				
Bismuth-212	U	0.270	+/-0.272	0.151	+/-0.267	0.331	pCi/g				
Bismuth-214		0.319	+/-0.088	0.0321	+/-0.0862	0.0705	pCi/g				
Cesium-134	U	-0.00679	+/-0.0226	0.0185	+/-0.0222	0.0413	pCi/g				
Cesium-137	U	-0.0196	+/-0.0226	0.0142	+/-0.0222	0.032	pCi/g				
Cobalt-60	U	0.00558	+/-0.0216	0.019	+/-0.0211	0.0435	pCi/g				
Europium-152	U	-0.000831	+/-0.0545	0.0475	+/-0.0534	0.102	pCi/g				
Europium-154	U	-0.0122	+/-0.0652	0.0537	+/-0.0639	0.122	pCi/g				
Europium-155	U	-0.0313	+/-0.0652	0.0563	+/-0.0639	0.118	pCi/g				
Lead-212		0.377	+/-0.0692	0.0291	+/-0.0678	0.0617	pCi/g				
Lead-214		0.320	+/-0.0797	0.035	+/-0.0781	0.0754	pCi/g				
Manganese-54	U	0.00291	+/-0.023	0.0198	+/-0.0226	0.0437	pCi/g				
Niobium-94	U	-0.0142	+/-0.0211	0.0169	+/-0.0207	0.0371	pCi/g				
Potassium-40		6.49	+/-1.03	0.174	+/-1.01	0.402	pCi/g				
Radium-226		0.319	+/-0.088	0.0321	+/-0.0862	0.0705	pCi/g				
Silver-108m	U	0.017	+/-0.0199	0.0168	+/-0.0195	0.0364	pCi/g				
Thallium-208		0.134	+/-0.0464	0.0162	+/-0.0455	0.0359	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid-ALL FSS											
Strontium-90	U	-0.000918	+/-0.00622	0.00608	+/-0.00622	0.0127	pCi/g		LCW1 04/09/05	2213	414564
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid-HTD2,ALL FSS											
Tritium	U	-1.95	+/-8.38	7.10	+/-8.38	14.7	pCi/g		ATH1 04/08/05	0106	409925

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	03/07/05	1024	406347
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DLD1	03/03/05	1550	406344

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: April 11, 2005

Client Sample ID: 9202–0000–134–C–2C–03
Sample ID: 131693018

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	75	(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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Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: April 11, 2005

Client Sample ID:	9202–0000–134–C–3C–04	Project:	YANK01204
Sample ID:	131693019	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	09–FEB–05		
Receive Date:	03–MAR–05		
Collector:	Client		
Moisture:	6.1%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Gamma Spec Analysis											
Gamma,Solid–FSS GAM & ALL FSS											
Actinium–228		0.411	+/–0.192	0.0807	+/–0.188	0.177	pCi/g		JPH1 03/09/05	1534	406667
Americium–241	U	–0.122	+/–0.120	0.0897	+/–0.117	0.188	pCi/g				
Bismuth–212	U	0.234	+/–0.232	0.144	+/–0.228	0.317	pCi/g				
Bismuth–214		0.337	+/–0.0969	0.0394	+/–0.095	0.0851	pCi/g				
Cesium–134	U	0.0045	+/–0.0252	0.0223	+/–0.0247	0.049	pCi/g				
Cesium–137	U	–0.014	+/–0.0249	0.0195	+/–0.0244	0.0427	pCi/g				
Cobalt–60	U	0.00919	+/–0.0271	0.0236	+/–0.0266	0.0531	pCi/g				
Europium–152	U	0.0598	+/–0.078	0.0495	+/–0.0764	0.106	pCi/g				
Europium–154	U	0.00463	+/–0.0812	0.0586	+/–0.0796	0.133	pCi/g				
Europium–155	U	0.035	+/–0.0666	0.0617	+/–0.0653	0.129	pCi/g				
Lead–212		0.350	+/–0.069	0.0327	+/–0.0676	0.0687	pCi/g				
Lead–214		0.387	+/–0.0831	0.0358	+/–0.0814	0.0768	pCi/g				
Manganese–54	U	0.00053	+/–0.0237	0.0205	+/–0.0233	0.0452	pCi/g				
Niobium–94	U	0.00765	+/–0.0212	0.0185	+/–0.0208	0.0403	pCi/g				
Potassium–40		7.03	+/–1.04	0.191	+/–1.02	0.440	pCi/g				
Radium–226		0.337	+/–0.0969	0.0394	+/–0.095	0.0851	pCi/g				
Silver–108m	U	0.0148	+/–0.0193	0.018	+/–0.0189	0.0387	pCi/g				
Thallium–208		0.151	+/–0.063	0.0204	+/–0.0618	0.0443	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid–ALL FSS											
Strontium–90	U	0.0154	+/–0.0178	0.018	+/–0.0178	0.039	pCi/g		BXD1 04/06/05	2151	414102
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid–HTD2,ALL FSS											
Tritium	U	–4.69	+/–8.17	7.04	+/–8.17	14.6	pCi/g		ATH1 04/08/05	0138	409925

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	03/07/05	1024	406347
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	DLD1	03/03/05	1550	406344

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: April 11, 2005

Client Sample ID: 9202–0000–134–C–3C–04
Sample ID: 131693019

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	73	(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 PO# 002332

Report Date: April 11, 2005

Client Sample ID:	9202-0000-134-C-3C-05	Project:	YANK01204
Sample ID:	131693020	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	09-FEB-05		
Receive Date:	03-MAR-05		
Collector:	Client		
Moisture:	4.51%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Alpha Spec Analysis											
Alphaspec Am241, Cm, Solid ALL FSS											
Americium-241	U	-0.00697	+/-0.122	0.133	+/-0.122	0.333	pCi/g		BJB1 04/04/05	1354	412129
Curium-242	U	0.0176	+/-0.0942	0.0876	+/-0.0942	0.260	pCi/g				
Curium-243/244	U	-0.099	+/-0.106	0.153	+/-0.107	0.374	pCi/g				
Alphaspec Pu, Solid-ALL FSS											
Plutonium-238	U	-0.0441	+/-0.0674	0.102	+/-0.0675	0.276	pCi/g		BJB1 04/05/05	1228	412132
Plutonium-239/240	U	0.00322	+/-0.101	0.106	+/-0.101	0.285	pCi/g				
Liquid Scint Pu241, Solid-ALL FSS											
Plutonium-241	U	2.09	+/-6.07	5.04	+/-6.08	10.4	pCi/g		BJB1 04/05/05	0928	412133
Rad Gamma Spec Analysis											
Gamma,Solid-FSS GAM & ALL FSS											
Actinium-228		0.370	+/-0.139	0.0557	+/-0.137	0.125	pCi/g		JPH1 03/09/05	1535	406667
Americium-241	U	-0.0124	+/-0.0758	0.0616	+/-0.0743	0.130	pCi/g				
Bismuth-212	U	0.0782	+/-0.222	0.165	+/-0.218	0.357	pCi/g				
Bismuth-214		0.306	+/-0.0874	0.0385	+/-0.0856	0.0827	pCi/g				
Cesium-134	U	0.0239	+/-0.0224	0.021	+/-0.0219	0.0459	pCi/g				
Cesium-137	U	0.0131	+/-0.023	0.0184	+/-0.0225	0.0402	pCi/g				
Cobalt-60	U	0.0218	+/-0.0229	0.0218	+/-0.0224	0.0488	pCi/g				
Europium-152	U	0.0107	+/-0.0593	0.0472	+/-0.0581	0.101	pCi/g				
Europium-154	U	-0.00389	+/-0.0611	0.0505	+/-0.0599	0.115	pCi/g				
Europium-155	U	0.045	+/-0.0716	0.0492	+/-0.0702	0.103	pCi/g				
Lead-212		0.295	+/-0.0718	0.0323	+/-0.0704	0.0676	pCi/g				
Lead-214		0.363	+/-0.0918	0.0326	+/-0.090	0.0698	pCi/g				
Manganese-54	U	-0.0187	+/-0.038	0.0161	+/-0.0373	0.0359	pCi/g				
Niobium-94	U	-0.00904	+/-0.0217	0.0146	+/-0.0212	0.0322	pCi/g				
Potassium-40		5.58	+/-0.886	0.151	+/-0.868	0.354	pCi/g				
Radium-226		0.306	+/-0.0874	0.0385	+/-0.0856	0.0827	pCi/g				
Silver-108m	U	-0.00463	+/-0.0171	0.0145	+/-0.0168	0.0314	pCi/g				
Thallium-208		0.113	+/-0.0475	0.0168	+/-0.0466	0.0366	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid-ALL FSS											
Strontium-90	U	-0.00726	+/-0.00722	0.00733	+/-0.00722	0.0152	pCi/g		LCW1 04/09/05	2213	414564
Rad Liquid Scintillation Analysis											
Liquid Scint Fe55, Solid-ALL FSS											
Iron-55	U	26.3	+/-56.2	37.6	+/-56.3	76.8	pCi/g		DAJ1 03/30/05	0739	407185
Liquid Scint Ni63, Solid-ALL FSS											

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: April 11, 2005

Client Sample ID: 9202–0000–134–C–3C–05
Sample ID: 131693020

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Liquid Scintillation Analysis											
Liquid Scint Ni63, Solid–ALL FSS											
Nickel–63	U	–1.33	+/–7.42	6.26	+/–7.42	12.8	pCi/g		DAJ1 03/29/05	1230	407187

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	03/07/05	1024	406347
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	DLD1	03/03/05	1550	406344

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 905.0 Modified
7	DOE RESL Fe–1, Modified
8	DOE RESL Ni–1, Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium–243	Alphaspec Am241, Cm, Solid ALL	91	(25%–125%)
Carrier/Tracer Recovery	Alphaspec Pu, Solid–ALL FSS	81	
Carrier/Tracer Recovery	Liquid Scint Pu241, Solid–ALL FS	98	
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	59	(25%–125%)
Carrier/Tracer Recovery	Liquid Scint Fe55, Solid–ALL FS	91	
Carrier/Tracer Recovery	Liquid Scint Ni63, Solid–ALL FS	85	

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.

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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: April 11, 2005

Client Sample ID: 9202–0000–134–C–3C–05
Sample ID: 131693020

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

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

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 PO# 002332

Report Date: April 11, 2005

Client Sample ID:	9202-0000-132-C-1C-01	Project:	YANK01204
Sample ID:	131693021	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	09-FEB-05		
Receive Date:	03-MAR-05		
Collector:	Client		
Moisture:	3.46%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Gamma Spec Analysis											
Gamma,Solid-FSS GAM & ALL FSS											
Actinium-228		0.361	+/-0.123	0.0513	+/-0.120	0.115	pCi/g		JPH1 03/10/05	0728	406668
Americium-241	U	-0.0212	+/-0.0762	0.0628	+/-0.0747	0.132	pCi/g				
Bismuth-212	U	0.287	+/-0.199	0.142	+/-0.195	0.309	pCi/g				
Bismuth-214		0.283	+/-0.0764	0.0335	+/-0.0749	0.0722	pCi/g				
Cesium-134	U	0.0313	+/-0.0232	0.0225	+/-0.0227	0.0487	pCi/g				
Cesium-137	U	-0.00462	+/-0.0194	0.0164	+/-0.019	0.0359	pCi/g				
Cobalt-60	U	-0.00922	+/-0.0194	0.0149	+/-0.019	0.0348	pCi/g				
Europium-152	U	0.00618	+/-0.0464	0.0413	+/-0.0455	0.0885	pCi/g				
Europium-154	U	-0.0456	+/-0.0621	0.0465	+/-0.0609	0.106	pCi/g				
Europium-155	U	0.0158	+/-0.0495	0.0456	+/-0.0485	0.0958	pCi/g				
Lead-212		0.307	+/-0.0569	0.0252	+/-0.0557	0.0532	pCi/g				
Lead-214		0.284	+/-0.0814	0.0272	+/-0.0798	0.0587	pCi/g				
Manganese-54	U	0.0159	+/-0.0182	0.0171	+/-0.0178	0.0377	pCi/g				
Niobium-94	U	0.00184	+/-0.0178	0.0156	+/-0.0175	0.034	pCi/g				
Potassium-40		5.84	+/-0.839	0.141	+/-0.822	0.331	pCi/g				
Radium-226		0.283	+/-0.0764	0.0335	+/-0.0749	0.0722	pCi/g				
Silver-108m	U	-0.00578	+/-0.0157	0.0129	+/-0.0153	0.0281	pCi/g				
Thallium-208		0.115	+/-0.0405	0.0141	+/-0.0397	0.031	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid-ALL FSS											
Strontium-90	U	0.00435	+/-0.0062	0.00578	+/-0.0062	0.012	pCi/g		LCW1 04/09/05	2213	414564
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid-HTD2,ALL FSS											
Tritium	U	2.38	+/-8.63	7.16	+/-8.63	14.9	pCi/g		ATH1 04/08/05	0210	409925

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	03/07/05	1048	406350
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DLD1	03/03/05	1553	406349

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: April 11, 2005

Client Sample ID: 9202–0000–132–C–1C–01
Sample ID: 131693021

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	73	(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.
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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: April 11, 2005

Client Sample ID:	9202-0000-132-C-1C-02	Project:	YANK01204
Sample ID:	131693022	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	09-FEB-05		
Receive Date:	03-MAR-05		
Collector:	Client		
Moisture:	4.09%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Gamma Spec Analysis											
Gamma,Solid-FSS GAM & ALL FSS											
Actinium-228		0.392	+/-0.152	0.0638	+/-0.149	0.142	pCi/g		JPH1 03/10/05	0728	406668
Americium-241	U	-0.00687	+/-0.124	0.0807	+/-0.121	0.170	pCi/g				
Bismuth-212	U	0.155	+/-0.264	0.149	+/-0.259	0.327	pCi/g				
Bismuth-214		0.295	+/-0.107	0.0381	+/-0.105	0.0824	pCi/g				
Cesium-134	U	0.0463	+/-0.0325	0.0228	+/-0.0318	0.0498	pCi/g				
Cesium-137	U	-0.0313	+/-0.023	0.0167	+/-0.0225	0.0371	pCi/g				
Cobalt-60	U	0.00648	+/-0.0212	0.0189	+/-0.0208	0.0433	pCi/g				
Europium-152	U	-0.0217	+/-0.0591	0.0499	+/-0.0579	0.107	pCi/g				
Europium-154	U	-0.0199	+/-0.0628	0.0504	+/-0.0616	0.116	pCi/g				
Europium-155	U	0.0701	+/-0.068	0.064	+/-0.0667	0.134	pCi/g				
Lead-212		0.316	+/-0.0697	0.0276	+/-0.0683	0.0588	pCi/g				
Lead-214		0.354	+/-0.0898	0.041	+/-0.088	0.0874	pCi/g				
Manganese-54	U	-0.00895	+/-0.0246	0.0199	+/-0.0241	0.0439	pCi/g				
Niobium-94	U	-0.0018	+/-0.0217	0.0186	+/-0.0213	0.0404	pCi/g				
Potassium-40		6.46	+/-1.05	0.181	+/-1.03	0.417	pCi/g				
Radium-226		0.295	+/-0.107	0.0381	+/-0.105	0.0824	pCi/g				
Silver-108m	U	-0.00836	+/-0.0229	0.0162	+/-0.0225	0.0352	pCi/g				
Thallium-208		0.0935	+/-0.0496	0.0184	+/-0.0486	0.0402	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid-ALL FSS											
Strontium-90	U	0.0142	+/-0.0178	0.0168	+/-0.0178	0.0344	pCi/g		BXD1 04/08/05	2219	414565
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid-HTD2,ALL FSS											
Tritium	U	-4.78	+/-8.03	6.92	+/-8.03	14.4	pCi/g		ATH1 04/08/05	0242	409925

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	03/07/05	1048	406350
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DLD1	03/03/05	1553	406349

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: April 11, 2005

Client Sample ID: 9202–0000–132–C–1C–02
Sample ID: 131693022

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	61	(25%–125%)

Notes:
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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 PO# 002332

Report Date: April 11, 2005

Client Sample ID:	9202-0000-132-C-3C-03	Project:	YANK01204
Sample ID:	131693023	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	09-FEB-05		
Receive Date:	03-MAR-05		
Collector:	Client		
Moisture:	5.29%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Gamma Spec Analysis											
Gamma,Solid-FSS GAM & ALL FSS											
Actinium-228	U	0.191	+/-0.135	0.0935	+/-0.132	0.199	pCi/g		JPH1 03/10/05	0728	406668
Americium-241	U	-0.0914	+/-0.102	0.0807	+/-0.100	0.171	pCi/g				
Bismuth-212	UUI	0.00	+/-0.236	0.119	+/-0.232	0.262	pCi/g				
Bismuth-214		0.299	+/-0.0856	0.0247	+/-0.0839	0.0545	pCi/g				
Cesium-134	U	0.0186	+/-0.0215	0.0198	+/-0.021	0.0432	pCi/g				
Cesium-137	U	0.00188	+/-0.0178	0.0135	+/-0.0174	0.030	pCi/g				
Cobalt-60	U	0.00536	+/-0.0183	0.0162	+/-0.018	0.0372	pCi/g				
Europium-152	U	-0.0456	+/-0.047	0.0327	+/-0.046	0.0711	pCi/g				
Europium-154	UUI	0.00	+/-0.148	0.0572	+/-0.145	0.127	pCi/g				
Europium-155	U	-0.0248	+/-0.0487	0.0434	+/-0.0477	0.0915	pCi/g				
Lead-212		0.372	+/-0.0864	0.0212	+/-0.0846	0.0451	pCi/g				
Lead-214		0.293	+/-0.078	0.0289	+/-0.0765	0.062	pCi/g				
Manganese-54	U	0.00159	+/-0.0181	0.0153	+/-0.0178	0.0338	pCi/g				
Niobium-94	U	0.00427	+/-0.0183	0.0141	+/-0.0179	0.0307	pCi/g				
Potassium-40		6.35	+/-0.860	0.184	+/-0.842	0.416	pCi/g				
Radium-226		0.299	+/-0.0856	0.0247	+/-0.0839	0.0545	pCi/g				
Silver-108m	U	-0.000509	+/-0.0133	0.0117	+/-0.013	0.0257	pCi/g				
Thallium-208	UUI	0.00	+/-0.0364	0.0277	+/-0.0357	0.0582	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid-ALL FSS											
Strontium-90	U	-0.0185	+/-0.0152	0.0153	+/-0.0152	0.0312	pCi/g		BXD1 04/08/05	2219	414565
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid-HTD2,ALL FSS											
Tritium	U	-5.41	+/-8.08	6.99	+/-8.08	14.5	pCi/g		ATH1 04/08/05	0315	409925

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	03/07/05	1048	406350
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DLD1	03/03/05	1553	406349

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: April 11, 2005

Client Sample ID: 9202–0000–132–C–3C–03
Sample ID: 131693023

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	61	(25%–125%)

Notes:
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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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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: April 11, 2005

Client Sample ID:	9202-0000-132-C-5C-04	Project:	YANK01204
Sample ID:	131693024	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	10-FEB-05		
Receive Date:	03-MAR-05		
Collector:	Client		
Moisture:	5.26%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Gamma Spec Analysis											
Gamma,Solid-FSS GAM & ALL FSS											
Actinium-228		0.249	+/-0.0988	0.0538	+/-0.0968	0.119	pCi/g		JPH1 03/10/05	0951	406668
Americium-241	U	0.0195	+/-0.0686	0.061	+/-0.0672	0.128	pCi/g				
Bismuth-212	U	0.174	+/-0.154	0.0947	+/-0.151	0.211	pCi/g				
Bismuth-214		0.285	+/-0.0626	0.0282	+/-0.0613	0.0612	pCi/g				
Cesium-134	U	0.0277	+/-0.023	0.0181	+/-0.0225	0.0395	pCi/g				
Cesium-137	U	0.00195	+/-0.0161	0.0145	+/-0.0158	0.0317	pCi/g				
Cobalt-60	U	-0.00373	+/-0.0204	0.0169	+/-0.020	0.0381	pCi/g				
Europium-152	U	0.013	+/-0.0495	0.0401	+/-0.0485	0.0856	pCi/g				
Europium-154	U	-0.0324	+/-0.0508	0.0387	+/-0.0498	0.0892	pCi/g				
Europium-155	U	-0.0206	+/-0.0475	0.0431	+/-0.0466	0.0902	pCi/g				
Lead-212		0.273	+/-0.0523	0.0243	+/-0.0513	0.0511	pCi/g				
Lead-214		0.323	+/-0.0661	0.0279	+/-0.0648	0.0597	pCi/g				
Manganese-54	U	0.0114	+/-0.0209	0.0159	+/-0.0205	0.0347	pCi/g				
Niobium-94	U	-0.00478	+/-0.0143	0.012	+/-0.014	0.0265	pCi/g				
Potassium-40		5.76	+/-0.740	0.164	+/-0.725	0.372	pCi/g				
Radium-226		0.285	+/-0.0626	0.0282	+/-0.0613	0.0612	pCi/g				
Silver-108m	U	-0.00396	+/-0.0158	0.0135	+/-0.0155	0.029	pCi/g				
Thallium-208		0.0836	+/-0.0334	0.0145	+/-0.0327	0.0316	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid-ALL FSS											
Strontium-90	U	0.00157	+/-0.0176	0.017	+/-0.0176	0.0349	pCi/g		BXD1 04/08/05	2219	414565
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid-HTD2,ALL FSS											
Tritium	U	-4.64	+/-8.10	6.97	+/-8.10	14.5	pCi/g		ATH1 04/08/05	0347	409925

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	03/07/05	1048	406350
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DLD1	03/03/05	1553	406349

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: April 11, 2005

Client Sample ID: 9202–0000–132–C–5C–04
Sample ID: 131693024

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	45	(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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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: April 11, 2005

Client Sample ID:	9202–0000–132–C–5C–05	Project:	YANK01204
Sample ID:	131693025	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	10–FEB–05		
Receive Date:	03–MAR–05		
Collector:	Client		
Moisture:	5.56%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Alpha Spec Analysis											
Alphaspec Am241, Cm, Solid ALL FSS											
Americium–241	U	–0.0489	+/–0.0964	0.125	+/–0.0966	0.315	pCi/g		BJB1 04/04/05	1354	412129
Curium–242	U	0.0313	+/–0.0881	0.0686	+/–0.0882	0.219	pCi/g				
Curium–243/244	U	–0.0597	+/–0.111	0.143	+/–0.112	0.350	pCi/g				
Alphaspec Pu, Solid–ALL FSS											
Plutonium–238	U	–0.00979	+/–0.0506	0.0621	+/–0.0506	0.184	pCi/g		BJB1 04/02/05	1112	412132
Plutonium–239/240	U	0.0116	+/–0.046	0.0358	+/–0.046	0.132	pCi/g				
Liquid Scint Pu241, Solid–ALL FSS											
Plutonium–241	U	1.83	+/–7.08	5.89	+/–7.08	12.1	pCi/g		BJB1 04/05/05	1336	412133
Rad Gamma Spec Analysis											
Gamma,Solid–FSS GAM & ALL FSS											
Actinium–228		0.485	+/–0.184	0.0572	+/–0.180	0.129	pCi/g		JPH1 03/10/05	0951	406668
Americium–241	U	0.0223	+/–0.0307	0.0287	+/–0.030	0.0596	pCi/g				
Bismuth–212	U	0.0581	+/–0.216	0.167	+/–0.212	0.364	pCi/g				
Bismuth–214	UUI	0.00	+/–0.0896	0.078	+/–0.0878	0.162	pCi/g				
Cesium–134	U	0.0492	+/–0.0381	0.0234	+/–0.0374	0.0511	pCi/g				
Cesium–137	U	–0.0241	+/–0.0292	0.0191	+/–0.0286	0.0417	pCi/g				
Cobalt–60	U	0.0117	+/–0.0196	0.017	+/–0.0192	0.0395	pCi/g				
Europium–152	U	–0.0282	+/–0.056	0.0461	+/–0.0549	0.099	pCi/g				
Europium–154	U	0.0391	+/–0.152	0.0553	+/–0.149	0.126	pCi/g				
Europium–155	U	0.0739	+/–0.0751	0.0465	+/–0.0736	0.0973	pCi/g				
Lead–212		0.338	+/–0.0641	0.0278	+/–0.0628	0.0587	pCi/g				
Lead–214		0.366	+/–0.0837	0.0372	+/–0.082	0.0793	pCi/g				
Manganese–54	U	–0.00371	+/–0.0215	0.0178	+/–0.0211	0.0396	pCi/g				
Niobium–94	U	–0.0111	+/–0.0182	0.0144	+/–0.0178	0.032	pCi/g				
Potassium–40		6.36	+/–0.930	0.135	+/–0.912	0.326	pCi/g				
Radium–226		0.347	+/–0.0896	0.0396	+/–0.0878	0.0855	pCi/g				
Silver–108m	U	0.0134	+/–0.0188	0.0173	+/–0.0184	0.0373	pCi/g				
Thallium–208		0.131	+/–0.0496	0.0183	+/–0.0486	0.0399	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid–ALL FSS											
Strontium–90		0.167	+/–0.034	0.0289	+/–0.0351	0.059	pCi/g		BXD1 04/08/05	2219	414565
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid–HTD2,ALL FSS											
Tritium	U	–0.372	+/–7.59	6.38	+/–7.59	13.2	pCi/g		ATH1 04/08/05	0419	409925
Liquid Scint C14, Solid All,FSS											

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: April 11, 2005

Client Sample ID: 9202–0000–132–C–5C–05
Sample ID: 131693025

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Liquid Scintillation Analysis											
Liquid Scint C14, Solid All,FSS											
Carbon–14	U	–0.0545	+/–0.0901	0.0764	+/–0.0901	0.155	pCi/g		EGD1 03/19/05	0857	407148
Liquid Scint Fe55, Solid–ALL FSS											
Iron–55	U	–6.76	+/–54.1	36.7	+/–54.1	74.9	pCi/g		DAJ1 03/30/05	0810	407185
Liquid Scint Ni63, Solid–ALL FSS											
Nickel–63	U	–1.79	+/–7.83	6.62	+/–7.83	13.6	pCi/g		DAJ1 03/29/05	1316	407187
Liquid Scint Tc99, Solid–ALL FSS											
Technetium–99	U	0.0933	+/–0.178	0.147	+/–0.178	0.302	pCi/g		DAJ1 03/21/05	1043	409273

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	03/07/05	1048	406350
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	DLD1	03/03/05	1553	406349

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 905.0 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 EML HASL–300, Tc–02–RC Modified
12	DOE EML HASL–300, Tc–02–RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium–243	Alphaspec Am241, Cm, Solid ALL	90	(25%–125%)
Carrier/Tracer Recovery	Alphaspec Pu, Solid–ALL FSS	94	
Carrier/Tracer Recovery	Liquid Scint Pu241, Solid–ALL FS	83	
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	34	(25%–125%)

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: April 11, 2005

Client Sample ID: 9202–0000–132–C–5C–05
Sample ID: 131693025

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Carrier/Tracer Recovery		Liquid Scint Fe55, Solid–ALL FS			90						
Carrier/Tracer Recovery		Liquid Scint Ni63, Solid–ALL FS			81						
Carrier/Tracer Recovery		Liquid Scint Tc99, Solid–ALL FS			71						

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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Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: April 11, 2005

Client Sample ID:	9202-0000-136-C-1C-01	Project:	YANK01204
Sample ID:	131693026	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	14-FEB-05		
Receive Date:	03-MAR-05		
Collector:	Client		
Moisture:	3.91%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Gamma Spec Analysis											
Gamma,Solid-FSS GAM & ALL FSS											
Actinium-228		0.524	+/-0.248	0.0846	+/-0.243	0.186	pCi/g		JPH1 03/10/05	0952	406668
Americium-241	U	0.0672	+/-0.110	0.101	+/-0.108	0.211	pCi/g				
Bismuth-212	U	0.197	+/-0.229	0.210	+/-0.224	0.453	pCi/g				
Bismuth-214		0.332	+/-0.112	0.0432	+/-0.110	0.0938	pCi/g				
Cesium-134	U	0.00432	+/-0.0282	0.0241	+/-0.0276	0.0533	pCi/g				
Cesium-137	U	0.00379	+/-0.0261	0.0227	+/-0.0256	0.0496	pCi/g				
Cobalt-60	U	0.023	+/-0.0264	0.0252	+/-0.0259	0.0569	pCi/g				
Europium-152	U	-0.0428	+/-0.0693	0.0557	+/-0.0679	0.120	pCi/g				
Europium-154	U	-0.0489	+/-0.0766	0.0572	+/-0.0751	0.132	pCi/g				
Europium-155	U	0.0029	+/-0.0758	0.0653	+/-0.0743	0.137	pCi/g				
Lead-212		0.375	+/-0.0864	0.0369	+/-0.0847	0.0779	pCi/g				
Lead-214		0.286	+/-0.129	0.0459	+/-0.126	0.0979	pCi/g				
Manganese-54	U	0.0204	+/-0.020	0.0218	+/-0.0196	0.0483	pCi/g				
Niobium-94	U	0.00873	+/-0.0224	0.0199	+/-0.022	0.0435	pCi/g				
Potassium-40		8.18	+/-1.26	0.177	+/-1.24	0.419	pCi/g				
Radium-226		0.332	+/-0.112	0.0432	+/-0.110	0.0938	pCi/g				
Silver-108m	U	0.0112	+/-0.0237	0.0208	+/-0.0232	0.0448	pCi/g				
Thallium-208		0.162	+/-0.050	0.0168	+/-0.049	0.0376	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid-ALL FSS											
Strontium-90	U	0.0014	+/-0.012	0.0116	+/-0.012	0.0239	pCi/g		BXD1 04/08/05	2219	414565
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid-HTD2,ALL FSS											
Tritium	U	4.60	+/-8.32	6.74	+/-8.32	14.2	pCi/g		ATH1 04/05/05	2150	409925

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	03/07/05	1048	406350
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DLD1	03/03/05	1553	406349

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: April 11, 2005

Client Sample ID: 9202–0000–136–C–1C–01
Sample ID: 131693026

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	57	(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 PO# 002332

Report Date: April 11, 2005

Client Sample ID:	9202–0000–136–C–1C–02	Project:	YANK01204
Sample ID:	131693027	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	14–FEB–05		
Receive Date:	03–MAR–05		
Collector:	Client		
Moisture:	4.07%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Gamma Spec Analysis											
Gamma,Solid–FSS GAM & ALL FSS											
Actinium–228		0.331	+/–0.186	0.0689	+/–0.182	0.154	pCi/g		JPH1 03/10/05	0952	406668
Americium–241	U	–0.00214	+/–0.0278	0.0237	+/–0.0273	0.0501	pCi/g				
Bismuth–212	U	0.00	+/–0.230	0.164	+/–0.226	0.359	pCi/g				
Bismuth–214		0.262	+/–0.116	0.0321	+/–0.113	0.071	pCi/g				
Cesium–134	U	–0.00684	+/–0.0253	0.0211	+/–0.0248	0.047	pCi/g				
Cesium–137	U	–0.00194	+/–0.0229	0.020	+/–0.0224	0.044	pCi/g				
Cobalt–60	U	–0.00387	+/–0.0169	0.0137	+/–0.0165	0.0337	pCi/g				
Europium–152	U	–0.0478	+/–0.054	0.0436	+/–0.0529	0.0943	pCi/g				
Europium–154	U	0.00	+/–0.0851	0.0589	+/–0.0834	0.135	pCi/g				
Europium–155	U	0.0328	+/–0.0594	0.0394	+/–0.0582	0.0834	pCi/g				
Lead–212		0.268	+/–0.052	0.0233	+/–0.0509	0.0498	pCi/g				
Lead–214		0.284	+/–0.0892	0.0321	+/–0.0874	0.0694	pCi/g				
Manganese–54	U	–0.0053	+/–0.0312	0.023	+/–0.0305	0.0503	pCi/g				
Niobium–94	U	–0.0034	+/–0.0226	0.0171	+/–0.0221	0.0376	pCi/g				
Potassium–40		5.58	+/–0.873	0.147	+/–0.856	0.357	pCi/g				
Radium–226		0.262	+/–0.116	0.0321	+/–0.113	0.071	pCi/g				
Silver–108m	U	–0.00167	+/–0.0192	0.0164	+/–0.0188	0.0356	pCi/g				
Thallium–208	UUI	0.00	+/–0.0374	0.0345	+/–0.0367	0.0725	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid–ALL FSS											
Strontium–90	U	0.00074	+/–0.012	0.0116	+/–0.012	0.024	pCi/g		BXD1 04/08/05	2219	414565
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid–HTD2,ALL FSS											
Tritium	U	4.00	+/–7.63	6.19	+/–7.63	13.1	pCi/g		ATH1 04/05/05	2207	409925

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	03/07/05	1048	406350
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	DLD1	03/03/05	1553	406349

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: April 11, 2005

Client Sample ID: 9202-0000-136-C-1C-02
Sample ID: 131693027

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-ALL FSS	51	(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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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: April 11, 2005

Client Sample ID:	9202–0000–136–C–2C–03	Project:	YANK01204
Sample ID:	131693028	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	14–FEB–05		
Receive Date:	03–MAR–05		
Collector:	Client		
Moisture:	6.15%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Gamma Spec Analysis											
Gamma,Solid–FSS GAM & ALL FSS											
Actinium–228		0.454	+/–0.133	0.0416	+/–0.131	0.0914	pCi/g		JPH1 03/10/05	1152	406668
Americium–241	U	–0.0277	+/–0.0495	0.0453	+/–0.0485	0.0949	pCi/g				
Bismuth–212		0.217	+/–0.180	0.0954	+/–0.176	0.207	pCi/g				
Bismuth–214		0.264	+/–0.0649	0.0262	+/–0.0636	0.056	pCi/g				
Cesium–134	U	0.017	+/–0.0185	0.0168	+/–0.0182	0.0359	pCi/g				
Cesium–137	U	0.0107	+/–0.0117	0.00883	+/–0.0115	0.0197	pCi/g				
Cobalt–60	U	0.000603	+/–0.015	0.0124	+/–0.0147	0.0279	pCi/g				
Europium–152	U	0.0152	+/–0.0386	0.0345	+/–0.0378	0.0732	pCi/g				
Europium–154	U	0.0314	+/–0.0487	0.0434	+/–0.0478	0.095	pCi/g				
Europium–155	U	0.0365	+/–0.0462	0.0433	+/–0.0453	0.0904	pCi/g				
Lead–212		0.333	+/–0.0538	0.0209	+/–0.0527	0.0438	pCi/g				
Lead–214		0.264	+/–0.0767	0.0246	+/–0.0752	0.0522	pCi/g				
Manganese–54	U	–0.0147	+/–0.0156	0.0115	+/–0.0153	0.0251	pCi/g				
Niobium–94	U	0.00665	+/–0.0144	0.0127	+/–0.0141	0.0272	pCi/g				
Potassium–40		6.22	+/–0.756	0.119	+/–0.741	0.268	pCi/g				
Radium–226		0.264	+/–0.0649	0.0262	+/–0.0636	0.056	pCi/g				
Silver–108m	U	–0.00567	+/–0.0149	0.0104	+/–0.0146	0.0225	pCi/g				
Thallium–208		0.121	+/–0.0326	0.0131	+/–0.0319	0.0282	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid–ALL FSS											
Strontium–90	U	0.00441	+/–0.0127	0.0121	+/–0.0127	0.025	pCi/g		BXD1 04/08/05	2219	414565
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid–HTD2,ALL FSS											
Tritium	U	2.24	+/–7.51	6.18	+/–7.51	13.0	pCi/g		ATH1 04/05/05	2224	409925

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	03/07/05	1048	406350
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	DLD1	03/03/05	1554	406349

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: April 11, 2005

Client Sample ID: 9202–0000–136–C–2C–03
Sample ID: 131693028

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	57	(25%–125%)

Notes:
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- 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 PO# 002332

Report Date: April 11, 2005

Client Sample ID:	9202-0000-136-C-4C-04	Project:	YANK01204
Sample ID:	131693029	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	14-FEB-05		
Receive Date:	03-MAR-05		
Collector:	Client		
Moisture:	7.39%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Gamma Spec Analysis											
Gamma,Solid-FSS GAM & ALL FSS											
Actinium-228		0.337	+/-0.291	0.107	+/-0.285	0.239	pCi/g		JPH1 03/10/05	1152	406668
Americium-241	U	-0.0017	+/-0.0794	0.0624	+/-0.0778	0.130	pCi/g				
Bismuth-212	U	0.315	+/-0.285	0.266	+/-0.280	0.580	pCi/g				
Bismuth-214		0.296	+/-0.114	0.0633	+/-0.112	0.137	pCi/g				
Cesium-134	U	0.0217	+/-0.0388	0.0355	+/-0.0381	0.0785	pCi/g				
Cesium-137	U	0.0501	+/-0.0819	0.0308	+/-0.0803	0.0677	pCi/g				
Cobalt-60	U	0.015	+/-0.0297	0.0273	+/-0.0291	0.0645	pCi/g				
Europium-152	U	0.0229	+/-0.0918	0.0716	+/-0.0899	0.154	pCi/g				
Europium-154	U	0.0449	+/-0.0986	0.0884	+/-0.0966	0.203	pCi/g				
Europium-155	U	0.0188	+/-0.0879	0.0763	+/-0.0862	0.160	pCi/g				
Lead-212		0.382	+/-0.0959	0.0407	+/-0.094	0.086	pCi/g				
Lead-214		0.255	+/-0.112	0.0458	+/-0.109	0.0992	pCi/g				
Manganese-54	U	0.0187	+/-0.0353	0.0321	+/-0.0346	0.0711	pCi/g				
Niobium-94	U	0.0227	+/-0.0335	0.0297	+/-0.0328	0.0649	pCi/g				
Potassium-40		5.38	+/-1.34	0.232	+/-1.31	0.562	pCi/g				
Radium-226		0.296	+/-0.114	0.0633	+/-0.112	0.137	pCi/g				
Silver-108m	U	-0.000155	+/-0.0288	0.0244	+/-0.0282	0.053	pCi/g				
Thallium-208		0.155	+/-0.0714	0.0255	+/-0.0699	0.0566	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid-ALL FSS											
Strontium-90	U	0.00515	+/-0.00856	0.00809	+/-0.00856	0.0167	pCi/g		BXD1 04/08/05	2219	414565
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid-HTD2,ALL FSS											
Tritium	U	1.08	+/-8.07	6.71	+/-8.07	14.2	pCi/g		ATH1 04/06/05	1711	409925

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	03/07/05	1048	406350
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DLD1	03/03/05	1554	406349

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
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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: April 11, 2005

Client Sample ID: 9202–0000–136–C–4C–04
Sample ID: 131693029

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	82	(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 PO# 002332

Report Date: April 11, 2005

Client Sample ID:	9202-0000-136-C-4C-05	Project:	YANK01204
Sample ID:	131693030	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	14-FEB-05		
Receive Date:	03-MAR-05		
Collector:	Client		
Moisture:	7.39%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Alpha Spec Analysis											
Alphaspec Am241, Cm, Solid ALL FSS											
Americium-241	U	0.0862	+/-0.0974	0.0395	+/-0.0981	0.145	pCi/g		BJB1 04/05/05	1228	412129
Curium-242	U	0.00	+/-0.0595	0.00	+/-0.0595	0.0823	pCi/g				
Curium-243/244	U	-0.0236	+/-0.0535	0.0561	+/-0.0535	0.179	pCi/g				
Alphaspec Pu, Solid-ALL FSS											
Plutonium-238	U	-0.058	+/-0.0464	0.112	+/-0.0469	0.334	pCi/g		BJB1 04/02/05	1112	412132
Plutonium-239/240	U	0.0209	+/-0.0832	0.0648	+/-0.0833	0.239	pCi/g				
Liquid Scint Pu241, Solid-ALL FSS											
Plutonium-241		11.8	+/-6.55	5.18	+/-6.66	10.6	pCi/g		BJB1 04/05/05	1408	412133
Rad Gamma Spec Analysis											
Gamma,Solid-FSS GAM & ALL FSS											
Actinium-228		0.337	+/-0.146	0.0528	+/-0.143	0.120	pCi/g		JPH1 03/10/05	1208	406668
Americium-241	U	-0.00935	+/-0.0775	0.070	+/-0.0759	0.147	pCi/g				
Bismuth-212	U	0.195	+/-0.341	0.142	+/-0.334	0.312	pCi/g				
Bismuth-214		0.309	+/-0.0722	0.0367	+/-0.0707	0.0792	pCi/g				
Cesium-134	U	0.0116	+/-0.023	0.0206	+/-0.0225	0.0453	pCi/g				
Cesium-137	U	-0.00556	+/-0.0194	0.0161	+/-0.019	0.0356	pCi/g				
Cobalt-60	U	0.0355	+/-0.0172	0.0201	+/-0.0169	0.0457	pCi/g				
Europium-152	U	0.00492	+/-0.0549	0.0477	+/-0.0538	0.102	pCi/g				
Europium-154	U	-0.0205	+/-0.0546	0.0424	+/-0.0535	0.100	pCi/g				
Europium-155	U	0.014	+/-0.0587	0.0523	+/-0.0576	0.110	pCi/g				
Lead-212		0.380	+/-0.0688	0.0272	+/-0.0675	0.0576	pCi/g				
Lead-214		0.365	+/-0.0859	0.0352	+/-0.0842	0.0753	pCi/g				
Manganese-54	U	0.006	+/-0.0226	0.0196	+/-0.0221	0.0429	pCi/g				
Niobium-94	U	0.0119	+/-0.0205	0.0174	+/-0.0201	0.038	pCi/g				
Potassium-40		7.01	+/-1.04	0.174	+/-1.02	0.404	pCi/g				
Radium-226		0.309	+/-0.0722	0.0367	+/-0.0707	0.0792	pCi/g				
Silver-108m	U	-0.0114	+/-0.0192	0.0152	+/-0.0188	0.033	pCi/g				
Thallium-208		0.132	+/-0.0509	0.0176	+/-0.0498	0.0385	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid-ALL FSS											
Strontium-90	U	-0.00012	+/-0.011	0.0107	+/-0.011	0.022	pCi/g		BXD1 04/08/05	2222	414565
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid-HTD2,ALL FSS											
Tritium	U	-1.68	+/-6.14	5.23	+/-6.14	10.9	pCi/g		EGD1 04/05/05	0723	409926
Liquid Scint C14, Solid All,FSS											

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: April 11, 2005

Client Sample ID: 9202-0000-136-C-4C-05
Sample ID: 131693030

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Liquid Scintillation Analysis											
Liquid Scint C14, Solid All,FSS											
Carbon-14	U	-0.0492	+/-0.0901	0.0764	+/-0.0901	0.155	pCi/g		EGD1 03/19/05	1029	407148
Liquid Scint Fe55, Solid-ALL FSS											
Iron-55	U	4.77	+/-61.3	41.5	+/-61.4	84.7	pCi/g		DAJ1 03/30/05	0842	407185
Liquid Scint Ni63, Solid-ALL FSS											
Nickel-63	U	-3.58	+/-7.80	6.63	+/-7.80	13.6	pCi/g		DAJ1 03/29/05	1403	407187
Liquid Scint Tc99, Solid-ALL FSS											
Technetium-99	U	0.0639	+/-0.176	0.146	+/-0.176	0.300	pCi/g		DAJ1 03/21/05	1130	409273

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	03/07/05	1048	406350
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DLD1	03/03/05	1554	406349

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 905.0 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 EML HASL-300, Tc-02-RC Modified
12	DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243	Alphaspec Am241, Cm, Solid ALL	84	(25%-125%)
Carrier/Tracer Recovery	Alphaspec Pu, Solid-ALL FSS	52	
Carrier/Tracer Recovery	Liquid Scint Pu241, Solid-ALL FS	94	
Carrier/Tracer Recovery	GFPC, Sr90, solid-ALL FSS	62	(25%-125%)

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East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: April 11, 2005

Client Sample ID: 9202–0000–136–C–4C–05
Sample ID: 131693030

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Carrier/Tracer Recovery		Liquid Scint Fe55, Solid–ALL FS			88						
Carrier/Tracer Recovery		Liquid Scint Ni63, Solid–ALL FS			83						
Carrier/Tracer Recovery		Liquid Scint Tc99, Solid–ALL FS			65						

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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Project: Soils PO# 002332

Report Date: April 11, 2005

Client Sample ID:	9202–0000–139–C–1C–01	Project:	YANK01204
Sample ID:	131693031	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	15–FEB–05		
Receive Date:	03–MAR–05		
Collector:	Client		
Moisture:	3.91%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Gamma Spec Analysis											
Gamma,Solid–FSS GAM & ALL FSS											
Actinium–228		0.332	+/–0.203	0.0833	+/–0.199	0.182	pCi/g		JPH1 03/10/05	1209	406668
Americium–241	U	–0.00938	+/–0.034	0.0262	+/–0.0334	0.0549	pCi/g				
Bismuth–212		0.427	+/–0.307	0.163	+/–0.301	0.357	pCi/g				
Bismuth–214		0.208	+/–0.116	0.0375	+/–0.114	0.0815	pCi/g				
Cesium–134	U	–0.015	+/–0.0233	0.0178	+/–0.0228	0.0401	pCi/g				
Cesium–137	U	0.000463	+/–0.0231	0.0199	+/–0.0227	0.0437	pCi/g				
Cobalt–60	U	–0.0115	+/–0.0168	0.0116	+/–0.0165	0.0291	pCi/g				
Europium–152	U	–0.0336	+/–0.0628	0.0513	+/–0.0616	0.110	pCi/g				
Europium–154	U	–0.0178	+/–0.0677	0.0549	+/–0.0664	0.126	pCi/g				
Europium–155	U	0.077	+/–0.051	0.0505	+/–0.0499	0.105	pCi/g				
Lead–212		0.268	+/–0.0581	0.0305	+/–0.0569	0.0641	pCi/g				
Lead–214		0.289	+/–0.0994	0.0368	+/–0.0974	0.0787	pCi/g				
Manganese–54	U	0.00891	+/–0.0255	0.0164	+/–0.025	0.037	pCi/g				
Niobium–94	U	0.0316	+/–0.0203	0.0202	+/–0.0199	0.0438	pCi/g				
Potassium–40		5.85	+/–0.850	0.167	+/–0.833	0.393	pCi/g				
Radium–226		0.208	+/–0.116	0.0375	+/–0.114	0.0815	pCi/g				
Silver–108m	U	0.00232	+/–0.0204	0.0183	+/–0.020	0.0394	pCi/g				
Thallium–208		0.122	+/–0.0472	0.0202	+/–0.0463	0.0439	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid–ALL FSS											
Strontium–90	U	0.0116	+/–0.0133	0.0124	+/–0.0134	0.0255	pCi/g		BXD1 04/08/05	2222	414565
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid–HTD2,ALL FSS											
Tritium	U	5.27	+/–6.25	5.04	+/–6.25	10.5	pCi/g		EGD1 04/05/05	0754	409926

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	03/07/05	1048	406350
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	DLD1	03/03/05	1554	406349

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: April 11, 2005

Client Sample ID: 9202–0000–139–C–1C–01
Sample ID: 131693031

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	50	(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 PO# 002332

Report Date: April 11, 2005

Client Sample ID:	9202-0000-139-C-1C-02	Project:	YANK01204
Sample ID:	131693032	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	15-FEB-05		
Receive Date:	03-MAR-05		
Collector:	Client		
Moisture:	4.79%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Gamma Spec Analysis											
Gamma,Solid-FSS GAM & ALL FSS											
Actinium-228		0.387	+/-0.121	0.0539	+/-0.119	0.121	pCi/g		JPH1 03/10/05	1210	406668
Americium-241	U	0.0503	+/-0.0831	0.0702	+/-0.0814	0.148	pCi/g				
Bismuth-212		0.302	+/-0.191	0.110	+/-0.188	0.247	pCi/g				
Bismuth-214		0.215	+/-0.0785	0.0249	+/-0.077	0.0554	pCi/g				
Cesium-134	U	0.0118	+/-0.0182	0.0168	+/-0.0178	0.0375	pCi/g				
Cesium-137	U	0.0158	+/-0.0174	0.0166	+/-0.017	0.0365	pCi/g				
Cobalt-60	U	-0.0162	+/-0.020	0.0139	+/-0.0196	0.0331	pCi/g				
Europium-152	U	-0.0052	+/-0.0463	0.0387	+/-0.0454	0.0839	pCi/g				
Europium-154	U	-0.00532	+/-0.0567	0.047	+/-0.0556	0.108	pCi/g				
Europium-155	U	-0.00306	+/-0.0484	0.0449	+/-0.0474	0.0946	pCi/g				
Lead-212		0.305	+/-0.0585	0.0248	+/-0.0573	0.0526	pCi/g				
Lead-214		0.261	+/-0.090	0.0312	+/-0.0882	0.067	pCi/g				
Manganese-54	U	-0.0179	+/-0.0227	0.0137	+/-0.0222	0.0309	pCi/g				
Niobium-94	U	-0.00098	+/-0.0163	0.0137	+/-0.016	0.0304	pCi/g				
Potassium-40		5.40	+/-0.810	0.130	+/-0.794	0.312	pCi/g				
Radium-226		0.215	+/-0.0785	0.0249	+/-0.077	0.0554	pCi/g				
Silver-108m	U	-0.000803	+/-0.0151	0.0134	+/-0.0148	0.0292	pCi/g				
Thallium-208		0.0982	+/-0.0399	0.0167	+/-0.0391	0.0364	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid-ALL FSS											
Strontium-90	U	0.00314	+/-0.00929	0.00888	+/-0.0093	0.0183	pCi/g		BXD1 04/08/05	2222	414565
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid-HTD2,ALL FSS											
Tritium	U	-3.32	+/-5.90	5.09	+/-5.90	10.6	pCi/g		EGD1 04/05/05	0826	409926

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	03/07/05	1048	406350
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DLD1	03/03/05	1554	406349

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: April 11, 2005

Client Sample ID: 9202–0000–139–C–1C–02
Sample ID: 131693032

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	75	(25%–125%)

Notes:
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- * 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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Address : Haddam Neck Plant
362 Injun Hollow Road
East Hampton, Connecticut 06424
Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: April 11, 2005

Client Sample ID:	9202–0000–139–C–6C–03	Project:	YANK01204
Sample ID:	131693033	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	15–FEB–05		
Receive Date:	03–MAR–05		
Collector:	Client		
Moisture:	6.03%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Gamma Spec Analysis											
Gamma,Solid–FSS GAM & ALL FSS											
Actinium–228		0.352	+/–0.107	0.0653	+/–0.105	0.145	pCi/g		JPH1 03/10/05	1211	406668
Americium–241	U	0.00588	+/–0.0998	0.0831	+/–0.0978	0.175	pCi/g				
Bismuth–212	U	0.169	+/–0.353	0.141	+/–0.346	0.312	pCi/g				
Bismuth–214		0.371	+/–0.0744	0.0291	+/–0.0729	0.0644	pCi/g				
Cesium–134	U	0.011	+/–0.0244	0.0196	+/–0.0239	0.0435	pCi/g				
Cesium–137	U	–0.00935	+/–0.0225	0.0186	+/–0.0221	0.0409	pCi/g				
Cobalt–60	U	–0.000253	+/–0.0218	0.0184	+/–0.0214	0.0422	pCi/g				
Europium–152	U	–0.0393	+/–0.0584	0.0478	+/–0.0572	0.103	pCi/g				
Europium–154	U	–0.00076	+/–0.062	0.0525	+/–0.0608	0.120	pCi/g				
Europium–155	U	0.018	+/–0.0609	0.0554	+/–0.0597	0.117	pCi/g				
Lead–212		0.318	+/–0.0835	0.0335	+/–0.0818	0.0705	pCi/g				
Lead–214		0.406	+/–0.0898	0.0361	+/–0.088	0.0776	pCi/g				
Manganese–54	U	–0.00432	+/–0.0215	0.0178	+/–0.0211	0.0394	pCi/g				
Niobium–94	U	–0.00222	+/–0.0188	0.016	+/–0.0184	0.0353	pCi/g				
Potassium–40		5.65	+/–0.967	0.186	+/–0.948	0.426	pCi/g				
Radium–226		0.371	+/–0.0744	0.0291	+/–0.0729	0.0644	pCi/g				
Silver–108m	U	0.00483	+/–0.0184	0.0162	+/–0.0181	0.0352	pCi/g				
Thallium–208		0.115	+/–0.046	0.0162	+/–0.0451	0.0357	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid–ALL FSS											
Strontium–90	U	–0.00172	+/–0.011	0.0128	+/–0.011	0.0283	pCi/g		BXD1 04/06/05	2151	414102
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid–HTD2,ALL FSS											
Tritium	U	–1.03	+/–5.92	5.01	+/–5.92	10.4	pCi/g		EGD1 04/05/05	0858	409926

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	03/07/05	1048	406350
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	DLD1	03/03/05	1554	406349

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: April 11, 2005

Client Sample ID: 9202–0000–139–C–6C–03
Sample ID: 131693033

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	82	(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 PO# 002332

Report Date: April 11, 2005

Client Sample ID:	9202–0000–139–C–8C–04	Project:	YANK01204
Sample ID:	131693034	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	15–FEB–05		
Receive Date:	03–MAR–05		
Collector:	Client		
Moisture:	5.38%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Gamma Spec Analysis											
Gamma,Solid–FSS GAM & ALL FSS											
Actinium–228		0.246	+/–0.168	0.0692	+/–0.165	0.155	pCi/g		JPH1 03/10/05	1211	406668
Americium–241	U	0.0109	+/–0.0271	0.0258	+/–0.0266	0.0541	pCi/g				
Bismuth–212	U	0.00	+/–0.181	0.171	+/–0.177	0.374	pCi/g				
Bismuth–214		0.215	+/–0.0783	0.0316	+/–0.0767	0.070	pCi/g				
Cesium–134	U	0.00446	+/–0.0269	0.0237	+/–0.0263	0.0522	pCi/g				
Cesium–137	U	0.00575	+/–0.0203	0.0185	+/–0.0199	0.041	pCi/g				
Cobalt–60	U	0.00438	+/–0.0274	0.0213	+/–0.0268	0.049	pCi/g				
Europium–152	U	–0.0325	+/–0.0539	0.0448	+/–0.0528	0.0967	pCi/g				
Europium–154	U	0.00	+/–0.0721	0.0578	+/–0.0707	0.133	pCi/g				
Europium–155	U	0.0173	+/–0.0445	0.0406	+/–0.0436	0.0857	pCi/g				
Lead–212		0.255	+/–0.0508	0.0219	+/–0.0497	0.0469	pCi/g				
Lead–214		0.218	+/–0.0767	0.0326	+/–0.0752	0.0703	pCi/g				
Manganese–54	U	–0.00172	+/–0.0231	0.0197	+/–0.0226	0.0438	pCi/g				
Niobium–94	U	0.001	+/–0.020	0.0176	+/–0.0196	0.0388	pCi/g				
Potassium–40		4.77	+/–0.783	0.224	+/–0.767	0.511	pCi/g				
Radium–226		0.215	+/–0.0783	0.0316	+/–0.0767	0.070	pCi/g				
Silver–108m	U	0.00679	+/–0.0175	0.0157	+/–0.0171	0.0343	pCi/g				
Thallium–208	UUI	0.00	+/–0.0475	0.0311	+/–0.0466	0.0657	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid–ALL FSS											
Strontium–90	U	–0.00929	+/–0.0135	0.0135	+/–0.0135	0.0277	pCi/g		BXD1 04/08/05	2225	414565
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid–HTD2,ALL FSS											
Tritium	U	1.38	+/–6.18	5.14	+/–6.18	10.7	pCi/g		EGD1 04/05/05	0930	409926

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	03/07/05	1048	406350
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	DLD1	03/03/05	1554	406349

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: April 11, 2005

Client Sample ID: 9202–0000–139–C–8C–04
Sample ID: 131693034

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	55	(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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Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: April 11, 2005

Client Sample ID:	9202–0000–139–C–8C–05	Project:	YANK01204
Sample ID:	131693035	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	15–FEB–05		
Receive Date:	03–MAR–05		
Collector:	Client		
Moisture:	4.92%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Alpha Spec Analysis												
Alphaspec Am241, Cm, Solid ALL FSS												
Americium–241	U	0.0771	+/–0.149	0.124	+/–0.150	0.328	pCi/g		BJB1	04/04/05	1354	412129
Curium–242	U	–0.0847	+/–0.0945	0.153	+/–0.0953	0.403	pCi/g					
Curium–243/244	U	–0.0997	+/–0.152	0.198	+/–0.153	0.475	pCi/g					
Alphaspec Pu, Solid–ALL FSS												
Plutonium–238	U	0.0402	+/–0.0793	0.0569	+/–0.0794	0.174	pCi/g		BJB1	04/04/05	1354	412132
Plutonium–239/240	U	0.00624	+/–0.0473	0.044	+/–0.0473	0.148	pCi/g					
Liquid Scint Pu241, Solid–ALL FSS												
Plutonium–241		13.4	+/–6.68	5.24	+/–6.80	10.8	pCi/g		BJB1	04/05/05	1440	412133
Rad Gamma Spec Analysis												
Gamma,Solid–FSS GAM & ALL FSS												
Actinium–228		0.237	+/–0.115	0.0433	+/–0.113	0.0943	pCi/g		JPH1	03/10/05	1212	406668
Americium–241	U	0.00314	+/–0.0921	0.0772	+/–0.0902	0.161	pCi/g					
Bismuth–212	U	0.199	+/–0.131	0.125	+/–0.128	0.266	pCi/g					
Bismuth–214		0.217	+/–0.0717	0.0245	+/–0.0703	0.0524	pCi/g					
Cesium–134	U	0.0032	+/–0.0158	0.0138	+/–0.0155	0.030	pCi/g					
Cesium–137	U	–0.00339	+/–0.0139	0.0119	+/–0.0136	0.0257	pCi/g					
Cobalt–60	UUI	0.00	+/–0.0279	0.0208	+/–0.0274	0.0446	pCi/g					
Europium–152	U	0.0147	+/–0.0384	0.0348	+/–0.0377	0.0738	pCi/g					
Europium–154	U	–0.00368	+/–0.0397	0.0335	+/–0.0389	0.0749	pCi/g					
Europium–155	U	0.00927	+/–0.0498	0.0452	+/–0.0488	0.0944	pCi/g					
Lead–212		0.294	+/–0.049	0.0196	+/–0.048	0.0413	pCi/g					
Lead–214		0.257	+/–0.0638	0.0249	+/–0.0625	0.0528	pCi/g					
Manganese–54	U	–0.00184	+/–0.0159	0.0134	+/–0.0156	0.0289	pCi/g					
Niobium–94	U	–0.00284	+/–0.0127	0.0109	+/–0.0125	0.0235	pCi/g					
Potassium–40		6.11	+/–0.694	0.105	+/–0.680	0.238	pCi/g					
Radium–226		0.217	+/–0.0717	0.0245	+/–0.0703	0.0524	pCi/g					
Silver–108m	U	0.00546	+/–0.0138	0.0123	+/–0.0135	0.0261	pCi/g					
Thallium–208		0.0592	+/–0.0353	0.0127	+/–0.0346	0.0272	pCi/g					
Rad Gas Flow Proportional Counting												
GFPC, Sr90, solid–ALL FSS												
Strontium–90	U	–0.0157	+/–0.013	0.0132	+/–0.013	0.0271	pCi/g		BXD1	04/08/05	2225	414565
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Solid–HTD2,ALL FSS												
Tritium	U	0.00	+/–6.27	5.26	+/–6.27	10.9	pCi/g		EGD1	04/05/05	1548	409926
Liquid Scint C14, Solid All,FSS												

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Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: April 11, 2005

Client Sample ID: 9202–0000–139–C–8C–05
Sample ID: 131693035

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Liquid Scintillation Analysis											
Liquid Scint C14, Solid All,FSS											
Carbon–14	U	–0.0564	+/–0.0919	0.078	+/–0.0919	0.158	pCi/g		EGD1 03/19/05	1202	407148
Liquid Scint Fe55, Solid–ALL FSS											
Iron–55	U	–15.2	+/–54.3	36.9	+/–54.3	75.4	pCi/g		DAJ1 03/30/05	0914	407185
Liquid Scint Ni63, Solid–ALL FSS											
Nickel–63	U	1.45	+/–8.48	7.08	+/–8.48	14.5	pCi/g		DAJ1 03/29/05	1450	407187
Liquid Scint Tc99, Solid–ALL FSS											
Technetium–99	U	0.150	+/–0.160	0.130	+/–0.160	0.267	pCi/g		DAJ1 03/21/05	1218	409273

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	03/07/05	1048	406350
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	DLD1	03/03/05	1554	406349

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 905.0 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 EML HASL–300, Tc–02–RC Modified
12	DOE EML HASL–300, Tc–02–RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium–243	Alphaspec Am241, Cm, Solid ALL	83	(25%–125%)
Carrier/Tracer Recovery	Alphaspec Pu, Solid–ALL FSS	99	
Carrier/Tracer Recovery	Liquid Scint Pu241, Solid–ALL FS	100	
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	55	(25%–125%)

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Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: April 11, 2005

Client Sample ID: 9202–0000–139–C–8C–05
Sample ID: 131693035

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Carrier/Tracer Recovery		Liquid Scint Fe55, Solid–ALL FS			90						
Carrier/Tracer Recovery		Liquid Scint Ni63, Solid–ALL FS			79						
Carrier/Tracer Recovery		Liquid Scint Tc99, Solid–ALL FS			73						

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 PO# 002332

Report Date: April 11, 2005

Client Sample ID:	9202–0000–137–C–1C–01	Project:	YANK01204
Sample ID:	131693036	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	14–FEB–05		
Receive Date:	03–MAR–05		
Collector:	Client		
Moisture:	4.14%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Gamma Spec Analysis											
Gamma,Solid–FSS GAM & ALL FSS											
Actinium–228		0.352	+/–0.186	0.057	+/–0.183	0.129	pCi/g		JPH1 03/10/05	1227	406668
Americium–241	U	0.0612	+/–0.0796	0.0747	+/–0.078	0.157	pCi/g				
Bismuth–212		0.290	+/–0.174	0.111	+/–0.171	0.250	pCi/g				
Bismuth–214	UUI	0.00	+/–0.0777	0.0689	+/–0.0762	0.144	pCi/g				
Cesium–134	U	0.0331	+/–0.0228	0.0225	+/–0.0224	0.0494	pCi/g				
Cesium–137	U	–0.00301	+/–0.0217	0.0178	+/–0.0212	0.0392	pCi/g				
Cobalt–60	U	0.0401	+/–0.0263	0.0267	+/–0.0257	0.0594	pCi/g				
Europium–152	U	–0.0163	+/–0.0529	0.045	+/–0.0518	0.0968	pCi/g				
Europium–154	U	0.00449	+/–0.0641	0.0543	+/–0.0628	0.125	pCi/g				
Europium–155	U	0.00418	+/–0.0579	0.0507	+/–0.0567	0.107	pCi/g				
Lead–212		0.305	+/–0.0598	0.025	+/–0.0586	0.0532	pCi/g				
Lead–214		0.337	+/–0.0882	0.0328	+/–0.0864	0.0706	pCi/g				
Manganese–54	U	–0.00437	+/–0.0228	0.0182	+/–0.0224	0.0405	pCi/g				
Niobium–94	U	–0.000244	+/–0.0202	0.0168	+/–0.0198	0.0369	pCi/g				
Potassium–40		6.02	+/–0.888	0.154	+/–0.870	0.368	pCi/g				
Radium–226		0.316	+/–0.0777	0.0291	+/–0.0762	0.0645	pCi/g				
Silver–108m	U	–0.00355	+/–0.0168	0.0141	+/–0.0165	0.0309	pCi/g				
Thallium–208		0.112	+/–0.046	0.0152	+/–0.0451	0.0337	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid–ALL FSS											
Strontium–90	U	–0.0132	+/–0.0135	0.0135	+/–0.0135	0.0277	pCi/g		BXD1 04/08/05	2225	414565
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid–HTD2,ALL FSS											
Tritium	U	1.66	+/–6.05	5.01	+/–6.05	10.4	pCi/g		EGD1 04/05/05	1620	409926

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	03/07/05	1048	406350
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	DLD1	03/03/05	1554	406349

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: April 11, 2005

Client Sample ID: 9202–0000–137–C–1C–01
Sample ID: 131693036

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	58	(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 PO# 002332

Report Date: April 11, 2005

Client Sample ID:	9202-0000-137-C-1C-02	Project:	YANK01204
Sample ID:	131693037	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	14-FEB-05		
Receive Date:	03-MAR-05		
Collector:	Client		
Moisture:	5.64%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Gamma Spec Analysis											
Gamma,Solid-FSS GAM & ALL FSS											
Actinium-228		0.281	+/-0.130	0.0622	+/-0.127	0.139	pCi/g		JPH1 03/10/05	1228	406668
Americium-241	U	-0.0444	+/-0.0845	0.0651	+/-0.0828	0.137	pCi/g				
Bismuth-212		0.369	+/-0.241	0.137	+/-0.236	0.302	pCi/g				
Bismuth-214		0.291	+/-0.0762	0.0372	+/-0.0747	0.0805	pCi/g				
Cesium-134	U	0.0209	+/-0.0239	0.0218	+/-0.0234	0.0479	pCi/g				
Cesium-137	U	-0.00327	+/-0.0214	0.0175	+/-0.021	0.0385	pCi/g				
Cobalt-60	U	-0.0148	+/-0.0232	0.0168	+/-0.0227	0.0392	pCi/g				
Europium-152	U	-0.0377	+/-0.0538	0.0441	+/-0.0527	0.0951	pCi/g				
Europium-154	U	0.0402	+/-0.0716	0.0643	+/-0.0701	0.144	pCi/g				
Europium-155	U	-0.00833	+/-0.064	0.0496	+/-0.0627	0.104	pCi/g				
Lead-212		0.316	+/-0.0638	0.0288	+/-0.0626	0.061	pCi/g				
Lead-214		0.350	+/-0.0912	0.0328	+/-0.0893	0.0705	pCi/g				
Manganese-54	U	0.0102	+/-0.0243	0.0209	+/-0.0238	0.0456	pCi/g				
Niobium-94	U	-0.00473	+/-0.0195	0.0156	+/-0.0191	0.0344	pCi/g				
Potassium-40		6.05	+/-0.892	0.163	+/-0.874	0.382	pCi/g				
Radium-226		0.291	+/-0.0762	0.0372	+/-0.0747	0.0805	pCi/g				
Silver-108m	U	-0.00956	+/-0.0194	0.0159	+/-0.019	0.0344	pCi/g				
Thallium-208		0.0826	+/-0.049	0.0179	+/-0.048	0.0391	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid-ALL FSS											
Strontium-90	U	-0.00702	+/-0.0123	0.0122	+/-0.0123	0.0249	pCi/g		BXD1 04/08/05	2225	414565
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid-HTD2,ALL FSS											
Tritium	U	3.88	+/-6.12	4.98	+/-6.12	10.4	pCi/g		EGD1 04/05/05	1652	409926

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	03/07/05	1048	406350
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DLD1	03/03/05	1554	406349

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: April 11, 2005

Client Sample ID: 9202-0000-137-C-1C-02
Sample ID: 131693037

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-ALL FSS	69	(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 PO# 002332

Report Date: April 11, 2005

Client Sample ID:	9202-0000-137-C-1C-03	Project:	YANK01204
Sample ID:	131693038	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	14-FEB-05		
Receive Date:	03-MAR-05		
Collector:	Client		
Moisture:	5.35%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Gamma Spec Analysis											
Gamma,Solid-FSS GAM & ALL FSS											
Actinium-228		0.388	+/-0.135	0.0431	+/-0.132	0.102	pCi/g		JPH1 03/10/05	1451	406668
Americium-241	U	-0.103	+/-0.121	0.0669	+/-0.119	0.141	pCi/g				
Bismuth-212		0.374	+/-0.224	0.128	+/-0.219	0.286	pCi/g				
Bismuth-214		0.243	+/-0.0938	0.0331	+/-0.092	0.0724	pCi/g				
Cesium-134	U	0.00459	+/-0.0209	0.0158	+/-0.0205	0.0362	pCi/g				
Cesium-137	U	-0.0127	+/-0.0219	0.0168	+/-0.0215	0.0374	pCi/g				
Cobalt-60	U	0.00785	+/-0.0238	0.021	+/-0.0234	0.0481	pCi/g				
Europium-152	U	0.0159	+/-0.0512	0.0459	+/-0.0502	0.0988	pCi/g				
Europium-154	U	-0.0153	+/-0.0591	0.0468	+/-0.0579	0.110	pCi/g				
Europium-155	U	-0.0157	+/-0.0593	0.0506	+/-0.0581	0.107	pCi/g				
Lead-212		0.342	+/-0.065	0.0258	+/-0.0637	0.0547	pCi/g				
Lead-214		0.235	+/-0.0677	0.0288	+/-0.0664	0.0626	pCi/g				
Manganese-54	U	-0.00758	+/-0.0233	0.0181	+/-0.0228	0.0404	pCi/g				
Niobium-94	U	0.00207	+/-0.0205	0.0172	+/-0.0201	0.0378	pCi/g				
Potassium-40		5.55	+/-0.906	0.165	+/-0.888	0.390	pCi/g				
Radium-226		0.243	+/-0.0938	0.0331	+/-0.092	0.0724	pCi/g				
Silver-108m	U	-0.01	+/-0.0176	0.0142	+/-0.0173	0.031	pCi/g				
Thallium-208		0.119	+/-0.0399	0.0143	+/-0.0391	0.032	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid-ALL FSS											
Strontium-90	U	0.0021	+/-0.011	0.0105	+/-0.011	0.0217	pCi/g		BXD1 04/08/05	2250	414565
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid-HTD2,ALL FSS											
Tritium	U	-0.458	+/-6.08	5.12	+/-6.08	10.6	pCi/g		EGD1 04/05/05	1724	409926

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	03/07/05	1048	406350
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DLD1	03/03/05	1554	406349

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: April 11, 2005

Client Sample ID: 9202-0000-137-C-1C-03
Sample ID: 131693038

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid-ALL FSS	59	(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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Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: April 11, 2005

Client Sample ID:	9202-0000-137-C-3C-04	Project:	YANK01204
Sample ID:	131693039	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	15-FEB-05		
Receive Date:	03-MAR-05		
Collector:	Client		
Moisture:	6.26%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Gamma Spec Analysis											
Gamma,Solid-FSS GAM & ALL FSS											
Actinium-228		0.339	+/-0.121	0.0668	+/-0.119	0.147	pCi/g		JPH1 03/10/05	1452	406668
Americium-241	U	-0.00445	+/-0.0776	0.0638	+/-0.076	0.134	pCi/g				
Bismuth-212	U	0.161	+/-0.200	0.152	+/-0.196	0.331	pCi/g				
Bismuth-214		0.208	+/-0.0762	0.0275	+/-0.0747	0.0607	pCi/g				
Cesium-134	UUI	0.00	+/-0.0356	0.0231	+/-0.0349	0.0501	pCi/g				
Cesium-137	U	-0.00412	+/-0.0188	0.0159	+/-0.0185	0.035	pCi/g				
Cobalt-60	U	-0.016	+/-0.0239	0.0178	+/-0.0234	0.0409	pCi/g				
Europium-152	U	-0.02	+/-0.0475	0.0396	+/-0.0466	0.0856	pCi/g				
Europium-154	U	-0.0106	+/-0.0702	0.058	+/-0.0688	0.130	pCi/g				
Europium-155	U	0.0129	+/-0.0561	0.0505	+/-0.055	0.106	pCi/g				
Lead-212		0.321	+/-0.0643	0.0266	+/-0.063	0.0562	pCi/g				
Lead-214		0.255	+/-0.0863	0.0308	+/-0.0845	0.0661	pCi/g				
Manganese-54	U	-0.00472	+/-0.0216	0.0151	+/-0.0212	0.0337	pCi/g				
Niobium-94	U	0.00451	+/-0.0162	0.0144	+/-0.0158	0.0317	pCi/g				
Potassium-40		6.60	+/-0.872	0.159	+/-0.854	0.371	pCi/g				
Radium-226		0.208	+/-0.0762	0.0275	+/-0.0747	0.0607	pCi/g				
Silver-108m	U	0.00578	+/-0.0182	0.0142	+/-0.0179	0.0309	pCi/g				
Thallium-208		0.0833	+/-0.0451	0.0161	+/-0.0442	0.0352	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid-ALL FSS											
Strontium-90	U	-0.000746	+/-0.0165	0.016	+/-0.0165	0.0331	pCi/g		BXD1 04/08/05	2250	414565
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid-HTD2,ALL FSS											
Tritium	U	1.46	+/-5.80	4.81	+/-5.80	10.0	pCi/g		EGD1 04/05/05	1756	409926

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL-RAD-A-021B	TC1	03/07/05	1048	406350
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	DLD1	03/03/05	1554	406349

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: April 11, 2005

Client Sample ID: 9202–0000–137–C–3C–04
Sample ID: 131693039

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	36	(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 PO# 002332

Report Date: April 11, 2005

Client Sample ID:	9202–0000–137–C–3C–05	Project:	YANK01204
Sample ID:	131693040	Client ID:	YANK001
Matrix:	CT	Vol. Recv.:	
Collect Date:	15–FEB–05		
Receive Date:	03–MAR–05		
Collector:	Client		
Moisture:	6.28%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Alpha Spec Analysis											
Alphaspec Am241, Cm, Solid ALL FSS											
Americium–241	U	0.126	+/–0.115	0.0555	+/–0.116	0.170	pCi/g		BJB1 04/04/05	1354	412129
Curium–242	U	–0.0182	+/–0.0622	0.0807	+/–0.0622	0.234	pCi/g				
Curium–243/244	U	–0.00612	+/–0.107	0.117	+/–0.107	0.293	pCi/g				
Alphaspec Pu, Solid–ALL FSS											
Plutonium–238	U	–0.0329	+/–0.0579	0.0848	+/–0.058	0.233	pCi/g		BJB1 04/04/05	1354	412132
Plutonium–239/240	U	0.00658	+/–0.0499	0.0464	+/–0.0499	0.156	pCi/g				
Liquid Scint Pu241, Solid–ALL FSS											
Plutonium–241		11.2	+/–6.70	5.31	+/–6.77	10.9	pCi/g		BJB1 04/05/05	1511	412133
Rad Gamma Spec Analysis											
Gamma,Solid–FSS GAM & ALL FSS											
Actinium–228		0.366	+/–0.128	0.0615	+/–0.125	0.138	pCi/g		JPH1 03/10/05	1452	406668
Americium–241	U	–0.0179	+/–0.0334	0.0257	+/–0.0327	0.0536	pCi/g				
Bismuth–212		0.315	+/–0.208	0.123	+/–0.204	0.275	pCi/g				
Bismuth–214		0.265	+/–0.0968	0.0376	+/–0.0948	0.0812	pCi/g				
Cesium–134	U	0.0151	+/–0.0234	0.0215	+/–0.0229	0.0473	pCi/g				
Cesium–137	U	0.00492	+/–0.0222	0.0197	+/–0.0218	0.043	pCi/g				
Cobalt–60	U	–0.00715	+/–0.0197	0.0155	+/–0.0193	0.0365	pCi/g				
Europium–152	U	0.0141	+/–0.0594	0.0464	+/–0.0582	0.0993	pCi/g				
Europium–154	U	–0.00461	+/–0.0663	0.0559	+/–0.065	0.127	pCi/g				
Europium–155	U	–0.00174	+/–0.0489	0.046	+/–0.0479	0.0961	pCi/g				
Lead–212		0.351	+/–0.0879	0.0279	+/–0.0861	0.0589	pCi/g				
Lead–214		0.257	+/–0.0779	0.0375	+/–0.0763	0.0797	pCi/g				
Manganese–54	U	0.0159	+/–0.0202	0.0221	+/–0.0198	0.0481	pCi/g				
Niobium–94	U	0.0135	+/–0.0207	0.019	+/–0.0203	0.0412	pCi/g				
Potassium–40		6.22	+/–0.879	0.140	+/–0.861	0.335	pCi/g				
Radium–226		0.265	+/–0.0968	0.0376	+/–0.0948	0.0812	pCi/g				
Silver–108m	U	0.0104	+/–0.0181	0.0171	+/–0.0177	0.0367	pCi/g				
Thallium–208		0.107	+/–0.0409	0.0206	+/–0.0401	0.0446	pCi/g				
Rad Gas Flow Proportional Counting											
GFPC, Sr90, solid–ALL FSS											
Strontium–90	U	0.00567	+/–0.00774	0.00727	+/–0.00783	0.015	pCi/g		BXD1 04/08/05	2250	414565
Rad Liquid Scintillation Analysis											
LSC, Tritium Dist, Solid–HTD2,ALL FSS											
Tritium	U	–1.87	+/–5.70	4.86	+/–5.70	10.1	pCi/g		EGD1 04/05/05	1828	409926
Liquid Scint C14, Solid All,FSS											

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Contact: Mr. Pete Hollenbeck
Project: Soils PO# 002332

Report Date: April 11, 2005

Client Sample ID: 9202–0000–137–C–3C–05
Sample ID: 131693040

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Rad Liquid Scintillation Analysis											
Liquid Scint C14, Solid All,FSS											
Carbon–14	U	–0.0565	+/–0.0908	0.077	+/–0.0908	0.156	pCi/g		EGD1 03/19/05	1335	407148
Liquid Scint Fe55, Solid–ALL FSS											
Iron–55	U	–17.9	+/–54.4	36.9	+/–54.4	75.4	pCi/g		DAJ1 03/30/05	0946	407185
Liquid Scint Ni63, Solid–ALL FSS											
Nickel–63	U	–3.66	+/–8.21	6.99	+/–8.22	14.3	pCi/g		DAJ1 03/29/05	1536	407187
Liquid Scint Tc99, Solid–ALL FSS											
Technetium–99	U	0.110	+/–0.175	0.144	+/–0.175	0.295	pCi/g		DAJ1 03/21/05	1306	409273

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL–RAD–A–021B	TC1	03/07/05	1048	406350
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	DLD1	03/03/05	1554	406349

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 905.0 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 EML HASL–300, Tc–02–RC Modified
12	DOE EML HASL–300, Tc–02–RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium–243	Alphaspec Am241, Cm, Solid ALL	93	(25%–125%)
Carrier/Tracer Recovery	Alphaspec Pu, Solid–ALL FSS	95	
Carrier/Tracer Recovery	Liquid Scint Pu241, Solid–ALL FS	95	
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	83	(25%–125%)

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: April 11, 2005

Client Sample ID: 9202–0000–137–C–3C–05
Sample ID: 131693040

Project: YANK01204
Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	AnalystDate	Time	Batch
Carrier/Tracer Recovery	Liquid Scint Fe55, Solid–ALL FS				93						
Carrier/Tracer Recovery	Liquid Scint Ni63, Solid–ALL FS				80						
Carrier/Tracer Recovery	Liquid Scint Tc99, Solid–ALL FS				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.
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: April 11, 2005

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

Contact: Mr. Pete Hollenbeck

Workorder: 131693

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Alpha Spec											
Batch 412129											
QC1200814040 131693005 DUP											
Americium-241		U	-0.0527 +/-0.0651	U	0.271 +/-0.211	pCi/g	297*		(0%-20%)	BJB1	04/04/05 13:54
Curium-242		U	0.0278 +/-0.103	U	0.00146 +/-0.0795	pCi/g	180*		(0%-20%)		
Curium-243/244		U	0.0552 +/-0.166	U	0.0337 +/-0.138	pCi/g	48*		(0%-20%)		
QC1200814042 LCS											
Americium-241	10.3				10.3 +/-0.998	pCi/g		100	(75%-125%)		
Curium-242				U	-0.0425 +/-0.0315	pCi/g					
Curium-243/244	12.6				12.4 +/-1.09	pCi/g		98	(75%-125%)		
QC1200814039 MB											
Americium-241				U	0.105 +/-0.114	pCi/g					
Curium-242				U	0.0123 +/-0.049	pCi/g					
Curium-243/244				U	-0.0407 +/-0.105	pCi/g					
QC1200814041 131693005 MS											
Americium-241	10.4	U	-0.0527 +/-0.0651		11.3 +/-1.03	pCi/g		109	(75%-125%)		
Curium-242		U	0.0278 +/-0.103	U	0.016 +/-0.0639	pCi/g					
Curium-243/244	12.9	U	0.0552 +/-0.166		14.6 +/-1.18	pCi/g		113	(75%-125%)		
Batch 412132											
QC1200814048 131693005 DUP											
Plutonium-238		U	-0.0202 +/-0.052	U	-0.0323 +/-0.0258	pCi/g	N/A		(0%-20%)	BJB1	04/04/05 13:54
Plutonium-239/240		U	0.000877 +/-0.0477	U	0.00627 +/-0.0476	pCi/g	151*		(0%-20%)		
QC1200814050 LCS											
Plutonium-238				U	0.000986 +/-0.0536	pCi/g			(75%-125%)		
Plutonium-239/240	8.99				10.8 +/-1.01	pCi/g		120	(75%-125%)		
QC1200814047 MB											
Plutonium-238				U	-0.0419 +/-0.0517	pCi/g					
Plutonium-239/240				U	0.0279	pCi/g					

QC Summary

Workorder: 131693

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Alpha Spec											
Batch 412132											
					+/-0.063						
QC1200814049 131693005 MS											
Plutonium-238		U	-0.0202		0.0685	pCi/g			(75%-125%)	BJB1	04/04/05 13:54
			+/-0.052		+/-0.0775						
Plutonium-239/240	9.12	U	0.000877		9.78	pCi/g		107	(75%-125%)		
			+/-0.0477		+/-0.926						
Batch 412133											
QC1200814052 131693005 DUP											
Plutonium-241		U	-3.74	U	8.14	pCi/g	0		(0%-20%)	BJB1	04/05/05 16:53
			+/-5.72		+/-7.25						
QC1200814054 LCS											
Plutonium-241	126				106	pCi/g		84	(75%-125%)		04/05/05 17:57
					+/-9.90						
QC1200814051 MB											
Plutonium-241				U	6.75	pCi/g					04/05/05 16:21
					+/-6.71						
QC1200814053 131693005 MS											
Plutonium-241	131	U	-3.74		114	pCi/g		87	(75%-125%)		04/05/05 17:25
			+/-5.72		+/-9.31						
Rad Gamma Spec											
Batch 406667											
QC1200800985 131693001 DUP											
Actinium-228			0.262		0.340	pCi/g	26			JPH1	03/09/05 15:36
			+/-0.134		+/-0.146						
Americium-241		U	0.0435	U	0.000722	pCi/g	193				
			+/-0.0714		+/-0.0274						
Bismuth-212		U	0.0665	U	0.249	pCi/g	116				
			+/-0.179		+/-0.166						
Bismuth-214		UUI	0.00	UUI	0.00	pCi/g	2				
			+/-0.0879		+/-0.076						
Cesium-134		U	0.00233	U	0.0396	pCi/g	178				
			+/-0.0223		+/-0.0228						
Cesium-137		U	0.0123	U	0.0166	pCi/g	30*		(0%-20%)		
			+/-0.0198		+/-0.0214						
Cobalt-60		U	-0.00718	U	-0.0067	pCi/g	N/A		(0%-20%)		
			+/-0.0294		+/-0.0221						
Europium-152		U	0.0581	U	-0.0193	pCi/g	399				
			+/-0.0663		+/-0.0518						
Europium-154		U	-0.0331	U	0.0152	pCi/g	541				
			+/-0.075		+/-0.0613						
Europium-155		U	0.00547	U	0.0575	pCi/g	165				
			+/-0.0466		+/-0.0743						
Lead-212			0.258		0.286	pCi/g	10				
			+/-0.0794		+/-0.0525						
Lead-214			0.301		0.235	pCi/g	25				
			+/-0.0738		+/-0.0824						
Manganese-54		U	0.0157	U	0.00588	pCi/g	91				

QC Summary

Workorder: 131693

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 406667										
		+/-0.0141		+/-0.0212						
Niobium-94		U 0.00472	U	0.00242	pCi/g	64			JPH1	03/09/05 15:36
		+/-0.0169		+/-0.0172						
Potassium-40		5.70		6.46	pCi/g	13		(0%-20%)		
		+/-0.811		+/-0.805						
Radium-226		0.199		0.196	pCi/g	2		(0%-20%)		
		+/-0.0879		+/-0.076						
Silver-108m		U -0.000739	U	-0.0069	pCi/g	N/A				
		+/-0.0184		+/-0.0164						
Thallium-208		0.0795		0.0794	pCi/g	0				
		+/-0.0381		+/-0.0527						
QC1200800986 LCS										
Actinium-228			U	0.686	pCi/g					03/09/05 11:22
				+/-0.745						
Americium-241	23.4			24.8	pCi/g		106	(75%-125%)		
				+/-1.93						
Bismuth-212			U	-0.684	pCi/g					
				+/-1.42						
Bismuth-214			U	0.123	pCi/g					
				+/-0.310						
Cesium-134			U	-0.0771	pCi/g					
				+/-0.197						
Cesium-137	9.09			9.85	pCi/g		108	(75%-125%)		
				+/-0.999						
Cobalt-60	13.0			13.5	pCi/g		103	(75%-125%)		
				+/-1.12						
Europium-152			U	-0.0262	pCi/g					
				+/-0.345						
Europium-154			U	-0.193	pCi/g					
				+/-0.363						
Europium-155			U	-0.284	pCi/g					
				+/-0.338						
Lead-212			U	0.143	pCi/g					
				+/-0.185						
Lead-214			U	0.0631	pCi/g					
				+/-0.263						
Manganese-54			U	0.0439	pCi/g					
				+/-0.172						
Niobium-94			U	0.122	pCi/g					
				+/-0.153						
Potassium-40			U	0.926	pCi/g					
				+/-1.13						
Radium-226			U	0.123	pCi/g			(75%-125%)		
				+/-0.310						
Silver-108m			U	-0.067	pCi/g					
				+/-0.139						
Thallium-208			U	0.110	pCi/g					

QC Summary

Workorder: 131693

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 406667										
				+/-0.158						
QC1200800984 MB										
Actinium-228			U	0.0614 +/-0.0451	pCi/g				JPH1	03/10/05 15:01
Americium-241			U	-0.0245 +/-0.0459	pCi/g					
Bismuth-212			U	0.0746 +/-0.0846	pCi/g					
Bismuth-214			U	0.00179 +/-0.0494	pCi/g					
Cesium-134			U	0.00486 +/-0.0122	pCi/g					
Cesium-137			U	0.00532 +/-0.0104	pCi/g					
Cobalt-60			U	0.00203 +/-0.0118	pCi/g					
Europium-152			U	0.0395 +/-0.0407	pCi/g					
Europium-154			U	-0.0246 +/-0.0296	pCi/g					
Europium-155			U	0.00358 +/-0.0289	pCi/g					
Lead-212			U	0.0166 +/-0.0277	pCi/g					
Lead-214			U	0.0021 +/-0.0221	pCi/g					
Manganese-54			U	-0.008 +/-0.0104	pCi/g					
Niobium-94			U	-0.00577 +/-0.0108	pCi/g					
Potassium-40			U	0.221 +/-0.135	pCi/g					
Radium-226			U	0.00179 +/-0.0494	pCi/g					
Silver-108m			U	-0.00102 +/-0.0116	pCi/g					
Thallium-208			U	0.00179 +/-0.0116	pCi/g					
Batch 406668										
QC1200800988 131693021 DUP										
Actinium-228		0.361 +/-0.123		0.224 +/-0.131	pCi/g	47			JPH1	03/10/05 15:05
Americium-241	U	-0.0212 +/-0.0762	U	-0.0242 +/-0.0798	pCi/g	N/A				
Bismuth-212	U	0.287 +/-0.199		0.537 +/-0.254	pCi/g	61				
Bismuth-214		0.283		0.314	pCi/g	10				

QC Summary

Workorder: 131693

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 406668										
		+/-0.0764		+/-0.0794						
Cesium-134		U 0.0313	U	0.0258	pCi/g	20			JPH1	03/10/05 15:05
		+/-0.0232		+/-0.0214						
Cesium-137		U -0.00462	U	-0.00411	pCi/g	N/A		(0%-20%)		
		+/-0.0194		+/-0.0182						
Cobalt-60		U -0.00922	U	0.00264	pCi/g	360*		(0%-20%)		
		+/-0.0194		+/-0.0165						
Europium-152		U 0.00618	U	-0.0103	pCi/g	800				
		+/-0.0464		+/-0.0483						
Europium-154		U -0.0456	U	-0.0118	pCi/g	N/A				
		+/-0.0621		+/-0.0547						
Europium-155		U 0.0158	U	0.0161	pCi/g	2				
		+/-0.0495		+/-0.0455						
Lead-212		0.307		0.290	pCi/g	6				
		+/-0.0569		+/-0.0551						
Lead-214		0.284		0.229	pCi/g	22				
		+/-0.0814		+/-0.0815						
Manganese-54		U 0.0159	U	-0.00257	pCi/g	277				
		+/-0.0182		+/-0.0166						
Niobium-94		U 0.00184	U	-0.00377	pCi/g	580				
		+/-0.0178		+/-0.0204						
Potassium-40		5.84		5.92	pCi/g	1		(0%-20%)		
		+/-0.839		+/-0.850						
Radium-226		0.283		0.314	pCi/g	10		(0%-20%)		
		+/-0.0764		+/-0.0794						
Silver-108m		U -0.00578	U	0.00935	pCi/g	847				
		+/-0.0157		+/-0.0168						
Thallium-208		0.115		0.0897	pCi/g	25				
		+/-0.0405		+/-0.0336						
QC1200800989 LCS										
Actinium-228			U	-0.204	pCi/g					03/10/05 08:59
				+/-0.721						
Americium-241	23.4			22.7	pCi/g		97	(75%-125%)		
				+/-1.96						
Bismuth-212			U	-0.248	pCi/g					
				+/-1.30						
Bismuth-214			U	0.0721	pCi/g					
				+/-0.281						
Cesium-134			U	0.0587	pCi/g					
				+/-0.196						
Cesium-137	9.09			9.78	pCi/g		108	(75%-125%)		
				+/-0.989						
Cobalt-60	13.0			13.8	pCi/g		106	(75%-125%)		
				+/-1.14						
Europium-152			U	0.302	pCi/g					
				+/-0.337						
Europium-154			U	0.029	pCi/g					

QC Summary

Workorder: 131693

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 406668										
				+/-0.360						
Europium-155			U	-0.12	pCi/g				JPH1	03/10/05 08:59
				+/-0.329						
Lead-212			U	0.0434	pCi/g					
				+/-0.176						
Lead-214			U	0.191	pCi/g					
				+/-0.466						
Manganese-54			U	-0.0398	pCi/g					
				+/-0.175						
Niobium-94			U	0.062	pCi/g					
				+/-0.158						
Potassium-40			U	0.779	pCi/g					
				+/-1.31						
Radium-226			U	0.0721	pCi/g			(75%-125%)		
				+/-0.281						
Silver-108m			U	-0.0855	pCi/g					
				+/-0.139						
Thallium-208			U	-0.051	pCi/g					
				+/-0.154						
QC1200800987 MB										
Actinium-228			U	0.052	pCi/g					03/10/05 14:55
				+/-0.0909						
Americium-241			U	0.0632	pCi/g					
				+/-0.103						
Bismuth-212			U	-0.167	pCi/g					
				+/-0.209						
Bismuth-214			U	0.0616	pCi/g					
				+/-0.0597						
Cesium-134			U	0.0054	pCi/g					
				+/-0.0247						
Cesium-137			U	0.00704	pCi/g					
				+/-0.0323						
Cobalt-60			U	0.0172	pCi/g					
				+/-0.0263						
Europium-152			U	-0.0287	pCi/g					
				+/-0.0789						
Europium-154			U	-0.0446	pCi/g					
				+/-0.0639						
Europium-155			U	0.0704	pCi/g					
				+/-0.079						
Lead-212			U	0.0315	pCi/g					
				+/-0.0667						
Lead-214			U	0.0568	pCi/g					
				+/-0.0606						
Manganese-54			U	0.0064	pCi/g					
				+/-0.0265						
Niobium-94			U	0.0146	pCi/g					

QC Summary

Workorder: 131693

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 406668										
				+/-0.0251						
Potassium-40			U	0.218 +/-0.324	pCi/g				JPH1	03/10/05 14:55
Radium-226			U	0.0616 +/-0.0597	pCi/g					
Silver-108m			U	0.00748 +/-0.0256	pCi/g					
Thallium-208			U	0.0158 +/-0.0318	pCi/g					
Rad Gas Flow										
Batch 414102										
QC1200818671 131693033 DUP										
Strontium-90	U	-0.00172 +/-0.011	U	0.00966 +/-0.0129	pCi/g	0		(0%-20%)	BXD1	04/06/05 23:31
QC1200818673 LCS										
Strontium-90	1.36			1.40 +/-0.0919	pCi/g		103	(75%-125%)		04/06/05 19:45
QC1200818670 MB										
Strontium-90			U	0.00114 +/-0.0116	pCi/g					04/06/05 23:30
QC1200818672 131693033 MS										
Strontium-90	2.73	U -0.00172 +/-0.011		2.18 +/-0.162	pCi/g		80	(75%-125%)		04/06/05 19:45
Batch 414564										
QC1200819798 131693018 DUP										
Strontium-90	U	-0.000918 +/-0.00622	U	-0.00037 +/-0.00437	pCi/g	N/A		(0%-20%)	LCW1	04/09/05 22:14
QC1200819800 LCS										
Strontium-90	1.13			1.13 +/-0.0655	pCi/g		100	(75%-125%)		04/08/05 21:00
QC1200819797 MB										
Strontium-90			U	0.000571 +/-0.00305	pCi/g					04/09/05 22:13
QC1200819799 131693018 MS										
Strontium-90	9.30	U -0.000918 +/-0.00622		8.09 +/-0.518	pCi/g		87	(75%-125%)		04/08/05 20:59
Batch 414565										
QC1200819802 131693028 DUP										
Strontium-90	U	0.00441 +/-0.0127	U	0.0131 +/-0.0167	pCi/g	0		(0%-20%)	BXD1	04/08/05 23:28
QC1200819804 LCS										
Strontium-90	2.77			2.69 +/-0.110	pCi/g		97	(75%-125%)		04/08/05 22:15
QC1200819801 MB										
Strontium-90			U	-0.00135 +/-0.00855	pCi/g					04/08/05 23:28
QC1200819803 131693028 MS										

QC Summary

Workorder: 131693

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gas Flow											
Batch 414565											
Strontium-90	8.15	U	0.00441 +/-0.0127		7.38 +/-0.519	pCi/g		91	(75%-125%)		04/08/05 22:15
Rad Liquid Scintillation											
Batch 407148											
QC1200802145 131693030 DUP											
Carbon-14		U	-0.0492 +/-0.0901	U	-0.0818 +/-0.0913	pCi/g	N/A		(0%-20%)	EGD1	03/19/05 16:41
QC1200802147 LCS											
Carbon-14	7.30				7.23 +/-0.180	pCi/g		99	(75%-125%)		03/19/05 19:46
QC1200802144 MB											
Carbon-14				U	-0.0357 +/-0.0928	pCi/g					03/19/05 15:08
QC1200802146 131693030 MS											
Carbon-14	7.22	U	-0.0492 +/-0.0901		7.06 +/-0.178	pCi/g		98	(75%-125%)		03/19/05 18:13
Batch 407185											
QC1200804899 131691003 DUP											
Iron-55		U	-35.9 +/-59.9	U	8.77 +/-55.1	pCi/g	0		(0%-30%)	DAJ1	03/30/05 10:49
QC1200802261 LCS											
Iron-55	412				401 +/-58.9	pCi/g		97	(75%-125%)		03/30/05 11:53
QC1200802258 MB											
Iron-55				U	-16.1 +/-52.9	pCi/g					03/30/05 10:17
QC1200804900 131691003 MS											
Iron-55	459	U	-35.9 +/-59.9		407 +/-64.3	pCi/g		89	(75%-125%)		03/30/05 11:21
Batch 407187											
QC1200804897 131691003 DUP											
Nickel-63		U	-3.49 +/-8.66	U	-5.24 +/-8.42	pCi/g	N/A		(0%-20%)	DAJ1	03/29/05 17:09
QC1200802271 LCS											
Nickel-63	757				735 +/-20.3	pCi/g		97	(75%-125%)		03/29/05 18:43
QC1200802268 MB											
Nickel-63				U	-6.84 +/-8.46	pCi/g					03/29/05 16:23
QC1200804898 131691003 MS											
Nickel-63	824	U	-3.49 +/-8.66		795 +/-21.7	pCi/g		96	(75%-125%)		03/29/05 17:56
Batch 409273											
QC1200807179 132450002 DUP											
Technetium-99			0.402 +/-0.205		0.459 +/-0.187	pCi/g	13		(0%-20%)	DAJ1	03/21/05 17:54
QC1200807181 LCS											
Technetium-99	14.9				14.3	pCi/g		96	(75%-125%)		03/21/05 19:30

QC Summary

Workorder: 131693

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Liquid Scintillation											
Batch 409273											
					+/-0.356						
QC1200807178 MB											
Technetium-99				U	0.123	pCi/g				DAJ1	03/21/05 17:06
					+/-0.134						
QC1200807180 132450002 MS											
Technetium-99	16.4		0.402		15.4	pCi/g		91	(75%-125%)		03/21/05 18:42
			+/-0.205		+/-0.446						
Batch 409871											
QC1200808783 131691001 DUP											
Tritium		U	1.78	U	4.60	pCi/g	0		(0%-20%)	ATH1	03/31/05 01:59
			+/-6.69		+/-7.48						
QC1200808785 LCS											
Tritium	73.5				74.8	pCi/g		102	(75%-125%)		03/31/05 03:03
					+/-9.17						
QC1200808782 MB											
Tritium				U	6.17	pCi/g					03/31/05 01:27
					+/-6.48						
QC1200808784 131691001 MS											
Tritium	80.0	U	1.78		72.2	pCi/g		88	(75%-125%)		03/31/05 02:31
			+/-6.69		+/-9.54						
Batch 409925											
QC1200808787 131693014 DUP											
Tritium		U	-3.39	U	-4.97	pCi/g	N/A		(0%-20%)	ATH1	04/06/05 17:44
			+/-7.47		+/-7.22						
QC1200808789 LCS											
Tritium	74.8				67.6	pCi/g		90	(75%-125%)		04/05/05 23:47
					+/-10.8						
QC1200808786 MB											
Tritium				U	1.72	pCi/g					04/06/05 17:28
					+/-7.32						
QC1200808788 131693014 MS											
Tritium	78.5	U	-3.39		75.0	pCi/g		96	(75%-125%)		04/06/05 18:01
			+/-7.47		+/-15.4						
Batch 409926											
QC1200808791 131693030 DUP											
Tritium		U	-1.68	U	2.12	pCi/g	0		(0%-20%)	EGD1	04/05/05 19:32
			+/-6.14		+/-6.11						
QC1200808793 LCS											
Tritium	73.1				70.8	pCi/g		97	(75%-125%)		04/05/05 20:35
					+/-8.40						
QC1200808790 MB											
Tritium				U	-0.694	pCi/g					04/05/05 19:00
					+/-5.74						
QC1200808792 131693030 MS											
Tritium	75.4	U	-1.68		64.4	pCi/g		86	(75%-125%)		04/05/05 20:03
			+/-6.14		+/-8.48						

QC Summary

Workorder: **131693**

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

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.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance 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.

9202-0000-133-C-1C-01	MSR#05-0800	131693001	406667	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.262	0.134	PCI/G	0		3/3/2005	38415.60347	10:09	0.137	PCI/G	0.0614	PCI/G	1	4.6	165	G	PCI/G	PR	
9202-0000-133-C-1C-01	MSR#05-0800	131693001	406667	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0435	0.0714	PCI/G	0	U	3/3/2005	38415.60347	10:09	0.136	PCI/G	0.0641	PCI/G	1	4.6	165	G	PCI/G	PR	
9202-0000-133-C-1C-01	MSR#05-0800	131693001	406667	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.0665	0.179	PCI/G	0	U	3/3/2005	38415.60347	10:09	0.293	PCI/G	0.132	PCI/G	1	4.6	165	G	PCI/G	PR	
9202-0000-133-C-1C-01	MSR#05-0800	131693001	406667	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0	0.0879	PCI/G	0	UUI	3/3/2005	38415.60347	10:09	0.126	PCI/G	0.06	PCI/G	1	4.6	165	G	PCI/G	PR	
9202-0000-133-C-1C-01	MSR#05-0800	131693001	406667	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.00233	0.0223	PCI/G	0	U	3/3/2005	38415.60347	10:09	0.0426	PCI/G	0.0192	PCI/G	1	4.6	165	G	PCI/G	PR	
9202-0000-133-C-1C-01	MSR#05-0800	131693001	406667	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.0123	0.0198	PCI/G	0	U	3/3/2005	38415.60347	10:09	0.0402	PCI/G	0.0184	PCI/G	1	4.6	165	G	PCI/G	PR	
9202-0000-133-C-1C-01	MSR#05-0800	131693001	406667	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.00718	0.0294	PCI/G	0	U	3/3/2005	38415.60347	10:09	0.0453	PCI/G	0.0199	PCI/G	1	4.6	165	G	PCI/G	PR	
9202-0000-133-C-1C-01	MSR#05-0800	131693001	406667	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0581	0.0663	PCI/G	0	U	3/3/2005	38415.60347	10:09	0.0975	PCI/G	0.0454	PCI/G	1	4.6	165	G	PCI/G	PR	
9202-0000-133-C-1C-01	MSR#05-0800	131693001	406667	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0331	0.075	PCI/G	0	U	3/3/2005	38415.60347	10:09	0.133	PCI/G	0.0588	PCI/G	1	4.6	165	G	PCI/G	PR	
9202-0000-133-C-1C-01	MSR#05-0800	131693001	406667	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.00547	0.0466	PCI/G	0	U	3/3/2005	38415.60347	10:09	0.0905	PCI/G	0.0427	PCI/G	1	4.6	165	G	PCI/G	PR	
9202-0000-133-C-1C-01	MSR#05-0800	131693001	406667	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.258	0.0794	PCI/G	0		3/3/2005	38415.60347	10:09	0.0637	PCI/G	0.0303	PCI/G	1	4.6	165	G	PCI/G	PR	
9202-0000-133-C-1C-01	MSR#05-0800	131693001	406667	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.301	0.0738	PCI/G	0		3/3/2005	38415.60347	10:09	0.0705	PCI/G	0.0328	PCI/G	1	4.6	165	G	PCI/G	PR	
9202-0000-133-C-1C-01	MSR#05-0800	131693001	406667	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0157	0.0141	PCI/G	0	U	3/3/2005	38415.60347	10:09	0.0375	PCI/G	0.0168	PCI/G	1	4.6	165	G	PCI/G	PR	
9202-0000-133-C-1C-01	MSR#05-0800	131693001	406667	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00472	0.0169	PCI/G	0	U	3/3/2005	38415.60347	10:09	0.0331	PCI/G	0.015	PCI/G	1	4.6	165	G	PCI/G	PR	
9202-0000-133-C-1C-01	MSR#05-0800	131693001	406667	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	5.7	0.811	PCI/G	0		3/3/2005	38415.60347	10:09	0.276	PCI/G	0.11	PCI/G	1	4.6	165	G	PCI/G	PR	
9202-0000-133-C-1C-01	MSR#05-0800	131693001	406667	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.199	0.0879	PCI/G	0		3/3/2005	38415.60347	10:09	0.0617	PCI/G	0.0279	PCI/G	1	4.6	165	G	PCI/G	PR	
9202-0000-133-C-1C-01	MSR#05-0800	131693001	406667	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.000739	0.0184	PCI/G	0	U	3/3/2005	38415.60347	10:09	0.034	PCI/G	0.0157	PCI/G	1	4.6	165	G	PCI/G	PR	
9202-0000-133-C-1C-01	MSR#05-0800	131693001	414564	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.0034	0.00586	PCI/G	0	U	7/3/2005	38445.08958	11:39	0.0114	PCI/G	0.00549	PCI/G	1	4.6	16.4	G	PCI/G	PR	
9202-0000-133-C-1C-01	MSR#05-0800	131693001	406667	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.0795	0.0381	PCI/G	0		3/3/2005	38415.60347	10:09	0.0389	PCI/G	0.0178	PCI/G	1	4.6	165	G	PCI/G	PR	
9202-0000-133-C-1C-01	MSR#05-0800	131693001	409871	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	1.87	7.03	PCI/G	0	U		30/03/2005	6:32	12.1	PCI/G	5.83	PCI/G	1	4.6	1.95	G	PCI/G	PR	
9202-0000-133-C-1C-02	MSR#05-0800	131693002	406667	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.356	0.113	PCI/G	0		3/3/2005	38415.60347	10:10	0.106	PCI/G	0.0465	PCI/G	1	4.6	184	G	PCI/G	PR	
9202-0000-133-C-1C-02	MSR#05-0800	131693002	406667	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0476	0.0765	PCI/G	0	U	3/3/2005	38415.60347	10:10	0.139	PCI/G	0.0659	PCI/G	1	4.6	184	G	PCI/G	PR	
9202-0000-133-C-1C-02	MSR#05-0800	131693002	406667	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.29	0.318	PCI/G	0		3/3/2005	38415.60347	10:10	0.236	PCI/G	0.106	PCI/G	1	4.6	184	G	PCI/G	PR	
9202-0000-133-C-1C-02	MSR#05-0800	131693002	406667	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.269	0.0702	PCI/G	0		3/3/2005	38415.60347	10:10	0.0613	PCI/G	0.028	PCI/G	1	4.6	184	G	PCI/G	PR	
9202-0000-133-C-1C-02	MSR#05-0800	131693002	406667	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.00514	0.0181	PCI/G	0	U	3/3/2005	38415.60347	10:10	0.0357	PCI/G	0.016	PCI/G	1	4.6	184	G	PCI/G	PR	
9202-0000-133-C-1C-02	MSR#05-0800	131693002	406667	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.00422	0.0175	PCI/G	0	U	3/3/2005	38415.60347	10:10	0.0342	PCI/G	0.0155	PCI/G	1	4.6	184	G	PCI/G	PR	
9202-0000-133-C-1C-02	MSR#05-0800	131693002	406667	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.00887	0.0172	PCI/G	0	U	3/3/2005	38415.60347	10:10	0.0369	PCI/G	0.016	PCI/G	1	4.6	184	G	PCI/G	PR	
9202-0000-133-C-1C-02	MSR#05-0800	131693002	406667	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0397	0.0484	PCI/G	0	U	3/3/2005	38415.60347	10:10	0.0819	PCI/G	0.0379	PCI/G	1	4.6	184	G	PCI/G	PR	
9202-0000-133-C-1C-02	MSR#05-0800	131693002	406667	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0147	0.048	PCI/G	0	U	3/3/2005	38415.60347	10:10	0.0994	PCI/G	0.043	PCI/G	1	4.6	184	G	PCI/G	PR	
9202-0000-133-C-1C-02	MSR#05-0800	131693002	406667	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0117	0.0439	PCI/G	0	U	3/3/2005	38415.60347	10:10	0.089	PCI/G	0.0422	PCI/G	1	4.6	184	G	PCI/G	PR	
9202-0000-133-C-1C-02	MSR#05-0800	131693002	406667	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.238	0.0574	PCI/G	0		3/3/2005	38415.60347	10:10	0.0525	PCI/G	0.0248	PCI/G	1	4.6	184	G	PCI/G	PR	
9202-0000-133-C-1C-02	MSR#05-0800	131693002	406667	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.198	0.0629	PCI/G	0		3/3/2005	38415.60347	10:10	0.061	PCI/G	0.0283	PCI/G	1	4.6	184	G	PCI/G	PR	
9202-0000-133-C-1C-02	MSR#05-0800	131693002	406667	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0159	0.0168	PCI/G	0	U	3/3/2005	38415.60347	10:10	0.0358	PCI/G	0.0161	PCI/G	1	4.6	184	G	PCI/G	PR	
9202-0000-133-C-1C-02	MSR#05-0800	131693002	406667	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00109	0.017	PCI/G	0	U	3/3/2005	38415.60347	10:10	0.0321	PCI/G	0.0147	PCI/G	1	4.6	184	G	PCI/G	PR	
9202-0000-133-C-1C-02	MSR#05-0800	131693002	406667	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	6.15	0.842	PCI/G	0		3/3/2005	38415.60347	10:10	0.293	PCI/G	0.122	PCI/G	1	4.6	184	G	PCI/G	PR	
9202-0000-133-C-1C-02	MSR#05-0800	131693002	406667	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.269	0.0702	PCI/G	0		3/3/2005	38415.60347	10:10	0.0613	PCI/G	0.028	PCI/G	1	4.6	184	G	PCI/G	PR	
9202-0000-133-C-1C-02	MSR#05-0800	131693002	406667	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00976	0.0132	PCI/G	0	U	3/3/2005	38415.60347	10:10	0.028	PCI/G	0.0128	PCI/G	1	4.6	184	G	PCI/G	PR	
9202-0000-133-C-1C-02	MSR#05-0800	131693002	414564	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.0123	0.0111	PCI/G	0	U	7/3/2005	38445.08958	11:39	0.0238	PCI/G	0.0114	PCI/G	1	4.6	12.9	G	PCI/G	PR	
9202-0000-133-C-1C-02	MSR#05-0800	131693002	406667	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.114	0.0356	PCI/G	0		3/3/2005	38415.60347	10:10	0.0306	PCI/G	0.0138	PCI/G	1	4.6	184	G	PCI/G	PR	
9202-0000-133-C-1C-02	MSR#05-0800	131693002	409871	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-0.833	6.71	PCI/G	0	U		30/03/2005	7:04	11.8	PCI/G	5.66	PCI/G	1	4.6	2.01	G	PCI/G	PR	
9202-0000-133-C-3C-03	MSR#05-0800	131693003	406667	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.259	0.107	PCI/G	0		3/3/2005	38415.60347	10:10	0.121	PCI/G	0.0546	PCI/G	1	5.1	187	G	PCI/G	PR	
9202-0000-133-C-3C-03	MSR#05-0800	131693003	406667	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0109	0.0261	PCI/G	0	U	3/3/2005	38415.60347	10:10	0.0441	PCI/G	0.0212	PCI/G	1	5.1	187	G	PCI/G	PR	
9202-0000-133-C-3C-03	MSR#05-0800	131693003	406667	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.197	0.156	PCI/G	0	U	3/3/2005	38415.60347	10:10	0.32	PCI/G	0.148	PCI/G	1	5.1	187	G	PCI/G	PR	
9202-0000-133-C-3C-03	MSR#05-0800	131693003	406667	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.283	0.0699	PCI/G	0		3/3/2005	38415.60347	10:10	0.0662	PCI/G	0.0307	PCI/G	1	5.1	187	G	PCI/G	PR	
9202-0000-133-C-3C-03	MSR#05-0800	131693003	406667	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0142	0.0207	PCI/G	0	U	3/3/2005	38415.60347	10:10	0.0412	PCI/G	0.0189	PCI/G	1	5.1	187	G	PCI/G	PR	
9202-0000-133-C-3C-03	MSR#05-0800	131693003	406667	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.00447	0.0177	PCI/G	0	U	3/3/2005	38415.60347	10:10	0.0276	PCI/G	0.0124	PCI/G	1	5.1	187	G	PCI/G	PR	
9202-0000-133-C-3C-03	MSR#05-0800	131693003	406667	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.00415	0.0206	PCI/G	0	U	3/3/2005	38415.60347	10:10	0.0403	PCI/G	0.0179	PCI/G	1	5.1	187	G	PCI/G	PR	
9202-0000-133-C-3C-03	MSR#05-0800	131693003	406667	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.027	0.0429	PCI/G	0	U	3/3/2005	38415.60347	10:10	0.0861	PCI/G	0.0404	PCI/G	1	5.1	187	G	PCI/G	PR	
9202-0000-133-C-3C-03	MSR#05-0800	131693003	406667	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.038	0.0499	PCI/G	0	U	3/3/2005	38415.60347	10:10	0.084	PCI/G	0.0358	PCI/G	1	5.1	187	G	PCI/G	PR	
9202-0000-133-C-3C-03	MSR#05-0800	131693003	406667	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0322	0.0536	PCI/G	0	U	3/3/2005	38415.60347	10:10	0.0828	PCI/G	0.0398	PCI/G	1	5.1	187	G	PCI/G	PR	
9202-0000-133-C-3C-03	MSR#05-0800	131693003	406667	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.271	0.0487	PCI/G	0		3/3/2005	38415.60347	10:10	0.0435	PCI/G	0.0206	PCI/G	1	5.1	187	G	PCI/G	PR	
9202-0000-133-C-3C-03	MSR#05-0800	131693003	406667	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.252	0.067	PCI/G	0		3/3/2005	38415.60347	10:10	0.0672	PCI/G	0.0317	PCI/G	1	5.1	187	G	PCI/G	PR	
9202-0000-133-C-3C-03	MSR#05-0800	131693003	406667	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.00977	0.0161	PCI/G	0	U	3/3/2005	38415.60347	10:10	0.0284	PCI/G	0.0126	PCI/G	1	5.1	187	G	PCI/G	PR	
9202-0000-133-C-3C-03	MSR#05-0800	131693003	406667	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.00988	0.0176	PCI/G	0	U	3/3/2005	38415.60347	10:10	0.0305	PCI/G	0.014	PCI/G	1	5.1	187	G	PCI/G	PR	
9202-0000-133-C-3C-03	MSR#05-0800	131693003	406667	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	5.88	0.774	PCI/G	0		3/3/2005	38415.60347	10:10	0.309	PCI/G	0.132	PCI/G	1	5.1	187	G	PCI/G	PR	
9202-0000-133-C-3C-03	MSR#05-0800	131693003	406667	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.283	0.0699	PCI/G	0		3/3/2005	38415.60347	10:10	0.0662	PCI/G	0.0307	PCI/G	1	5.1	187	G	PCI/G	PR	
9202-0000-133-C-3C-03	MSR#05-0800	131693003	406667	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.0132	0.0154	PCI/G	0	U	3/3/2005	38415.60347	10:10	0.0271	PCI/G	0.0125	PCI/G	1	5.1	187	G	PCI/G	PR	
9202-0000-133-C-3C-03	MSR#05-0800	131693003	414564	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.0171	0.0073	PCI/G	0		7/3/2005	38445.08958	11:40	0.0129	PCI/G	0.00622	PCI/G	1	5.1	10.7	G	PCI/G	PR	
9202-0000-133-C-3C-03	MSR#05-0800	131693003	406667	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.0689	0.0359	PCI/G	0		3/3/2005	38415.60347	10:10	0.0328	PCI/G	0.0151	PCI/G	1	5.1	187	G	PCI/G	PR	
9202-0000-133-C-3C-03	MSR#05-0800	131693003	409871	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	4.49	7.07	PCI/G	0	U		30/03/2005	7:36	12	PCI/G	5.76	PCI/G	1	5.1	1.96	G	PCI/G	PR	
9202-0000-133-C-6C-04	MSR#05-0800	131693004	406667	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.349	0.199	PCI/G	0		3/3/2005	38415.60347	10:11	0.136	PCI/G	0.0595	PCI/G	1	5.9	177	G	PCI/G	PR	
9202-0000-133-C-6C-04	MSR#05-0800	131693004	406667	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.000428	0.0271	PCI/G	0	U	3/3/2005	38415.60347	10:11	0.0525	PCI/G	0.0249	PCI/G	1	5.9	177	G	PCI/G	PR	
9202-0000-133-C-6C-04	MSR#05-0800	131693004	406667	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.249	0.225	PCI/G	0	U	3/3/2005	38415.60347	10:11	0.316	PCI/G	0.142	PCI/G	1	5.9	177	G	PCI/G	PR	
9202-0000-133-C-6C-04	MSR#05-0800	131693004	406667	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0	0.0932	PCI/G	0	UUI	3/3/2005	38415.60347	10:11	0.15	PCI/G	0.0715	PCI/G	1	5.9	177	G	PCI/G	PR	
9202-0000-133-C-6C-04	MSR#05-0800	131693004	406667	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0121	0.0273	PCI/G	0	U	3/3/2005	38415.60347	10:11	0.0546	PCI/G	0.0248	PCI/G	1	5.9	177	G	PCI/G	PR	
9202-0000-133-C-6C-04	MSR#05-0800	131693004	406667	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.00072	0.0237	PCI/G	0	U	3/3/2005	38415.60347	10:11	0.0456	PCI/G	0.0208	PCI/G	1	5.9	177	G	PCI/G	PR	
9202-0000-133-C-6C-04	MSR#05-0800	131693004	406667	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.00708	0.0244	PCI/G	0	U	3/3/2005	38415.60347	10:11	0.0398	PCI/G	0.0167	PCI/G	1	5.9	177	G	PCI/G	PR	
9202-0000-133-C-6C-04	MSR#05-0800	131693004	406667	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0197	0.0501	PCI/G	0	U	3/3/2005	38415.60347	10:11	0.0919	PCI/G	0.0423	PCI/G	1	5.9	177	G	PCI/G	PR	
9202-0000-133-C-6C-04	MSR#05-0800	131693004	406667	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0146	0.0715	PCI/G	0	U	3/3/2005	38415.60347	10:11	0.126	PCI/G	0.0541	PCI/G	1	5.9	177	G	PCI/G	PR	
9202-0000-133-C-6C-04	MSR#05-0800	131693004	406667	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	-0.0155	0.0474	PCI/G	0	U	3/3/2005	38415.60347	10:11	0.0861	PCI/G	0.0408	PCI/G	1	5.9	177	G	PCI/G	PR	
9202-0000-133-C-6C-04	MSR#05-0800	131693004	406667	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.32	0.0581	PCI/G	0		3/3/2005	38415.60347	10:11	0.053	PCI/G	0.0249	PCI/G	1	5.9	177	G	PCI/G	PR	
9202-0000-133-C-6C-04	MSR#05-0800	131693004	406667	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.332	0.0743	PCI/G	0		3/3/2005	38415.60347	10:11	0.0716	PCI/G	0.0332	PCI/G	1	5.9	177	G	PCI/G	PR	
9202-0000-133-C-6C-04	MSR#05-0800	131693004	406667	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.00685	0.0246	PCI/G	0	U	3/3/2005	38415.60347	10:11	0.0423	PCI/G	0.0189	PCI/G	1	5.9	177	G	PCI/G	PR	
9202-0000-133-C-6C-04	MSR#05-0800	131693004	406667	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.0146	0.0187	PCI/G	0	U	3/3/2005	38415.60347	10:11	0.0329	PCI/G	0.0146	PCI/G	1	5.9	177	G	PCI/G	PR	
9202-0000-133-C-6C-04	MSR#05-0800	131693004	406667	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	5.29	0.889	PCI/G	0		3/3/2005	38415.60347	10:11	0.402	PCI/G	0.169	PCI/G	1	5.9	177	G	PCI/G	PR	
9202-0000-133-C-6C-04	MSR#05-0800	131693004	406667	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.282	0.0932	PCI/G	0		3/3/2005	38415.60347	10:11	0.0708	PCI/G	0.032	PCI/G	1	5.9	177	G	PCI/G	PR	
9202-0000-133-C-6C-04	MSR#05-0800	131693004	406667	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.0145	0.017	PCI/G	0	U	3/3/2005	38415.60347	10:11	0.035	PCI/G	0.016	PCI/G	1	5.9	177	G	PCI/G	PR	
9202-0000-133-C-6C-04	MSR#05-0800	131693004	414564	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.00324	0.0041	PCI/G	0	U	7/3/2005	38445.08958	11:40	0.00863	PCI/G	0.00415	PCI/G	1	5.9	13	G	PCI/G	PR	
9202-0000-133-C-6C-04	MSR#05-0800	131693004	406667	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0	0.0402	PCI/G	0	UUI	3/3/2005	38415.60347	10:11	0.0701	PCI/G	0.0332	PCI/G	1	5.9	177	G	PCI/G	PR	
9202-0000-133-C-6C-04	MSR#05-0800	131693004	409871	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	2.64	6.99	PCI/G	0	U		30/03/2005	8:08	12	PCI/G	5.76	PCI/G	1	5.9	1.97	G	PCI/G	PR	
9202-0000-133-C-6C-05	MSR#05-0800	131693005	406667	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.243	0.11	PCI/G	0		3/3/2005	38415.60347	10:12	0.0934	PCI/G	0.0428	PCI/G	1	5	177	G	PCI/G	PR	
9202-0000-133-C-6C-05	MSR#05-0800	131693005	406667	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0227	0.0857	PCI/G	0	U	3/3/2005	38415.60347	10:12	0.153	PCI/G	0.0733	PCI/G	1	5	177	G	PCI/G	PR	
9202-0000-133-C-6C-05	MSR#05-0800	131693005	412129	14596-10-2	Americium-241	TRG 1	UAM05RCM	AM05RCM	REG	-0.0527	0.0651	PCI/G	0	U	7/3/2005	38445.08611	1:54	0.251	PCI/G	0.0885	PCI/G	1	5	0.259	G	PCI/G	PR	
9202-0000-133-C-6C-05	MSR#05-0800	131693005	406667	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.32	0.196	PCI/G	0		3/3/2005	38415.60347	10:12	0.211	PCI/G	0.0978	PCI/G	1	5	177	G	PCI/G	PR	
9202-0000-133-C-6C-05	MSR#05-0800	131693005	406667	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.191	0.0697	PCI/G	0		3/3/2005	38415.60347	10:12	0.0489	PCI/G	0.0228	PCI/G	1	5	177	G	PCI/G	PR	
9202-0000-133-C-6C-05	MSR#05-0800	131693005	407148	14762-75-5	Carbon-14	TRG 5	ULSC	LSC	REG	-0.0214	0.0915	PCI/G	0	U		19/03/2005	4:19	0.157	PCI/G	0.0771	PCI/G	1	5	9.24	G	PCI/G	PR	

9202-0000-133-C-6C-05	MSR#05-0800	131693005	406667	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	-0.00331	0.0146	PCI/G	0	U	3/3/2005	38415.60347	10:12	0.0268	PCI/G	0.0123	PCI/G	1	5	177	G	PCI/G		PR	
9202-0000-133-C-6C-05	MSR#05-0800	131693005	406667	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.00428	0.0122	PCI/G	0	U	3/3/2005	38415.60347	10:12	0.024	PCI/G	0.011	PCI/G	1	5	177	G	PCI/G		PR	
9202-0000-133-C-6C-05	MSR#05-0800	131693005	406667	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.00268	0.0142	PCI/G	0	U	3/3/2005	38415.60347	10:12	0.0264	PCI/G	0.0117	PCI/G	1	5	177	G	PCI/G		PR	
9202-0000-133-C-6C-05	MSR#05-0800	131693005	412129	OER-100-93	Curium-242	TRG 1	UAM05RCM	AM05RCM	REG	0.0278	0.103	PCI/G	0	U	7/3/2005	38445.08611	1:54	0.271	PCI/G	0.0886	PCI/G	1	5	0.259	G	PCI/G		PR	
9202-0000-133-C-6C-05	MSR#05-0800	131693005	412129	OER-101-57	Curium-243/244	TRG 1	UAM05RCM	AM05RCM	REG	0.0552	0.166	PCI/G	0	U	7/3/2005	38445.08611	1:54	0.389	PCI/G	0.157	PCI/G	1	5	0.259	G	PCI/G		PR	
9202-0000-133-C-6C-05	MSR#05-0800	131693005	406667	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0199	0.0394	PCI/G	0	U	3/3/2005	38415.60347	10:12	0.0711	PCI/G	0.0335	PCI/G	1	5	177	G	PCI/G		PR	
9202-0000-133-C-6C-05	MSR#05-0800	131693005	406667	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.00266	0.0394	PCI/G	0	U	3/3/2005	38415.60347	10:12	0.0746	PCI/G	0.0334	PCI/G	1	5	177	G	PCI/G		PR	
9202-0000-133-C-6C-05	MSR#05-0800	131693005	406667	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0138	0.0478	PCI/G	0	U	3/3/2005	38415.60347	10:12	0.0916	PCI/G	0.0439	PCI/G	1	5	177	G	PCI/G		PR	
9202-0000-133-C-6C-05	MSR#05-0800	131693005	407185	14681-59-5	Iron-55	TRG 26	ULSC	LSC	REG	-11.3	57	PCI/G	0	U	7/3/2005	38414.10417	6:03	79	PCI/G	38.7	PCI/G	1	5	0.19	G	PCI/G		PR	
9202-0000-133-C-6C-05	MSR#05-0800	131693005	406667	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.295	0.0487	PCI/G	0		3/3/2005	38415.60347	10:12	0.0424	PCI/G	0.0202	PCI/G	1	5	177	G	PCI/G		PR	
9202-0000-133-C-6C-05	MSR#05-0800	131693005	406667	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.266	0.064	PCI/G	0		3/3/2005	38415.60347	10:12	0.0523	PCI/G	0.0246	PCI/G	1	5	177	G	PCI/G		PR	
9202-0000-133-C-6C-05	MSR#05-0800	131693005	406667	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.00399	0.0154	PCI/G	0	U	3/3/2005	38415.60347	10:12	0.0278	PCI/G	0.0128	PCI/G	1	5	177	G	PCI/G		PR	
9202-0000-133-C-6C-05	MSR#05-0800	131693005	407187	13781-37-8	Nickel-63	TRG 30	ULSC	LSC	REG	0.112	8.18	PCI/G	0	U	7/3/2005	38414.10347	10:10	14.1	PCI/G	6.86	PCI/G	1	5	0.19	G	PCI/G		PR	
9202-0000-133-C-6C-05	MSR#05-0800	131693005	406667	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0074	0.0126	PCI/G	0	U	3/3/2005	38415.60347	10:12	0.0248	PCI/G	0.0115	PCI/G	1	5	177	G	PCI/G		PR	
9202-0000-133-C-6C-05	MSR#05-0800	131693005	412132	13981-16-3	Plutonium-238	TRG 32	UPU11RCM	PU11RCM	REG	-0.0202	0.052	PCI/G	0	U	7/3/2005	38445.08472	11:12	0.201	PCI/G	0.0708	PCI/G	1	5	0.259	G	PCI/G		PR	
9202-0000-133-C-6C-05	MSR#05-0800	131693005	412132	OER-100-70	Plutonium-239/240	TRG 32	UPU11RCM	PU11RCM	REG	0.000877	0.0477	PCI/G	0	U	7/3/2005	38445.08472	11:12	0.159	PCI/G	0.05	PCI/G	1	5	0.259	G	PCI/G		PR	
9202-0000-133-C-6C-05	MSR#05-0800	131693005	412133	14119-32-5	Plutonium-241	TRG 36	UPU11RCM	PU11RCM	REG	-3.74	5.72	PCI/G	0	U	7/3/2005	38445.08681	7:53	10.1	PCI/G	4.9	PCI/G	1	5	0.512	G	PCI/G		PR	
9202-0000-133-C-6C-05	MSR#05-0800	131693005	406667	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	5.57	0.688	PCI/G	0		3/3/2005	38415.60347	10:12	0.262	PCI/G	0.117	PCI/G	1	5	177	G	PCI/G		PR	
9202-0000-133-C-6C-05	MSR#05-0800	131693005	406667	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.191	0.0697	PCI/G	0		3/3/2005	38415.60347	10:12	0.0489	PCI/G	0.0228	PCI/G	1	5	177	G	PCI/G		PR	
9202-0000-133-C-6C-05	MSR#05-0800	131693005	406667	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00571	0.0131	PCI/G	0	U	3/3/2005	38415.60347	10:12	0.0235	PCI/G	0.011	PCI/G	1	5	177	G	PCI/G		PR	
9202-0000-133-C-6C-05	MSR#05-0800	131693005	414564	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.00138	0.00714	PCI/G	0	U	7/3/2005	38445.08958	11:40	0.0144	PCI/G	0.00698	PCI/G	1	5	12.7	G	PCI/G		PR	
9202-0000-133-C-6C-05	MSR#05-0800	131693005	409273	14133-76-7	Technetium-99	TRG 46	UTC02RCM	TC02RCM	REG	0.191	0.146	PCI/G	0	U		21/03/2005	8:19	0.242	PCI/G	0.118	PCI/G	1	5	7.1	G	PCI/G		PR	
9202-0000-133-C-6C-05	MSR#05-0800	131693005	406667	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.0832	0.0308	PCI/G	0		3/3/2005	38415.60347	10:12	0.0245	PCI/G	0.0113	PCI/G	1	5	177	G	PCI/G		PR	
9202-0000-133-C-6C-05	MSR#05-0800	131693005	409871	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	2.78	6.51	PCI/G	0	U		30/03/2005	8:40	11.1	PCI/G	5.35	PCI/G	1	5	2.12	G	PCI/G		PR	
9202-0000-138-C-1C-01	MSR#05-0800	131693006	406667	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.399	0.129	PCI/G	0		3/3/2005	38415.60347	11:28	0.124	PCI/G	0.0552	PCI/G	1	4.2	176	G	PCI/G		PR	
9202-0000-138-C-1C-01	MSR#05-0800	131693006	406667	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0557	0.0974	PCI/G	0	U	3/3/2005	38415.60347	11:28	0.179	PCI/G	0.0857	PCI/G	1	4.2	176	G	PCI/G		PR	
9202-0000-138-C-1C-01	MSR#05-0800	131693006	406667	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.201	0.285	PCI/G	0	U	3/3/2005	38415.60347	11:28	0.304	PCI/G	0.138	PCI/G	1	4.2	176	G	PCI/G		PR	
9202-0000-138-C-1C-01	MSR#05-0800	131693006	406667	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.356	0.0978	PCI/G	0		3/3/2005	38415.60347	11:28	0.0654	PCI/G	0.0297	PCI/G	1	4.2	176	G	PCI/G		PR	
9202-0000-138-C-1C-01	MSR#05-0800	131693006	406667	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0103	0.0225	PCI/G	0	U	3/3/2005	38415.60347	11:28	0.0448	PCI/G	0.0204	PCI/G	1	4.2	176	G	PCI/G		PR	
9202-0000-138-C-1C-01	MSR#05-0800	131693006	406667	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.0178	0.0302	PCI/G	0	U	3/3/2005	38415.60347	11:28	0.0407	PCI/G	0.0186	PCI/G	1	4.2	176	G	PCI/G		PR	
9202-0000-138-C-1C-01	MSR#05-0800	131693006	406667	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.00202	0.0195	PCI/G	0	U	3/3/2005	38415.60347	11:28	0.0388	PCI/G	0.0168	PCI/G	1	4.2	176	G	PCI/G		PR	
9202-0000-138-C-1C-01	MSR#05-0800	131693006	406667	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0295	0.0548	PCI/G	0	U	3/3/2005	38415.60347	11:28	0.108	PCI/G	0.0505	PCI/G	1	4.2	176	G	PCI/G		PR	
9202-0000-138-C-1C-01	MSR#05-0800	131693006	406667	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0142	0.073	PCI/G	0	U	3/3/2005	38415.60347	11:28	0.141	PCI/G	0.0637	PCI/G	1	4.2	176	G	PCI/G		PR	
9202-0000-138-C-1C-01	MSR#05-0800	131693006	406667	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0516	0.0609	PCI/G	0	U	3/3/2005	38415.60347	11:28	0.121	PCI/G	0.0579	PCI/G	1	4.2	176	G	PCI/G		PR	
9202-0000-138-C-1C-01	MSR#05-0800	131693006	406667	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.41	0.069	PCI/G	0		3/3/2005	38415.60347	11:28	0.0624	PCI/G	0.0295	PCI/G	1	4.2	176	G	PCI/G		PR	
9202-0000-138-C-1C-01	MSR#05-0800	131693006	406667	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.325	0.0998	PCI/G	0		3/3/2005	38415.60347	11:28	0.0735	PCI/G	0.0343	PCI/G	1	4.2	176	G	PCI/G		PR	
9202-0000-138-C-1C-01	MSR#05-0800	131693006	406667	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.00774	0.0207	PCI/G	0	U	3/3/2005	38415.60347	11:28	0.0407	PCI/G	0.0185	PCI/G	1	4.2	176	G	PCI/G		PR	
9202-0000-138-C-1C-01	MSR#05-0800	131693006	406667	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.00712	0.0193	PCI/G	0	U	3/3/2005	38415.60347	11:28	0.0352	PCI/G	0.0161	PCI/G	1	4.2	176	G	PCI/G		PR	
9202-0000-138-C-1C-01	MSR#05-0800	131693006	406667	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	6.82	1.02	PCI/G	0		3/3/2005	38415.60347	11:28	0.428	PCI/G	0.188	PCI/G	1	4.2	176	G	PCI/G		PR	
9202-0000-138-C-1C-01	MSR#05-0800	131693006	406667	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.356	0.0978	PCI/G	0		3/3/2005	38415.60347	11:28	0.0654	PCI/G	0.0297	PCI/G	1	4.2	176	G	PCI/G		PR	
9202-0000-138-C-1C-01	MSR#05-0800	131693006	406667	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00723	0.0178	PCI/G	0	U	3/3/2005	38415.60347	11:28	0.0319	PCI/G	0.0147	PCI/G	1	4.2	176	G	PCI/G		PR	
9202-0000-138-C-1C-01	MSR#05-0800	131693006	414564	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.00071	0.00692	PCI/G	0	U	7/3/2005	38445.08958	12:47	0.014	PCI/G	0.00674	PCI/G	1	4.2	12.6	G	PCI/G		PR	
9202-0000-138-C-1C-01	MSR#05-0800	131693006	406667	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.134	0.0431	PCI/G	0		3/3/2005	38415.60347	11:28	0.0438	PCI/G	0.0203	PCI/G	1	4.2	176	G	PCI/G		PR	
9202-0000-138-C-1C-01	MSR#05-0800	131693006	409871	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	2.83	6.97	PCI/G	0	U		30/03/2005	9:12	11.9	PCI/G	5.74	PCI/G	1	4.2	1.98	G	PCI/G		PR	
9202-0000-138-C-1C-02	MSR#05-0800	131693007	406667	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.255	0.121	PCI/G	0		3/3/2005	38415.60347	12:21	0.124	PCI/G	0.0556	PCI/G	1	4.5	181	G	PCI/G		PR	
9202-0000-138-C-1C-02	MSR#05-0800	131693007	406667	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.00911	0.0782	PCI/G	0	U	3/3/2005	38415.60347	12:21	0.12	PCI/G	0.0564	PCI/G	1	4.5	181	G	PCI/G		PR	
9202-0000-138-C-1C-02	MSR#05-0800	131693007	406667	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.269	0.164	PCI/G	0	U	3/3/2005	38415.60347	12:21	0.349	PCI/G	0.162	PCI/G	1	4.5	181	G	PCI/G		PR	
9202-0000-138-C-1C-02	MSR#05-0800	131693007	406667	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.231	0.0883	PCI/G	0		3/3/2005	38415.60347	12:21	0.0597	PCI/G	0.0272	PCI/G	1	4.5	181	G	PCI/G		PR	
9202-0000-138-C-1C-02	MSR#05-0800	131693007	406667	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.036	0.0416	PCI/G	0	U	3/3/2005	38415.60347	12:21	0.0421	PCI/G	0.0192	PCI/G	1	4.5	181	G	PCI/G		PR	
9202-0000-138-C-1C-02	MSR#05-0800	131693007	406667	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.00597	0.0191	PCI/G	0	U	3/3/2005	38415.60347	12:21	0.0337	PCI/G	0.0153	PCI/G	1	4.5	181	G	PCI/G		PR	
9202-0000-138-C-1C-02	MSR#05-0800	131693007	406667	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0155	0.0187	PCI/G	0	U	3/3/2005	38415.60347	12:21	0.0412	PCI/G	0.0181	PCI/G	1	4.5	181	G	PCI/G		PR	
9202-0000-138-C-1C-02	MSR#05-0800	131693007	406667	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.00721	0.0504	PCI/G	0	U	3/3/2005	38415.60347	12:21	0.0842	PCI/G	0.039	PCI/G	1	4.5	181	G	PCI/G		PR	
9202-0000-138-C-1C-02	MSR#05-0800	131693007	406667	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0297	0.058	PCI/G	0	U	3/3/2005	38415.60347	12:21	0.103	PCI/G	0.0446	PCI/G	1	4.5	181	G	PCI/G		PR	
9202-0000-138-C-1C-02	MSR#05-0800	131693007	406667	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0359	0.0453	PCI/G	0	U	3/3/2005	38415.60347	12:21	0.0939	PCI/G	0.0447	PCI/G	1	4.5	181	G	PCI/G		PR	
9202-0000-138-C-1C-02	MSR#05-0800	131693007	406667	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.239	0.059	PCI/G	0		3/3/2005	38415.60347	12:21	0.0643	PCI/G	0.0307	PCI/G	1	4.5	181	G	PCI/G		PR	
9202-0000-138-C-1C-02	MSR#05-0800	131693007	406667	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.323	0.0723	PCI/G	0		3/3/2005	38415.60347	12:21	0.0624	PCI/G	0.029	PCI/G	1	4.5	181	G	PCI/G		PR	
9202-0000-138-C-1C-02	MSR#05-0800	131693007	406667	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.00378	0.0213	PCI/G	0	U	3/3/2005	38415.60347	12:21	0.0385	PCI/G	0.0175	PCI/G	1	4.5	181	G	PCI/G		PR	
9202-0000-138-C-1C-02	MSR#05-0800	131693007	406667	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.01	0.0172	PCI/G	0	U	3/3/2005	38415.60347	12:21	0.03	PCI/G	0.0136	PCI/G	1	4.5	181	G	PCI/G		PR	
9202-0000-138-C-1C-02	MSR#05-0800	131693007	406667	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	5.89	0.853	PCI/G	0		3/3/2005	38415.60347	12:21	0.326	PCI/G	0.138	PCI/G	1	4.5	181	G	PCI/G		PR	
9202-0000-138-C-1C-02	MSR#05-0800	131693007	406667	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.231	0.0883	PCI/G	0		3/3/2005	38415.60347	12:21	0.0597	PCI/G	0.0272	PCI/G	1	4.5	181	G	PCI/G		PR	
9202-0000-138-C-1C-02	MSR#05-0800	131693007	406667	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00971	0.0154	PCI/G	0	U	3/3/2005	38415.60347	12:21	0.0316	PCI/G	0.0146	PCI/G	1	4.5	181	G	PCI/G		PR	
9202-0000-138-C-1C-02	MSR#05-0800	131693007	414564	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.00857	0.00651	PCI/G	0	U	7/3/2005	38445.08958	12:47	0.0139	PCI/G	0.00671	PCI/G	1	4.5	12.6	G	PCI/G		PR	
9202-0000-138-C-1C-02	MSR#05-0800	131693007	406667	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0	0.0331	PCI/G	0	UUI	3/3/2005	38415.60347	12:21	0.0583	PCI/G	0.0277	PCI/G	1	4.5	181	G	PCI/G		PR	
9202-0000-138-C-1C-02	MSR#05-0800	131693007	409871	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-1.27	6.41	PCI/G	0	U		30/03/2005	9:44	11.3	PCI/G	5.43	PCI/G	1	4.5	2.08	G	PCI/G		PR	
9202-0000-138-C-3C-03	MSR#05-0800	131693008	406667	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.446	0.142	PCI/G	0		3/3/2005	38415.60347	12:21	0.158	PCI/G	0.0711	PCI/G	1	6.3	167	G	PCI/G		PR	
9202-0000-138-C-3C-03	MSR#05-0800	131693008	406667	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0114	0.109	PCI/G	0	U	3/3/2005	38415.60347	12:21	0.187	PCI/G	0.0892	PCI/G	1	6.3	167	G	PCI/G		PR	
9202-0000-138-C-3C-03	MSR#05-0800	131693008	406667	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.335	0.282	PCI/G	0		3/3/2005	38415.60347	12:21	0.303	PCI/G	0.136	PCI/G	1	6.3	167	G	PCI/G		PR	
9202-0000-138-C-3C-03	MSR#05-0800	131693008	406667	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.328	0.112	PCI/G	0		3/3/2005	38415.60347	12:21	0.0751	PCI/G	0.0343	PCI/G	1	6.3	167	G	PCI/G		PR	
9202-0000-138-C-3C-03	MSR#05-0800	131693008	406667	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0216	0.0262	PCI/G	0	U	3/3/2005	38415.60347	12:21	0.0538	PCI/G	0.0247	PCI/G	1	6.3	167	G	PCI/G		PR	
9202-0000-138-C-3C-03	MSR#05-0800	131693008	406667	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.0172	0.0285	PCI/G	0	U	3/3/2005	38415.60347	12:21	0.0405	PCI/G	0.0184	PCI/G	1	6.3	167	G	PCI/G		PR	
9202-0000-138-C-3C-03	MSR#05-0800	131693008	406667	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0091	0.0288	PCI/G	0	U	3/3/2005	38415.60347	12:21	0.0557	PCI/G	0.0249	PCI/G	1	6.3	167	G	PCI/G		PR	
9202-0000-138-C-3C-03	MSR#05-0800	131693008	406667	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.00996	0.0685	PCI/G	0	U	3/3/2005	38415.60347	12:21	0.114	PCI/G	0.0534	PCI/G	1	6.3	167	G	PCI/G		PR	
9202-0000-138-C-3C-03	MSR#05-0800	131693008	406667	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.00519	0.0935	PCI/G	0	U	3/3/2005	38415.60347	12:21	0.151	PCI/G	0.0673	PCI/G	1	6.3	167	G	PCI/G		PR	
9202-0000-138-C-3C-03	MSR#05-0800	131693008	406667	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0214	0.067	PCI/G	0	U	3/3/2005	38415.60347	12:21	0.128	PCI/G	0.0612	PCI/G	1	6.3	167	G	PCI/G		PR	
9202-0000-138-C-3C-03	MSR#05-0800	131693008	406667	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.395	0.0737	PCI/G	0		3/3/2005	38415.60347	12:21	0.0641	PCI/G	0.0304	PCI/G	1	6.3	167	G	PCI/G		PR	
9202-0000-138-C-3C-03	MSR#05-0800	131693008	406667	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.34	0.103	PCI/G	0		3/3/2005	38415.60347	12:21	0.0768	PCI/G	0.0358	PCI/G	1	6.3	167	G	PCI/G		PR	
9202-0000-138-C-3C-03	MSR#05-0800	131693008	406667	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.00341	0.031	PCI/G	0	U	3/3/2005	38415.60347	12:21	0.0509	PCI/G	0.0234	PCI/G	1	6.3	167	G	PCI/G		PR	
9202-0000-138-C-3C-03	MSR#05-0800	131693008	406667	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.007	0.0245	PCI/G	0	U	3/3/2005	38415.60347	12:21	0.0455	PCI/G	0.0211	PCI/G	1	6.3	167	G	PCI/G		PR	
9202-0000-138-C-3C-03	MSR#05-0800	131693008	406667	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.78	1.07	PCI/G	0		3/3/2005	38415.60347	12:21	0.49	PCI/G	0.216	PCI/G	1	6.3	167	G	PCI/G		PR	
9202-0000-138-C-3C-03	MSR#05-0800	131693008	406667	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.328	0.112	PCI/G	0		3/3/2005	38415.60347	12:21	0.0751	PCI/G	0.0343	PCI/G	1	6.3	167	G	PCI/G		PR	
9202-0000-138-C-3C-03	MSR#05-0800	131693008	406667	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00212	0.0231	PCI/G	0	U	3/3/2005	38415.60347	12:21	0.0425	PCI/G	0.0199	PCI/G	1	6.3	167	G	PCI/G		PR	
9202-0000-138-C-3C-03	MSR#05-0800	131693008	414564	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.000608	0.00614	PCI/G	0	U	7/3/2005	38445.08958	12:47	0.0125	PCI/G	0.00599	PCI/G	1	6.3	12.7	G	PCI/G		PR	
9202-0000-138-C-3C-03	MSR#05-0800	131693008	406667	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.153	0.0425	PCI/G	0		3/3/2005	38415.60347	12:21	0.0428	PCI/G	0.0196	PCI/G	1	6.3	167	G	PCI/G		PR	
9202-0000-138-C-3C-03	MSR#05-0800	131693008	409871	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	5.25	6.64	PCI/G	0	U		30/03/2005	10:16	11.2	PCI/G	5.37	PCI/G	1	6.3	2.11	G	PCI/G		PR	
9202-0000-138-C-5C-04	MSR#05-0800	131693009	406667	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.381	0.186	PCI/G	0		3/3/2005	38415.60347	12:22	0.114	PCI/G	0.0504	PCI/G	1	7.1	164	G	PCI/G		PR	
9202-0000-138-C-5C-04	MSR#05-0800	131693009	406667	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0238	0.0292	PCI/G	0	U	3/3/2005	38415.60347	12:22	0.0516	PCI/G	0.0248	PCI/G	1	7.1	164	G	PCI/G		PR	

9202-0000-138-C-5C-04	MSR#05-0800	131693009	406667	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.263	0.248	PCI/G	0	U	3/3/2005	38415.60347	12:22	0.289	PCI/G	0.132	PCI/G	1	7.1	164	G	PCI/G		PR	
9202-0000-138-C-5C-04	MSR#05-0800	131693009	406667	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.38	0.0933	PCI/G	0		3/3/2005	38415.60347	12:22	0.0729	PCI/G	0.0337	PCI/G	1	7.1	164	G	PCI/G		PR	
9202-0000-138-C-5C-04	MSR#05-0800	131693009	406667	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.00935	0.026	PCI/G	0	U	3/3/2005	38415.60347	12:22	0.0436	PCI/G	0.0199	PCI/G	1	7.1	164	G	PCI/G		PR	
9202-0000-138-C-5C-04	MSR#05-0800	131693009	406667	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.00121	0.021	PCI/G	0	U	3/3/2005	38415.60347	12:22	0.0384	PCI/G	0.0176	PCI/G	1	7.1	164	G	PCI/G		PR	
9202-0000-138-C-5C-04	MSR#05-0800	131693009	406667	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.0102	0.0201	PCI/G	0	U	3/3/2005	38415.60347	12:22	0.0352	PCI/G	0.0151	PCI/G	1	7.1	164	G	PCI/G		PR	
9202-0000-138-C-5C-04	MSR#05-0800	131693009	406667	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.00295	0.0499	PCI/G	0	U	3/3/2005	38415.60347	12:22	0.0944	PCI/G	0.0443	PCI/G	1	7.1	164	G	PCI/G		PR	
9202-0000-138-C-5C-04	MSR#05-0800	131693009	406667	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0206	0.0698	PCI/G	0	U	3/3/2005	38415.60347	12:22	0.135	PCI/G	0.0608	PCI/G	1	7.1	164	G	PCI/G		PR	
9202-0000-138-C-5C-04	MSR#05-0800	131693009	406667	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0125	0.0478	PCI/G	0	U	3/3/2005	38415.60347	12:22	0.0902	PCI/G	0.0433	PCI/G	1	7.1	164	G	PCI/G		PR	
9202-0000-138-C-5C-04	MSR#05-0800	131693009	406667	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.343	0.0586	PCI/G	0		3/3/2005	38415.60347	12:22	0.0578	PCI/G	0.0276	PCI/G	1	7.1	164	G	PCI/G		PR	
9202-0000-138-C-5C-04	MSR#05-0800	131693009	406667	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.309	0.0959	PCI/G	0		3/3/2005	38415.60347	12:22	0.0628	PCI/G	0.0293	PCI/G	1	7.1	164	G	PCI/G		PR	
9202-0000-138-C-5C-04	MSR#05-0800	131693009	406667	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.0268	0.0221	PCI/G	0	U	3/3/2005	38415.60347	12:22	0.0337	PCI/G	0.0151	PCI/G	1	7.1	164	G	PCI/G		PR	
9202-0000-138-C-5C-04	MSR#05-0800	131693009	406667	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.01	0.0203	PCI/G	0	U	3/3/2005	38415.60347	12:22	0.035	PCI/G	0.0161	PCI/G	1	7.1	164	G	PCI/G		PR	
9202-0000-138-C-5C-04	MSR#05-0800	131693009	406667	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7	1.01	PCI/G	0		3/3/2005	38415.60347	12:22	0.361	PCI/G	0.155	PCI/G	1	7.1	164	G	PCI/G		PR	
9202-0000-138-C-5C-04	MSR#05-0800	131693009	406667	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.38	0.0933	PCI/G	0		3/3/2005	38415.60347	12:22	0.0729	PCI/G	0.0337	PCI/G	1	7.1	164	G	PCI/G		PR	
9202-0000-138-C-5C-04	MSR#05-0800	131693009	406667	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00497	0.0184	PCI/G	0	U	3/3/2005	38415.60347	12:22	0.0334	PCI/G	0.0156	PCI/G	1	7.1	164	G	PCI/G		PR	
9202-0000-138-C-5C-04	MSR#05-0800	131693009	414564	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00984	0.00637	PCI/G	0	U	7/3/2005	38445.08958	12:47	0.0117	PCI/G	0.00562	PCI/G	1	7.1	12.8	G	PCI/G		PR	
9202-0000-138-C-5C-04	MSR#05-0800	131693009	406667	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.137	0.0465	PCI/G	0		3/3/2005	38415.60347	12:22	0.038	PCI/G	0.0175	PCI/G	1	7.1	164	G	PCI/G		PR	
9202-0000-138-C-5C-04	MSR#05-0800	131693009	409871	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	5.59	6.67	PCI/G	0	U		30/03/2005	10:47	11.2	PCI/G	5.38	PCI/G	1	7.1	2.1	G	PCI/G		PR	
9202-0000-138-C-5C-05	MSR#05-0800	131693010	406667	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.284	0.154	PCI/G	0		3/3/2005	38415.60347	12:22	0.183	PCI/G	0.0824	PCI/G	1	5.8	165	G	PCI/G		PR	
9202-0000-138-C-5C-05	MSR#05-0800	131693010	406667	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0314	0.0299	PCI/G	0	U	3/3/2005	38415.60347	12:22	0.0479	PCI/G	0.0226	PCI/G	1	5.8	165	G	PCI/G		PR	
9202-0000-138-C-5C-05	MSR#05-0800	131693010	412129	14596-10-2	Americium-241	TRG 1	UAM05RCM	AM05RCM	REG	-0.00423	0.047	PCI/G	0	U	7/3/2005	38445.08681	12:28	0.165	PCI/G	0.0539	PCI/G	1	5.8	0.266	G	PCI/G		PR	
9202-0000-138-C-5C-05	MSR#05-0800	131693010	406667	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.46	0.379	PCI/G	0		3/3/2005	38415.60347	12:22	0.317	PCI/G	0.141	PCI/G	1	5.8	165	G	PCI/G		PR	
9202-0000-138-C-5C-05	MSR#05-0800	131693010	406667	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.32	0.112	PCI/G	0		3/3/2005	38415.60347	12:22	0.0731	PCI/G	0.0329	PCI/G	1	5.8	165	G	PCI/G		PR	
9202-0000-138-C-5C-05	MSR#05-0800	131693010	407148	14762-75-5	Carbon-14	TRG 5	ULSC	LSC	REG	-0.0206	0.0913	PCI/G	0	U		19/03/2005	5:51	0.156	PCI/G	0.0769	PCI/G	1	5.8	9.27	G	PCI/G		PR	
9202-0000-138-C-5C-05	MSR#05-0800	131693010	406667	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0178	0.0379	PCI/G	0	U	3/3/2005	38415.60347	12:22	0.0562	PCI/G	0.0255	PCI/G	1	5.8	165	G	PCI/G		PR	
9202-0000-138-C-5C-05	MSR#05-0800	131693010	406667	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.00613	0.0215	PCI/G	0	U	3/3/2005	38415.60347	12:22	0.0406	PCI/G	0.0181	PCI/G	1	5.8	165	G	PCI/G		PR	
9202-0000-138-C-5C-05	MSR#05-0800	131693010	406667	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.00277	0.026	PCI/G	0	U	3/3/2005	38415.60347	12:22	0.0521	PCI/G	0.0226	PCI/G	1	5.8	165	G	PCI/G		PR	
9202-0000-138-C-5C-05	MSR#05-0800	131693010	412129	OER-100-93	Curium-242	TRG 1	UAM05RCM	AM05RCM	REG	-0.0128	0.0552	PCI/G	0	U	7/3/2005	38445.08681	12:28	0.158	PCI/G	0.043	PCI/G	1	5.8	0.266	G	PCI/G		PR	
9202-0000-138-C-5C-05	MSR#05-0800	131693010	412129	OER-101-57	Curium-243/244	TRG 1	UAM05RCM	AM05RCM	REG	-0.0247	0.0513	PCI/G	0	U	7/3/2005	38445.08681	12:28	0.203	PCI/G	0.0727	PCI/G	1	5.8	0.266	G	PCI/G		PR	
9202-0000-138-C-5C-05	MSR#05-0800	131693010	406667	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0129	0.0559	PCI/G	0	U	3/3/2005	38415.60347	12:22	0.107	PCI/G	0.0498	PCI/G	1	5.8	165	G	PCI/G		PR	
9202-0000-138-C-5C-05	MSR#05-0800	131693010	406667	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0271	0.0756	PCI/G	0	U	3/3/2005	38415.60347	12:22	0.132	PCI/G	0.0569	PCI/G	1	5.8	165	G	PCI/G		PR	
9202-0000-138-C-5C-05	MSR#05-0800	131693010	406667	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0329	0.0607	PCI/G	0	U	3/3/2005	38415.60347	12:22	0.0863	PCI/G	0.0407	PCI/G	1	5.8	165	G	PCI/G		PR	
9202-0000-138-C-5C-05	MSR#05-0800	131693010	407185	14681-59-5	Iron-55	TRG 26	ULSC	LSC	REG	12.9	56.4	PCI/G	0	U	7/3/2005	38414.10417	6:35	77.3	PCI/G	37.9	PCI/G	1	5.8	0.198	G	PCI/G		PR	
9202-0000-138-C-5C-05	MSR#05-0800	131693010	406667	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.306	0.0602	PCI/G	0		3/3/2005	38415.60347	12:22	0.0572	PCI/G	0.0269	PCI/G	1	5.8	165	G	PCI/G		PR	
9202-0000-138-C-5C-05	MSR#05-0800	131693010	406667	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.306	0.0942	PCI/G	0		3/3/2005	38415.60347	12:22	0.0712	PCI/G	0.0328	PCI/G	1	5.8	165	G	PCI/G		PR	
9202-0000-138-C-5C-05	MSR#05-0800	131693010	406667	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0036	0.0258	PCI/G	0	U	3/3/2005	38415.60347	12:22	0.0497	PCI/G	0.0224	PCI/G	1	5.8	165	G	PCI/G		PR	
9202-0000-138-C-5C-05	MSR#05-0800	131693010	407187	13781-37-8	Nickel-63	TRG 30	ULSC	LSC	REG	-2.68	7.57	PCI/G	0	U	7/3/2005	38414.10347	10:57	13.2	PCI/G	6.42	PCI/G	1	5.8	0.198	G	PCI/G		PR	
9202-0000-138-C-5C-05	MSR#05-0800	131693010	406667	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.00813	0.0213	PCI/G	0	U	3/3/2005	38415.60347	12:22	0.0392	PCI/G	0.0176	PCI/G	1	5.8	165	G	PCI/G		PR	
9202-0000-138-C-5C-05	MSR#05-0800	131693010	412132	13981-16-3	Plutonium-238	TRG 32	UPU11RCM	PU11RCM	REG	-0.107	0.0656	PCI/G	0	U	7/3/2005	38445.08472	11:12	0.302	PCI/G	0.122	PCI/G	1	5.8	0.266	G	PCI/G		PR	
9202-0000-138-C-5C-05	MSR#05-0800	131693010	412132	OER-100-70	Plutonium-239/240	TRG 32	UPU11RCM	PU11RCM	REG	-0.0308	0.0247	PCI/G	0	U	7/3/2005	38445.08472	11:12	0.177	PCI/G	0.0597	PCI/G	1	5.8	0.266	G	PCI/G		PR	
9202-0000-138-C-5C-05	MSR#05-0800	131693010	412133	14119-32-5	Plutonium-241	TRG 36	UPU11RCM	PU11RCM	REG	2.16	6.57	PCI/G	0	U	7/3/2005	38445.08681	8:25	11.2	PCI/G	5.45	PCI/G	1	5.8	0.532	G	PCI/G		PR	
9202-0000-138-C-5C-05	MSR#05-0800	131693010	406667	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	5.73	0.997	PCI/G	0		3/3/2005	38415.60347	12:22	0.429	PCI/G	0.18	PCI/G	1	5.8	165	G	PCI/G		PR	
9202-0000-138-C-5C-05	MSR#05-0800	131693010	406667	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.32	0.112	PCI/G	0		3/3/2005	38415.60347	12:22	0.0731	PCI/G	0.0329	PCI/G	1	5.8	165	G	PCI/G		PR	
9202-0000-138-C-5C-05	MSR#05-0800	131693010	406667	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.0103	0.0173	PCI/G	0	U	3/3/2005	38415.60347	12:22	0.03	PCI/G	0.0135	PCI/G	1	5.8	165	G	PCI/G		PR	
9202-0000-138-C-5C-05	MSR#05-0800	131693010	414564	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.00137	0.00421	PCI/G	0	U	7/3/2005	38445.08958	12:47	0.00874	PCI/G	0.00417	PCI/G	1	5.8	13.2	G	PCI/G		PR	
9202-0000-138-C-5C-05	MSR#05-0800	131693010	409273	14133-76-7	Technetium-99	TRG 46	UTC02RCM	TC02RCM	REG	0.0934	0.138	PCI/G	0	U		21/03/2005	9:07	0.233	PCI/G	0.114	PCI/G	1	5.8	7.92	G	PCI/G		PR	
9202-0000-138-C-5C-05	MSR#05-0800	131693010	406667	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.101	0.0571	PCI/G	0		3/3/2005	38415.60347	12:22	0.0429	PCI/G	0.0195	PCI/G	1	5.8	165	G	PCI/G		PR	
9202-0000-138-C-5C-05	MSR#05-0800	131693010	409871	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	3.38	5.77	PCI/G	0	U		30/03/2005	11:19	9.79	PCI/G	4.71	PCI/G	1	5.8	2.01	G	PCI/G		PR	
9202-0000-135-C-1C-01	MSR#05-0800	131693011	406667	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0	0.121	PCI/G	0	UUI	3/3/2005	38415.60347	3:39	0.221	PCI/G	0.105	PCI/G	1	4.3	180	G	PCI/G		PR	
9202-0000-135-C-1C-01	MSR#05-0800	131693011	406667	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0584	0.074	PCI/G	0	U	3/3/2005	38415.60347	3:39	0.124	PCI/G	0.0587	PCI/G	1	4.3	180	G	PCI/G		PR	
9202-0000-135-C-1C-01	MSR#05-0800	131693011	406667	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.197	0.217	PCI/G	0	U	3/3/2005	38415.60347	3:39	0.264	PCI/G	0.12	PCI/G	1	4.3	180	G	PCI/G		PR	
9202-0000-135-C-1C-01	MSR#05-0800	131693011	406667	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.184	0.0619	PCI/G	0		3/3/2005	38415.60347	3:39	0.0616	PCI/G	0.0282	PCI/G	1	4.3	180	G	PCI/G		PR	
9202-0000-135-C-1C-01	MSR#05-0800	131693011	406667	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0127	0.0212	PCI/G	0	U	3/3/2005	38415.60347	3:39	0.0424	PCI/G	0.0194	PCI/G	1	4.3	180	G	PCI/G		PR	
9202-0000-135-C-1C-01	MSR#05-0800	131693011	406667	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.0701	0.0416	PCI/G	0		3/3/2005	38415.60347	3:39	0.0363	PCI/G	0.0167	PCI/G	1	4.3	180	G	PCI/G		PR	
9202-0000-135-C-1C-01	MSR#05-0800	131693011	406667	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0576	0.0357	PCI/G	0	U	3/3/2005	38415.60347	3:39	0.0687	PCI/G	0.0319	PCI/G	1	4.3	180	G	PCI/G		PR	
9202-0000-135-C-1C-01	MSR#05-0800	131693011	406667	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0253	0.0439	PCI/G	0	U	3/3/2005	38415.60347	3:39	0.0873	PCI/G	0.0408	PCI/G	1	4.3	180	G	PCI/G		PR	
9202-0000-135-C-1C-01	MSR#05-0800	131693011	406667	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0252	0.0587	PCI/G	0	U	3/3/2005	38415.60347	3:39	0.119	PCI/G	0.053	PCI/G	1	4.3	180	G	PCI/G		PR	
9202-0000-135-C-1C-01	MSR#05-0800	131693011	406667	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0221	0.0491	PCI/G	0	U	3/3/2005	38415.60347	3:39	0.0961	PCI/G	0.0458	PCI/G	1	4.3	180	G	PCI/G		PR	
9202-0000-135-C-1C-01	MSR#05-0800	131693011	406667	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0	0.0542	PCI/G	0	UUI	3/3/2005	38415.60347	3:39	0.0986	PCI/G	0.048	PCI/G	1	4.3	180	G	PCI/G		PR	
9202-0000-135-C-1C-01	MSR#05-0800	131693011	406667	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.327	0.075	PCI/G	0		3/3/2005	38415.60347	3:39	0.0536	PCI/G	0.0247	PCI/G	1	4.3	180	G	PCI/G		PR	
9202-0000-135-C-1C-01	MSR#05-0800	131693011	406667	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-1.34E-05	0.0215	PCI/G	0	U	3/3/2005	38415.60347	3:39	0.04	PCI/G	0.0183	PCI/G	1	4.3	180	G	PCI/G		PR	
9202-0000-135-C-1C-01	MSR#05-0800	131693011	406667	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00388	0.0174	PCI/G	0	U	3/3/2005	38415.60347	3:39	0.0335	PCI/G	0.0154	PCI/G	1	4.3	180	G	PCI/G		PR	
9202-0000-135-C-1C-01	MSR#05-0800	131693011	406667	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	5.73	0.891	PCI/G	0		3/3/2005	38415.60347	3:39	0.398	PCI/G	0.175	PCI/G	1	4.3	180	G	PCI/G		PR	
9202-0000-135-C-1C-01	MSR#05-0800	131693011	406667	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.184	0.0619	PCI/G	0		3/3/2005	38415.60347	3:39	0.0616	PCI/G	0.0282	PCI/G	1	4.3	180	G	PCI/G		PR	
9202-0000-135-C-1C-01	MSR#05-0800	131693011	406667	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00392	0.0163	PCI/G	0	U	3/3/2005	38415.60347	3:39	0.0298	PCI/G	0.0138	PCI/G	1	4.3	180	G	PCI/G		PR	
9202-0000-135-C-1C-01	MSR#05-0800	131693011	414564	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.000684	0.00712	PCI/G	0	U	7/3/2005	38445.08958	12:47	0.0143	PCI/G	0.00687	PCI/G	1	4.3	12.8	G	PCI/G		PR	
9202-0000-135-C-1C-01	MSR#05-0800	131693011	406667	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.088	0.0288	PCI/G	0		3/3/2005	38415.60347	3:39	0.0367	PCI/G	0.0169	PCI/G	1	4.3	180	G	PCI/G		PR	
9202-0000-135-C-1C-01	MSR#05-0800	131693011	409871	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	3.81	6.73	PCI/G	0	U		30/03/2005	11:51	11.4	PCI/G	5.5	PCI/G	1	4.3	2.04	G	PCI/G		PR	
9202-0000-135-C-1C-02	MSR#05-0800	131693012	406667	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.319	0.117	PCI/G	0		3/3/2005	38415.60347	3:26	0.0908	PCI/G	0.0414	PCI/G	1	4.3	161	G	PCI/G		PR	
9202-0000-135-C-1C-02	MSR#05-0800	131693012	406667	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0062	0.0539	PCI/G	0	U	3/3/2005	38415.60347	3:26	0.0969	PCI/G	0.0463	PCI/G	1	4.3	161	G	PCI/G		PR	
9202-0000-135-C-1C-02	MSR#05-0800	131693012	406667	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.309	0.192	PCI/G	0		3/3/2005	38415.60347	3:26	0.196	PCI/G	0.0896	PCI/G	1	4.3	161	G	PCI/G		PR	
9202-0000-135-C-1C-02	MSR#05-0800	131693012	406667	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.189	0.0675	PCI/G	0		3/3/2005	38415.60347	3:26	0.0545	PCI/G	0.0255	PCI/G	1	4.3	161	G	PCI/G		PR	
9202-0000-135-C-1C-02	MSR#05-0800	131693012	406667	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	-0.000416	0.0165	PCI/G	0	U	3/3/2005	38415.60347	3:26	0.0298	PCI/G	0.0137	PCI/G	1	4.3	161	G	PCI/G		PR	
9202-0000-135-C-1C-02	MSR#05-0800	131693012	406667	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.00197	0.0165	PCI/G	0	U	3/3/2005	38415.60347	3:26	0.0299	PCI/G	0.0139	PCI/G	1	4.3	161	G	PCI/G		PR	
9202-0000-135-C-1C-02	MSR#05-0800	131693012	406667	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.00785	0.0179	PCI/G	0	U	3/3/2005	38415.60347	3:26	0.0308	PCI/G	0.0139	PCI/G	1	4.3	161	G	PCI/G		PR	
9202-0000-135-C-1C-02	MSR#05-0800	131693012	406667	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0148	0.0387	PCI/G	0	U	3/3/2005	38415.60347	3:26	0.0695	PCI/G	0.0326	PCI/G	1	4.3	161	G	PCI/G		PR	
9202-0000-135-C-1C-02	MSR#05-0800	131693012	406667	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0171	0.0462	PCI/G	0	U	3/3/2005	38415.60347	3:26	0.0805	PCI/G	0.0362	PCI/G	1	4.3	161	G	PCI/G		PR	
9202-0000-135-C-1C-02	MSR#05-0800	131693012	406667	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.047	0.0564	PCI/G	0	U	3/3/2005	38415.60347	3:26	0.0803	PCI/G	0.0383	PCI/G	1	4.3	161	G	PCI/G		PR	
9202-0000-135-C-1C-02	MSR#05-0800	131693012	406667	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.346	0.0548	PCI/G	0		3/3/2005	38415.60347	3:26	0.0409	PCI/G	0.0194	PCI/G	1	4.3	161	G	PCI/G		PR	
9202-0000-135-C-1C-02	MSR#05-0800	131693012	406667	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.254	0.0648	PCI/G	0		3/3/2005	38415.60347	3:26	0.0557	PCI/G	0.0263	PCI/G	1	4.3	161	G	PCI/G		PR	
9202-0000-135-C-1C-02	MSR#05-0800	131693012	406667	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.00656	0.0152	PCI/G	0	U	3/3/2005	38415.60347	3:26	0.0287	PCI/G	0.0132	PCI/G	1	4.3	161	G	PCI/G		PR	
9202-0000-135-C-1C-02	MSR#05-0800	131693012	406667	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00165	0.0153	PCI/G	0	U	3/3/2005	38415.60347	3:26	0.0281	PCI/G	0.0131	PCI/G	1	4.3	161	G	PCI/G		PR	
9202-0000-135-C-1C-02	MSR#05-0800	131693012	406667	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	5.85	0.717	PCI/G	0		3/3/2005	38415.60347	3:26	0.261	PCI/G	0.116	PCI/G	1	4.3	161	G	PCI/G		PR	
9202-0000-135-C-1C-02	MSR#05-0800	131693012	406667	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.189	0.0675	PCI/G	0		3/3/2005	38415.60347	3:26	0.0545	PCI/G	0.0255	PCI/G	1	4.3	161	G	PCI/G		PR	
9202-0000-135-C-1C-02	MSR#05-0800	131693012	406667	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.000523	0.0171	PCI/G	0	U	3/3/2005	38415.60347	3:26	0.0269	PCI/G	0.0127	PCI/G	1	4.3	161	G	PCI/G		PR	
9202-0000-135-C-1C-02	MSR#05-0800	131693012	414564	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00364	0.00505	PCI/G	0	U	7/3/2005	38445.08958	12:47	0.00978	PCI/G	0.00469	PCI/G	1	4.3	12.9	G	PCI/G		PR	

9202-0000-135-C-1C-02	MSR#05-0800	131693012	406667	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.0915	0.0271	PCI/G	0		3/3/2005	38415.60347	3:26	0.0288	PCI/G	0.0134	PCI/G	1	4.3	161	G	PCI/G		PR	
9202-0000-135-C-1C-02	MSR#05-0800	131693012	409871	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	2.19	6.52	PCI/G	0	U		31/03/2005	12:23	11.2	PCI/G	5.39	PCI/G	1	4.3	2.05	G	PCI/G		PR	
9202-0000-135-C-5C-03	MSR#05-0800	131693013	406667	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.288	0.149	PCI/G	0		3/3/2005	38415.60347	3:27	0.146	PCI/G	0.0664	PCI/G	1	5.2	179	G	PCI/G		PR	
9202-0000-135-C-5C-03	MSR#05-0800	131693013	406667	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0465	0.103	PCI/G	0	U	3/3/2005	38415.60347	3:27	0.172	PCI/G	0.0807	PCI/G	1	5.2	179	G	PCI/G		PR	
9202-0000-135-C-5C-03	MSR#05-0800	131693013	406667	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.186	0.165	PCI/G	0	U	3/3/2005	38415.60347	3:27	0.217	PCI/G	0.0953	PCI/G	1	5.2	179	G	PCI/G		PR	
9202-0000-135-C-5C-03	MSR#05-0800	131693013	406667	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.26	0.0753	PCI/G	0		3/3/2005	38415.60347	3:27	0.059	PCI/G	0.0267	PCI/G	1	5.2	179	G	PCI/G		PR	
9202-0000-135-C-5C-03	MSR#05-0800	131693013	406667	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.00421	0.0185	PCI/G	0	U	3/3/2005	38415.60347	3:27	0.036	PCI/G	0.0161	PCI/G	1	5.2	179	G	PCI/G		PR	
9202-0000-135-C-5C-03	MSR#05-0800	131693013	406667	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.0149	0.0183	PCI/G	0	U	3/3/2005	38415.60347	3:27	0.0312	PCI/G	0.014	PCI/G	1	5.2	179	G	PCI/G		PR	
9202-0000-135-C-5C-03	MSR#05-0800	131693013	406667	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.000333	0.0199	PCI/G	0	U	3/3/2005	38415.60347	3:27	0.0382	PCI/G	0.0166	PCI/G	1	5.2	179	G	PCI/G		PR	
9202-0000-135-C-5C-03	MSR#05-0800	131693013	406667	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0122	0.0482	PCI/G	0	U	3/3/2005	38415.60347	3:27	0.0908	PCI/G	0.0423	PCI/G	1	5.2	179	G	PCI/G		PR	
9202-0000-135-C-5C-03	MSR#05-0800	131693013	406667	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0345	0.0485	PCI/G	0	U	3/3/2005	38415.60347	3:27	0.0821	PCI/G	0.0341	PCI/G	1	5.2	179	G	PCI/G		PR	
9202-0000-135-C-5C-03	MSR#05-0800	131693013	406667	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0064	0.0464	PCI/G	0	U	3/3/2005	38415.60347	3:27	0.0942	PCI/G	0.0445	PCI/G	1	5.2	179	G	PCI/G		PR	
9202-0000-135-C-5C-03	MSR#05-0800	131693013	406667	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.314	0.0581	PCI/G	0		3/3/2005	38415.60347	3:27	0.0486	PCI/G	0.0228	PCI/G	1	5.2	179	G	PCI/G		PR	
9202-0000-135-C-5C-03	MSR#05-0800	131693013	406667	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.292	0.0712	PCI/G	0		3/3/2005	38415.60347	3:27	0.0656	PCI/G	0.0306	PCI/G	1	5.2	179	G	PCI/G		PR	
9202-0000-135-C-5C-03	MSR#05-0800	131693013	406667	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.000573	0.0206	PCI/G	0	U	3/3/2005	38415.60347	3:27	0.0379	PCI/G	0.0172	PCI/G	1	5.2	179	G	PCI/G		PR	
9202-0000-135-C-5C-03	MSR#05-0800	131693013	406667	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00486	0.0201	PCI/G	0	U	3/3/2005	38415.60347	3:27	0.034	PCI/G	0.0156	PCI/G	1	5.2	179	G	PCI/G		PR	
9202-0000-135-C-5C-03	MSR#05-0800	131693013	406667	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	5.43	0.795	PCI/G	0		3/3/2005	38415.60347	3:27	0.336	PCI/G	0.142	PCI/G	1	5.2	179	G	PCI/G		PR	
9202-0000-135-C-5C-03	MSR#05-0800	131693013	406667	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.26	0.0753	PCI/G	0		3/3/2005	38415.60347	3:27	0.059	PCI/G	0.0267	PCI/G	1	5.2	179	G	PCI/G		PR	
9202-0000-135-C-5C-03	MSR#05-0800	131693013	406667	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00694	0.0149	PCI/G	0	U	3/3/2005	38415.60347	3:27	0.0303	PCI/G	0.0139	PCI/G	1	5.2	179	G	PCI/G		PR	
9202-0000-135-C-5C-03	MSR#05-0800	131693013	414564	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.0022	0.00538	PCI/G	0	U	7/3/2005	38445.08958	12:47	0.0111	PCI/G	0.00534	PCI/G	1	5.2	13	G	PCI/G		PR	
9202-0000-135-C-5C-03	MSR#05-0800	131693013	406667	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.0801	0.0369	PCI/G	0		3/3/2005	38415.60347	3:27	0.0316	PCI/G	0.0143	PCI/G	1	5.2	179	G	PCI/G		PR	
9202-0000-135-C-5C-03	MSR#05-0800	131693013	409871	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	5.84	6.59	PCI/G	0	U		31/03/2005	12:55	11	PCI/G	5.31	PCI/G	1	5.2	2.09	G	PCI/G		PR	
9202-0000-135-C-10C-04	MSR#05-0800	131693014	406667	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.362	0.146	PCI/G	0		3/3/2005	38415.60347	3:28	0.171	PCI/G	0.0772	PCI/G	1	6.1	161	G	PCI/G		PR	
9202-0000-135-C-10C-04	MSR#05-0800	131693014	406667	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.00257	0.0337	PCI/G	0	U	3/3/2005	38415.60347	3:28	0.0552	PCI/G	0.0264	PCI/G	1	6.1	161	G	PCI/G		PR	
9202-0000-135-C-10C-04	MSR#05-0800	131693014	406667	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.564	0.37	PCI/G	0		3/3/2005	38415.60347	3:28	0.327	PCI/G	0.147	PCI/G	1	6.1	161	G	PCI/G		PR	
9202-0000-135-C-10C-04	MSR#05-0800	131693014	406667	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0	0.0986	PCI/G	0	UUI	3/3/2005	38415.60347	3:28	0.16	PCI/G	0.0766	PCI/G	1	6.1	161	G	PCI/G		PR	
9202-0000-135-C-10C-04	MSR#05-0800	131693014	406667	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	-0.002	0.0256	PCI/G	0	U	3/3/2005	38415.60347	3:28	0.0475	PCI/G	0.0213	PCI/G	1	6.1	161	G	PCI/G		PR	
9202-0000-135-C-10C-04	MSR#05-0800	131693014	406667	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.00059	0.0219	PCI/G	0	U	3/3/2005	38415.60347	3:28	0.0413	PCI/G	0.0187	PCI/G	1	6.1	161	G	PCI/G		PR	
9202-0000-135-C-10C-04	MSR#05-0800	131693014	406667	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.00719	0.0204	PCI/G	0	U	3/3/2005	38415.60347	3:28	0.0431	PCI/G	0.0184	PCI/G	1	6.1	161	G	PCI/G		PR	
9202-0000-135-C-10C-04	MSR#05-0800	131693014	406667	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.013	0.057	PCI/G	0	U	3/3/2005	38415.60347	3:28	0.102	PCI/G	0.0474	PCI/G	1	6.1	161	G	PCI/G		PR	
9202-0000-135-C-10C-04	MSR#05-0800	131693014	406667	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.00229	0.0621	PCI/G	0	U	3/3/2005	38415.60347	3:28	0.121	PCI/G	0.0522	PCI/G	1	6.1	161	G	PCI/G		PR	
9202-0000-135-C-10C-04	MSR#05-0800	131693014	406667	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0389	0.0539	PCI/G	0	U	3/3/2005	38415.60347	3:28	0.107	PCI/G	0.0511	PCI/G	1	6.1	161	G	PCI/G		PR	
9202-0000-135-C-10C-04	MSR#05-0800	131693014	406667	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.367	0.0664	PCI/G	0		3/3/2005	38415.60347	3:28	0.0621	PCI/G	0.0294	PCI/G	1	6.1	161	G	PCI/G		PR	
9202-0000-135-C-10C-04	MSR#05-0800	131693014	406667	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.337	0.0846	PCI/G	0		3/3/2005	38415.60347	3:28	0.0759	PCI/G	0.0353	PCI/G	1	6.1	161	G	PCI/G		PR	
9202-0000-135-C-10C-04	MSR#05-0800	131693014	406667	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.00603	0.0217	PCI/G	0	U	3/3/2005	38415.60347	3:28	0.0424	PCI/G	0.019	PCI/G	1	6.1	161	G	PCI/G		PR	
9202-0000-135-C-10C-04	MSR#05-0800	131693014	406667	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0172	0.0235	PCI/G	0	U	3/3/2005	38415.60347	3:28	0.0466	PCI/G	0.0215	PCI/G	1	6.1	161	G	PCI/G		PR	
9202-0000-135-C-10C-04	MSR#05-0800	131693014	406667	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	5.72	0.972	PCI/G	0		3/3/2005	38415.60347	3:28	0.414	PCI/G	0.176	PCI/G	1	6.1	161	G	PCI/G		PR	
9202-0000-135-C-10C-04	MSR#05-0800	131693014	406667	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.329	0.0986	PCI/G	0		3/3/2005	38415.60347	3:28	0.0821	PCI/G	0.0376	PCI/G	1	6.1	161	G	PCI/G		PR	
9202-0000-135-C-10C-04	MSR#05-0800	131693014	406667	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.0089	0.0178	PCI/G	0	U	3/3/2005	38415.60347	3:28	0.0401	PCI/G	0.0186	PCI/G	1	6.1	161	G	PCI/G		PR	
9202-0000-135-C-10C-04	MSR#05-0800	131693014	414564	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.000714	0.00512	PCI/G	0	U	7/3/2005	38445.08958	10:12	0.0102	PCI/G	0.00493	PCI/G	1	6.1	12.7	G	PCI/G		PR	
9202-0000-135-C-10C-04	MSR#05-0800	131693014	406667	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.107	0.0438	PCI/G	0		3/3/2005	38415.60347	3:28	0.0399	PCI/G	0.0181	PCI/G	1	6.1	161	G	PCI/G		PR	
9202-0000-135-C-10C-04	MSR#05-0800	131693014	409925	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-3.39	7.47	PCI/G	0	U		5/4/2005	6:46	13.6	PCI/G	6.46	PCI/G	1	6.1	2.03	G	PCI/G		PR	
9202-0000-135-C-10C-05	MSR#05-0800	131693015	406667	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.39	0.209	PCI/G	0		3/3/2005	38415.60347	3:29	0.144	PCI/G	0.0632	PCI/G	1	7.7	153	G	PCI/G		PR	
9202-0000-135-C-10C-05	MSR#05-0800	131693015	406667	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0872	0.106	PCI/G	0	U	3/3/2005	38415.60347	3:29	0.191	PCI/G	0.0907	PCI/G	1	7.7	153	G	PCI/G		PR	
9202-0000-135-C-10C-05	MSR#05-0800	131693015	412129	14596-10-2	Americium-241	TRG 1	UAM05RCM	AM05RCM	REG	0.0784	0.108	PCI/G	0	U	7/3/2005	38445.08611	1:54	0.206	PCI/G	0.0712	PCI/G	1	7.7	0.255	G	PCI/G		PR	
9202-0000-135-C-10C-05	MSR#05-0800	131693015	406667	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.276	0.225	PCI/G	0	U	3/3/2005	38415.60347	3:29	0.363	PCI/G	0.165	PCI/G	1	7.7	153	G	PCI/G		PR	
9202-0000-135-C-10C-05	MSR#05-0800	131693015	406667	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.317	0.0842	PCI/G	0		3/3/2005	38415.60347	3:29	0.0644	PCI/G	0.0286	PCI/G	1	7.7	153	G	PCI/G		PR	
9202-0000-135-C-10C-05	MSR#05-0800	131693015	407148	14762-75-5	Carbon-14	TRG 5	ULSC	LSC	REG	-0.0263	0.0926	PCI/G	0	U		19/03/2005	7:24	0.159	PCI/G	0.0781	PCI/G	1	7.7	9.09	G	PCI/G		PR	
9202-0000-135-C-10C-05	MSR#05-0800	131693015	406667	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0176	0.0286	PCI/G	0	U	3/3/2005	38415.60347	3:29	0.0566	PCI/G	0.0258	PCI/G	1	7.7	153	G	PCI/G		PR	
9202-0000-135-C-10C-05	MSR#05-0800	131693015	406667	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.0185	0.0253	PCI/G	0	U	3/3/2005	38415.60347	3:29	0.0509	PCI/G	0.0233	PCI/G	1	7.7	153	G	PCI/G		PR	
9202-0000-135-C-10C-05	MSR#05-0800	131693015	406667	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.00733	0.0182	PCI/G	0	U	3/3/2005	38415.60347	3:29	0.0337	PCI/G	0.0136	PCI/G	1	7.7	153	G	PCI/G		PR	
9202-0000-135-C-10C-05	MSR#05-0800	131693015	412129	OER-100-93	Curium-242	TRG 1	UAM05RCM	AM05RCM	REG	0.0536	0.106	PCI/G	0	U	7/3/2005	38445.08611	1:54	0.232	PCI/G	0.0759	PCI/G	1	7.7	0.255	G	PCI/G		PR	
9202-0000-135-C-10C-05	MSR#05-0800	131693015	412129	OER-101-57	Curium-243/244	TRG 1	UAM05RCM	AM05RCM	REG	0.037	0.153	PCI/G	0	U	7/3/2005	38445.08611	1:54	0.365	PCI/G	0.151	PCI/G	1	7.7	0.255	G	PCI/G		PR	
9202-0000-135-C-10C-05	MSR#05-0800	131693015	406667	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.00201	0.0634	PCI/G	0	U	3/3/2005	38415.60347	3:29	0.114	PCI/G	0.0532	PCI/G	1	7.7	153	G	PCI/G		PR	
9202-0000-135-C-10C-05	MSR#05-0800	131693015	406667	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0103	0.0739	PCI/G	0	U	3/3/2005	38415.60347	3:29	0.139	PCI/G	0.0608	PCI/G	1	7.7	153	G	PCI/G		PR	
9202-0000-135-C-10C-05	MSR#05-0800	131693015	406667	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.00247	0.0604	PCI/G	0	U	3/3/2005	38415.60347	3:29	0.118	PCI/G	0.0558	PCI/G	1	7.7	153	G	PCI/G		PR	
9202-0000-135-C-10C-05	MSR#05-0800	131693015	407185	14681-59-5	Iron-55	TRG 26	ULSC	LSC	REG	-20.3	55.2	PCI/G	0	U	7/3/2005	38414.10417	7:07	76.4	PCI/G	37.4	PCI/G	1	7.7	0.188	G	PCI/G		PR	
9202-0000-135-C-10C-05	MSR#05-0800	131693015	406667	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.325	0.0574	PCI/G	0		3/3/2005	38415.60347	3:29	0.06	PCI/G	0.0282	PCI/G	1	7.7	153	G	PCI/G		PR	
9202-0000-135-C-10C-05	MSR#05-0800	131693015	406667	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.268	0.099	PCI/G	0		3/3/2005	38415.60347	3:29	0.0866	PCI/G	0.0404	PCI/G	1	7.7	153	G	PCI/G		PR	
9202-0000-135-C-10C-05	MSR#05-0800	131693015	406667	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.00145	0.0226	PCI/G	0	U	3/3/2005	38415.60347	3:29	0.043	PCI/G	0.0191	PCI/G	1	7.7	153	G	PCI/G		PR	
9202-0000-135-C-10C-05	MSR#05-0800	131693015	407187	13781-37-8	Nickel-63	TRG 30	ULSC	LSC	REG	-7.44	7.93	PCI/G	0	U	7/3/2005	38414.10347	11:43	14	PCI/G	6.84	PCI/G	1	7.7	0.188	G	PCI/G		PR	
9202-0000-135-C-10C-05	MSR#05-0800	131693015	406667	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.0129	0.0223	PCI/G	0	U	3/3/2005	38415.60347	3:29	0.0387	PCI/G	0.0175	PCI/G	1	7.7	153	G	PCI/G		PR	
9202-0000-135-C-10C-05	MSR#05-0800	131693015	412132	13981-16-3	Plutonium-238	TRG 32	UPU11RCM	PU11RCM	REG	-0.0227	0.0222	PCI/G	0	U	7/3/2005	38445.08472	11:12	0.105	PCI/G	0.0371	PCI/G	1	7.7	0.255	G	PCI/G		PR	
9202-0000-135-C-10C-05	MSR#05-0800	131693015	412132	OER-100-70	Plutonium-239/240	TRG 32	UPU11RCM	PU11RCM	REG	-0.017	0.0292	PCI/G	0	U	7/3/2005	38445.08472	11:12	0.0945	PCI/G	0.0321	PCI/G	1	7.7	0.255	G	PCI/G		PR	
9202-0000-135-C-10C-05	MSR#05-0800	131693015	412133	14119-32-5	Plutonium-241	TRG 36	UPU11RCM	PU11RCM	REG	1.9	6.48	PCI/G	0	U	7/3/2005	38445.08681	8:56	11.1	PCI/G	5.38	PCI/G	1	7.7	0.523	G	PCI/G		PR	
9202-0000-135-C-10C-05	MSR#05-0800	131693015	406667	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	5.55	0.895	PCI/G	0		3/3/2005	38415.60347	3:29	0.458	PCI/G	0.196	PCI/G	1	7.7	153	G	PCI/G		PR	
9202-0000-135-C-10C-05	MSR#05-0800	131693015	406667	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.317	0.0842	PCI/G	0		3/3/2005	38415.60347	3:29	0.0644	PCI/G	0.0286	PCI/G	1	7.7	153	G	PCI/G		PR	
9202-0000-135-C-10C-05	MSR#05-0800	131693015	406667	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.0066	0.0237	PCI/G	0	U	3/3/2005	38415.60347	3:29	0.041	PCI/G	0.019	PCI/G	1	7.7	153	G	PCI/G		PR	
9202-0000-135-C-10C-05	MSR#05-0800	131693015	414564	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.00256	0.00609	PCI/G	0	U	7/3/2005	38445.08958	10:12	0.0126	PCI/G	0.00604	PCI/G	1	7.7	12.9	G	PCI/G		PR	
9202-0000-135-C-10C-05	MSR#05-0800	131693015	409273	14133-76-7	Technetium-99	TRG 46	UTC02RCM	TC02RCM	REG	0.266	0.181	PCI/G	0	U		21/03/2005	9:55	0.298	PCI/G	0.145	PCI/G	1	7.7	7	G	PCI/G		PR	
9202-0000-135-C-10C-05	MSR#05-0800	131693015	406667	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.117	0.0508	PCI/G	0		3/3/2005	38415.60347	3:29	0.0416	PCI/G	0.0188	PCI/G	1	7.7	153	G	PCI/G		PR	
9202-0000-135-C-10C-05	MSR#05-0800	131693015	409925	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	4.53	7.73	PCI/G	0	U		5/4/2005	7:02	13.2	PCI/G	6.24	PCI/G	1	7.7	2.05	G	PCI/G		PR	
9202-0000-134-C-1C-01	MSR#05-0800	131693016	406667	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.271	0.12	PCI/G	0		3/3/2005	38415.60347	3:30	0.126	PCI/G	0.0559	PCI/G	1	3.6	172	G	PCI/G		PR	
9202-0000-134-C-1C-01	MSR#05-0800	131693016	406667	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0273	0.0729	PCI/G	0	U	3/3/2005	38415.60347	3:30	0.129	PCI/G	0.0608	PCI/G	1	3.6	172	G	PCI/G		PR	
9202-0000-134-C-1C-01	MSR#05-0800	131693016	406667	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.2	0.334	PCI/G	0	U	3/3/2005	38415.60347	3:30	0.257	PCI/G	0.115	PCI/G	1	3.6	172	G	PCI/G		PR	
9202-0000-134-C-1C-01	MSR#05-0800	131693016	406667	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.271	0.0665	PCI/G	0		3/3/2005	38415.60347	3:30	0.0695	PCI/G	0.0319	PCI/G	1	3.6	172	G	PCI/G		PR	
9202-0000-134-C-1C-01	MSR#05-0800	131693016	406667	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0145	0.0239	PCI/G	0	U	3/3/2005	38415.60347	3:30	0.0475	PCI/G	0.0217	PCI/G	1	3.6	172	G	PCI/G		PR	
9202-0000-134-C-1C-01	MSR#05-0800	131693016	406667	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.00419	0.0177	PCI/G	0	U	3/3/2005	38415.60347	3:30	0.0333	PCI/G	0.015	PCI/G	1	3.6	172	G	PCI/G		PR	
9202-0000-134-C-1C-01	MSR#05-0800	131693016	406667	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.00152	0.0194	PCI/G	0	U	3/3/2005	38415.60347	3:30	0.0383	PCI/G	0.0165	PCI/G	1	3.6	172	G	PCI/G		PR	
9202-0000-134-C-1C-01	MSR#05-0800	131693016	406667	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0396	0.0492	PCI/G	0	U	3/3/2005	38415.60347	3:30	0.0868	PCI/G	0.0402	PCI/G	1	3.6	172	G	PCI/G		PR	
9202-0000-134-C-1C-01	MSR#05-0800	131693016	406667	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0803	0.0758	PCI/G	0	U	3/3/2005	38415.60347	3:30	0.135	PCI/G	0.0602	PCI/G	1	3.6	172	G	PCI/G		PR	
9202-0000-134-C-1C-01	MSR#05-0800	131693016	406667	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0133	0.0497	PCI/G	0	U	3/3/2005	38415.60347	3:30	0.0975	PCI/G	0.0463	PCI/G	1	3.6	172	G	PCI/G		PR	
9202-0000-134-C-1C-01	MSR#05-0800	131693016	406667	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.343	0.0614	PCI/G	0		3/3/2005	38415.60347	3:30	0.0512	PCI/G	0.0241	PCI/G	1	3.6	172	G	PCI/G		PR	
9202-0000-134-C-1C-01	MSR#05-0800	131693016	406667	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.303	0.0769	PCI/G	0		3/3/2005	38415.60347	3:30	0.0681	PCI/G	0.0317	PCI/G	1	3.6	172	G	PCI/G		PR	
9202-0000-134-C-1C-01	MSR#05-0800	131693016	406667	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0224	0.0193	PCI/G	0	U	3/3/2005	38415.60347	3:30	0.0413	PCI/G	0.0188	PCI/G	1	3.6	172	G	PCI/G		PR	
9202-0000-134-C-1C-01	MSR#05-0800	131693016	406667	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00879	0.0175	PCI/G	0	U	3/3/2005	38415.60347	3:30	0.035	PCI/G	0.016	PCI/G	1	3.6	172	G	PCI/G		PR	

9202-0000-134-C-1C-01	MSR#05-0800	131693016	406667	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	5.57	0.813	PCI/G	0		3/3/2005	38415.60347	3:30	0.403	PCI/G	0.175	PCI/G	1	3.6	172	G	PCI/G	PR	
9202-0000-134-C-1C-01	MSR#05-0800	131693016	406667	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.271	0.0665	PCI/G	0		3/3/2005	38415.60347	3:30	0.0695	PCI/G	0.0319	PCI/G	1	3.6	172	G	PCI/G	PR	
9202-0000-134-C-1C-01	MSR#05-0800	131693016	406667	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00924	0.0168	PCI/G	0	U	3/3/2005	38415.60347	3:30	0.0297	PCI/G	0.0136	PCI/G	1	3.6	172	G	PCI/G	PR	
9202-0000-134-C-1C-01	MSR#05-0800	131693016	414564	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00135	0.00574	PCI/G	0	U	7/3/2005	38445.08958	10:13	0.0114	PCI/G	0.00549	PCI/G	1	3.6	12.6	G	PCI/G	PR	
9202-0000-134-C-1C-01	MSR#05-0800	131693016	406667	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.0602	0.0384	PCI/G	0		3/3/2005	38415.60347	3:30	0.0344	PCI/G	0.0157	PCI/G	1	3.6	172	G	PCI/G	PR	
9202-0000-134-C-1C-01	MSR#05-0800	131693016	409925	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-3.36	7.86	PCI/G	0	U		8/4/2005	12:33	14	PCI/G	6.73	PCI/G	1	3.6	2.03	G	PCI/G	PR	
9202-0000-134-C-1C-02	MSR#05-0800	131693017	406667	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.375	0.155	PCI/G	0		3/3/2005	38415.60347	3:32	0.141	PCI/G	0.0632	PCI/G	1	4.8	163	G	PCI/G	PR	
9202-0000-134-C-1C-02	MSR#05-0800	131693017	406667	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0443	0.0976	PCI/G	0	U	3/3/2005	38415.60347	3:32	0.134	PCI/G	0.0632	PCI/G	1	4.8	163	G	PCI/G	PR	
9202-0000-134-C-1C-02	MSR#05-0800	131693017	406667	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.288	0.275	PCI/G	0	U	3/3/2005	38415.60347	3:32	0.291	PCI/G	0.132	PCI/G	1	4.8	163	G	PCI/G	PR	
9202-0000-134-C-1C-02	MSR#05-0800	131693017	406667	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.279	0.0818	PCI/G	0		3/3/2005	38415.60347	3:32	0.0637	PCI/G	0.0289	PCI/G	1	4.8	163	G	PCI/G	PR	
9202-0000-134-C-1C-02	MSR#05-0800	131693017	406667	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0329	0.0445	PCI/G	0	U	3/3/2005	38415.60347	3:32	0.0468	PCI/G	0.0213	PCI/G	1	4.8	163	G	PCI/G	PR	
9202-0000-134-C-1C-02	MSR#05-0800	131693017	406667	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.00146	0.0182	PCI/G	0	U	3/3/2005	38415.60347	3:32	0.0349	PCI/G	0.0157	PCI/G	1	4.8	163	G	PCI/G	PR	
9202-0000-134-C-1C-02	MSR#05-0800	131693017	406667	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.00446	0.0181	PCI/G	0	U	3/3/2005	38415.60347	3:32	0.0374	PCI/G	0.0159	PCI/G	1	4.8	163	G	PCI/G	PR	
9202-0000-134-C-1C-02	MSR#05-0800	131693017	406667	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0549	0.0545	PCI/G	0	U	3/3/2005	38415.60347	3:32	0.0885	PCI/G	0.0409	PCI/G	1	4.8	163	G	PCI/G	PR	
9202-0000-134-C-1C-02	MSR#05-0800	131693017	406667	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.00572	0.0494	PCI/G	0	U	3/3/2005	38415.60347	3:32	0.0999	PCI/G	0.0425	PCI/G	1	4.8	163	G	PCI/G	PR	
9202-0000-134-C-1C-02	MSR#05-0800	131693017	406667	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	-0.0167	0.0493	PCI/G	0	U	3/3/2005	38415.60347	3:32	0.094	PCI/G	0.0445	PCI/G	1	4.8	163	G	PCI/G	PR	
9202-0000-134-C-1C-02	MSR#05-0800	131693017	406667	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.348	0.0611	PCI/G	0		3/3/2005	38415.60347	3:32	0.0486	PCI/G	0.0227	PCI/G	1	4.8	163	G	PCI/G	PR	
9202-0000-134-C-1C-02	MSR#05-0800	131693017	406667	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.306	0.0817	PCI/G	0		3/3/2005	38415.60347	3:32	0.0675	PCI/G	0.0313	PCI/G	1	4.8	163	G	PCI/G	PR	
9202-0000-134-C-1C-02	MSR#05-0800	131693017	406667	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0313	0.0197	PCI/G	0	U	3/3/2005	38415.60347	3:32	0.0419	PCI/G	0.019	PCI/G	1	4.8	163	G	PCI/G	PR	
9202-0000-134-C-1C-02	MSR#05-0800	131693017	406667	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00683	0.0195	PCI/G	0	U	3/3/2005	38415.60347	3:32	0.0374	PCI/G	0.0172	PCI/G	1	4.8	163	G	PCI/G	PR	
9202-0000-134-C-1C-02	MSR#05-0800	131693017	406667	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	5.8	0.857	PCI/G	0		3/3/2005	38415.60347	3:32	0.291	PCI/G	0.118	PCI/G	1	4.8	163	G	PCI/G	PR	
9202-0000-134-C-1C-02	MSR#05-0800	131693017	406667	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.279	0.0818	PCI/G	0		3/3/2005	38415.60347	3:32	0.0637	PCI/G	0.0289	PCI/G	1	4.8	163	G	PCI/G	PR	
9202-0000-134-C-1C-02	MSR#05-0800	131693017	406667	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00181	0.0146	PCI/G	0	U	3/3/2005	38415.60347	3:32	0.0281	PCI/G	0.0128	PCI/G	1	4.8	163	G	PCI/G	PR	
9202-0000-134-C-1C-02	MSR#05-0800	131693017	414564	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00336	0.00676	PCI/G	0	U	7/3/2005	38445.08958	10:13	0.0132	PCI/G	0.0064	PCI/G	1	4.8	13.1	G	PCI/G	PR	
9202-0000-134-C-1C-02	MSR#05-0800	131693017	406667	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.114	0.0395	PCI/G	0		3/3/2005	38415.60347	3:32	0.0315	PCI/G	0.0141	PCI/G	1	4.8	163	G	PCI/G	PR	
9202-0000-134-C-1C-02	MSR#05-0800	131693017	409925	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-0.496	7.49	PCI/G	0	U		5/4/2005	7:36	13.3	PCI/G	6.32	PCI/G	1	4.8	2.02	G	PCI/G	PR	
9202-0000-134-C-2C-03	MSR#05-0800	131693018	406667	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.0634	0.176	PCI/G	0	U	3/3/2005	38415.60347	3:33	0.156	PCI/G	0.0705	PCI/G	1	5.5	164	G	PCI/G	PR	
9202-0000-134-C-2C-03	MSR#05-0800	131693018	406667	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0386	0.0923	PCI/G	0	U	3/3/2005	38415.60347	3:33	0.175	PCI/G	0.0832	PCI/G	1	5.5	164	G	PCI/G	PR	
9202-0000-134-C-2C-03	MSR#05-0800	131693018	406667	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.27	0.272	PCI/G	0	U	3/3/2005	38415.60347	3:33	0.331	PCI/G	0.151	PCI/G	1	5.5	164	G	PCI/G	PR	
9202-0000-134-C-2C-03	MSR#05-0800	131693018	406667	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.319	0.088	PCI/G	0		3/3/2005	38415.60347	3:33	0.0705	PCI/G	0.0321	PCI/G	1	5.5	164	G	PCI/G	PR	
9202-0000-134-C-2C-03	MSR#05-0800	131693018	406667	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	-0.00679	0.0226	PCI/G	0	U	3/3/2005	38415.60347	3:33	0.0413	PCI/G	0.0185	PCI/G	1	5.5	164	G	PCI/G	PR	
9202-0000-134-C-2C-03	MSR#05-0800	131693018	406667	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.0196	0.0226	PCI/G	0	U	3/3/2005	38415.60347	3:33	0.032	PCI/G	0.0142	PCI/G	1	5.5	164	G	PCI/G	PR	
9202-0000-134-C-2C-03	MSR#05-0800	131693018	406667	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.00558	0.0216	PCI/G	0	U	3/3/2005	38415.60347	3:33	0.0435	PCI/G	0.019	PCI/G	1	5.5	164	G	PCI/G	PR	
9202-0000-134-C-2C-03	MSR#05-0800	131693018	406667	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.000831	0.0545	PCI/G	0	U	3/3/2005	38415.60347	3:33	0.102	PCI/G	0.0475	PCI/G	1	5.5	164	G	PCI/G	PR	
9202-0000-134-C-2C-03	MSR#05-0800	131693018	406667	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0122	0.0652	PCI/G	0	U	3/3/2005	38415.60347	3:33	0.122	PCI/G	0.0537	PCI/G	1	5.5	164	G	PCI/G	PR	
9202-0000-134-C-2C-03	MSR#05-0800	131693018	406667	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	-0.0313	0.0652	PCI/G	0	U	3/3/2005	38415.60347	3:33	0.118	PCI/G	0.0563	PCI/G	1	5.5	164	G	PCI/G	PR	
9202-0000-134-C-2C-03	MSR#05-0800	131693018	406667	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.377	0.0692	PCI/G	0		3/3/2005	38415.60347	3:33	0.0617	PCI/G	0.0291	PCI/G	1	5.5	164	G	PCI/G	PR	
9202-0000-134-C-2C-03	MSR#05-0800	131693018	406667	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.32	0.0797	PCI/G	0		3/3/2005	38415.60347	3:33	0.0754	PCI/G	0.035	PCI/G	1	5.5	164	G	PCI/G	PR	
9202-0000-134-C-2C-03	MSR#05-0800	131693018	406667	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.00291	0.023	PCI/G	0	U	3/3/2005	38415.60347	3:33	0.0437	PCI/G	0.0198	PCI/G	1	5.5	164	G	PCI/G	PR	
9202-0000-134-C-2C-03	MSR#05-0800	131693018	406667	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.0142	0.0211	PCI/G	0	U	3/3/2005	38415.60347	3:33	0.0371	PCI/G	0.0169	PCI/G	1	5.5	164	G	PCI/G	PR	
9202-0000-134-C-2C-03	MSR#05-0800	131693018	406667	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	6.49	1.03	PCI/G	0		3/3/2005	38415.60347	3:33	0.402	PCI/G	0.174	PCI/G	1	5.5	164	G	PCI/G	PR	
9202-0000-134-C-2C-03	MSR#05-0800	131693018	406667	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.319	0.088	PCI/G	0		3/3/2005	38415.60347	3:33	0.0705	PCI/G	0.0321	PCI/G	1	5.5	164	G	PCI/G	PR	
9202-0000-134-C-2C-03	MSR#05-0800	131693018	406667	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.017	0.0199	PCI/G	0	U	3/3/2005	38415.60347	3:33	0.0364	PCI/G	0.0168	PCI/G	1	5.5	164	G	PCI/G	PR	
9202-0000-134-C-2C-03	MSR#05-0800	131693018	414564	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.000918	0.00622	PCI/G	0	U	7/3/2005	38445.08958	10:13	0.0127	PCI/G	0.00608	PCI/G	1	5.5	10.5	G	PCI/G	PR	
9202-0000-134-C-2C-03	MSR#05-0800	131693018	406667	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.134	0.0464	PCI/G	0		3/3/2005	38415.60347	3:33	0.0359	PCI/G	0.0162	PCI/G	1	5.5	164	G	PCI/G	PR	
9202-0000-134-C-2C-03	MSR#05-0800	131693018	409925	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-1.95	8.38	PCI/G	0	U		8/4/2005	1:06	14.7	PCI/G	7.1	PCI/G	1	5.5	2.01	G	PCI/G	PR	
9202-0000-134-C-3C-04	MSR#05-0800	131693019	406667	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.411	0.192	PCI/G	0		3/3/2005	38415.60347	3:34	0.177	PCI/G	0.0807	PCI/G	1	6.1	169	G	PCI/G	PR	
9202-0000-134-C-3C-04	MSR#05-0800	131693019	406667	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.122	0.12	PCI/G	0	U	3/3/2005	38415.60347	3:34	0.188	PCI/G	0.0897	PCI/G	1	6.1	169	G	PCI/G	PR	
9202-0000-134-C-3C-04	MSR#05-0800	131693019	406667	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.234	0.232	PCI/G	0	U	3/3/2005	38415.60347	3:34	0.317	PCI/G	0.144	PCI/G	1	6.1	169	G	PCI/G	PR	
9202-0000-134-C-3C-04	MSR#05-0800	131693019	406667	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.337	0.0969	PCI/G	0		3/3/2005	38415.60347	3:34	0.0851	PCI/G	0.0394	PCI/G	1	6.1	169	G	PCI/G	PR	
9202-0000-134-C-3C-04	MSR#05-0800	131693019	406667	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0045	0.0252	PCI/G	0	U	3/3/2005	38415.60347	3:34	0.049	PCI/G	0.0223	PCI/G	1	6.1	169	G	PCI/G	PR	
9202-0000-134-C-3C-04	MSR#05-0800	131693019	406667	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.014	0.0249	PCI/G	0	U	3/3/2005	38415.60347	3:34	0.0427	PCI/G	0.0195	PCI/G	1	6.1	169	G	PCI/G	PR	
9202-0000-134-C-3C-04	MSR#05-0800	131693019	406667	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.00919	0.0271	PCI/G	0	U	3/3/2005	38415.60347	3:34	0.0531	PCI/G	0.0236	PCI/G	1	6.1	169	G	PCI/G	PR	
9202-0000-134-C-3C-04	MSR#05-0800	131693019	406667	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0598	0.078	PCI/G	0	U	3/3/2005	38415.60347	3:34	0.106	PCI/G	0.0495	PCI/G	1	6.1	169	G	PCI/G	PR	
9202-0000-134-C-3C-04	MSR#05-0800	131693019	406667	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.00463	0.0812	PCI/G	0	U	3/3/2005	38415.60347	3:34	0.133	PCI/G	0.0586	PCI/G	1	6.1	169	G	PCI/G	PR	
9202-0000-134-C-3C-04	MSR#05-0800	131693019	406667	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.035	0.0666	PCI/G	0	U	3/3/2005	38415.60347	3:34	0.129	PCI/G	0.0617	PCI/G	1	6.1	169	G	PCI/G	PR	
9202-0000-134-C-3C-04	MSR#05-0800	131693019	406667	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.35	0.069	PCI/G	0		3/3/2005	38415.60347	3:34	0.0687	PCI/G	0.0327	PCI/G	1	6.1	169	G	PCI/G	PR	
9202-0000-134-C-3C-04	MSR#05-0800	131693019	406667	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.387	0.0831	PCI/G	0		3/3/2005	38415.60347	3:34	0.0768	PCI/G	0.0358	PCI/G	1	6.1	169	G	PCI/G	PR	
9202-0000-134-C-3C-04	MSR#05-0800	131693019	406667	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.00053	0.0237	PCI/G	0	U	3/3/2005	38415.60347	3:34	0.0452	PCI/G	0.0205	PCI/G	1	6.1	169	G	PCI/G	PR	
9202-0000-134-C-3C-04	MSR#05-0800	131693019	406667	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00765	0.0212	PCI/G	0	U	3/3/2005	38415.60347	3:34	0.0403	PCI/G	0.0185	PCI/G	1	6.1	169	G	PCI/G	PR	
9202-0000-134-C-3C-04	MSR#05-0800	131693019	406667	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.03	1.04	PCI/G	0		3/3/2005	38415.60347	3:34	0.44	PCI/G	0.191	PCI/G	1	6.1	169	G	PCI/G	PR	
9202-0000-134-C-3C-04	MSR#05-0800	131693019	406667	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.337	0.0969	PCI/G	0		3/3/2005	38415.60347	3:34	0.0851	PCI/G	0.0394	PCI/G	1	6.1	169	G	PCI/G	PR	
9202-0000-134-C-3C-04	MSR#05-0800	131693019	406667	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.0148	0.0193	PCI/G	0	U	3/3/2005	38415.60347	3:34	0.0387	PCI/G	0.018	PCI/G	1	6.1	169	G	PCI/G	PR	
9202-0000-134-C-3C-04	MSR#05-0800	131693019	414102	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.0154	0.0178	PCI/G	0	U	7/3/2005	38445.0875	9:51	0.039	PCI/G	0.018	PCI/G	1	6.1	12.8	G	PCI/G	PR	
9202-0000-134-C-3C-04	MSR#05-0800	131693019	406667	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.151	0.063	PCI/G	0		3/3/2005	38415.60347	3:34	0.0443	PCI/G	0.0204	PCI/G	1	6.1	169	G	PCI/G	PR	
9202-0000-134-C-3C-04	MSR#05-0800	131693019	409925	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-4.69	8.17	PCI/G	0	U		8/4/2005	1:38	14.6	PCI/G	7.04	PCI/G	1	6.1	1.99	G	PCI/G	PR	
9202-0000-134-C-3C-05	MSR#05-0800	131693020	406667	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.37	0.139	PCI/G	0		3/3/2005	38415.60347	3:35	0.125	PCI/G	0.0557	PCI/G	1	4.5	162	G	PCI/G	PR	
9202-0000-134-C-3C-05	MSR#05-0800	131693020	406667	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0124	0.0758	PCI/G	0	U	3/3/2005	38415.60347	3:35	0.13	PCI/G	0.0616	PCI/G	1	4.5	162	G	PCI/G	PR	
9202-0000-134-C-3C-05	MSR#05-0800	131693020	412129	14596-10-2	Americium-241	TRG 1	UAM05RCM	AM05RCM	REG	-0.00697	0.122	PCI/G	0	U	7/3/2005	38445.08611	1:54	0.333	PCI/G	0.133	PCI/G	1	4.5	0.263	G	PCI/G	PR	
9202-0000-134-C-3C-05	MSR#05-0800	131693020	406667	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.0782	0.222	PCI/G	0	U	3/3/2005	38415.60347	3:35	0.357	PCI/G	0.165	PCI/G	1	4.5	162	G	PCI/G	PR	
9202-0000-134-C-3C-05	MSR#05-0800	131693020	406667	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.306	0.0874	PCI/G	0		3/3/2005	38415.60347	3:35	0.0827	PCI/G	0.0385	PCI/G	1	4.5	162	G	PCI/G	PR	
9202-0000-134-C-3C-05	MSR#05-0800	131693020	406667	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0239	0.0224	PCI/G	0	U	3/3/2005	38415.60347	3:35	0.0459	PCI/G	0.021	PCI/G	1	4.5	162	G	PCI/G	PR	
9202-0000-134-C-3C-05	MSR#05-0800	131693020	406667	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.0131	0.023	PCI/G	0	U	3/3/2005	38415.60347	3:35	0.0402	PCI/G	0.0184	PCI/G	1	4.5	162	G	PCI/G	PR	
9202-0000-134-C-3C-05	MSR#05-0800	131693020	406667	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0218	0.0229	PCI/G	0	U	3/3/2005	38415.60347	3:35	0.0488	PCI/G	0.0218	PCI/G	1	4.5	162	G	PCI/G	PR	
9202-0000-134-C-3C-05	MSR#05-0800	131693020	412129	OER-100-93	Curium-242	TRG 1	UAM05RCM	AM05RCM	REG	0.0176	0.0942	PCI/G	0	U	7/3/2005	38445.08611	1:54	0.26	PCI/G	0.0876	PCI/G	1	4.5	0.263	G	PCI/G	PR	
9202-0000-134-C-3C-05	MSR#05-0800	131693020	412129	OER-101-57	Curium-243/244	TRG 1	UAM05RCM	AM05RCM	REG	-0.099	0.106	PCI/G	0	U	7/3/2005	38445.08611	1:54	0.374	PCI/G	0.153	PCI/G	1	4.5	0.263	G	PCI/G	PR	
9202-0000-134-C-3C-05	MSR#05-0800	131693020	406667	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0107	0.0593	PCI/G	0	U	3/3/2005	38415.60347	3:35	0.101	PCI/G	0.0472	PCI/G	1	4.5	162	G	PCI/G	PR	
9202-0000-134-C-3C-05	MSR#05-0800	131693020	406667	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.00389	0.0611	PCI/G	0	U	3/3/2005	38415.60347	3:35	0.115	PCI/G	0.0505	PCI/G	1	4.5	162	G	PCI/G	PR	
9202-0000-134-C-3C-05	MSR#05-0800	131693020	406667	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.045	0.0716	PCI/G	0	U	3/3/2005	38415.60347	3:35	0.103	PCI/G	0.0492	PCI/G	1	4.5	162	G	PCI/G	PR	
9202-0000-134-C-3C-05	MSR#05-0800	131693020	407185	14681-59-5	Iron-55	TRG 26	ULSC	LSC	REG	26.3	56.2	PCI/G	0	U	7/3/2005	38414.10417	7:39	76.8	PCI/G	37.6	PCI/G	1	4.5	0.198	G	PCI/G	PR	
9202-0000-134-C-3C-05	MSR#05-0800	131693020	406667	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.295	0.0718	PCI/G	0		3/3/2005	38415.60347	3:35	0.0676	PCI/G	0.0323	PCI/G	1	4.5	162	G	PCI/G	PR	
9202-0000-134-C-3C-05	MSR#05-0800	131693020	406667	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.363	0.0918	PCI/G	0		3/3/2005	38415.60347	3:35	0.0698	PCI/G	0.0326	PCI/G	1	4.5	162	G	PCI/G	PR	
9202-0000-134-C-3C-05	MSR#05-0800	131693020	406667	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.0187	0.038	PCI/G	0	U	3/3/2005	38415.60347	3:35	0.0359	PCI/G	0.0161	PCI/G	1	4.5	162	G	PCI/G	PR	
9202-0000-134-C-3C-05	MSR#05-0800	131693020	407187	13781-37-8	Nickel-63	TRG 30	ULSC	LSC	REG	-1.33	7.42	PCI/G	0	U	7/3/2005	38414.10347	12:30	12.8	PCI/G	6.26	PCI/G	1	4.5	0.198	G	PCI/G	PR	
9202-0000-134-C-3C-05	MSR#05-0800	131693020	406667	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.00904	0.0217	PCI/G	0	U	3/3/2005	38415.60347	3:35	0.0322	PCI/G	0.0146	PCI/G	1	4.5	162	G	PCI/G	PR	
9202-0000-134-C-3C-05	MSR#05-0800	131693020	412132	13981-16-3	Plutonium-238	TRG 32	UPU11RCM	PU11RCM	REG	-0.0441	0.0674	PCI/G	0	U	7/3/2005	38445.08681	12:28	0.276	PCI/G	0.102	PCI/G	1	4.5	0.263	G	PCI/G	PR	

9202-0000-134-C-3C-05	MSR#05-0800	131693020	412132	OER-100-70	Plutonium-239/240	TRG 32	UPU11RCM	PU11RCM	REG	0.00322	0.101	PCI/G	0	U	7/3/2005	38445.08681	12:28	0.285	PCI/G	0.106	PCI/G	1	4.5	0.263	G	PCI/G		PR	
9202-0000-134-C-3C-05	MSR#05-0800	131693020	412133	14119-32-5	Plutonium-241	TRG 36	UPU11RCM	PU11RCM	REG	2.09	6.07	PCI/G	0	U	7/3/2005	38445.08681	9:28	10.4	PCI/G	5.04	PCI/G	1	4.5	0.536	G	PCI/G		PR	
9202-0000-134-C-3C-05	MSR#05-0800	131693020	406667	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	5.58	0.886	PCI/G	0		3/3/2005	38415.60347	3:35	0.354	PCI/G	0.151	PCI/G	1	4.5	162	G	PCI/G		PR	
9202-0000-134-C-3C-05	MSR#05-0800	131693020	406667	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.306	0.0874	PCI/G	0		3/3/2005	38415.60347	3:35	0.0827	PCI/G	0.0385	PCI/G	1	4.5	162	G	PCI/G		PR	
9202-0000-134-C-3C-05	MSR#05-0800	131693020	406667	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00463	0.0171	PCI/G	0	U	3/3/2005	38415.60347	3:35	0.0314	PCI/G	0.0145	PCI/G	1	4.5	162	G	PCI/G		PR	
9202-0000-134-C-3C-05	MSR#05-0800	131693020	414564	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.00726	0.00722	PCI/G	0	U	7/3/2005	38445.08958	10:13	0.0152	PCI/G	0.00733	PCI/G	1	4.5	13.1	G	PCI/G		PR	
9202-0000-134-C-3C-05	MSR#05-0800	131693020	406667	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.113	0.0475	PCI/G	0		3/3/2005	38415.60347	3:35	0.0366	PCI/G	0.0168	PCI/G	1	4.5	162	G	PCI/G		PR	
9202-0000-132-C-1C-01	MSR#05-0800	131693021	406668	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.361	0.123	PCI/G	0		3/3/2005	38415.8125	7:28	0.115	PCI/G	0.0513	PCI/G	1	3.5	174	G	PCI/G		PR	
9202-0000-132-C-1C-01	MSR#05-0800	131693021	406668	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0212	0.0762	PCI/G	0	U	3/3/2005	38415.8125	7:28	0.132	PCI/G	0.0628	PCI/G	1	3.5	174	G	PCI/G		PR	
9202-0000-132-C-1C-01	MSR#05-0800	131693021	406668	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.287	0.199	PCI/G	0	U	3/3/2005	38415.8125	7:28	0.309	PCI/G	0.142	PCI/G	1	3.5	174	G	PCI/G		PR	
9202-0000-132-C-1C-01	MSR#05-0800	131693021	406668	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.283	0.0764	PCI/G	0		3/3/2005	38415.8125	7:28	0.0722	PCI/G	0.0335	PCI/G	1	3.5	174	G	PCI/G		PR	
9202-0000-132-C-1C-01	MSR#05-0800	131693021	406668	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0313	0.0232	PCI/G	0	U	3/3/2005	38415.8125	7:28	0.0487	PCI/G	0.0225	PCI/G	1	3.5	174	G	PCI/G		PR	
9202-0000-132-C-1C-01	MSR#05-0800	131693021	406668	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.00462	0.0194	PCI/G	0	U	3/3/2005	38415.8125	7:28	0.0359	PCI/G	0.0164	PCI/G	1	3.5	174	G	PCI/G		PR	
9202-0000-132-C-1C-01	MSR#05-0800	131693021	406668	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.00922	0.0194	PCI/G	0	U	3/3/2005	38415.8125	7:28	0.0348	PCI/G	0.0149	PCI/G	1	3.5	174	G	PCI/G		PR	
9202-0000-132-C-1C-01	MSR#05-0800	131693021	406668	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.00618	0.0464	PCI/G	0	U	3/3/2005	38415.8125	7:28	0.0885	PCI/G	0.0413	PCI/G	1	3.5	174	G	PCI/G		PR	
9202-0000-132-C-1C-01	MSR#05-0800	131693021	406668	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0456	0.0621	PCI/G	0	U	3/3/2005	38415.8125	7:28	0.106	PCI/G	0.0465	PCI/G	1	3.5	174	G	PCI/G		PR	
9202-0000-132-C-1C-01	MSR#05-0800	131693021	406668	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0158	0.0495	PCI/G	0	U	3/3/2005	38415.8125	7:28	0.0958	PCI/G	0.0456	PCI/G	1	3.5	174	G	PCI/G		PR	
9202-0000-132-C-1C-01	MSR#05-0800	131693021	406668	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.307	0.0569	PCI/G	0		3/3/2005	38415.8125	7:28	0.0532	PCI/G	0.0252	PCI/G	1	3.5	174	G	PCI/G		PR	
9202-0000-132-C-1C-01	MSR#05-0800	131693021	406668	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.284	0.0814	PCI/G	0		3/3/2005	38415.8125	7:28	0.0587	PCI/G	0.0272	PCI/G	1	3.5	174	G	PCI/G		PR	
9202-0000-132-C-1C-01	MSR#05-0800	131693021	406668	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0159	0.0182	PCI/G	0	U	3/3/2005	38415.8125	7:28	0.0377	PCI/G	0.0171	PCI/G	1	3.5	174	G	PCI/G		PR	
9202-0000-132-C-1C-01	MSR#05-0800	131693021	406668	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00184	0.0178	PCI/G	0	U	3/3/2005	38415.8125	7:28	0.034	PCI/G	0.0156	PCI/G	1	3.5	174	G	PCI/G		PR	
9202-0000-132-C-1C-01	MSR#05-0800	131693021	406668	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	5.84	0.839	PCI/G	0		3/3/2005	38415.8125	7:28	0.331	PCI/G	0.141	PCI/G	1	3.5	174	G	PCI/G		PR	
9202-0000-132-C-1C-01	MSR#05-0800	131693021	406668	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.283	0.0764	PCI/G	0		3/3/2005	38415.8125	7:28	0.0722	PCI/G	0.0335	PCI/G	1	3.5	174	G	PCI/G		PR	
9202-0000-132-C-1C-01	MSR#05-0800	131693021	406668	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00578	0.0157	PCI/G	0	U	3/3/2005	38415.8125	7:28	0.0281	PCI/G	0.0129	PCI/G	1	3.5	174	G	PCI/G		PR	
9202-0000-132-C-1C-01	MSR#05-0800	131693021	414564	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00435	0.0062	PCI/G	0	U	7/3/2005	38446.75625	10:13	0.012	PCI/G	0.00578	PCI/G	1	3.5	11.2	G	PCI/G		PR	
9202-0000-132-C-1C-01	MSR#05-0800	131693021	406668	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.115	0.0405	PCI/G	0		3/3/2005	38415.8125	7:28	0.031	PCI/G	0.0141	PCI/G	1	3.5	174	G	PCI/G		PR	
9202-0000-132-C-1C-01	MSR#05-0800	131693021	409925	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	2.38	8.63	PCI/G	0	U		8/4/2005	2:10	14.9	PCI/G	7.16	PCI/G	1	3.5	1.98	G	PCI/G		PR	
9202-0000-132-C-1C-02	MSR#05-0800	131693022	406668	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.392	0.152	PCI/G	0		3/3/2005	38415.8125	7:28	0.142	PCI/G	0.0638	PCI/G	1	4.1	162	G	PCI/G		PR	
9202-0000-132-C-1C-02	MSR#05-0800	131693022	406668	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.00687	0.124	PCI/G	0	U	3/3/2005	38415.8125	7:28	0.17	PCI/G	0.0807	PCI/G	1	4.1	162	G	PCI/G		PR	
9202-0000-132-C-1C-02	MSR#05-0800	131693022	406668	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.155	0.264	PCI/G	0	U	3/3/2005	38415.8125	7:28	0.327	PCI/G	0.149	PCI/G	1	4.1	162	G	PCI/G		PR	
9202-0000-132-C-1C-02	MSR#05-0800	131693022	406668	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.295	0.107	PCI/G	0		3/3/2005	38415.8125	7:28	0.0824	PCI/G	0.0381	PCI/G	1	4.1	162	G	PCI/G		PR	
9202-0000-132-C-1C-02	MSR#05-0800	131693022	406668	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0463	0.0325	PCI/G	0	U	3/3/2005	38415.8125	7:28	0.0498	PCI/G	0.0228	PCI/G	1	4.1	162	G	PCI/G		PR	
9202-0000-132-C-1C-02	MSR#05-0800	131693022	406668	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.0313	0.023	PCI/G	0	U	3/3/2005	38415.8125	7:28	0.0371	PCI/G	0.0167	PCI/G	1	4.1	162	G	PCI/G		PR	
9202-0000-132-C-1C-02	MSR#05-0800	131693022	406668	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.00648	0.0212	PCI/G	0	U	3/3/2005	38415.8125	7:28	0.0433	PCI/G	0.0189	PCI/G	1	4.1	162	G	PCI/G		PR	
9202-0000-132-C-1C-02	MSR#05-0800	131693022	406668	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0217	0.0591	PCI/G	0	U	3/3/2005	38415.8125	7:28	0.107	PCI/G	0.0499	PCI/G	1	4.1	162	G	PCI/G		PR	
9202-0000-132-C-1C-02	MSR#05-0800	131693022	406668	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0199	0.0628	PCI/G	0	U	3/3/2005	38415.8125	7:28	0.116	PCI/G	0.0504	PCI/G	1	4.1	162	G	PCI/G		PR	
9202-0000-132-C-1C-02	MSR#05-0800	131693022	406668	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0701	0.068	PCI/G	0	U	3/3/2005	38415.8125	7:28	0.134	PCI/G	0.064	PCI/G	1	4.1	162	G	PCI/G		PR	
9202-0000-132-C-1C-02	MSR#05-0800	131693022	406668	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.316	0.0697	PCI/G	0		3/3/2005	38415.8125	7:28	0.0588	PCI/G	0.0276	PCI/G	1	4.1	162	G	PCI/G		PR	
9202-0000-132-C-1C-02	MSR#05-0800	131693022	406668	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.354	0.0898	PCI/G	0		3/3/2005	38415.8125	7:28	0.0874	PCI/G	0.041	PCI/G	1	4.1	162	G	PCI/G		PR	
9202-0000-132-C-1C-02	MSR#05-0800	131693022	406668	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.00895	0.0246	PCI/G	0	U	3/3/2005	38415.8125	7:28	0.0439	PCI/G	0.0199	PCI/G	1	4.1	162	G	PCI/G		PR	
9202-0000-132-C-1C-02	MSR#05-0800	131693022	406668	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.0018	0.0217	PCI/G	0	U	3/3/2005	38415.8125	7:28	0.0404	PCI/G	0.0186	PCI/G	1	4.1	162	G	PCI/G		PR	
9202-0000-132-C-1C-02	MSR#05-0800	131693022	406668	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	6.46	1.05	PCI/G	0		3/3/2005	38415.8125	7:28	0.417	PCI/G	0.181	PCI/G	1	4.1	162	G	PCI/G		PR	
9202-0000-132-C-1C-02	MSR#05-0800	131693022	406668	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.295	0.107	PCI/G	0		3/3/2005	38415.8125	7:28	0.0824	PCI/G	0.0381	PCI/G	1	4.1	162	G	PCI/G		PR	
9202-0000-132-C-1C-02	MSR#05-0800	131693022	406668	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00836	0.0229	PCI/G	0	U	3/3/2005	38415.8125	7:28	0.0352	PCI/G	0.0162	PCI/G	1	4.1	162	G	PCI/G		PR	
9202-0000-132-C-1C-02	MSR#05-0800	131693022	414565	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.0142	0.0178	PCI/G	0	U	7/3/2005	38446.75556	10:19	0.0344	PCI/G	0.0168	PCI/G	1	4.1	10.8	G	PCI/G		PR	
9202-0000-132-C-1C-02	MSR#05-0800	131693022	406668	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.0935	0.0496	PCI/G	0		3/3/2005	38415.8125	7:28	0.0402	PCI/G	0.0184	PCI/G	1	4.1	162	G	PCI/G		PR	
9202-0000-132-C-1C-02	MSR#05-0800	131693022	409925	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-4.78	8.03	PCI/G	0	U		8/4/2005	2:42	14.4	PCI/G	6.92	PCI/G	1	4.1	2.04	G	PCI/G		PR	
9202-0000-132-C-3C-03	MSR#05-0800	131693023	406668	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.191	0.135	PCI/G	0	U	3/3/2005	38415.8125	7:28	0.199	PCI/G	0.0935	PCI/G	1	5.3	174	G	PCI/G		PR	
9202-0000-132-C-3C-03	MSR#05-0800	131693023	406668	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0914	0.102	PCI/G	0	U	3/3/2005	38415.8125	7:28	0.171	PCI/G	0.0807	PCI/G	1	5.3	174	G	PCI/G		PR	
9202-0000-132-C-3C-03	MSR#05-0800	131693023	406668	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0	0.236	PCI/G	0	UUI	3/3/2005	38415.8125	7:28	0.262	PCI/G	0.119	PCI/G	1	5.3	174	G	PCI/G		PR	
9202-0000-132-C-3C-03	MSR#05-0800	131693023	406668	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.299	0.0856	PCI/G	0		3/3/2005	38415.8125	7:28	0.0545	PCI/G	0.0247	PCI/G	1	5.3	174	G	PCI/G		PR	
9202-0000-132-C-3C-03	MSR#05-0800	131693023	406668	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0186	0.0215	PCI/G	0	U	3/3/2005	38415.8125	7:28	0.0432	PCI/G	0.0198	PCI/G	1	5.3	174	G	PCI/G		PR	
9202-0000-132-C-3C-03	MSR#05-0800	131693023	406668	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.00188	0.0178	PCI/G	0	U	3/3/2005	38415.8125	7:28	0.03	PCI/G	0.0135	PCI/G	1	5.3	174	G	PCI/G		PR	
9202-0000-132-C-3C-03	MSR#05-0800	131693023	406668	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.00536	0.0183	PCI/G	0	U	3/3/2005	38415.8125	7:28	0.0372	PCI/G	0.0162	PCI/G	1	5.3	174	G	PCI/G		PR	
9202-0000-132-C-3C-03	MSR#05-0800	131693023	406668	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0456	0.047	PCI/G	0	U	3/3/2005	38415.8125	7:28	0.0711	PCI/G	0.0327	PCI/G	1	5.3	174	G	PCI/G		PR	
9202-0000-132-C-3C-03	MSR#05-0800	131693023	406668	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0	0.148	PCI/G	0	UUI	3/3/2005	38415.8125	7:28	0.127	PCI/G	0.0572	PCI/G	1	5.3	174	G	PCI/G		PR	
9202-0000-132-C-3C-03	MSR#05-0800	131693023	406668	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	-0.0248	0.0487	PCI/G	0	U	3/3/2005	38415.8125	7:28	0.0915	PCI/G	0.0434	PCI/G	1	5.3	174	G	PCI/G		PR	
9202-0000-132-C-3C-03	MSR#05-0800	131693023	406668	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.372	0.0864	PCI/G	0		3/3/2005	38415.8125	7:28	0.0451	PCI/G	0.0212	PCI/G	1	5.3	174	G	PCI/G		PR	
9202-0000-132-C-3C-03	MSR#05-0800	131693023	406668	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.293	0.078	PCI/G	0		3/3/2005	38415.8125	7:28	0.062	PCI/G	0.0289	PCI/G	1	5.3	174	G	PCI/G		PR	
9202-0000-132-C-3C-03	MSR#05-0800	131693023	406668	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.00159	0.0181	PCI/G	0	U	3/3/2005	38415.8125	7:28	0.0338	PCI/G	0.0153	PCI/G	1	5.3	174	G	PCI/G		PR	
9202-0000-132-C-3C-03	MSR#05-0800	131693023	406668	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00427	0.0183	PCI/G	0	U	3/3/2005	38415.8125	7:28	0.0307	PCI/G	0.0141	PCI/G	1	5.3	174	G	PCI/G		PR	
9202-0000-132-C-3C-03	MSR#05-0800	131693023	406668	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	6.35	0.86	PCI/G	0		3/3/2005	38415.8125	7:28	0.416	PCI/G	0.184	PCI/G	1	5.3	174	G	PCI/G		PR	
9202-0000-132-C-3C-03	MSR#05-0800	131693023	406668	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.299	0.0856	PCI/G	0		3/3/2005	38415.8125	7:28	0.0545	PCI/G	0.0247	PCI/G	1	5.3	174	G	PCI/G		PR	
9202-0000-132-C-3C-03	MSR#05-0800	131693023	406668	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.000509	0.0133	PCI/G	0	U	3/3/2005	38415.8125	7:28	0.0257	PCI/G	0.0117	PCI/G	1	5.3	174	G	PCI/G		PR	
9202-0000-132-C-3C-03	MSR#05-0800	131693023	414565	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.0185	0.0152	PCI/G	0	U	7/3/2005	38446.75556	10:19	0.0312	PCI/G	0.0153	PCI/G	1	5.3	12.7	G	PCI/G		PR	
9202-0000-132-C-3C-03	MSR#05-0800	131693023	406668	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0	0.0364	PCI/G	0	UUI	3/3/2005	38415.8125	7:28	0.0582	PCI/G	0.0277	PCI/G	1	5.3	174	G	PCI/G		PR	
9202-0000-132-C-3C-03	MSR#05-0800	131693023	409925	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-5.41	8.08	PCI/G	0	U		8/4/2005	3:15	14.5	PCI/G	6.99	PCI/G	1	5.3	2	G	PCI/G		PR	
9202-0000-132-C-5C-04	MSR#05-0800	131693024	406668	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.249	0.0988	PCI/G	0		3/3/2005	38415.8125	9:51	0.119	PCI/G	0.0538	PCI/G	1	5.3	198	G	PCI/G		PR	
9202-0000-132-C-5C-04	MSR#05-0800	131693024	406668	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0195	0.0686	PCI/G	0	U	3/3/2005	38415.8125	9:51	0.128	PCI/G	0.061	PCI/G	1	5.3	198	G	PCI/G		PR	
9202-0000-132-C-5C-04	MSR#05-0800	131693024	406668	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.174	0.154	PCI/G	0	U	3/3/2005	38415.8125	9:51	0.211	PCI/G	0.0947	PCI/G	1	5.3	198	G	PCI/G		PR	
9202-0000-132-C-5C-04	MSR#05-0800	131693024	406668	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.285	0.0626	PCI/G	0		3/3/2005	38415.8125	9:51	0.0612	PCI/G	0.0282	PCI/G	1	5.3	198	G	PCI/G		PR	
9202-0000-132-C-5C-04	MSR#05-0800	131693024	406668	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0277	0.023	PCI/G	0	U	3/3/2005	38415.8125	9:51	0.0395	PCI/G	0.0181	PCI/G	1	5.3	198	G	PCI/G		PR	
9202-0000-132-C-5C-04	MSR#05-0800	131693024	406668	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.00195	0.0161	PCI/G	0	U	3/3/2005	38415.8125	9:51	0.0317	PCI/G	0.0145	PCI/G	1	5.3	198	G	PCI/G		PR	
9202-0000-132-C-5C-04	MSR#05-0800	131693024	406668	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.00373	0.0204	PCI/G	0	U	3/3/2005	38415.8125	9:51	0.0381	PCI/G	0.0169	PCI/G	1	5.3	198	G	PCI/G		PR	
9202-0000-132-C-5C-04	MSR#05-0800	131693024	406668	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.013	0.0495	PCI/G	0	U	3/3/2005	38415.8125	9:51	0.0856	PCI/G	0.0401	PCI/G	1	5.3	198	G	PCI/G		PR	
9202-0000-132-C-5C-04	MSR#05-0800	131693024	406668	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0324	0.0508	PCI/G	0	U	3/3/2005	38415.8125	9:51	0.0892	PCI/G	0.0387	PCI/G	1	5.3	198	G	PCI/G		PR	
9202-0000-132-C-5C-04	MSR#05-0800	131693024	406668	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	-0.0206	0.0475	PCI/G	0	U	3/3/2005	38415.8125	9:51	0.0902	PCI/G	0.0431	PCI/G	1	5.3	198	G	PCI/G		PR	
9202-0000-132-C-5C-04	MSR#05-0800	131693024	406668	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.273	0.0523	PCI/G	0		3/3/2005	38415.8125	9:51	0.0511	PCI/G	0.0243	PCI/G	1	5.3	198	G	PCI/G		PR	
9202-0000-132-C-5C-04	MSR#05-0800	131693024	406668	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.323	0.0661	PCI/G	0		3/3/2005	38415.8125	9:51	0.0597	PCI/G	0.0279	PCI/G	1	5.3	198	G	PCI/G		PR	
9202-0000-132-C-5C-04	MSR#05-0800	131693024	406668	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0114	0.0209	PCI/G	0	U	3/3/2005	38415.8125	9:51	0.0347	PCI/G	0.0159	PCI/G	1	5.3	198	G	PCI/G		PR	
9202-0000-132-C-5C-04	MSR#05-0800	131693024	406668	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.00478	0.0143	PCI/G	0	U	3/3/2005	38415.8125	9:51	0.0265	PCI/G	0.012	PCI/G	1	5.3	198	G	PCI/G		PR	
9202-0000-132-C-5C-04	MSR#05-0800	131693024	406668	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	5.76	0.74	PCI/G	0		3/3/2005	38415.8125	9:51	0.372	PCI/G	0.164	PCI/G	1	5.3	198	G	PCI/G		PR	
9202-0000-132-C-5C-04	MSR#05-0800	131693024	406668	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.285	0.0626	PCI/G	0		3/3/2005	38415.8125	9:51	0.0612	PCI/G	0.0282	PCI/G	1	5.3	198	G	PCI/G		PR	
9202-0000-132-C-5C-04	MSR#05-0800	131693024	406668	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00396	0.0158	PCI/G	0	U	3/3/2005	38415.8125	9:51	0.029	PCI/G	0.0135	PCI/G	1	5.3	198	G	PCI/G		PR	
9202-0000-132-C-5C-04	MSR#05-0800	131693024	414565	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00157	0.0176	PCI/G	0	U	7/3/2005	38446.75556	10:19	0.0349	PCI/G	0.017	PCI/G	1	5.3	12.8	G	PCI/G		PR	
9202-0000-132-C-5C-04	MSR#05-0800	131693024	406668	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.0836	0.0334	PCI/G	0		3/3/2005	38415.8125	9:51	0.0316	PCI/G	0.0145	PCI/G	1	5.3	198	G	PCI/G		PR	

9202-0000-132-C-5C-04	MSR#05-0800	131693024	409925	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-4.64	8.1	PCI/G	0	U		8/4/2005	3:47	14.5	PCI/G	6.97	PCI/G	1	5.3	1.99	G	PCI/G		PR	
9202-0000-132-C-5C-05	MSR#05-0800	131693025	406668	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.485	0.184	PCI/G	0		3/3/2005	38415.8125	9:51	0.129	PCI/G	0.0572	PCI/G	1	5.6	179	G	PCI/G		PR	
9202-0000-132-C-5C-05	MSR#05-0800	131693025	406668	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0223	0.0307	PCI/G	0	U	3/3/2005	38415.8125	9:51	0.0596	PCI/G	0.0287	PCI/G	1	5.6	179	G	PCI/G		PR	
9202-0000-132-C-5C-05	MSR#05-0800	131693025	412129	14596-10-2	Americium-241	TRG 1	UAM05RCM	AM05RCM	REG	-0.0489	0.0964	PCI/G	0	U	7/3/2005	38446.75278	1:54	0.315	PCI/G	0.125	PCI/G	1	5.6	0.263	G	PCI/G		PR	
9202-0000-132-C-5C-05	MSR#05-0800	131693025	406668	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.0581	0.216	PCI/G	0	U	3/3/2005	38415.8125	9:51	0.364	PCI/G	0.167	PCI/G	1	5.6	179	G	PCI/G		PR	
9202-0000-132-C-5C-05	MSR#05-0800	131693025	406668	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0	0.0896	PCI/G	0	UUI	3/3/2005	38415.8125	9:51	0.162	PCI/G	0.078	PCI/G	1	5.6	179	G	PCI/G		PR	
9202-0000-132-C-5C-05	MSR#05-0800	131693025	407148	14762-75-5	Carbon-14	TRG 5	ULSC	LSC	REG	-0.0545	0.0901	PCI/G	0	U		19/03/2005	8:57	0.155	PCI/G	0.0764	PCI/G	1	5.6	9.26	G	PCI/G		PR	
9202-0000-132-C-5C-05	MSR#05-0800	131693025	406668	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0492	0.0381	PCI/G	0	U	3/3/2005	38415.8125	9:51	0.0511	PCI/G	0.0234	PCI/G	1	5.6	179	G	PCI/G		PR	
9202-0000-132-C-5C-05	MSR#05-0800	131693025	406668	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.0241	0.0292	PCI/G	0	U	3/3/2005	38415.8125	9:51	0.0417	PCI/G	0.0191	PCI/G	1	5.6	179	G	PCI/G		PR	
9202-0000-132-C-5C-05	MSR#05-0800	131693025	406668	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0117	0.0196	PCI/G	0	U	3/3/2005	38415.8125	9:51	0.0395	PCI/G	0.017	PCI/G	1	5.6	179	G	PCI/G		PR	
9202-0000-132-C-5C-05	MSR#05-0800	131693025	412129	OER-100-93	Curium-242	TRG 1	UAM05RCM	AM05RCM	REG	0.0313	0.0881	PCI/G	0	U	7/3/2005	38446.75278	1:54	0.219	PCI/G	0.0686	PCI/G	1	5.6	0.263	G	PCI/G		PR	
9202-0000-132-C-5C-05	MSR#05-0800	131693025	412129	OER-101-57	Curium-243/244	TRG 1	UAM05RCM	AM05RCM	REG	-0.0597	0.111	PCI/G	0	U	7/3/2005	38446.75278	1:54	0.35	PCI/G	0.143	PCI/G	1	5.6	0.263	G	PCI/G		PR	
9202-0000-132-C-5C-05	MSR#05-0800	131693025	406668	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0282	0.056	PCI/G	0	U	3/3/2005	38415.8125	9:51	0.099	PCI/G	0.0461	PCI/G	1	5.6	179	G	PCI/G		PR	
9202-0000-132-C-5C-05	MSR#05-0800	131693025	406668	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0391	0.152	PCI/G	0	U	3/3/2005	38415.8125	9:51	0.126	PCI/G	0.0553	PCI/G	1	5.6	179	G	PCI/G		PR	
9202-0000-132-C-5C-05	MSR#05-0800	131693025	406668	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0739	0.0751	PCI/G	0	U	3/3/2005	38415.8125	9:51	0.0973	PCI/G	0.0465	PCI/G	1	5.6	179	G	PCI/G		PR	
9202-0000-132-C-5C-05	MSR#05-0800	131693025	407185	14681-59-5	Iron-55	TRG 26	ULSC	LSC	REG	-6.76	54.1	PCI/G	0	U	7/3/2005	38415.77083	8:10	74.9	PCI/G	36.7	PCI/G	1	5.6	0.198	G	PCI/G		PR	
9202-0000-132-C-5C-05	MSR#05-0800	131693025	406668	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.338	0.0641	PCI/G	0		3/3/2005	38415.8125	9:51	0.0587	PCI/G	0.0278	PCI/G	1	5.6	179	G	PCI/G		PR	
9202-0000-132-C-5C-05	MSR#05-0800	131693025	406668	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.366	0.0837	PCI/G	0		3/3/2005	38415.8125	9:51	0.0793	PCI/G	0.0372	PCI/G	1	5.6	179	G	PCI/G		PR	
9202-0000-132-C-5C-05	MSR#05-0800	131693025	406668	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.00371	0.0215	PCI/G	0	U	3/3/2005	38415.8125	9:51	0.0396	PCI/G	0.0178	PCI/G	1	5.6	179	G	PCI/G		PR	
9202-0000-132-C-5C-05	MSR#05-0800	131693025	407187	13781-37-8	Nickel-63	TRG 30	ULSC	LSC	REG	-1.79	7.83	PCI/G	0	U	7/3/2005	38415.77014	1:16	13.6	PCI/G	6.62	PCI/G	1	5.6	0.198	G	PCI/G		PR	
9202-0000-132-C-5C-05	MSR#05-0800	131693025	406668	14681-83-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.0111	0.0182	PCI/G	0	U	3/3/2005	38415.8125	9:51	0.032	PCI/G	0.0144	PCI/G	1	5.6	179	G	PCI/G		PR	
9202-0000-132-C-5C-05	MSR#05-0800	131693025	412132	13981-16-3	Plutonium-238	TRG 32	UPU11RCM	PU11RCM	REG	-0.00979	0.0506	PCI/G	0	U	7/3/2005	38446.75139	11:12	0.184	PCI/G	0.0621	PCI/G	1	5.6	0.263	G	PCI/G		PR	
9202-0000-132-C-5C-05	MSR#05-0800	131693025	412132	OER-100-70	Plutonium-239/240	TRG 32	UPU11RCM	PU11RCM	REG	0.0116	0.046	PCI/G	0	U	7/3/2005	38446.75139	11:12	0.132	PCI/G	0.0358	PCI/G	1	5.6	0.263	G	PCI/G		PR	
9202-0000-132-C-5C-05	MSR#05-0800	131693025	412133	14119-32-5	Plutonium-241	TRG 36	UPU11RCM	PU11RCM	REG	1.83	7.08	PCI/G	0	U	7/3/2005	38446.75347	1:36	12.1	PCI/G	5.89	PCI/G	1	5.6	0.542	G	PCI/G		PR	
9202-0000-132-C-5C-05	MSR#05-0800	131693025	406668	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	6.36	0.93	PCI/G	0		3/3/2005	38415.8125	9:51	0.326	PCI/G	0.135	PCI/G	1	5.6	179	G	PCI/G		PR	
9202-0000-132-C-5C-05	MSR#05-0800	131693025	406668	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.347	0.0896	PCI/G	0		3/3/2005	38415.8125	9:51	0.0855	PCI/G	0.0396	PCI/G	1	5.6	179	G	PCI/G		PR	
9202-0000-132-C-5C-05	MSR#05-0800	131693025	406668	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.0134	0.0188	PCI/G	0	U	3/3/2005	38415.8125	9:51	0.0373	PCI/G	0.0173	PCI/G	1	5.6	179	G	PCI/G		PR	
9202-0000-132-C-5C-05	MSR#05-0800	131693025	414565	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.167	0.034	PCI/G	0		7/3/2005	38446.75556	10:19	0.059	PCI/G	0.0289	PCI/G	1	5.6	13.1	G	PCI/G		PR	
9202-0000-132-C-5C-05	MSR#05-0800	131693025	409273	14133-76-7	Technetium-99	TRG 46	UTC02RCM	TC02RCM	REG	0.0933	0.178	PCI/G	0	U		21/03/2005	10:43	0.302	PCI/G	0.147	PCI/G	1	5.6	7.06	G	PCI/G		PR	
9202-0000-132-C-5C-05	MSR#05-0800	131693025	406668	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.131	0.0496	PCI/G	0		3/3/2005	38415.8125	9:51	0.0399	PCI/G	0.0183	PCI/G	1	5.6	179	G	PCI/G		PR	
9202-0000-132-C-5C-05	MSR#05-0800	131693025	409925	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-0.372	7.59	PCI/G	0	U		8/4/2005	4:19	13.2	PCI/G	6.38	PCI/G	1	5.6	2.02	G	PCI/G		PR	
9202-0000-136-C-1C-01	MSR#05-0800	131693026	406668	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.524	0.248	PCI/G	0		3/3/2005	38415.8125	9:52	0.186	PCI/G	0.0846	PCI/G	1	3.9	136	G	PCI/G		PR	
9202-0000-136-C-1C-01	MSR#05-0800	131693026	406668	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0672	0.11	PCI/G	0	U	3/3/2005	38415.8125	9:52	0.211	PCI/G	0.101	PCI/G	1	3.9	136	G	PCI/G		PR	
9202-0000-136-C-1C-01	MSR#05-0800	131693026	406668	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.197	0.229	PCI/G	0	U	3/3/2005	38415.8125	9:52	0.453	PCI/G	0.21	PCI/G	1	3.9	136	G	PCI/G		PR	
9202-0000-136-C-1C-01	MSR#05-0800	131693026	406668	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.332	0.112	PCI/G	0		3/3/2005	38415.8125	9:52	0.0938	PCI/G	0.0432	PCI/G	1	3.9	136	G	PCI/G		PR	
9202-0000-136-C-1C-01	MSR#05-0800	131693026	406668	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.00432	0.0282	PCI/G	0	U	3/3/2005	38415.8125	9:52	0.0533	PCI/G	0.0241	PCI/G	1	3.9	136	G	PCI/G		PR	
9202-0000-136-C-1C-01	MSR#05-0800	131693026	406668	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.00379	0.0261	PCI/G	0	U	3/3/2005	38415.8125	9:52	0.0496	PCI/G	0.0227	PCI/G	1	3.9	136	G	PCI/G		PR	
9202-0000-136-C-1C-01	MSR#05-0800	131693026	406668	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.023	0.0264	PCI/G	0	U	3/3/2005	38415.8125	9:52	0.0569	PCI/G	0.0252	PCI/G	1	3.9	136	G	PCI/G		PR	
9202-0000-136-C-1C-01	MSR#05-0800	131693026	406668	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0428	0.0693	PCI/G	0	U	3/3/2005	38415.8125	9:52	0.12	PCI/G	0.0557	PCI/G	1	3.9	136	G	PCI/G		PR	
9202-0000-136-C-1C-01	MSR#05-0800	131693026	406668	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0489	0.0766	PCI/G	0	U	3/3/2005	38415.8125	9:52	0.132	PCI/G	0.0572	PCI/G	1	3.9	136	G	PCI/G		PR	
9202-0000-136-C-1C-01	MSR#05-0800	131693026	406668	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0029	0.0758	PCI/G	0	U	3/3/2005	38415.8125	9:52	0.137	PCI/G	0.0653	PCI/G	1	3.9	136	G	PCI/G		PR	
9202-0000-136-C-1C-01	MSR#05-0800	131693026	406668	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.375	0.0864	PCI/G	0		3/3/2005	38415.8125	9:52	0.0779	PCI/G	0.0369	PCI/G	1	3.9	136	G	PCI/G		PR	
9202-0000-136-C-1C-01	MSR#05-0800	131693026	406668	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.286	0.129	PCI/G	0		3/3/2005	38415.8125	9:52	0.0979	PCI/G	0.0459	PCI/G	1	3.9	136	G	PCI/G		PR	
9202-0000-136-C-1C-01	MSR#05-0800	131693026	406668	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0204	0.02	PCI/G	0	U	3/3/2005	38415.8125	9:52	0.0483	PCI/G	0.0218	PCI/G	1	3.9	136	G	PCI/G		PR	
9202-0000-136-C-1C-01	MSR#05-0800	131693026	406668	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00873	0.0224	PCI/G	0	U	3/3/2005	38415.8125	9:52	0.0435	PCI/G	0.0199	PCI/G	1	3.9	136	G	PCI/G		PR	
9202-0000-136-C-1C-01	MSR#05-0800	131693026	406668	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	8.18	1.26	PCI/G	0		3/3/2005	38415.8125	9:52	0.419	PCI/G	0.177	PCI/G	1	3.9	136	G	PCI/G		PR	
9202-0000-136-C-1C-01	MSR#05-0800	131693026	406668	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.332	0.112	PCI/G	0		3/3/2005	38415.8125	9:52	0.0938	PCI/G	0.0432	PCI/G	1	3.9	136	G	PCI/G		PR	
9202-0000-136-C-1C-01	MSR#05-0800	131693026	406668	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.0112	0.0237	PCI/G	0	U	3/3/2005	38415.8125	9:52	0.0448	PCI/G	0.0208	PCI/G	1	3.9	136	G	PCI/G		PR	
9202-0000-136-C-1C-01	MSR#05-0800	131693026	414565	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.0014	0.012	PCI/G	0	U	7/3/2005	38446.75556	10:19	0.0239	PCI/G	0.0116	PCI/G	1	3.9	12.8	G	PCI/G		PR	
9202-0000-136-C-1C-01	MSR#05-0800	131693026	406668	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.162	0.05	PCI/G	0		3/3/2005	38415.8125	9:52	0.0376	PCI/G	0.0168	PCI/G	1	3.9	136	G	PCI/G		PR	
9202-0000-136-C-1C-01	MSR#05-0800	131693026	409925	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	4.6	8.32	PCI/G	0	U		5/4/2005	9:50	14.2	PCI/G	6.74	PCI/G	1	3.9	1.99	G	PCI/G		PR	
9202-0000-136-C-1C-02	MSR#05-0800	131693027	406668	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.331	0.186	PCI/G	0		3/3/2005	38415.8125	9:52	0.154	PCI/G	0.0689	PCI/G	1	4.1	181	G	PCI/G		PR	
9202-0000-136-C-1C-02	MSR#05-0800	131693027	406668	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.00214	0.0278	PCI/G	0	U	3/3/2005	38415.8125	9:52	0.0501	PCI/G	0.0237	PCI/G	1	4.1	181	G	PCI/G		PR	
9202-0000-136-C-1C-02	MSR#05-0800	131693027	406668	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0	0.23	PCI/G	0	U	3/3/2005	38415.8125	9:52	0.359	PCI/G	0.164	PCI/G	1	4.1	181	G	PCI/G		PR	
9202-0000-136-C-1C-02	MSR#05-0800	131693027	406668	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.262	0.116	PCI/G	0		3/3/2005	38415.8125	9:52	0.071	PCI/G	0.0321	PCI/G	1	4.1	181	G	PCI/G		PR	
9202-0000-136-C-1C-02	MSR#05-0800	131693027	406668	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	-0.00684	0.0253	PCI/G	0	U	3/3/2005	38415.8125	9:52	0.047	PCI/G	0.0211	PCI/G	1	4.1	181	G	PCI/G		PR	
9202-0000-136-C-1C-02	MSR#05-0800	131693027	406668	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.00194	0.0229	PCI/G	0	U	3/3/2005	38415.8125	9:52	0.044	PCI/G	0.02	PCI/G	1	4.1	181	G	PCI/G		PR	
9202-0000-136-C-1C-02	MSR#05-0800	131693027	406668	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.00387	0.0169	PCI/G	0	U	3/3/2005	38415.8125	9:52	0.0337	PCI/G	0.0137	PCI/G	1	4.1	181	G	PCI/G		PR	
9202-0000-136-C-1C-02	MSR#05-0800	131693027	406668	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0478	0.054	PCI/G	0	U	3/3/2005	38415.8125	9:52	0.0943	PCI/G	0.0436	PCI/G	1	4.1	181	G	PCI/G		PR	
9202-0000-136-C-1C-02	MSR#05-0800	131693027	406668	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0	0.0851	PCI/G	0	U	3/3/2005	38415.8125	9:52	0.135	PCI/G	0.0589	PCI/G	1	4.1	181	G	PCI/G		PR	
9202-0000-136-C-1C-02	MSR#05-0800	131693027	406668	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0328	0.0594	PCI/G	0	U	3/3/2005	38415.8125	9:52	0.0834	PCI/G	0.0394	PCI/G	1	4.1	181	G	PCI/G		PR	
9202-0000-136-C-1C-02	MSR#05-0800	131693027	406668	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.268	0.052	PCI/G	0		3/3/2005	38415.8125	9:52	0.0498	PCI/G	0.0233	PCI/G	1	4.1	181	G	PCI/G		PR	
9202-0000-136-C-1C-02	MSR#05-0800	131693027	406668	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.284	0.0892	PCI/G	0		3/3/2005	38415.8125	9:52	0.0694	PCI/G	0.0321	PCI/G	1	4.1	181	G	PCI/G		PR	
9202-0000-136-C-1C-02	MSR#05-0800	131693027	406668	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.0053	0.0312	PCI/G	0	U	3/3/2005	38415.8125	9:52	0.0503	PCI/G	0.023	PCI/G	1	4.1	181	G	PCI/G		PR	
9202-0000-136-C-1C-02	MSR#05-0800	131693027	406668	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.0034	0.0226	PCI/G	0	U	3/3/2005	38415.8125	9:52	0.0376	PCI/G	0.0171	PCI/G	1	4.1	181	G	PCI/G		PR	
9202-0000-136-C-1C-02	MSR#05-0800	131693027	406668	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	5.58	0.873	PCI/G	0		3/3/2005	38415.8125	9:52	0.357	PCI/G	0.147	PCI/G	1	4.1	181	G	PCI/G		PR	
9202-0000-136-C-1C-02	MSR#05-0800	131693027	406668	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.262	0.116	PCI/G	0		3/3/2005	38415.8125	9:52	0.071	PCI/G	0.0321	PCI/G	1	4.1	181	G	PCI/G		PR	
9202-0000-136-C-1C-02	MSR#05-0800	131693027	406668	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00167	0.0192	PCI/G	0	U	3/3/2005	38415.8125	9:52	0.0356	PCI/G	0.0164	PCI/G	1	4.1	181	G	PCI/G		PR	
9202-0000-136-C-1C-02	MSR#05-0800	131693027	414565	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00074	0.012	PCI/G	0	U	7/3/2005	38446.75556	10:19	0.024	PCI/G	0.0116	PCI/G	1	4.1	12.9	G	PCI/G		PR	
9202-0000-136-C-1C-02	MSR#05-0800	131693027	406668	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0	0.0374	PCI/G	0	UUI	3/3/2005	38415.8125	9:52	0.0725	PCI/G	0.0345	PCI/G	1	4.1	181	G	PCI/G		PR	
9202-0000-136-C-1C-02	MSR#05-0800	131693027	409925	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	4	7.63	PCI/G	0	U		5/4/2005	10:07	13.1	PCI/G	6.19	PCI/G	1	4.1	2.08	G	PCI/G		PR	
9202-0000-136-C-2C-03	MSR#05-0800	131693028	406668	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.454	0.133	PCI/G	0		3/3/2005	38415.88194	11:52	0.0914	PCI/G	0.0416	PCI/G	1	6.2	160	G	PCI/G		PR	
9202-0000-136-C-2C-03	MSR#05-0800	131693028	406668	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0277	0.0495	PCI/G	0	U	3/3/2005	38415.88194	11:52	0.0949	PCI/G	0.0453	PCI/G	1	6.2	160	G	PCI/G		PR	
9202-0000-136-C-2C-03	MSR#05-0800	131693028	406668	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.217	0.18	PCI/G	0		3/3/2005	38415.88194	11:52	0.207	PCI/G	0.0954	PCI/G	1	6.2	160	G	PCI/G		PR	
9202-0000-136-C-2C-03	MSR#05-0800	131693028	406668	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.264	0.0649	PCI/G	0		3/3/2005	38415.88194	11:52	0.056	PCI/G	0.0262	PCI/G	1	6.2	160	G	PCI/G		PR	
9202-0000-136-C-2C-03	MSR#05-0800	131693028	406668	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.017	0.0185	PCI/G	0	U	3/3/2005	38415.88194	11:52	0.0359	PCI/G	0.0168	PCI/G	1	6.2	160	G	PCI/G		PR	
9202-0000-136-C-2C-03	MSR#05-0800	131693028	406668	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.0107	0.0117	PCI/G	0	U	3/3/2005	38415.88194	11:52	0.0197	PCI/G	0.00883	PCI/G	1	6.2	160	G	PCI/G		PR	
9202-0000-136-C-2C-03	MSR#05-0800	131693028	406668	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.000603	0.015	PCI/G	0	U	3/3/2005	38415.88194	11:52	0.0279	PCI/G	0.0124	PCI/G	1	6.2	160	G	PCI/G		PR	
9202-0000-136-C-2C-03	MSR#05-0800	131693028	406668	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0152	0.0386	PCI/G	0	U	3/3/2005	38415.88194	11:52	0.0732	PCI/G	0.0345	PCI/G	1	6.2	160	G	PCI/G		PR	
9202-0000-136-C-2C-03	MSR#05-0800	131693028	406668	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0314	0.0487	PCI/G	0	U	3/3/2005	38415.88194	11:52	0.095	PCI/G	0.0434	PCI/G	1	6.2	160	G	PCI/G		PR	
9202-0000-136-C-2C-03	MSR#05-0800	131693028	406668	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0365	0.0462	PCI/G	0	U	3/3/2005	38415.88194	11:52	0.0904	PCI/G	0.0433	PCI/G	1	6.2	160	G	PCI/G		PR	
9202-0000-136-C-2C-03	MSR#05-0800	131693028	406668	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.333	0.0538	PCI/G	0		3/3/2005	38415.88194	11:52	0.0438	PCI/G	0.0209	PCI/G	1	6.2	160	G	PCI/G		PR	
9202-0000-136-C-2C-03	MSR#05-0800	131693028	406668	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.264	0.0767	PCI/G	0		3/3/2005	38415.88194	11:52	0.0522	PCI/G	0.0246	PCI/G	1	6.2	160	G	PCI/G		PR	
9202-0000-136-C-2C-03	MSR#05-0800	131693028	406668	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.0147	0.0156	PCI/G	0	U	3/3/2005	38415.88194	11:52	0.0251	PCI/G	0.0115	PCI/G	1	6.2	160	G	PCI/G		PR	
9202-0000-136-C-2C-03	MSR#05-0800	131693028	406668	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00665	0.0144	PCI/G	0	U	3/3/2005	38415.88194	11:52	0.0272	PCI/G	0.0127	PCI/G	1	6.2	160	G	PCI/G		PR	
9202-0000-136-C-2C-03	MSR#05-0800	131693028	406668	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	6.22	0.756	PCI/G	0		3/3/2005	38415.88194	11:52	0.268	PCI/G	0.119	PCI/G	1	6.2	160	G	PCI/G		PR	

9202-0000-136-C-2C-03	MSR#05-0800	131693028	406668	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.264	0.0649	PCI/G	0		3/3/2005	38415.88194	11:52	0.056	PCI/G	0.0262	PCI/G	1	6.2	160	G	PCI/G	PR	
9202-0000-136-C-2C-03	MSR#05-0800	131693028	406668	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00567	0.0149	PCI/G	0	U	3/3/2005	38415.88194	11:52	0.0225	PCI/G	0.0104	PCI/G	1	6.2	160	G	PCI/G	PR	
9202-0000-136-C-2C-03	MSR#05-0800	131693028	414565	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00441	0.0127	PCI/G	0	U	7/3/2005	38446.75556	10:19	0.025	PCI/G	0.0121	PCI/G	1	6.2	11.2	G	PCI/G	PR	
9202-0000-136-C-2C-03	MSR#05-0800	131693028	406668	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.121	0.0326	PCI/G	0		3/3/2005	38415.88194	11:52	0.0282	PCI/G	0.0131	PCI/G	1	6.2	160	G	PCI/G	PR	
9202-0000-136-C-2C-03	MSR#05-0800	131693028	409925	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	2.24	7.51	PCI/G	0	U		5/4/2005	10:24	13	PCI/G	6.18	PCI/G	1	6.2	2.03	G	PCI/G	PR	
9202-0000-136-C-4C-04	MSR#05-0800	131693029	406668	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.337	0.291	PCI/G	0		3/3/2005	38415.88194	11:52	0.239	PCI/G	0.107	PCI/G	1	7.4	145	G	PCI/G	PR	
9202-0000-136-C-4C-04	MSR#05-0800	131693029	406668	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0017	0.0794	PCI/G	0	U	3/3/2005	38415.88194	11:52	0.13	PCI/G	0.0624	PCI/G	1	7.4	145	G	PCI/G	PR	
9202-0000-136-C-4C-04	MSR#05-0800	131693029	406668	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.315	0.285	PCI/G	0	U	3/3/2005	38415.88194	11:52	0.58	PCI/G	0.266	PCI/G	1	7.4	145	G	PCI/G	PR	
9202-0000-136-C-4C-04	MSR#05-0800	131693029	406668	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.296	0.114	PCI/G	0		3/3/2005	38415.88194	11:52	0.137	PCI/G	0.0633	PCI/G	1	7.4	145	G	PCI/G	PR	
9202-0000-136-C-4C-04	MSR#05-0800	131693029	406668	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0217	0.0388	PCI/G	0	U	3/3/2005	38415.88194	11:52	0.0785	PCI/G	0.0355	PCI/G	1	7.4	145	G	PCI/G	PR	
9202-0000-136-C-4C-04	MSR#05-0800	131693029	406668	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.0501	0.0819	PCI/G	0	U	3/3/2005	38415.88194	11:52	0.0677	PCI/G	0.0308	PCI/G	1	7.4	145	G	PCI/G	PR	
9202-0000-136-C-4C-04	MSR#05-0800	131693029	406668	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.015	0.0297	PCI/G	0	U	3/3/2005	38415.88194	11:52	0.0645	PCI/G	0.0273	PCI/G	1	7.4	145	G	PCI/G	PR	
9202-0000-136-C-4C-04	MSR#05-0800	131693029	406668	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0229	0.0918	PCI/G	0	U	3/3/2005	38415.88194	11:52	0.154	PCI/G	0.0716	PCI/G	1	7.4	145	G	PCI/G	PR	
9202-0000-136-C-4C-04	MSR#05-0800	131693029	406668	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0449	0.0986	PCI/G	0	U	3/3/2005	38415.88194	11:52	0.203	PCI/G	0.0884	PCI/G	1	7.4	145	G	PCI/G	PR	
9202-0000-136-C-4C-04	MSR#05-0800	131693029	406668	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0188	0.0879	PCI/G	0	U	3/3/2005	38415.88194	11:52	0.16	PCI/G	0.0763	PCI/G	1	7.4	145	G	PCI/G	PR	
9202-0000-136-C-4C-04	MSR#05-0800	131693029	406668	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.382	0.0959	PCI/G	0		3/3/2005	38415.88194	11:52	0.086	PCI/G	0.0407	PCI/G	1	7.4	145	G	PCI/G	PR	
9202-0000-136-C-4C-04	MSR#05-0800	131693029	406668	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.255	0.112	PCI/G	0		3/3/2005	38415.88194	11:52	0.0992	PCI/G	0.0458	PCI/G	1	7.4	145	G	PCI/G	PR	
9202-0000-136-C-4C-04	MSR#05-0800	131693029	406668	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0187	0.0353	PCI/G	0	U	3/3/2005	38415.88194	11:52	0.0711	PCI/G	0.0321	PCI/G	1	7.4	145	G	PCI/G	PR	
9202-0000-136-C-4C-04	MSR#05-0800	131693029	406668	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0227	0.0335	PCI/G	0	U	3/3/2005	38415.88194	11:52	0.0649	PCI/G	0.0297	PCI/G	1	7.4	145	G	PCI/G	PR	
9202-0000-136-C-4C-04	MSR#05-0800	131693029	406668	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	5.38	1.34	PCI/G	0		3/3/2005	38415.88194	11:52	0.562	PCI/G	0.232	PCI/G	1	7.4	145	G	PCI/G	PR	
9202-0000-136-C-4C-04	MSR#05-0800	131693029	406668	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.296	0.114	PCI/G	0		3/3/2005	38415.88194	11:52	0.137	PCI/G	0.0633	PCI/G	1	7.4	145	G	PCI/G	PR	
9202-0000-136-C-4C-04	MSR#05-0800	131693029	406668	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.000155	0.0288	PCI/G	0	U	3/3/2005	38415.88194	11:52	0.053	PCI/G	0.0244	PCI/G	1	7.4	145	G	PCI/G	PR	
9202-0000-136-C-4C-04	MSR#05-0800	131693029	414565	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00515	0.00856	PCI/G	0	U	7/3/2005	38446.75556	10:19	0.0167	PCI/G	0.00809	PCI/G	1	7.4	11.5	G	PCI/G	PR	
9202-0000-136-C-4C-04	MSR#05-0800	131693029	406668	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.155	0.0714	PCI/G	0		3/3/2005	38415.88194	11:52	0.0566	PCI/G	0.0255	PCI/G	1	7.4	145	G	PCI/G	PR	
9202-0000-136-C-4C-04	MSR#05-0800	131693029	409925	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	1.08	8.07	PCI/G	0	U		6/4/2005	5:11	14.2	PCI/G	6.71	PCI/G	1	7.4	2	G	PCI/G	PR	
9202-0000-136-C-4C-05	MSR#05-0800	131693030	406668	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.337	0.146	PCI/G	0		3/3/2005	38415.88194	12:08	0.12	PCI/G	0.0528	PCI/G	1	7.4	152	G	PCI/G	PR	
9202-0000-136-C-4C-05	MSR#05-0800	131693030	406668	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.00935	0.0775	PCI/G	0	U	3/3/2005	38415.88194	12:08	0.147	PCI/G	0.07	PCI/G	1	7.4	152	G	PCI/G	PR	
9202-0000-136-C-4C-05	MSR#05-0800	131693030	412129	14596-10-2	Americium-241	TRG 1	UAM05RCM	AM05RCM	REG	0.0862	0.0974	PCI/G	0	U	7/3/2005	38446.75347	12:28	0.145	PCI/G	0.0395	PCI/G	1	7.4	0.264	G	PCI/G	PR	
9202-0000-136-C-4C-05	MSR#05-0800	131693030	406668	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.195	0.341	PCI/G	0	U	3/3/2005	38415.88194	12:08	0.312	PCI/G	0.142	PCI/G	1	7.4	152	G	PCI/G	PR	
9202-0000-136-C-4C-05	MSR#05-0800	131693030	406668	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.309	0.0722	PCI/G	0		3/3/2005	38415.88194	12:08	0.0792	PCI/G	0.0367	PCI/G	1	7.4	152	G	PCI/G	PR	
9202-0000-136-C-4C-05	MSR#05-0800	131693030	407148	14762-75-5	Carbon-14	TRG 5	ULSC	LSC	REG	-0.0492	0.0901	PCI/G	0	U		19/03/2005	10:29	0.155	PCI/G	0.0764	PCI/G	1	7.4	9.18	G	PCI/G	PR	
9202-0000-136-C-4C-05	MSR#05-0800	131693030	406668	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0116	0.023	PCI/G	0	U	3/3/2005	38415.88194	12:08	0.0453	PCI/G	0.0206	PCI/G	1	7.4	152	G	PCI/G	PR	
9202-0000-136-C-4C-05	MSR#05-0800	131693030	406668	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.00556	0.0194	PCI/G	0	U	3/3/2005	38415.88194	12:08	0.0356	PCI/G	0.0161	PCI/G	1	7.4	152	G	PCI/G	PR	
9202-0000-136-C-4C-05	MSR#05-0800	131693030	406668	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0355	0.0172	PCI/G	0	U	3/3/2005	38415.88194	12:08	0.0457	PCI/G	0.0201	PCI/G	1	7.4	152	G	PCI/G	PR	
9202-0000-136-C-4C-05	MSR#05-0800	131693030	412129	OER-100-93	Curium-242	TRG 1	UAM05RCM	AM05RCM	REG	0	0.0595	PCI/G	0	U	7/3/2005	38446.75347	12:28	0.0823	PCI/G	0	PCI/G	1	7.4	0.264	G	PCI/G	PR	
9202-0000-136-C-4C-05	MSR#05-0800	131693030	412129	OER-101-57	Curium-243/244	TRG 1	UAM05RCM	AM05RCM	REG	-0.0236	0.0535	PCI/G	0	U	7/3/2005	38446.75347	12:28	0.179	PCI/G	0.0561	PCI/G	1	7.4	0.264	G	PCI/G	PR	
9202-0000-136-C-4C-05	MSR#05-0800	131693030	406668	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.00492	0.0549	PCI/G	0	U	3/3/2005	38415.88194	12:08	0.102	PCI/G	0.0477	PCI/G	1	7.4	152	G	PCI/G	PR	
9202-0000-136-C-4C-05	MSR#05-0800	131693030	406668	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0205	0.0546	PCI/G	0	U	3/3/2005	38415.88194	12:08	0.1	PCI/G	0.0424	PCI/G	1	7.4	152	G	PCI/G	PR	
9202-0000-136-C-4C-05	MSR#05-0800	131693030	406668	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.014	0.0587	PCI/G	0	U	3/3/2005	38415.88194	12:08	0.11	PCI/G	0.0523	PCI/G	1	7.4	152	G	PCI/G	PR	
9202-0000-136-C-4C-05	MSR#05-0800	131693030	407185	14681-59-5	Iron-55	TRG 26	ULSC	LSC	REG	4.77	61.3	PCI/G	0	U	7/3/2005	38415.77083	8:42	84.7	PCI/G	41.5	PCI/G	1	7.4	0.193	G	PCI/G	PR	
9202-0000-136-C-4C-05	MSR#05-0800	131693030	406668	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.38	0.0688	PCI/G	0		3/3/2005	38415.88194	12:08	0.0576	PCI/G	0.0272	PCI/G	1	7.4	152	G	PCI/G	PR	
9202-0000-136-C-4C-05	MSR#05-0800	131693030	406668	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.365	0.0859	PCI/G	0		3/3/2005	38415.88194	12:08	0.0753	PCI/G	0.0352	PCI/G	1	7.4	152	G	PCI/G	PR	
9202-0000-136-C-4C-05	MSR#05-0800	131693030	406668	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.006	0.0226	PCI/G	0	U	3/3/2005	38415.88194	12:08	0.0429	PCI/G	0.0196	PCI/G	1	7.4	152	G	PCI/G	PR	
9202-0000-136-C-4C-05	MSR#05-0800	131693030	407187	13781-37-8	Nickel-63	TRG 30	ULSC	LSC	REG	-3.58	7.8	PCI/G	0	U	7/3/2005	38415.77014	2:03	13.6	PCI/G	6.63	PCI/G	1	7.4	0.193	G	PCI/G	PR	
9202-0000-136-C-4C-05	MSR#05-0800	131693030	406668	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0119	0.0205	PCI/G	0	U	3/3/2005	38415.88194	12:08	0.038	PCI/G	0.0174	PCI/G	1	7.4	152	G	PCI/G	PR	
9202-0000-136-C-4C-05	MSR#05-0800	131693030	412132	13981-16-3	Plutonium-238	TRG 32	UPU11RCM	PU11RCM	REG	-0.058	0.0464	PCI/G	0	U	7/3/2005	38446.75139	11:12	0.334	PCI/G	0.112	PCI/G	1	7.4	0.264	G	PCI/G	PR	
9202-0000-136-C-4C-05	MSR#05-0800	131693030	412132	OER-100-70	Plutonium-239/240	TRG 32	UPU11RCM	PU11RCM	REG	0.0209	0.0832	PCI/G	0	U	7/3/2005	38446.75139	11:12	0.239	PCI/G	0.0648	PCI/G	1	7.4	0.264	G	PCI/G	PR	
9202-0000-136-C-4C-05	MSR#05-0800	131693030	412133	14119-32-5	Plutonium-241	TRG 36	UPU11RCM	PU11RCM	REG	11.8	6.55	PCI/G	0		7/3/2005	38446.75347	2:08	10.6	PCI/G	5.18	PCI/G	1	7.4	0.54	G	PCI/G	PR	
9202-0000-136-C-4C-05	MSR#05-0800	131693030	406668	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	7.01	1.04	PCI/G	0		3/3/2005	38415.88194	12:08	0.404	PCI/G	0.174	PCI/G	1	7.4	152	G	PCI/G	PR	
9202-0000-136-C-4C-05	MSR#05-0800	131693030	406668	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.309	0.0722	PCI/G	0		3/3/2005	38415.88194	12:08	0.0792	PCI/G	0.0367	PCI/G	1	7.4	152	G	PCI/G	PR	
9202-0000-136-C-4C-05	MSR#05-0800	131693030	406668	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.0114	0.0192	PCI/G	0	U	3/3/2005	38415.88194	12:08	0.033	PCI/G	0.0152	PCI/G	1	7.4	152	G	PCI/G	PR	
9202-0000-136-C-4C-05	MSR#05-0800	131693030	414565	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.00012	0.011	PCI/G	0	U	7/3/2005	38446.75556	10:22	0.022	PCI/G	0.0107	PCI/G	1	7.4	13.2	G	PCI/G	PR	
9202-0000-136-C-4C-05	MSR#05-0800	131693030	409273	14133-76-7	Technetium-99	TRG 46	UTC02RCM	TC02RCM	REG	0.0639	0.176	PCI/G	0	U		21/03/2005	11:30	0.3	PCI/G	0.146	PCI/G	1	7.4	7.73	G	PCI/G	PR	
9202-0000-136-C-4C-05	MSR#05-0800	131693030	406668	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.132	0.0509	PCI/G	0		3/3/2005	38415.88194	12:08	0.0385	PCI/G	0.0176	PCI/G	1	7.4	152	G	PCI/G	PR	
9202-0000-136-C-4C-05	MSR#05-0800	131693030	409926	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-1.68	6.14	PCI/G	0	U		5/4/2005	7:23	10.9	PCI/G	5.23	PCI/G	1	7.4	2.05	G	PCI/G	PR	
9202-0000-139-C-1C-01	MSR#05-0800	131693031	406668	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.332	0.203	PCI/G	0		3/3/2005	38415.88194	12:09	0.182	PCI/G	0.0833	PCI/G	1	3.9	170	G	PCI/G	PR	
9202-0000-139-C-1C-01	MSR#05-0800	131693031	406668	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.00938	0.034	PCI/G	0	U	3/3/2005	38415.88194	12:09	0.0549	PCI/G	0.0262	PCI/G	1	3.9	170	G	PCI/G	PR	
9202-0000-139-C-1C-01	MSR#05-0800	131693031	406668	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.427	0.307	PCI/G	0		3/3/2005	38415.88194	12:09	0.357	PCI/G	0.163	PCI/G	1	3.9	170	G	PCI/G	PR	
9202-0000-139-C-1C-01	MSR#05-0800	131693031	406668	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.208	0.116	PCI/G	0		3/3/2005	38415.88194	12:09	0.0815	PCI/G	0.0375	PCI/G	1	3.9	170	G	PCI/G	PR	
9202-0000-139-C-1C-01	MSR#05-0800	131693031	406668	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	-0.015	0.0233	PCI/G	0	U	3/3/2005	38415.88194	12:09	0.0401	PCI/G	0.0178	PCI/G	1	3.9	170	G	PCI/G	PR	
9202-0000-139-C-1C-01	MSR#05-0800	131693031	406668	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.000463	0.0231	PCI/G	0	U	3/3/2005	38415.88194	12:09	0.0437	PCI/G	0.0199	PCI/G	1	3.9	170	G	PCI/G	PR	
9202-0000-139-C-1C-01	MSR#05-0800	131693031	406668	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.0115	0.0168	PCI/G	0	U	3/3/2005	38415.88194	12:09	0.0291	PCI/G	0.0116	PCI/G	1	3.9	170	G	PCI/G	PR	
9202-0000-139-C-1C-01	MSR#05-0800	131693031	406668	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0336	0.0628	PCI/G	0	U	3/3/2005	38415.88194	12:09	0.11	PCI/G	0.0513	PCI/G	1	3.9	170	G	PCI/G	PR	
9202-0000-139-C-1C-01	MSR#05-0800	131693031	406668	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0178	0.0677	PCI/G	0	U	3/3/2005	38415.88194	12:09	0.126	PCI/G	0.0549	PCI/G	1	3.9	170	G	PCI/G	PR	
9202-0000-139-C-1C-01	MSR#05-0800	131693031	406668	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.077	0.051	PCI/G	0	U	3/3/2005	38415.88194	12:09	0.105	PCI/G	0.0505	PCI/G	1	3.9	170	G	PCI/G	PR	
9202-0000-139-C-1C-01	MSR#05-0800	131693031	406668	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.268	0.0581	PCI/G	0		3/3/2005	38415.88194	12:09	0.0641	PCI/G	0.0305	PCI/G	1	3.9	170	G	PCI/G	PR	
9202-0000-139-C-1C-01	MSR#05-0800	131693031	406668	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.289	0.0994	PCI/G	0		3/3/2005	38415.88194	12:09	0.0787	PCI/G	0.0368	PCI/G	1	3.9	170	G	PCI/G	PR	
9202-0000-139-C-1C-01	MSR#05-0800	131693031	406668	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.00891	0.0255	PCI/G	0	U	3/3/2005	38415.88194	12:09	0.037	PCI/G	0.0164	PCI/G	1	3.9	170	G	PCI/G	PR	
9202-0000-139-C-1C-01	MSR#05-0800	131693031	406668	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0316	0.0203	PCI/G	0	U	3/3/2005	38415.88194	12:09	0.0438	PCI/G	0.0202	PCI/G	1	3.9	170	G	PCI/G	PR	
9202-0000-139-C-1C-01	MSR#05-0800	131693031	406668	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	5.85	0.85	PCI/G	0		3/3/2005	38415.88194	12:09	0.393	PCI/G	0.167	PCI/G	1	3.9	170	G	PCI/G	PR	
9202-0000-139-C-1C-01	MSR#05-0800	131693031	406668	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.208	0.116	PCI/G	0		3/3/2005	38415.88194	12:09	0.0815	PCI/G	0.0375	PCI/G	1	3.9	170	G	PCI/G	PR	
9202-0000-139-C-1C-01	MSR#05-0800	131693031	406668	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00232	0.0204	PCI/G	0	U	3/3/2005	38415.88194	12:09	0.0394	PCI/G	0.0183	PCI/G	1	3.9	170	G	PCI/G	PR	
9202-0000-139-C-1C-01	MSR#05-0800	131693031	414565	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.0116	0.0133	PCI/G	0	U	7/3/2005	38446.75556	10:22	0.0255	PCI/G	0.0124	PCI/G	1	3.9	13.1	G	PCI/G	PR	
9202-0000-139-C-1C-01	MSR#05-0800	131693031	406668	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.122	0.0472	PCI/G	0		3/3/2005	38415.88194	12:09	0.0439	PCI/G	0.0202	PCI/G	1	3.9	170	G	PCI/G	PR	
9202-0000-139-C-1C-01	MSR#05-0800	131693031	409926	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	5.27	6.25	PCI/G	0	U		5/4/2005	7:54	10.5	PCI/G	5.04	PCI/G	1	3.9	2.12	G	PCI/G	PR	
9202-0000-139-C-1C-02	MSR#05-0800	131693032	406668	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.387	0.121	PCI/G	0		3/3/2005	38415.88194	12:10	0.121	PCI/G	0.0539	PCI/G	1	4.8	172	G	PCI/G	PR	
9202-0000-139-C-1C-02	MSR#05-0800	131693032	406668	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0503	0.0831	PCI/G	0	U	3/3/2005	38415.88194	12:10	0.148	PCI/G	0.0702	PCI/G	1	4.8	172	G	PCI/G	PR	
9202-0000-139-C-1C-02	MSR#05-0800	131693032	406668	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.302	0.191	PCI/G	0		3/3/2005	38415.88194	12:10	0.247	PCI/G	0.11	PCI/G	1	4.8	172	G	PCI/G	PR	
9202-0000-139-C-1C-02	MSR#05-0800	131693032	406668	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.215	0.0785	PCI/G	0		3/3/2005	38415.88194	12:10	0.0554	PCI/G	0.0249	PCI/G	1	4.8	172	G	PCI/G	PR	
9202-0000-139-C-1C-02	MSR#05-0800	131693032	406668	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0118	0.0182	PCI/G	0	U	3/3/2005	38415.88194	12:10	0.0375	PCI/G	0.0168	PCI/G	1	4.8	172	G	PCI/G	PR	
9202-0000-139-C-1C-02	MSR#05-0800	131693032	406668	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.0158	0.0174	PCI/G	0	U	3/3/2005	38415.88194	12:10	0.0365	PCI/G	0.0166	PCI/G	1	4.8	172	G	PCI/G	PR	
9202-0000-139-C-1C-02	MSR#05-0800	131693032	406668	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.0162	0.02	PCI/G	0	U	3/3/2005	38415.88194	12:10	0.0331	PCI/G	0.0139	PCI/G	1	4.8	172	G	PCI/G	PR	
9202-0000-139-C-1C-02	MSR#05-0800	131693032	406668	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0052	0.0463	PCI/G	0	U	3/3/2005	38415.88194	12:10	0.0839	PCI/G	0.0387	PCI/G	1	4.8	172	G	PCI/G	PR	
9202-0000-139-C-1C-02	MSR#05-0800	131693032	406668	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.00532	0.0567	PCI/G	0	U	3/3/2005	38415.88194	12:10	0.108	PCI/G	0.047	PCI/G	1	4.8	172	G	PCI/G	PR	
9202-0000-139-C-1C-02	MSR#05-0800	131693032	406668	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	-0.00306	0.0484	PCI/G	0	U	3/3/2005	38415.88194	12:10	0.0946	PCI/G	0.0449	PCI/G	1	4.8	172	G	PCI/G	PR	
9202-0000-139-C-1C-02	MSR#05-0800	131693032	406668	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.305	0.0585	PCI/G	0		3/3/2005	38415.88194	12:10	0.0526	PCI/G	0.0248	PCI/G	1	4.8	172	G	PCI/G	PR	

9202-0000-139-C-1C-02	MSR#05-0800	131693032	406668	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.261	0.09	PCI/G	0		3/3/2005	38415.88194	12:10	0.067	PCI/G	0.0312	PCI/G	1	4.8	172	G	PCI/G		PR	
9202-0000-139-C-1C-02	MSR#05-0800	131693032	406668	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.0179	0.0227	PCI/G	0	U	3/3/2005	38415.88194	12:10	0.0309	PCI/G	0.0137	PCI/G	1	4.8	172	G	PCI/G		PR	
9202-0000-139-C-1C-02	MSR#05-0800	131693032	406668	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.00098	0.0163	PCI/G	0	U	3/3/2005	38415.88194	12:10	0.0304	PCI/G	0.0137	PCI/G	1	4.8	172	G	PCI/G		PR	
9202-0000-139-C-1C-02	MSR#05-0800	131693032	406668	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	5.4	0.81	PCI/G	0		3/3/2005	38415.88194	12:10	0.312	PCI/G	0.13	PCI/G	1	4.8	172	G	PCI/G		PR	
9202-0000-139-C-1C-02	MSR#05-0800	131693032	406668	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.215	0.0785	PCI/G	0		3/3/2005	38415.88194	12:10	0.0554	PCI/G	0.0249	PCI/G	1	4.8	172	G	PCI/G		PR	
9202-0000-139-C-1C-02	MSR#05-0800	131693032	406668	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.000803	0.0151	PCI/G	0	U	3/3/2005	38415.88194	12:10	0.0292	PCI/G	0.0134	PCI/G	1	4.8	172	G	PCI/G		PR	
9202-0000-139-C-1C-02	MSR#05-0800	131693032	414565	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00314	0.00929	PCI/G	0	U	7/3/2005	38446.75556	10:22	0.0183	PCI/G	0.00888	PCI/G	1	4.8	13.4	G	PCI/G		PR	
9202-0000-139-C-1C-02	MSR#05-0800	131693032	406668	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.0982	0.0399	PCI/G	0		3/3/2005	38415.88194	12:10	0.0364	PCI/G	0.0167	PCI/G	1	4.8	172	G	PCI/G		PR	
9202-0000-139-C-1C-02	MSR#05-0800	131693032	409926	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-3.32	5.9	PCI/G	0	U		5/4/2005	8:26	10.6	PCI/G	5.09	PCI/G	1	4.8	2.09	G	PCI/G		PR	
9202-0000-139-C-6C-03	MSR#05-0800	131693033	406668	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.352	0.107	PCI/G	0		3/3/2005	38415.88194	12:11	0.145	PCI/G	0.0653	PCI/G	1	6	164	G	PCI/G		PR	
9202-0000-139-C-6C-03	MSR#05-0800	131693033	406668	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.00588	0.0998	PCI/G	0	U	3/3/2005	38415.88194	12:11	0.175	PCI/G	0.0831	PCI/G	1	6	164	G	PCI/G		PR	
9202-0000-139-C-6C-03	MSR#05-0800	131693033	406668	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.169	0.353	PCI/G	0	U	3/3/2005	38415.88194	12:11	0.312	PCI/G	0.141	PCI/G	1	6	164	G	PCI/G		PR	
9202-0000-139-C-6C-03	MSR#05-0800	131693033	406668	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.371	0.0744	PCI/G	0		3/3/2005	38415.88194	12:11	0.0644	PCI/G	0.0291	PCI/G	1	6	164	G	PCI/G		PR	
9202-0000-139-C-6C-03	MSR#05-0800	131693033	406668	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.011	0.0244	PCI/G	0	U	3/3/2005	38415.88194	12:11	0.0435	PCI/G	0.0196	PCI/G	1	6	164	G	PCI/G		PR	
9202-0000-139-C-6C-03	MSR#05-0800	131693033	406668	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.00935	0.0225	PCI/G	0	U	3/3/2005	38415.88194	12:11	0.0409	PCI/G	0.0186	PCI/G	1	6	164	G	PCI/G		PR	
9202-0000-139-C-6C-03	MSR#05-0800	131693033	406668	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.000253	0.0218	PCI/G	0	U	3/3/2005	38415.88194	12:11	0.0422	PCI/G	0.0184	PCI/G	1	6	164	G	PCI/G		PR	
9202-0000-139-C-6C-03	MSR#05-0800	131693033	406668	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0393	0.0584	PCI/G	0	U	3/3/2005	38415.88194	12:11	0.103	PCI/G	0.0478	PCI/G	1	6	164	G	PCI/G		PR	
9202-0000-139-C-6C-03	MSR#05-0800	131693033	406668	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.00076	0.062	PCI/G	0	U	3/3/2005	38415.88194	12:11	0.12	PCI/G	0.0525	PCI/G	1	6	164	G	PCI/G		PR	
9202-0000-139-C-6C-03	MSR#05-0800	131693033	406668	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.018	0.0609	PCI/G	0	U	3/3/2005	38415.88194	12:11	0.117	PCI/G	0.0554	PCI/G	1	6	164	G	PCI/G		PR	
9202-0000-139-C-6C-03	MSR#05-0800	131693033	406668	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.318	0.0835	PCI/G	0		3/3/2005	38415.88194	12:11	0.0705	PCI/G	0.0335	PCI/G	1	6	164	G	PCI/G		PR	
9202-0000-139-C-6C-03	MSR#05-0800	131693033	406668	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.406	0.0898	PCI/G	0		3/3/2005	38415.88194	12:11	0.0776	PCI/G	0.0361	PCI/G	1	6	164	G	PCI/G		PR	
9202-0000-139-C-6C-03	MSR#05-0800	131693033	406668	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.00432	0.0215	PCI/G	0	U	3/3/2005	38415.88194	12:11	0.0394	PCI/G	0.0178	PCI/G	1	6	164	G	PCI/G		PR	
9202-0000-139-C-6C-03	MSR#05-0800	131693033	406668	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.00222	0.0188	PCI/G	0	U	3/3/2005	38415.88194	12:11	0.0353	PCI/G	0.016	PCI/G	1	6	164	G	PCI/G		PR	
9202-0000-139-C-6C-03	MSR#05-0800	131693033	406668	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	5.65	0.967	PCI/G	0		3/3/2005	38415.88194	12:11	0.426	PCI/G	0.186	PCI/G	1	6	164	G	PCI/G		PR	
9202-0000-139-C-6C-03	MSR#05-0800	131693033	406668	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.371	0.0744	PCI/G	0		3/3/2005	38415.88194	12:11	0.0644	PCI/G	0.0291	PCI/G	1	6	164	G	PCI/G		PR	
9202-0000-139-C-6C-03	MSR#05-0800	131693033	406668	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00483	0.0184	PCI/G	0	U	3/3/2005	38415.88194	12:11	0.0352	PCI/G	0.0162	PCI/G	1	6	164	G	PCI/G		PR	
9202-0000-139-C-6C-03	MSR#05-0800	131693033	414102	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.00172	0.011	PCI/G	0	U	7/3/2005	38446.75417	9:51	0.0283	PCI/G	0.0128	PCI/G	1	6	13.2	G	PCI/G		PR	
9202-0000-139-C-6C-03	MSR#05-0800	131693033	406668	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.115	0.046	PCI/G	0		3/3/2005	38415.88194	12:11	0.0357	PCI/G	0.0162	PCI/G	1	6	164	G	PCI/G		PR	
9202-0000-139-C-6C-03	MSR#05-0800	131693033	409926	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-1.03	5.92	PCI/G	0	U		5/4/2005	8:58	10.4	PCI/G	5.01	PCI/G	1	6	2.1	G	PCI/G		PR	
9202-0000-139-C-8C-04	MSR#05-0800	131693034	406668	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.246	0.168	PCI/G	0		3/3/2005	38415.88194	12:11	0.155	PCI/G	0.0692	PCI/G	1	5.4	180	G	PCI/G		PR	
9202-0000-139-C-8C-04	MSR#05-0800	131693034	406668	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0109	0.0271	PCI/G	0	U	3/3/2005	38415.88194	12:11	0.0541	PCI/G	0.0258	PCI/G	1	5.4	180	G	PCI/G		PR	
9202-0000-139-C-8C-04	MSR#05-0800	131693034	406668	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0	0.181	PCI/G	0	U	3/3/2005	38415.88194	12:11	0.374	PCI/G	0.171	PCI/G	1	5.4	180	G	PCI/G		PR	
9202-0000-139-C-8C-04	MSR#05-0800	131693034	406668	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.215	0.0783	PCI/G	0		3/3/2005	38415.88194	12:11	0.07	PCI/G	0.0316	PCI/G	1	5.4	180	G	PCI/G		PR	
9202-0000-139-C-8C-04	MSR#05-0800	131693034	406668	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.00446	0.0269	PCI/G	0	U	3/3/2005	38415.88194	12:11	0.0522	PCI/G	0.0237	PCI/G	1	5.4	180	G	PCI/G		PR	
9202-0000-139-C-8C-04	MSR#05-0800	131693034	406668	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.00575	0.0203	PCI/G	0	U	3/3/2005	38415.88194	12:11	0.041	PCI/G	0.0185	PCI/G	1	5.4	180	G	PCI/G		PR	
9202-0000-139-C-8C-04	MSR#05-0800	131693034	406668	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.00438	0.0274	PCI/G	0	U	3/3/2005	38415.88194	12:11	0.049	PCI/G	0.0213	PCI/G	1	5.4	180	G	PCI/G		PR	
9202-0000-139-C-8C-04	MSR#05-0800	131693034	406668	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0325	0.0539	PCI/G	0	U	3/3/2005	38415.88194	12:11	0.0967	PCI/G	0.0448	PCI/G	1	5.4	180	G	PCI/G		PR	
9202-0000-139-C-8C-04	MSR#05-0800	131693034	406668	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0	0.0721	PCI/G	0	U	3/3/2005	38415.88194	12:11	0.133	PCI/G	0.0578	PCI/G	1	5.4	180	G	PCI/G		PR	
9202-0000-139-C-8C-04	MSR#05-0800	131693034	406668	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0173	0.0445	PCI/G	0	U	3/3/2005	38415.88194	12:11	0.0857	PCI/G	0.0406	PCI/G	1	5.4	180	G	PCI/G		PR	
9202-0000-139-C-8C-04	MSR#05-0800	131693034	406668	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.255	0.0508	PCI/G	0		3/3/2005	38415.88194	12:11	0.0469	PCI/G	0.0219	PCI/G	1	5.4	180	G	PCI/G		PR	
9202-0000-139-C-8C-04	MSR#05-0800	131693034	406668	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.218	0.0767	PCI/G	0		3/3/2005	38415.88194	12:11	0.0703	PCI/G	0.0326	PCI/G	1	5.4	180	G	PCI/G		PR	
9202-0000-139-C-8C-04	MSR#05-0800	131693034	406668	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.00172	0.0231	PCI/G	0	U	3/3/2005	38415.88194	12:11	0.0438	PCI/G	0.0197	PCI/G	1	5.4	180	G	PCI/G		PR	
9202-0000-139-C-8C-04	MSR#05-0800	131693034	406668	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.001	0.02	PCI/G	0	U	3/3/2005	38415.88194	12:11	0.0388	PCI/G	0.0176	PCI/G	1	5.4	180	G	PCI/G		PR	
9202-0000-139-C-8C-04	MSR#05-0800	131693034	406668	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	4.77	0.783	PCI/G	0		3/3/2005	38415.88194	12:11	0.511	PCI/G	0.224	PCI/G	1	5.4	180	G	PCI/G		PR	
9202-0000-139-C-8C-04	MSR#05-0800	131693034	406668	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.215	0.0783	PCI/G	0		3/3/2005	38415.88194	12:11	0.07	PCI/G	0.0316	PCI/G	1	5.4	180	G	PCI/G		PR	
9202-0000-139-C-8C-04	MSR#05-0800	131693034	406668	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00679	0.0175	PCI/G	0	U	3/3/2005	38415.88194	12:11	0.0343	PCI/G	0.0157	PCI/G	1	5.4	180	G	PCI/G		PR	
9202-0000-139-C-8C-04	MSR#05-0800	131693034	414565	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.00929	0.0135	PCI/G	0	U	7/3/2005	38446.75556	10:25	0.0277	PCI/G	0.0135	PCI/G	1	5.4	12.7	G	PCI/G		PR	
9202-0000-139-C-8C-04	MSR#05-0800	131693034	406668	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0	0.0475	PCI/G	0	UUI	3/3/2005	38415.88194	12:11	0.0657	PCI/G	0.0311	PCI/G	1	5.4	180	G	PCI/G		PR	
9202-0000-139-C-8C-04	MSR#05-0800	131693034	409926	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	1.38	6.18	PCI/G	0	U		5/4/2005	9:30	10.7	PCI/G	5.14	PCI/G	1	5.4	2.04	G	PCI/G		PR	
9202-0000-139-C-8C-05	MSR#05-0800	131693035	406668	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.237	0.115	PCI/G	0		3/3/2005	38415.88194	12:12	0.0943	PCI/G	0.0433	PCI/G	1	4.9	175	G	PCI/G		PR	
9202-0000-139-C-8C-05	MSR#05-0800	131693035	406668	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.00314	0.0921	PCI/G	0	U	3/3/2005	38415.88194	12:12	0.161	PCI/G	0.0772	PCI/G	1	4.9	175	G	PCI/G		PR	
9202-0000-139-C-8C-05	MSR#05-0800	131693035	412129	14596-10-2	Americium-241	TRG 1	UAM05RCM	AM05RCM	REG	0.0771	0.149	PCI/G	0	U	7/3/2005	38446.75278	1:54	0.328	PCI/G	0.124	PCI/G	1	4.9	0.255	G	PCI/G		PR	
9202-0000-139-C-8C-05	MSR#05-0800	131693035	406668	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.199	0.131	PCI/G	0	U	3/3/2005	38415.88194	12:12	0.266	PCI/G	0.125	PCI/G	1	4.9	175	G	PCI/G		PR	
9202-0000-139-C-8C-05	MSR#05-0800	131693035	406668	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.217	0.0717	PCI/G	0		3/3/2005	38415.88194	12:12	0.0524	PCI/G	0.0245	PCI/G	1	4.9	175	G	PCI/G		PR	
9202-0000-139-C-8C-05	MSR#05-0800	131693035	407148	14762-75-5	Carbon-14	TRG 5	ULSC	LSC	REG	-0.0564	0.0919	PCI/G	0	U		19/03/2005	12:02	0.158	PCI/G	0.078	PCI/G	1	4.9	9.15	G	PCI/G		PR	
9202-0000-139-C-8C-05	MSR#05-0800	131693035	406668	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0032	0.0158	PCI/G	0	U	3/3/2005	38415.88194	12:12	0.03	PCI/G	0.0138	PCI/G	1	4.9	175	G	PCI/G		PR	
9202-0000-139-C-8C-05	MSR#05-0800	131693035	406668	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.00339	0.0139	PCI/G	0	U	3/3/2005	38415.88194	12:12	0.0257	PCI/G	0.0119	PCI/G	1	4.9	175	G	PCI/G		PR	
9202-0000-139-C-8C-05	MSR#05-0800	131693035	406668	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0	0.0279	PCI/G	0	UUI	3/3/2005	38415.88194	12:12	0.0446	PCI/G	0.0208	PCI/G	1	4.9	175	G	PCI/G		PR	
9202-0000-139-C-8C-05	MSR#05-0800	131693035	412129	OER-100-93	Curium-242	TRG 1	UAM05RCM	AM05RCM	REG	-0.0847	0.0945	PCI/G	0	U	7/3/2005	38446.75278	1:54	0.403	PCI/G	0.153	PCI/G	1	4.9	0.255	G	PCI/G		PR	
9202-0000-139-C-8C-05	MSR#05-0800	131693035	412129	OER-101-57	Curium-243/244	TRG 1	UAM05RCM	AM05RCM	REG	-0.0997	0.152	PCI/G	0	U	7/3/2005	38446.75278	1:54	0.475	PCI/G	0.198	PCI/G	1	4.9	0.255	G	PCI/G		PR	
9202-0000-139-C-8C-05	MSR#05-0800	131693035	406668	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0147	0.0384	PCI/G	0	U	3/3/2005	38415.88194	12:12	0.0738	PCI/G	0.0348	PCI/G	1	4.9	175	G	PCI/G		PR	
9202-0000-139-C-8C-05	MSR#05-0800	131693035	406668	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.00368	0.0397	PCI/G	0	U	3/3/2005	38415.88194	12:12	0.0749	PCI/G	0.0335	PCI/G	1	4.9	175	G	PCI/G		PR	
9202-0000-139-C-8C-05	MSR#05-0800	131693035	406668	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.00927	0.0498	PCI/G	0	U	3/3/2005	38415.88194	12:12	0.0944	PCI/G	0.0452	PCI/G	1	4.9	175	G	PCI/G		PR	
9202-0000-139-C-8C-05	MSR#05-0800	131693035	407185	14681-59-5	Iron-55	TRG 26	ULSC	LSC	REG	-15.2	54.3	PCI/G	0	U	7/3/2005	38415.77083	9:14	75.4	PCI/G	36.9	PCI/G	1	4.9	0.188	G	PCI/G		PR	
9202-0000-139-C-8C-05	MSR#05-0800	131693035	406668	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.294	0.049	PCI/G	0		3/3/2005	38415.88194	12:12	0.0413	PCI/G	0.0196	PCI/G	1	4.9	175	G	PCI/G		PR	
9202-0000-139-C-8C-05	MSR#05-0800	131693035	406668	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.257	0.0638	PCI/G	0		3/3/2005	38415.88194	12:12	0.0526	PCI/G	0.0249	PCI/G	1	4.9	175	G	PCI/G		PR	
9202-0000-139-C-8C-05	MSR#05-0800	131693035	406668	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.00184	0.0159	PCI/G	0	U	3/3/2005	38415.88194	12:12	0.0289	PCI/G	0.0134	PCI/G	1	4.9	175	G	PCI/G		PR	
9202-0000-139-C-8C-05	MSR#05-0800	131693035	407187	13781-37-8	Nickel-63	TRG 30	ULSC	LSC	REG	1.45	8.48	PCI/G	0	U	7/3/2005	38415.77014	2:50	14.5	PCI/G	7.08	PCI/G	1	4.9	0.188	G	PCI/G		PR	
9202-0000-139-C-8C-05	MSR#05-0800	131693035	406668	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.00284	0.0127	PCI/G	0	U	3/3/2005	38415.88194	12:12	0.0235	PCI/G	0.0109	PCI/G	1	4.9	175	G	PCI/G		PR	
9202-0000-139-C-8C-05	MSR#05-0800	131693035	412132	13981-16-3	Plutonium-238	TRG 32	UPU11RCM	PU11RCM	REG	0.0402	0.0793	PCI/G	0	U	7/3/2005	38446.75278	1:54	0.174	PCI/G	0.0569	PCI/G	1	4.9	0.255	G	PCI/G		PR	
9202-0000-139-C-8C-05	MSR#05-0800	131693035	412132	OER-100-70	Plutonium-239/240	TRG 32	UPU11RCM	PU11RCM	REG	0.00624	0.0473	PCI/G	0	U	7/3/2005	38446.75278	1:54	0.148	PCI/G	0.044	PCI/G	1	4.9	0.255	G	PCI/G		PR	
9202-0000-139-C-8C-05	MSR#05-0800	131693035	412133	14119-32-5	Plutonium-241	TRG 36	UPU11RCM	PU11RCM	REG	13.4	6.68	PCI/G	0		7/3/2005	38446.75347	2:40	10.8	PCI/G	5.24	PCI/G	1	4.9	0.513	G	PCI/G		PR	
9202-0000-139-C-8C-05	MSR#05-0800	131693035	406668	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	6.11	0.694	PCI/G	0		3/3/2005	38415.88194	12:12	0.238	PCI/G	0.105	PCI/G	1	4.9	175	G	PCI/G		PR	
9202-0000-139-C-8C-05	MSR#05-0800	131693035	406668	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.217	0.0717	PCI/G	0		3/3/2005	38415.88194	12:12	0.0524	PCI/G	0.0245	PCI/G	1	4.9	175	G	PCI/G		PR	
9202-0000-139-C-8C-05	MSR#05-0800	131693035	406668	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00546	0.0138	PCI/G	0	U	3/3/2005	38415.88194	12:12	0.0281	PCI/G	0.0123	PCI/G	1	4.9	175	G	PCI/G		PR	
9202-0000-139-C-8C-05	MSR#05-0800	131693035	414565	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.0157	0.013	PCI/G	0	U	7/3/2005	38446.75556	10:25	0.0271	PCI/G	0.0132	PCI/G	1	4.9	12.9	G	PCI/G		PR	
9202-0000-139-C-8C-05	MSR#05-0800	131693035	409273	14133-76-7	Technetium-99	TRG 46	UTC02RCM	TC02RCM	REG	0.15	0.16	PCI/G	0	U		21/03/2005	12:18	0.267	PCI/G	0.13	PCI/G	1	4.9	7.73	G	PCI/G		PR	
9202-0000-139-C-8C-05	MSR#05-0800	131693035	406668	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.0592	0.0353	PCI/G	0		3/3/2005	38415.88194	12:12	0.0272	PCI/G	0.0127	PCI/G	1	4.9	175	G	PCI/G		PR	
9202-0000-139-C-8C-05	MSR#05-0800	131693035	409926	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	0	6.27	PCI/G	0	U		5/4/2005	3:48	10.9	PCI/G	5.26	PCI/G	1	4.9	2.01	G	PCI/G		PR	
9202-0000-137-C-1C-01	MSR#05-0800	131693036	406668	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.352	0.186	PCI/G	0		3/3/2005	38415.88194	12:27	0.129	PCI/G	0.057	PCI/G	1	4.1	155	G	PCI/G		PR	
9202-0000-137-C-1C-01	MSR#05-0800	131693036	406668	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	0.0612	0.0796	PCI/G	0	U	3/3/2005	38415.88194	12:27	0.157	PCI/G	0.0747	PCI/G	1	4.1	155	G	PCI/G		PR	
9202-0000-137-C-1C-01	MSR#05-0800	131693036	406668	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.29	0.174	PCI/G	0		3/3/2005	38415.88194	12:27	0.25	PCI/G	0.111	PCI/G	1	4.1	155	G	PCI/G		PR	
9202-0000-137-C-1C-01	MSR#05-0800	131693036	406668	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0	0.0777	PCI/G	0	UUI	3/3/2005	38415.88194	12:27	0.144	PCI/G	0.0689	PCI/G	1	4.1	155	G	PCI/G		PR	
9202-0000-137-C-1C-01	MSR#05-0800	131693036	406668	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0331	0.0228	PCI/G	0	U	3/3/2005	38415.88194	12:27	0.0494	PCI/G	0.0225	PCI/G	1	4.1	155	G	PCI/G		PR	
9202-0000-137-C-1C-01	MSR#05-0800	131693036	406668	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.00301	0.0217	PCI/G	0	U	3/3/2005	38415.88194	12:27	0.0392	PCI/G	0.0178	PCI/G	1	4.1	155	G	PCI/G		PR	
9202-0000-137-C-1C-01	MSR#05-0800	131693036	406668	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.0401	0.0263	PCI/G	0	U	3/3/2005	38415.88194	12:27	0.0594	PCI/G	0.0267	PCI/G	1	4.1	155	G	PCI/G		PR	

9202-0000-137-C-1C-01	MSR#05-0800	131693036	406668	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0163	0.0529	PCI/G	0	U	3/3/2005	38415.88194	12:27	0.0968	PCI/G	0.045	PCI/G	1	4.1	155	G	PCI/G		PR	
9202-0000-137-C-1C-01	MSR#05-0800	131693036	406668	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.00449	0.0641	PCI/G	0	U	3/3/2005	38415.88194	12:27	0.125	PCI/G	0.0543	PCI/G	1	4.1	155	G	PCI/G		PR	
9202-0000-137-C-1C-01	MSR#05-0800	131693036	406668	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.00418	0.0579	PCI/G	0	U	3/3/2005	38415.88194	12:27	0.107	PCI/G	0.0507	PCI/G	1	4.1	155	G	PCI/G		PR	
9202-0000-137-C-1C-01	MSR#05-0800	131693036	406668	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.305	0.0598	PCI/G	0		3/3/2005	38415.88194	12:27	0.0532	PCI/G	0.025	PCI/G	1	4.1	155	G	PCI/G		PR	
9202-0000-137-C-1C-01	MSR#05-0800	131693036	406668	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.337	0.0882	PCI/G	0		3/3/2005	38415.88194	12:27	0.0706	PCI/G	0.0328	PCI/G	1	4.1	155	G	PCI/G		PR	
9202-0000-137-C-1C-01	MSR#05-0800	131693036	406668	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.00437	0.0228	PCI/G	0	U	3/3/2005	38415.88194	12:27	0.0405	PCI/G	0.0182	PCI/G	1	4.1	155	G	PCI/G		PR	
9202-0000-137-C-1C-01	MSR#05-0800	131693036	406668	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.000244	0.0202	PCI/G	0	U	3/3/2005	38415.88194	12:27	0.0369	PCI/G	0.0168	PCI/G	1	4.1	155	G	PCI/G		PR	
9202-0000-137-C-1C-01	MSR#05-0800	131693036	406668	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	6.02	0.888	PCI/G	0		3/3/2005	38415.88194	12:27	0.368	PCI/G	0.154	PCI/G	1	4.1	155	G	PCI/G		PR	
9202-0000-137-C-1C-01	MSR#05-0800	131693036	406668	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.316	0.0777	PCI/G	0		3/3/2005	38415.88194	12:27	0.0645	PCI/G	0.0291	PCI/G	1	4.1	155	G	PCI/G		PR	
9202-0000-137-C-1C-01	MSR#05-0800	131693036	406668	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00355	0.0168	PCI/G	0	U	3/3/2005	38415.88194	12:27	0.0309	PCI/G	0.0141	PCI/G	1	4.1	155	G	PCI/G		PR	
9202-0000-137-C-1C-01	MSR#05-0800	131693036	414565	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.0132	0.0135	PCI/G	0	U	7/3/2005	38446.75556	10:25	0.0277	PCI/G	0.0135	PCI/G	1	4.1	12.7	G	PCI/G		PR	
9202-0000-137-C-1C-01	MSR#05-0800	131693036	406668	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.112	0.046	PCI/G	0		3/3/2005	38415.88194	12:27	0.0337	PCI/G	0.0152	PCI/G	1	4.1	155	G	PCI/G		PR	
9202-0000-137-C-1C-01	MSR#05-0800	131693036	409926	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	1.66	6.05	PCI/G	0	U		5/4/2005	4:20	10.4	PCI/G	5.01	PCI/G	1	4.1	2.07	G	PCI/G		PR	
9202-0000-137-C-1C-02	MSR#05-0800	131693037	406668	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.281	0.13	PCI/G	0		3/3/2005	38415.88194	12:28	0.139	PCI/G	0.0622	PCI/G	1	5.6	150	G	PCI/G		PR	
9202-0000-137-C-1C-02	MSR#05-0800	131693037	406668	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0444	0.0845	PCI/G	0	U	3/3/2005	38415.88194	12:28	0.137	PCI/G	0.0651	PCI/G	1	5.6	150	G	PCI/G		PR	
9202-0000-137-C-1C-02	MSR#05-0800	131693037	406668	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.369	0.241	PCI/G	0		3/3/2005	38415.88194	12:28	0.302	PCI/G	0.137	PCI/G	1	5.6	150	G	PCI/G		PR	
9202-0000-137-C-1C-02	MSR#05-0800	131693037	406668	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.291	0.0762	PCI/G	0		3/3/2005	38415.88194	12:28	0.0805	PCI/G	0.0372	PCI/G	1	5.6	150	G	PCI/G		PR	
9202-0000-137-C-1C-02	MSR#05-0800	131693037	406668	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0209	0.0239	PCI/G	0	U	3/3/2005	38415.88194	12:28	0.0479	PCI/G	0.0218	PCI/G	1	5.6	150	G	PCI/G		PR	
9202-0000-137-C-1C-02	MSR#05-0800	131693037	406668	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.00327	0.0214	PCI/G	0	U	3/3/2005	38415.88194	12:28	0.0385	PCI/G	0.0175	PCI/G	1	5.6	150	G	PCI/G		PR	
9202-0000-137-C-1C-02	MSR#05-0800	131693037	406668	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.0148	0.0232	PCI/G	0	U	3/3/2005	38415.88194	12:28	0.0392	PCI/G	0.0168	PCI/G	1	5.6	150	G	PCI/G		PR	
9202-0000-137-C-1C-02	MSR#05-0800	131693037	406668	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.0377	0.0538	PCI/G	0	U	3/3/2005	38415.88194	12:28	0.0951	PCI/G	0.0441	PCI/G	1	5.6	150	G	PCI/G		PR	
9202-0000-137-C-1C-02	MSR#05-0800	131693037	406668	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	0.0402	0.0716	PCI/G	0	U	3/3/2005	38415.88194	12:28	0.144	PCI/G	0.0643	PCI/G	1	5.6	150	G	PCI/G		PR	
9202-0000-137-C-1C-02	MSR#05-0800	131693037	406668	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	-0.00833	0.064	PCI/G	0	U	3/3/2005	38415.88194	12:28	0.104	PCI/G	0.0496	PCI/G	1	5.6	150	G	PCI/G		PR	
9202-0000-137-C-1C-02	MSR#05-0800	131693037	406668	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.316	0.0638	PCI/G	0		3/3/2005	38415.88194	12:28	0.061	PCI/G	0.0288	PCI/G	1	5.6	150	G	PCI/G		PR	
9202-0000-137-C-1C-02	MSR#05-0800	131693037	406668	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.35	0.0912	PCI/G	0		3/3/2005	38415.88194	12:28	0.0705	PCI/G	0.0328	PCI/G	1	5.6	150	G	PCI/G		PR	
9202-0000-137-C-1C-02	MSR#05-0800	131693037	406668	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0102	0.0243	PCI/G	0	U	3/3/2005	38415.88194	12:28	0.0456	PCI/G	0.0209	PCI/G	1	5.6	150	G	PCI/G		PR	
9202-0000-137-C-1C-02	MSR#05-0800	131693037	406668	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	-0.00473	0.0195	PCI/G	0	U	3/3/2005	38415.88194	12:28	0.0344	PCI/G	0.0156	PCI/G	1	5.6	150	G	PCI/G		PR	
9202-0000-137-C-1C-02	MSR#05-0800	131693037	406668	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	6.05	0.892	PCI/G	0		3/3/2005	38415.88194	12:28	0.382	PCI/G	0.163	PCI/G	1	5.6	150	G	PCI/G		PR	
9202-0000-137-C-1C-02	MSR#05-0800	131693037	406668	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.291	0.0762	PCI/G	0		3/3/2005	38415.88194	12:28	0.0805	PCI/G	0.0372	PCI/G	1	5.6	150	G	PCI/G		PR	
9202-0000-137-C-1C-02	MSR#05-0800	131693037	406668	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.00956	0.0194	PCI/G	0	U	3/3/2005	38415.88194	12:28	0.0344	PCI/G	0.0159	PCI/G	1	5.6	150	G	PCI/G		PR	
9202-0000-137-C-1C-02	MSR#05-0800	131693037	414565	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.00702	0.0123	PCI/G	0	U	7/3/2005	38446.75556	10:25	0.0249	PCI/G	0.0122	PCI/G	1	5.6	13	G	PCI/G		PR	
9202-0000-137-C-1C-02	MSR#05-0800	131693037	406668	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.0826	0.049	PCI/G	0		3/3/2005	38415.88194	12:28	0.0391	PCI/G	0.0179	PCI/G	1	5.6	150	G	PCI/G		PR	
9202-0000-137-C-1C-02	MSR#05-0800	131693037	409926	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	3.88	6.12	PCI/G	0	U		5/4/2005	4:52	10.4	PCI/G	4.98	PCI/G	1	5.6	2.08	G	PCI/G		PR	
9202-0000-137-C-1C-03	MSR#05-0800	131693038	406668	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.388	0.135	PCI/G	0		3/3/2005	38415.88194	2:51	0.102	PCI/G	0.0431	PCI/G	1	5.4	153	G	PCI/G		PR	
9202-0000-137-C-1C-03	MSR#05-0800	131693038	406668	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.103	0.121	PCI/G	0	U	3/3/2005	38415.88194	2:51	0.141	PCI/G	0.0669	PCI/G	1	5.4	153	G	PCI/G		PR	
9202-0000-137-C-1C-03	MSR#05-0800	131693038	406668	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.374	0.224	PCI/G	0		3/3/2005	38415.88194	2:51	0.286	PCI/G	0.128	PCI/G	1	5.4	153	G	PCI/G		PR	
9202-0000-137-C-1C-03	MSR#05-0800	131693038	406668	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.243	0.0938	PCI/G	0		3/3/2005	38415.88194	2:51	0.0724	PCI/G	0.0331	PCI/G	1	5.4	153	G	PCI/G		PR	
9202-0000-137-C-1C-03	MSR#05-0800	131693038	406668	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.00459	0.0209	PCI/G	0	U	3/3/2005	38415.88194	2:51	0.0362	PCI/G	0.0158	PCI/G	1	5.4	153	G	PCI/G		PR	
9202-0000-137-C-1C-03	MSR#05-0800	131693038	406668	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.0127	0.0219	PCI/G	0	U	3/3/2005	38415.88194	2:51	0.0374	PCI/G	0.0168	PCI/G	1	5.4	153	G	PCI/G		PR	
9202-0000-137-C-1C-03	MSR#05-0800	131693038	406668	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	0.00785	0.0238	PCI/G	0	U	3/3/2005	38415.88194	2:51	0.0481	PCI/G	0.021	PCI/G	1	5.4	153	G	PCI/G		PR	
9202-0000-137-C-1C-03	MSR#05-0800	131693038	406668	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0159	0.0512	PCI/G	0	U	3/3/2005	38415.88194	2:51	0.0988	PCI/G	0.0459	PCI/G	1	5.4	153	G	PCI/G		PR	
9202-0000-137-C-1C-03	MSR#05-0800	131693038	406668	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0153	0.0591	PCI/G	0	U	3/3/2005	38415.88194	2:51	0.11	PCI/G	0.0468	PCI/G	1	5.4	153	G	PCI/G		PR	
9202-0000-137-C-1C-03	MSR#05-0800	131693038	406668	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	-0.0157	0.0593	PCI/G	0	U	3/3/2005	38415.88194	2:51	0.107	PCI/G	0.0506	PCI/G	1	5.4	153	G	PCI/G		PR	
9202-0000-137-C-1C-03	MSR#05-0800	131693038	406668	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.342	0.065	PCI/G	0		3/3/2005	38415.88194	2:51	0.0547	PCI/G	0.0258	PCI/G	1	5.4	153	G	PCI/G		PR	
9202-0000-137-C-1C-03	MSR#05-0800	131693038	406668	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.235	0.0677	PCI/G	0		3/3/2005	38415.88194	2:51	0.0626	PCI/G	0.0288	PCI/G	1	5.4	153	G	PCI/G		PR	
9202-0000-137-C-1C-03	MSR#05-0800	131693038	406668	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.00758	0.0233	PCI/G	0	U	3/3/2005	38415.88194	2:51	0.0404	PCI/G	0.0181	PCI/G	1	5.4	153	G	PCI/G		PR	
9202-0000-137-C-1C-03	MSR#05-0800	131693038	406668	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00207	0.0205	PCI/G	0	U	3/3/2005	38415.88194	2:51	0.0378	PCI/G	0.0172	PCI/G	1	5.4	153	G	PCI/G		PR	
9202-0000-137-C-1C-03	MSR#05-0800	131693038	406668	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	5.55	0.906	PCI/G	0		3/3/2005	38415.88194	2:51	0.39	PCI/G	0.165	PCI/G	1	5.4	153	G	PCI/G		PR	
9202-0000-137-C-1C-03	MSR#05-0800	131693038	406668	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.243	0.0938	PCI/G	0		3/3/2005	38415.88194	2:51	0.0724	PCI/G	0.0331	PCI/G	1	5.4	153	G	PCI/G		PR	
9202-0000-137-C-1C-03	MSR#05-0800	131693038	406668	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	-0.01	0.0176	PCI/G	0	U	3/3/2005	38415.88194	2:51	0.031	PCI/G	0.0142	PCI/G	1	5.4	153	G	PCI/G		PR	
9202-0000-137-C-1C-03	MSR#05-0800	131693038	414565	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.0021	0.011	PCI/G	0	U	7/3/2005	38446.75556	10:50	0.0217	PCI/G	0.0105	PCI/G	1	5.4	12.8	G	PCI/G		PR	
9202-0000-137-C-1C-03	MSR#05-0800	131693038	406668	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.119	0.0399	PCI/G	0		3/3/2005	38415.88194	2:51	0.032	PCI/G	0.0143	PCI/G	1	5.4	153	G	PCI/G		PR	
9202-0000-137-C-1C-03	MSR#05-0800	131693038	409926	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-0.458	6.08	PCI/G	0	U		5/4/2005	5:24	10.6	PCI/G	5.12	PCI/G	1	5.4	2.07	G	PCI/G		PR	
9202-0000-137-C-3C-04	MSR#05-0800	131693039	406668	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.339	0.121	PCI/G	0		3/3/2005	38415.88194	2:52	0.147	PCI/G	0.0668	PCI/G	1	6.3	161	G	PCI/G		PR	
9202-0000-137-C-3C-04	MSR#05-0800	131693039	406668	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.00445	0.0776	PCI/G	0	U	3/3/2005	38415.88194	2:52	0.134	PCI/G	0.0638	PCI/G	1	6.3	161	G	PCI/G		PR	
9202-0000-137-C-3C-04	MSR#05-0800	131693039	406668	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.161	0.2	PCI/G	0	U	3/3/2005	38415.88194	2:52	0.331	PCI/G	0.152	PCI/G	1	6.3	161	G	PCI/G		PR	
9202-0000-137-C-3C-04	MSR#05-0800	131693039	406668	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.208	0.0762	PCI/G	0		3/3/2005	38415.88194	2:52	0.0607	PCI/G	0.0275	PCI/G	1	6.3	161	G	PCI/G		PR	
9202-0000-137-C-3C-04	MSR#05-0800	131693039	406668	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0	0.0356	PCI/G	0	UUI	3/3/2005	38415.88194	2:52	0.0501	PCI/G	0.0231	PCI/G	1	6.3	161	G	PCI/G		PR	
9202-0000-137-C-3C-04	MSR#05-0800	131693039	406668	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	-0.00412	0.0188	PCI/G	0	U	3/3/2005	38415.88194	2:52	0.035	PCI/G	0.0159	PCI/G	1	6.3	161	G	PCI/G		PR	
9202-0000-137-C-3C-04	MSR#05-0800	131693039	406668	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.016	0.0239	PCI/G	0	U	3/3/2005	38415.88194	2:52	0.0409	PCI/G	0.0178	PCI/G	1	6.3	161	G	PCI/G		PR	
9202-0000-137-C-3C-04	MSR#05-0800	131693039	406668	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	-0.02	0.0475	PCI/G	0	U	3/3/2005	38415.88194	2:52	0.0856	PCI/G	0.0396	PCI/G	1	6.3	161	G	PCI/G		PR	
9202-0000-137-C-3C-04	MSR#05-0800	131693039	406668	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.0106	0.0702	PCI/G	0	U	3/3/2005	38415.88194	2:52	0.13	PCI/G	0.058	PCI/G	1	6.3	161	G	PCI/G		PR	
9202-0000-137-C-3C-04	MSR#05-0800	131693039	406668	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	0.0129	0.0561	PCI/G	0	U	3/3/2005	38415.88194	2:52	0.106	PCI/G	0.0505	PCI/G	1	6.3	161	G	PCI/G		PR	
9202-0000-137-C-3C-04	MSR#05-0800	131693039	406668	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.321	0.0643	PCI/G	0		3/3/2005	38415.88194	2:52	0.0562	PCI/G	0.0266	PCI/G	1	6.3	161	G	PCI/G		PR	
9202-0000-137-C-3C-04	MSR#05-0800	131693039	406668	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.255	0.0863	PCI/G	0		3/3/2005	38415.88194	2:52	0.0661	PCI/G	0.0308	PCI/G	1	6.3	161	G	PCI/G		PR	
9202-0000-137-C-3C-04	MSR#05-0800	131693039	406668	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	-0.00472	0.0216	PCI/G	0	U	3/3/2005	38415.88194	2:52	0.0337	PCI/G	0.0151	PCI/G	1	6.3	161	G	PCI/G		PR	
9202-0000-137-C-3C-04	MSR#05-0800	131693039	406668	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.00451	0.0162	PCI/G	0	U	3/3/2005	38415.88194	2:52	0.0317	PCI/G	0.0144	PCI/G	1	6.3	161	G	PCI/G		PR	
9202-0000-137-C-3C-04	MSR#05-0800	131693039	406668	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	6.6	0.872	PCI/G	0		3/3/2005	38415.88194	2:52	0.371	PCI/G	0.159	PCI/G	1	6.3	161	G	PCI/G		PR	
9202-0000-137-C-3C-04	MSR#05-0800	131693039	406668	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.208	0.0762	PCI/G	0		3/3/2005	38415.88194	2:52	0.0607	PCI/G	0.0275	PCI/G	1	6.3	161	G	PCI/G		PR	
9202-0000-137-C-3C-04	MSR#05-0800	131693039	406668	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.00578	0.0182	PCI/G	0	U	3/3/2005	38415.88194	2:52	0.0309	PCI/G	0.0142	PCI/G	1	6.3	161	G	PCI/G		PR	
9202-0000-137-C-3C-04	MSR#05-0800	131693039	414565	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	-0.000746	0.0165	PCI/G	0	U	7/3/2005	38446.75556	10:50	0.0331	PCI/G	0.016	PCI/G	1	6.3	12.9	G	PCI/G		PR	
9202-0000-137-C-3C-04	MSR#05-0800	131693039	406668	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.0833	0.0451	PCI/G	0		3/3/2005	38415.88194	2:52	0.0352	PCI/G	0.0161	PCI/G	1	6.3	181	G	PCI/G		PR	
9202-0000-137-C-3C-04	MSR#05-0800	131693039	409926	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	1.46	5.8	PCI/G	0	U		5/4/2005	5:56	10	PCI/G	4.81	PCI/G	1	6.3	2.13	G	PCI/G		PR	
9202-0000-137-C-3C-05	MSR#05-0800	131693040	406668	14331-83-0	Actinium-228	TRG 8	UHASL300	HASL300	REG	0.366	0.128	PCI/G	0		3/3/2005	38415.88194	2:52	0.138	PCI/G	0.0615	PCI/G	1	6.3	184	G	PCI/G		PR	
9202-0000-137-C-3C-05	MSR#05-0800	131693040	406668	14596-10-2	Americium-241	TRG 8	UHASL300	HASL300	REG	-0.0179	0.0334	PCI/G	0	U	3/3/2005	38415.88194	2:52	0.0536	PCI/G	0.0257	PCI/G	1	6.3	184	G	PCI/G		PR	
9202-0000-137-C-3C-05	MSR#05-0800	131693040	412129	14596-10-2	Americium-241	TRG 1	UAM05RCM	AM05RCM	REG	0.126	0.115	PCI/G	0	U	7/3/2005	38446.75278	1:54	0.17	PCI/G	0.0555	PCI/G	1	6.3	0.26	G	PCI/G		PR	
9202-0000-137-C-3C-05	MSR#05-0800	131693040	406668	14913-49-6	Bismuth-212	TRG 8	UHASL300	HASL300	REG	0.315	0.208	PCI/G	0		3/3/2005	38415.88194	2:52	0.275	PCI/G	0.123	PCI/G	1	6.3	184	G	PCI/G		PR	
9202-0000-137-C-3C-05	MSR#05-0800	131693040	406668	14733-03-0	Bismuth-214	TRG 8	UHASL300	HASL300	REG	0.265	0.0968	PCI/G	0		3/3/2005	38415.88194	2:52	0.0812	PCI/G	0.0376	PCI/G	1	6.3	184	G	PCI/G		PR	
9202-0000-137-C-3C-05	MSR#05-0800	131693040	407148	14762-75-5	Carbon-14	TRG 5	ULSC	LSC	REG	-0.0565	0.0908	PCI/G	0	U		19/03/2005	1:35	0.156	PCI/G	0.077	PCI/G	1	6.3	9.11	G	PCI/G		PR	
9202-0000-137-C-3C-05	MSR#05-0800	131693040	406668	13967-70-9	Cesium-134	TRG 8	UHASL300	HASL300	REG	0.0151	0.0234	PCI/G	0	U	3/3/2005	38415.88194	2:52	0.0473	PCI/G	0.0215	PCI/G	1	6.3	184	G	PCI/G		PR	
9202-0000-137-C-3C-05	MSR#05-0800	131693040	406668	10045-97-3	Cesium-137	TRG 8	UHASL300	HASL300	REG	0.00492	0.0222	PCI/G	0	U	3/3/2005	38415.88194	2:52	0.043	PCI/G	0.0197	PCI/G	1	6.3	184	G	PCI/G		PR	
9202-0000-137-C-3C-05	MSR#05-0800	131693040	406668	10198-40-0	Cobalt-60	TRG 8	UHASL300	HASL300	REG	-0.00715	0.0197	PCI/G	0	U	3/3/2005	38415.88194	2:52	0.0365	PCI/G	0.0155	PCI/G	1	6.3	184	G	PCI/G		PR	
9202-0000-137-C-3C-05	MSR#05-0800	131693040	412129	OER-100-93	Curium-242	TRG 1	UAM05RCM	AM05RCM	REG	-0.0182	0.0622	PCI/G	0	U	7/3/2005	38446.75278	1:54	0.234	PCI/G	0.0807	PCI/G	1	6.3	0.26	G	PCI/G		PR	
9202-0000-137-C-3C-05	MSR#05-0800	131693040	412129	OER-101-57	Curium-243/244	TRG 1	UAM05RCM	AM05RCM	REG	-0.00612	0.107	PCI/G	0	U	7/3/2005	38446.75278	1:54	0.293	PCI/G	0.117	PCI/G	1	6.3	0.26	G	PCI/G		PR	
9202-0000-137-C-3C-05	MSR#05-0800	131693040	406668	14683-23-9	Europium-152	TRG 8	UHASL300	HASL300	REG	0.0141	0.0594	PCI/G	0	U	3/3/2005	38415.88194	2:52	0.0993	PCI/G	0.0464	PCI/G	1	6.3	184	G	PCI/G		PR	
9202-0000-137-C-3C-05	MSR#05-0800	131693040	406668	15585-10-1	Europium-154	TRG 8	UHASL300	HASL300	REG	-0.00461	0.0663	PCI/G	0	U	3/3/2005	38415.88194	2:52	0.127	PCI/G	0.0559	PCI/G	1	6.3	184	G	PCI/G		PR	

9202-0000-137-C-3C-05	MSR#05-0800	131693040	406668	14391-16-3	Europium-155	TRG 8	UHASL300	HASL300	REG	-0.00174	0.0489	PCI/G	0	U	3/3/2005	38415.88194	2:52	0.0961	PCI/G	0.046	PCI/G	1	6.3	184	G	PCI/G		PR	
9202-0000-137-C-3C-05	MSR#05-0800	131693040	407185	14681-59-5	Iron-55	TRG 26	ULSC	LSC	REG	-17.9	54.4	PCI/G	0	U	7/3/2005	38415.77083	9:46	75.4	PCI/G	36.9	PCI/G	1	6.3	0.189	G	PCI/G		PR	
9202-0000-137-C-3C-05	MSR#05-0800	131693040	406668	15092-94-1	Lead-212	TRG 8	UHASL300	HASL300	REG	0.351	0.0879	PCI/G	0		3/3/2005	38415.88194	2:52	0.0589	PCI/G	0.0279	PCI/G	1	6.3	184	G	PCI/G		PR	
9202-0000-137-C-3C-05	MSR#05-0800	131693040	406668	15067-28-4	Lead-214	TRG 8	UHASL300	HASL300	REG	0.257	0.0779	PCI/G	0		3/3/2005	38415.88194	2:52	0.0797	PCI/G	0.0375	PCI/G	1	6.3	184	G	PCI/G		PR	
9202-0000-137-C-3C-05	MSR#05-0800	131693040	406668	13966-31-9	Manganese-54	TRG 8	UHASL300	HASL300	REG	0.0159	0.0202	PCI/G	0	U	3/3/2005	38415.88194	2:52	0.0481	PCI/G	0.0221	PCI/G	1	6.3	184	G	PCI/G		PR	
9202-0000-137-C-3C-05	MSR#05-0800	131693040	407187	13781-37-8	Nickel-63	TRG 30	ULSC	LSC	REG	-3.66	8.21	PCI/G	0	U	7/3/2005	38415.77014	3:36	14.3	PCI/G	6.99	PCI/G	1	6.3	0.189	G	PCI/G		PR	
9202-0000-137-C-3C-05	MSR#05-0800	131693040	406668	14681-63-1	Niobium-94	TRG 8	UHASL300	HASL300	REG	0.0135	0.0207	PCI/G	0	U	3/3/2005	38415.88194	2:52	0.0412	PCI/G	0.019	PCI/G	1	6.3	184	G	PCI/G		PR	
9202-0000-137-C-3C-05	MSR#05-0800	131693040	412132	13981-16-3	Plutonium-238	TRG 32	UPU11RCM	PU11RCM	REG	-0.0329	0.0579	PCI/G	0	U	7/3/2005	38446.75278	1:54	0.233	PCI/G	0.0848	PCI/G	1	6.3	0.26	G	PCI/G		PR	
9202-0000-137-C-3C-05	MSR#05-0800	131693040	412132	OER-100-70	Plutonium-239/240	TRG 32	UPU11RCM	PU11RCM	REG	0.00658	0.0499	PCI/G	0	U	7/3/2005	38446.75278	1:54	0.156	PCI/G	0.0464	PCI/G	1	6.3	0.26	G	PCI/G		PR	
9202-0000-137-C-3C-05	MSR#05-0800	131693040	412133	14119-32-5	Plutonium-241	TRG 36	UPU11RCM	PU11RCM	REG	11.2	6.7	PCI/G	0		7/3/2005	38446.75347	3:11	10.9	PCI/G	5.31	PCI/G	1	6.3	0.532	G	PCI/G		PR	
9202-0000-137-C-3C-05	MSR#05-0800	131693040	406668	13966-00-2	Potassium-40	TRG 8	UHASL300	HASL300	REG	6.22	0.879	PCI/G	0		3/3/2005	38415.88194	2:52	0.335	PCI/G	0.14	PCI/G	1	6.3	184	G	PCI/G		PR	
9202-0000-137-C-3C-05	MSR#05-0800	131693040	406668	13982-63-3	Radium-226	TRG 8	UHASL300	HASL300	REG	0.265	0.0968	PCI/G	0		3/3/2005	38415.88194	2:52	0.0812	PCI/G	0.0376	PCI/G	1	6.3	184	G	PCI/G		PR	
9202-0000-137-C-3C-05	MSR#05-0800	131693040	406668	14391-65-2	Silver-108m	TRG 8	UHASL300	HASL300	REG	0.0104	0.0181	PCI/G	0	U	3/3/2005	38415.88194	2:52	0.0367	PCI/G	0.0171	PCI/G	1	6.3	184	G	PCI/G		PR	
9202-0000-137-C-3C-05	MSR#05-0800	131693040	414565	10098-97-2	Strontium-90	TRG 45	UE905M	E905M	REG	0.00567	0.00774	PCI/G	0	U	7/3/2005	38446.75556	10:50	0.015	PCI/G	0.00727	PCI/G	1	6.3	13	G	PCI/G		PR	
9202-0000-137-C-3C-05	MSR#05-0800	131693040	409273	14133-76-7	Technetium-99	TRG 46	UTC02RCM	TC02RCM	REG	0.11	0.175	PCI/G	0	U		21/03/2005	1:06	0.295	PCI/G	0.144	PCI/G	1	6.3	7.22	G	PCI/G		PR	
9202-0000-137-C-3C-05	MSR#05-0800	131693040	406668	14913-50-9	Thallium-208	TRG 8	UHASL300	HASL300	REG	0.107	0.0409	PCI/G	0		3/3/2005	38415.88194	2:52	0.0446	PCI/G	0.0206	PCI/G	1	6.3	184	G	PCI/G		PR	
9202-0000-137-C-3C-05	MSR#05-0800	131693040	409926	10028-17-8	Tritium	TRG 20	UE906.0	E906.0	REG	-1.87	5.7	PCI/G	0	U		5/4/2005	6:28	10.1	PCI/G	4.86	PCI/G	1	6.3	2.11	G	PCI/G		PR	
	MSR#05-0800	1200800984	406667	14331-83-0	Actinium-228	TRG	U	HASL300	LB1	0.0614	0.0451	PCI/G	0	U		10/3/2005	3:01	0.0953	PCI/G	0.044	PCI/G	1	0	180	G	PCI/G		PR	
	MSR#05-0800	1200800984	406667	14596-10-2	Americium-241	TRG	U	HASL300	LB1	-0.0245	0.0459	PCI/G	0	U		10/3/2005	3:01	0.063	PCI/G	0.0295	PCI/G	1	0	180	G	PCI/G		PR	
	MSR#05-0800	1200800984	406667	14913-49-6	Bismuth-212	TRG	U	HASL300	LB1	0.0746	0.0846	PCI/G	0	U		10/3/2005	3:01	0.173	PCI/G	0.0794	PCI/G	1	0	180	G	PCI/G		PR	
	MSR#05-0800	1200800984	406667	14733-03-0	Bismuth-214	TRG	U	HASL300	LB1	0.00179	0.0494	PCI/G	0	U		10/3/2005	3:01	0.052	PCI/G	0.0244	PCI/G	1	0	180	G	PCI/G		PR	
	MSR#05-0800	1200800984	406667	13967-70-9	Cesium-134	TRG	U	HASL300	LB1	0.00486	0.0122	PCI/G	0	U		10/3/2005	3:01	0.0238	PCI/G	0.0108	PCI/G	1	0	180	G	PCI/G		PR	
	MSR#05-0800	1200800984	406667	10045-97-3	Cesium-137	TRG	U	HASL300	LB1	0.00532	0.0104	PCI/G	0	U		10/3/2005	3:01	0.0209	PCI/G	0.00954	PCI/G	1	0	180	G	PCI/G		PR	
	MSR#05-0800	1200800984	406667	10198-40-0	Cobalt-60	TRG	U	HASL300	LB1	0.00203	0.0118	PCI/G	0	U		10/3/2005	3:01	0.0228	PCI/G	0.0101	PCI/G	1	0	180	G	PCI/G		PR	
	MSR#05-0800	1200800984	406667	14683-23-9	Europium-152	TRG	U	HASL300	LB1	0.0395	0.0407	PCI/G	0	U		10/3/2005	3:01	0.0625	PCI/G	0.0293	PCI/G	1	0	180	G	PCI/G		PR	
	MSR#05-0800	1200800984	406667	15585-10-1	Europium-154	TRG	U	HASL300	LB1	-0.0246	0.0296	PCI/G	0	U		10/3/2005	3:01	0.0481	PCI/G	0.0204	PCI/G	1	0	180	G	PCI/G		PR	
	MSR#05-0800	1200800984	406667	14391-16-3	Europium-155	TRG	U	HASL300	LB1	0.00359	0.0289	PCI/G	0	U		10/3/2005	3:01	0.0574	PCI/G	0.027	PCI/G	1	0	180	G	PCI/G		PR	
	MSR#05-0800	1200800984	406667	15092-94-1	Lead-212	TRG	U	HASL300	LB1	0.0166	0.0277	PCI/G	0	U		10/3/2005	3:01	0.0409	PCI/G	0.0195	PCI/G	1	0	180	G	PCI/G		PR	
	MSR#05-0800	1200800984	406667	15067-28-4	Lead-214	TRG	U	HASL300	LB1	0.0021	0.0221	PCI/G	0	U		10/3/2005	3:01	0.0419	PCI/G	0.0196	PCI/G	1	0	180	G	PCI/G		PR	
	MSR#05-0800	1200800984	406667	13966-31-9	Manganese-54	TRG	U	HASL300	LB1	-0.008	0.0104	PCI/G	0	U		10/3/2005	3:01	0.0174	PCI/G	0.00773	PCI/G	1	0	180	G	PCI/G		PR	
	MSR#05-0800	1200800984	406667	14681-63-1	Niobium-94	TRG	U	HASL300	LB1	-0.00577	0.0108	PCI/G	0	U		10/3/2005	3:01	0.019	PCI/G	0.00869	PCI/G	1	0	180	G	PCI/G		PR	
	MSR#05-0800	1200800984	406667	13966-00-2	Potassium-40	TRG	U	HASL300	LB1	0.221	0.135	PCI/G	0	U		10/3/2005	3:01	0.301	PCI/G	0.137	PCI/G	1	0	180	G	PCI/G		PR	
	MSR#05-0800	1200800984	406667	13982-63-3	Radium-226	TRG	U	HASL300	LB1	0.00179	0.0494	PCI/G	0	U		10/3/2005	3:01	0.052	PCI/G	0.0244	PCI/G	1	0	180	G	PCI/G		PR	
	MSR#05-0800	1200800984	406667	14391-65-2	Silver-108m	TRG	U	HASL300	LB1	-0.00102	0.0116	PCI/G	0	U		10/3/2005	3:01	0.0187	PCI/G	0.00862	PCI/G	1	0	180	G	PCI/G		PR	
	MSR#05-0800	1200800984	406667	14913-50-9	Thallium-208	TRG	U	HASL300	LB1	0.00179	0.0116	PCI/G	0	U		10/3/2005	3:01	0.0224	PCI/G	0.0104	PCI/G	1	0	180	G	PCI/G		PR	
9202-0000-133-C-1C-01	MSR#05-0800	1200800985	406667	14331-83-0	Actinium-228	TRG	U	HASL300	LR1	0.34	0.146	PCI/G	0			9/3/2005	3:36	0.121	PCI/G	0.054	PCI/G	1	4.6	165	G	PCI/G	0.26	2	PR
9202-0000-133-C-1C-01	MSR#05-0800	1200800985	406667	14596-10-2	Americium-241	TRG	U	HASL300	LR1	0.000722	0.0274	PCI/G	0	U		9/3/2005	3:36	0.0464	PCI/G	0.0222	PCI/G	1	4.6	165	G	PCI/G	0.04	35	PR
9202-0000-133-C-1C-01	MSR#05-0800	1200800985	406667	14913-49-6	Bismuth-212	TRG	U	HASL300	LR1	0.249	0.166	PCI/G	0	U		9/3/2005	3:36	0.307	PCI/G	0.141	PCI/G	1	4.6	165	G	PCI/G	0.06	65	PR
9202-0000-133-C-1C-01	MSR#05-0800	1200800985	406667	14733-03-0	Bismuth-214	TRG	U	HASL300	LR1	0	0.076	PCI/G	0	UUI		9/3/2005	3:36	0.123	PCI/G	0.059	PCI/G	1	4.6	165	G	PCI/G	0.00	PR	
9202-0000-133-C-1C-01	MSR#05-0800	1200800985	406667	13967-70-9	Cesium-134	TRG	U	HASL300	LR1	0.0396	0.0228	PCI/G	0	U		9/3/2005	3:36	0.0493	PCI/G	0.0227	PCI/G	1	4.6	165	G	PCI/G	0.00	233	PR
9202-0000-133-C-1C-01	MSR#05-0800	1200800985	406667	10045-97-3	Cesium-137	TRG	U	HASL300	LR1	0.0166	0.0214	PCI/G	0	U		9/3/2005	3:36	0.0422	PCI/G	0.0195	PCI/G	1	4.6	165	G	PCI/G	0.01	23	PR
9202-0000-133-C-1C-01	MSR#05-0800	1200800985	406667	10198-40-0	Cobalt-60	TRG	U	HASL300	LR1	-0.0067	0.0221	PCI/G	0	U		9/3/2005	3:36	0.04	PCI/G	0.0174	PCI/G	1	4.6	165	G	PCI/G	-0.0	0718	PR
9202-0000-133-C-1C-01	MSR#05-0800	1200800985	406667	14683-23-9	Europium-152	TRG	U	HASL300	LR1	-0.0193	0.0518	PCI/G	0	U		9/3/2005	3:36	0.0947	PCI/G	0.0444	PCI/G	1	4.6	165	G	PCI/G	0.05	81	PR
9202-0000-133-C-1C-01	MSR#05-0800	1200800985	406667	15585-10-1	Europium-154	TRG	U	HASL300	LR1	0.0152	0.0613	PCI/G	0	U		9/3/2005	3:36	0.12	PCI/G	0.0533	PCI/G	1	4.6	165	G	PCI/G	-0.0	331	PR
9202-0000-133-C-1C-01	MSR#05-0800	1200800985	406667	14391-16-3	Europium-155	TRG	U	HASL300	LR1	0.0575	0.0743	PCI/G	0	U		9/3/2005	3:36	0.0815	PCI/G	0.039	PCI/G	1	4.6	165	G	PCI/G	0.00	547	PR
9202-0000-133-C-1C-01	MSR#05-0800	1200800985	406667	15092-94-1	Lead-212	TRG	U	HASL300	LR1	0.286	0.0525	PCI/G	0			9/3/2005	3:36	0.0487	PCI/G	0.023	PCI/G	1	4.6	165	G	PCI/G	0.25	8	PR
9202-0000-133-C-1C-01	MSR#05-0800	1200800985	406667	15067-28-4	Lead-214	TRG	U	HASL300	LR1	0.235	0.0824	PCI/G	0			9/3/2005	3:36	0.0636	PCI/G	0.0297	PCI/G	1	4.6	165	G	PCI/G	0.30	1	PR
9202-0000-133-C-1C-01	MSR#05-0800	1200800985	406667	13966-31-9	Manganese-54	TRG	U	HASL300	LR1	0.00588	0.0212	PCI/G	0	U		9/3/2005	3:36	0.0401	PCI/G	0.0182	PCI/G	1	4.6	165	G	PCI/G	0.01	57	PR
9202-0000-133-C-1C-01	MSR#05-0800	1200800985	406667	14681-63-1	Niobium-94	TRG	U	HASL300	LR1	0.00242	0.0172	PCI/G	0	U		9/3/2005	3:36	0.0322	PCI/G	0.0147	PCI/G	1	4.6	165	G	PCI/G	0.00	472	PR
9202-0000-133-C-1C-01	MSR#05-0800	1200800985	406667	13966-00-2	Potassium-40	TRG	U	HASL300	LR1	6.46	0.805	PCI/G	0			9/3/2005	3:36	0.304	PCI/G	0.126	PCI/G	1	4.6	165	G	PCI/G	5.70	PR	
9202-0000-133-C-1C-01	MSR#05-0800	1200800985	406667	13982-63-3	Radium-226	TRG	U	HASL300	LR1	0.196	0.076	PCI/G	0			9/3/2005	3:36	0.0686	PCI/G	0.0316	PCI/G	1	4.6	165	G	PCI/G	0.19	9	PR
9202-0000-133-C-1C-01	MSR#05-0800	1200800985	406667	14391-65-2	Silver-108m	TRG	U	HASL300	LR1	-0.0069	0.0164	PCI/G	0	U		9/3/2005	3:36	0.0296	PCI/G	0.0137	PCI/G	1	4.6	165	G	PCI/G	-0.0	00739	PR
9202-0000-133-C-1C-01	MSR#05-0800	1200800985	406667	14913-50-9	Thallium-208	TRG	U	HASL300	LR1	0.0794	0.0527	PCI/G	0			9/3/2005	3:36	0.0403	PCI/G	0.0187	PCI/G	1	4.6	165	G	PCI/G	0.07	95	PR
	MSR#05-0800	1200800986	406667	14331-83-0	Actinium-228	TRG	U	HASL300	BS1	0.686	0.745	PCI/G	0	U		9/3/2005	11:22	1.38	PCI/G	0.652	PCI/G	1	0	100	G	PCI/G		PR	
	MSR#05-0800	1200800986	406667	14596-10-2	Americium-241	TRG	U	HASL300	BS1	24.8	1.93	PCI/G	0			9/3/2005	11:22	0.566	PCI/G	0.276	PCI/G	1	0	100	G	.4	PCI/G	PR	
	MSR#05-0800	1200800986	406667	14913-49-6	Bismuth-212	TRG	U	HASL300	BS1	-0.684	1.42	PCI/G	0	U		9/3/2005	11:22	2.29	PCI/G	1.08	PCI/G	1	0	100	G	PCI/G		PR	
	MSR#05-0800	1200800986	406667	14733-03-0	Bismuth-214	TRG	U	HASL300	BS1	0.123	0.31	PCI/G	0	U		9/3/2005	11:22	0.541	PCI/G	0.256	PCI/G	1	0	100	G	PCI/G		PR	
	MSR#05-0800	1200800986	406667	13967-70-9	Cesium-134	TRG	U	HASL300	BS1	-0.0771	0.197	PCI/G	0	U		9/3/2005	11:22	0.34	PCI/G	0.16	PCI/G	1	0	100	G	PCI/G		PR	
	MSR#05-0800	1200800986	406667	10045-97-3	Cesium-137	TRG	U	HASL300	BS1	9.85	0.999	PCI/G	0			9/3/2005	11:22	0.285	PCI/G	0.134	PCI/G	1	0	100	G	09	PCI/G	PR	
	MSR#05-0800	1200800986	406667	10198-40-0	Cobalt-60	TRG	U	HASL300	BS1	13.5	1.12	PCI/G	0			9/3/2005	11:22	0.288	PCI/G	0.13	PCI/G	1	0	100	G	.0	PCI/G	PR	
	MSR#05-0800	1200800986	406667	14683-23-9	Europium-152	TRG	U	HASL300	BS1	-0.0262	0.345	PCI/G	0	U		9/3/2005	11:22	0.595	PCI/G	0.283	PCI/G	1	0	100	G	PCI/G		PR	
	MSR#05-0800	1200800986	406667	15585-10-1	Europium-154	TRG	U	HASL300	BS1	-0.193	0.363	PCI/G	0	U		9/3/2005	11:22	0.61	PCI/G	0.267	PCI/G	1	0	100	G	PCI/G		PR	
	MSR#05-0800	1200800986	406667	14391-16-3	Europium-155	TRG	U	HASL300	BS1	-0.284	0.338	PCI/G	0	U		9/3/2005	11:22	0.538	PCI/G	0.26	PCI/G	1	0	100	G	PCI/G		PR	
	MSR#05-0800	1200800986	406667	15092-94-1	Lead-212	TRG	U	HASL300	BS1	0.143	0.185	PCI/G	0	U		9/3/2005	11:22	0.333	PCI/G	0.16	PCI/G	1	0	100	G	PCI/G		PR	
	MSR#05-0800	1200800986	406667	15067-28-4	Lead-214	TRG	U	HASL300	BS1	0.0631	0.263	PCI/G	0	U		9/3/2005	11:22	0.461	PCI/G	0.22	PCI/G	1	0	100	G	PCI/G		PR	
	MSR#05-0800	1200800986	406667	13966-31-9	Manganese-54	TRG	U	HASL300	BS1	0.0439	0.172	PCI/G	0	U		9/3/2005	11:22	0.31	PCI/G	0.146	PCI/G	1	0	100	G	PCI/G		PR	
	MSR#05-0800	1200800986	406667	14681-63-1	Niobium-94	TRG	U	HASL300	BS1	0.122	0.153	PCI/G	0	U		9/3/2005	11:22	0.275	PCI/G	0.13	PCI/G	1	0	100	G	PCI/G		PR	
	MSR#05-0800	1200800986	406667	13966-00-2	Potassium-40	TRG	U	HASL300	BS1	0.926	1.13	PCI/G	0	U		9/3/2005	11:22	2.37	PCI/G	1.04	PCI/G	1	0	100	G	PCI/G		PR	
	MSR#05-0800	1200800986	406667	13982-63-3	Radium-226	TRG	U	HASL300	BS1	0.123	0.31	PCI/G	0	U		9/3/2005	11:22	0.541	PCI/G	0.256	PCI/G	1	0	100	G	PCI/G		PR	
	MSR#05-0800	1200800986	406667	14391-65-2	Silver-108m	TRG	U	HASL300	BS1	-0.067	0.139	PCI/G	0	U		9/3/2005	11:22	0.232	PCI/G	0.11	PCI/G	1	0	100	G	PCI/G		PR	
	MSR#05-0800	1200800986	406667	14913-50-9	Thallium-208	TRG	U	HASL300	BS1	0.11	0.158	PCI/G	0	U		9/3/2005	11:22	0.282	PCI/G	0.133	PCI/G	1	0	100	G	PCI/G		PR	
	MSR#05-0800	1200800987	406668	14331-83-0	Actinium-228	TRG	U	HASL300	LB1	0.052	0.0909	PCI/G	0	U		10/3/2005	2:55	0.186	PCI/G	0.0815	PCI/G	1	0	101	G	PCI/G		PR	
	MSR#05-0800	1200800987	406668	14596-10-2	Americium-241	TRG	U	HASL300	LB1	0.0632	0.103	PCI/G	0	U		10/3/2005	2:55	0.168	PCI/G	0.0777	PCI/G	1	0	101	G	PCI/G		PR	
	MSR#05-0800	1200800987	406668	14913-49-6	Bismuth-212	TRG	U	HASL300	LB1	-0.167	0.209	PCI/G	0	U		10/3/2005	2:55	0.344	PCI/G	0.15	PCI/G	1	0	101	G	PCI/G		PR	
	MSR#05-0800	1200800987	406668	14733-03-0	Bismuth-214	TRG	U	HASL300	LB1	0.0616	0.0597	PCI/G	0	U		10/3/2005	2:55	0.12	PCI/G	0.0552	PCI/G	1	0	101	G	PCI/G		PR	
	MSR#05-0800	1200800987	406668	13967-70-9	Cesium-134	TRG	U	HASL300	LB1	0.0054	0.0247	PCI/G	0	U		10/3/2005	2:55	0.0489	PCI/G	0.0211	PCI/G	1	0	101	G	PCI/G		PR	
	MSR#05-0800	1200800987	406668	10045-97-3	Cesium-137	TRG	U	HASL300	LB1	0.00704	0.0323	PCI/G	0	U		10/3/2005	2:55	0.0609	PCI/G	0.0276	PCI/G	1	0	101	G	PCI/G		PR	
	MSR#05-0800	1200800987	406668	10198-40-0	Cobalt-60	TRG	U	HASL300	LB1	0.0172	0.0263	PCI/G	0	U		10/3/2005	2:55	0.0582	PCI/G	0.0248	PCI/G	1	0	101	G	PCI/G		PR	
	MSR#05-0800	1200800987	406668	14683-23-9	Europium-152	TRG	U	HASL300	LB1	-0.0287	0.0789	PCI/G	0	U		10/3/2005	2:55	0.136	PCI/G	0.0624	PCI/G	1	0	101	G	PCI/G		PR	
	MSR#05-0800	1200800987	406668	15585-10-1	Europium-154	TRG	U	HASL300	LB1	-0.0446	0.0639	PCI/G	0	U		10/3/2005	2:55	0.108	PCI/G	0.0421	PCI/G	1	0	101	G	PCI/G		PR	
	MSR#05-0800	1200800987	406668	14391-16-3	Europium-155	TRG	U	HASL300	LB1	0.0704	0.079	PCI/G	0	U		10/3/2005	2:55	0.147	PCI/G	0.0689	PCI/G	1	0	101	G	PCI/G		PR	
	MSR#05-0800	1200800987	406668	15092-94-1	Lead-212	TRG	U	HASL300	LB1	0.0315	0.0667	PCI/G	0	U		10/3/2005	2:55	0.0895	PCI/G	0.0421	PCI/G	1	0	101	G	PCI/G		PR	
	MSR#05-0800	1200800987	406668	15067-28-4	Lead-214	TRG	U	HASL300	LB1	0.0568	0.0606	PCI/G	0	U		10/3/2005	2:55	0.116	PCI/G	0.054	PCI/G	1	0	101	G	PCI/G		PR	
	MSR#05-0800	1200800987	406668	13966-31-9	Manganese-54	TRG	U	HASL300	LB1	0.0064	0.0265	PCI/G	0	U		10/3/2005	2:55	0.0509	PCI/G	0.0225	PCI/G	1	0	101	G	PCI/G		PR	
	MSR#05-0800	1200800987	406668	14681-63-1	Niobium-94	TRG	U	HASL300	LB1	0.0146	0.0251	PCI/G	0	U		10/3/2005	2:55	0.05	PCI/G	0.0225	PCI/G	1	0	101	G	PCI/G		PR	
	MSR#05-0800	1200800987	406668	13966-00-2	Potassium-40	TRG	U	HASL300	LB1	0.218	0.324	PCI/G	0	U		10/3/2005	2:55	0.648	PCI/G	0.28	PCI/G	1	0	101	G	PCI/G		PR	

	MSR#05-0800	1200800987	406668	13982-63-3	Radium-226	TRG	U	HASL300	LB1	0.0616	0.0597	PCI/G	0	U		10/3/2005	2:55	0.12	PCI/G	0.0552	PCI/G	1	0	101	G	PCI/G		PR					
	MSR#05-0800	1200800987	406668	14391-65-2	Silver-108m	TRG	U	HASL300	LB1	0.00748	0.0256	PCI/G	0	U		10/3/2005	2:55	0.0473	PCI/G	0.0215	PCI/G	1	0	101	G	PCI/G		PR					
	MSR#05-0800	1200800987	406668	14913-50-9	Thallium-208	TRG	U	HASL300	LB1	0.0158	0.0318	PCI/G	0	U		10/3/2005	2:55	0.059	PCI/G	0.0269	PCI/G	1	0	101	G	PCI/G		PR					
9202-0000-132-C-1C-01	MSR#05-0800	1200800988	406668	14331-83-0	Actinium-228	TRG	U	HASL300	LR1	0.224	0.131	PCI/G	0			10/3/2005	3:05	0.133	PCI/G	0.0595	PCI/G	1	3.5	174	G	PCI/G	0.36	1	PR				
9202-0000-132-C-1C-01	MSR#05-0800	1200800988	406668	14596-10-2	Americium-241	TRG	U	HASL300	LR1	-0.0242	0.0798	PCI/G	0	U		10/3/2005	3:05	0.132	PCI/G	0.0622	PCI/G	1	3.5	174	G	PCI/G	-0.0	212	PR				
9202-0000-132-C-1C-01	MSR#05-0800	1200800988	406668	14913-49-6	Bismuth-212	TRG	U	HASL300	LR1	0.537	0.254	PCI/G	0			10/3/2005	3:05	0.262	PCI/G	0.118	PCI/G	1	3.5	174	G	PCI/G	0.28	7	PR				
9202-0000-132-C-1C-01	MSR#05-0800	1200800988	406668	14733-03-0	Bismuth-214	TRG	U	HASL300	LR1	0.314	0.0794	PCI/G	0			10/3/2005	3:05	0.0657	PCI/G	0.03	PCI/G	1	3.5	174	G	PCI/G	0.28	3	PR				
9202-0000-132-C-1C-01	MSR#05-0800	1200800988	406668	13967-70-9	Cesium-134	TRG	U	HASL300	LR1	0.0258	0.0214	PCI/G	0	U		10/3/2005	3:05	0.0453	PCI/G	0.0207	PCI/G	1	3.5	174	G	PCI/G	0.03	13	PR				
9202-0000-132-C-1C-01	MSR#05-0800	1200800988	406668	10045-97-3	Cesium-137	TRG	U	HASL300	LR1	-0.00411	0.0182	PCI/G	0	U		10/3/2005	3:05	0.0336	PCI/G	0.0151	PCI/G	1	3.5	174	G	PCI/G	-0.0	0462	PR				
9202-0000-132-C-1C-01	MSR#05-0800	1200800988	406668	10198-40-0	Cobalt-60	TRG	U	HASL300	LR1	0.00264	0.0165	PCI/G	0	U		10/3/2005	3:05	0.0306	PCI/G	0.0127	PCI/G	1	3.5	174	G	PCI/G	-0.0	0922	PR				
9202-0000-132-C-1C-01	MSR#05-0800	1200800988	406668	14683-23-9	Europium-152	TRG	U	HASL300	LR1	-0.0103	0.0483	PCI/G	0	U		10/3/2005	3:05	0.0865	PCI/G	0.04	PCI/G	1	3.5	174	G	PCI/G	0.00	618	PR				
9202-0000-132-C-1C-01	MSR#05-0800	1200800988	406668	15585-10-1	Europium-154	TRG	U	HASL300	LR1	-0.0118	0.0547	PCI/G	0	U		10/3/2005	3:05	0.103	PCI/G	0.0443	PCI/G	1	3.5	174	G	PCI/G	-0.0	456	PR				
9202-0000-132-C-1C-01	MSR#05-0800	1200800988	406668	14391-16-3	Europium-155	TRG	U	HASL300	LR1	0.0161	0.0455	PCI/G	0	U		10/3/2005	3:05	0.0917	PCI/G	0.0435	PCI/G	1	3.5	174	G	PCI/G	0.01	58	PR				
9202-0000-132-C-1C-01	MSR#05-0800	1200800988	406668	15092-94-1	Lead-212	TRG	U	HASL300	LR1	0.29	0.0551	PCI/G	0			10/3/2005	3:05	0.0505	PCI/G	0.0237	PCI/G	1	3.5	174	G	PCI/G	0.30	7	PR				
9202-0000-132-C-1C-01	MSR#05-0800	1200800988	406668	15067-28-4	Lead-214	TRG	U	HASL300	LR1	0.229	0.0815	PCI/G	0			10/3/2005	3:05	0.0637	PCI/G	0.0296	PCI/G	1	3.5	174	G	PCI/G	0.28	4	PR				
9202-0000-132-C-1C-01	MSR#05-0800	1200800988	406668	13966-31-9	Manganese-54	TRG	U	HASL300	LR1	-0.00257	0.0166	PCI/G	0	U		10/3/2005	3:05	0.0306	PCI/G	0.0135	PCI/G	1	3.5	174	G	PCI/G	0.01	59	PR				
9202-0000-132-C-1C-01	MSR#05-0800	1200800988	406668	14681-63-1	Niobium-94	TRG	U	HASL300	LR1	-0.00377	0.0204	PCI/G	0	U		10/3/2005	3:05	0.0324	PCI/G	0.0147	PCI/G	1	3.5	174	G	PCI/G	0.00	184	PR				
9202-0000-132-C-1C-01	MSR#05-0800	1200800988	406668	13966-00-2	Potassium-40	TRG	U	HASL300	LR1	5.92	0.85	PCI/G	0			10/3/2005	3:05	0.351	PCI/G	0.15	PCI/G	1	3.5	174	G	PCI/G	5.84	PR					
9202-0000-132-C-1C-01	MSR#05-0800	1200800988	406668	13982-63-3	Radium-226	TRG	U	HASL300	LR1	0.314	0.0794	PCI/G	0			10/3/2005	3:05	0.0657	PCI/G	0.03	PCI/G	1	3.5	174	G	PCI/G	0.28	3	PR				
9202-0000-132-C-1C-01	MSR#05-0800	1200800988	406668	14391-65-2	Silver-108m	TRG	U	HASL300	LR1	0.00935	0.0168	PCI/G	0	U		10/3/2005	3:05	0.0339	PCI/G	0.0157	PCI/G	1	3.5	174	G	PCI/G	-0.0	0578	PR				
9202-0000-132-C-1C-01	MSR#05-0800	1200800988	406668	14913-50-9	Thallium-208	TRG	U	HASL300	LR1	0.0897	0.0336	PCI/G	0			10/3/2005	3:05	0.0303	PCI/G	0.0136	PCI/G	1	3.5	174	G	PCI/G	0.11	5	PR				
	MSR#05-0800	1200800989	406668	14331-83-0	Actinium-228	TRG	U	HASL300	BS1	-0.204	0.721	PCI/G	0	U		10/3/2005	8:59	1.24	PCI/G	0.584	PCI/G	1	0	100	G	PCI/G		PR					
	MSR#05-0800	1200800989	406668	14596-10-2	Americium-241	TRG	U	HASL300	BS1	22.7	1.96	PCI/G	0			10/3/2005	8:59	0.684	PCI/G	0.335	PCI/G	1	0	100	G	4	PCI/G	PR					
	MSR#05-0800	1200800989	406668	14913-49-6	Bismuth-212	TRG	U	HASL300	BS1	-0.248	1.3	PCI/G	0	U		10/3/2005	8:59	2.16	PCI/G	1.01	PCI/G	1	0	100	G	PCI/G		PR					
	MSR#05-0800	1200800989	406668	14733-03-0	Bismuth-214	TRG	U	HASL300	BS1	0.0721	0.281	PCI/G	0	U		10/3/2005	8:59	0.489	PCI/G	0.23	PCI/G	1	0	100	G	PCI/G		PR					
	MSR#05-0800	1200800989	406668	13967-70-9	Cesium-134	TRG	U	HASL300	BS1	0.0587	0.196	PCI/G	0	U		10/3/2005	8:59	0.354	PCI/G	0.167	PCI/G	1	0	100	G	PCI/G		PR					
	MSR#05-0800	1200800989	406668	10045-97-3	Cesium-137	TRG	U	HASL300	BS1	9.78	0.989	PCI/G	0			10/3/2005	8:59	0.309	PCI/G	0.146	PCI/G	1	0	100	G	09	PCI/G	PR					
	MSR#05-0800	1200800989	406668	10198-40-0	Cobalt-60	TRG	U	HASL300	BS1	13.8	1.14	PCI/G	0			10/3/2005	8:59	0.273	PCI/G	0.123	PCI/G	1	0	100	G	.0	PCI/G	PR					
	MSR#05-0800	1200800989	406668	14683-23-9	Europium-152	TRG	U	HASL300	BS1	0.302	0.337	PCI/G	0	U		10/3/2005	8:59	0.614	PCI/G	0.293	PCI/G	1	0	100	G	PCI/G		PR					
	MSR#05-0800	1200800989	406668	15585-10-1	Europium-154	TRG	U	HASL300	BS1	0.029	0.36	PCI/G	0	U		10/3/2005	8:59	0.667	PCI/G	0.296	PCI/G	1	0	100	G	PCI/G		PR					
	MSR#05-0800	1200800989	406668	14391-16-3	Europium-155	TRG	U	HASL300	BS1	-0.12	0.329	PCI/G	0	U		10/3/2005	8:59	0.537	PCI/G	0.259	PCI/G	1	0	100	G	PCI/G		PR					
	MSR#05-0800	1200800989	406668	15092-94-1	Lead-212	TRG	U	HASL300	BS1	0.0434	0.176	PCI/G	0	U		10/3/2005	8:59	0.31	PCI/G	0.149	PCI/G	1	0	100	G	PCI/G		PR					
	MSR#05-0800	1200800989	406668	15067-28-4	Lead-214	TRG	U	HASL300	BS1	0.191	0.466	PCI/G	0	U		10/3/2005	8:59	0.453	PCI/G	0.216	PCI/G	1	0	100	G	PCI/G		PR					
	MSR#05-0800	1200800989	406668	13966-31-9	Manganese-54	TRG	U	HASL300	BS1	-0.0398	0.175	PCI/G	0	U		10/3/2005	8:59	0.304	PCI/G	0.143	PCI/G	1	0	100	G	PCI/G		PR					
	MSR#05-0800	1200800989	406668	14681-63-1	Niobium-94	TRG	U	HASL300	BS1	0.062	0.158	PCI/G	0	U		10/3/2005	8:59	0.274	PCI/G	0.129	PCI/G	1	0	100	G	PCI/G		PR					
	MSR#05-0800	1200800989	406668	13966-00-2	Potassium-40	TRG	U	HASL300	BS1	0.779	1.31	PCI/G	0	U		10/3/2005	8:59	2.58	PCI/G	1.15	PCI/G	1	0	100	G	PCI/G		PR					
	MSR#05-0800	1200800989	406668	13982-63-3	Radium-226	TRG	U	HASL300	BS1	0.0721	0.281	PCI/G	0	U		10/3/2005	8:59	0.489	PCI/G	0.23	PCI/G	1	0	100	G	PCI/G		PR					
	MSR#05-0800	1200800989	406668	14391-65-2	Silver-108m	TRG	U	HASL300	BS1	-0.0855	0.139	PCI/G	0	U		10/3/2005	8:59	0.229	PCI/G	0.108	PCI/G	1	0	100	G	PCI/G		PR					
	MSR#05-0800	1200800989	406668	14913-50-9	Thallium-208	TRG	U	HASL300	BS1	-0.051	0.154	PCI/G	0	U		10/3/2005	8:59	0.256	PCI/G	0.121	PCI/G	1	0	100	G	PCI/G		PR					
	MSR#05-0800	1200802144	407148	14762-75-5	Carbon-14	TRG	U	LSC	LB1	-0.0357	0.0928	PCI/G	0	U		19/03/2005	3:08	0.159	PCI/G	0.0784	PCI/G	1	0	9	G	PCI/G		PR					
9202-0000-136-C-4C-05	MSR#05-0800	1200802145	407148	14762-75-5	Carbon-14	TRG	U	LSC	LR1	-0.0818	0.0913	PCI/G	0	U		19/03/2005	4:41	0.158	PCI/G	0.0779	PCI/G	1	7.4	9.06	G	PCI/G	-0.0	492	PR				
9202-0000-136-C-4C-05	MSR#05-0800	1200802146	407148	14762-75-5	Carbon-14	TRG	U	LSC	MS1	7.06	0.178	PCI/G	0			19/03/2005	6:13	0.158	PCI/G	0.0776	PCI/G	1	7.4	9.1	G	22	PCI/G 7.17	PR					
	MSR#05-0800	1200802147	407148	14762-75-5	Carbon-14	TRG	U	LSC	BS1	7.23	0.18	PCI/G	0			19/03/2005	7:46	0.158	PCI/G	0.0776	PCI/G	1	0	9	G	30	PCI/G	PR					
	MSR#05-0800	1200802258	407185	14681-59-5	Iron-55	TRG	U	LSC	LB1	-16.1	52.9	PCI/G	0	U		30/03/2005	10:17	73.4	PCI/G	36	PCI/G	1	0	0.198	G	PCI/G		PR					
	MSR#05-0800	1200802261	407185	14681-59-5	Iron-55	TRG	U	LSC	BS1	401	58.9	PCI/G	0			30/03/2005	11:53	70.9	PCI/G	34.7	PCI/G	1	0	0.198	G	2	PCI/G	PR					
	MSR#05-0800	1200802268	407187	13781-37-8	Nickel-63	TRG	U	LSC	LB1	-6.84	8.46	PCI/G	0	U		29/03/2005	4:23	14.9	PCI/G	7.27	PCI/G	1	0	0.198	G	PCI/G		PR					
	MSR#05-0800	1200802271	407187	13781-37-8	Nickel-63	TRG	U	LSC	BS1	735	20.3	PCI/G	0			29/03/2005	6:43	13.9	PCI/G	6.77	PCI/G	1	0	0.198	G	7	PCI/G	PR					
9202-0000-133-S-03	MSR#05-0800	1200804897	407187	13781-37-8	Nickel-63	TRG	U	LSC	LR1	-5.24	8.42	PCI/G	0	U		29/03/2005	5:09	14.7	PCI/G	7.2	PCI/G	1	9.9	0.178	G	PCI/G	-3.4	9	PR				
9202-0000-133-S-03	MSR#05-0800	1200804898	407187	13781-37-8	Nickel-63	TRG	U	LSC	MS1	795	21.7	PCI/G	0			29/03/2005	5:56	14.7	PCI/G	7.19	PCI/G	1	9.9	0.182	G	4	PCI/G 821	PR					
9202-0000-133-S-03	MSR#05-0800	1200804899	407185	14681-59-5	Iron-55	TRG	U	LSC	LR1	8.77	55.1	PCI/G	0	U		30/03/2005	10:49	75.9	PCI/G	37.2	PCI/G	1	9.9	0.178	G	PCI/G	-35.	9	PR				
9202-0000-133-S-03	MSR#05-0800	1200804900	407185	14681-59-5	Iron-55	TRG	U	LSC	MS1	407	64.3	PCI/G	0			30/03/2005	11:21	78.2	PCI/G	38.3	PCI/G	1	9.9	0.182	G	9	PCI/G 423	PR					
	MSR#05-0800	1200807178	409273	14133-76-7	Technetium-99	TRG	U	TC02RCM	LB1	0.123	0.134	PCI/G	0	U		21/03/2005	5:06	0.224	PCI/G	0.109	PCI/G	1	0	7.92	G	PCI/G		PR					
	MSR#05-0800	1200807181	409273	14133-76-7	Technetium-99	TRG	U	TC02RCM	BS1	14.3	0.356	PCI/G	0			21/03/2005	7:30	0.217	PCI/G	0.106	PCI/G	1	0	7.92	G	.9	PCI/G	PR					
	MSR#05-0800	1200808782	409871	10028-17-8	Tritium	TRG	U	E906.0	LB1	6.17	6.48	PCI/G	0	U		31/03/2005	1:27	10.8	PCI/G	5.21	PCI/G	1	0	2.12	G	PCI/G		PR					
9202-0000-133-S-01	MSR#05-0800	1200808783	409871	10028-17-8	Tritium	TRG	U	E906.0	LR1	4.6	7.48	PCI/G	0	U		31/03/2005	1:59	12.7	PCI/G	6.1	PCI/G	1	9.3	1.99	G	PCI/G	1.78	PR					
9202-0000-133-S-01	MSR#05-0800	1200808784	409871	10028-17-8	Tritium	TRG	U	E906.0	MS1	72.2	9.54	PCI/G	0			31/03/2005	2:31	11.8	PCI/G	5.67	PCI/G	1	9.3	1.96	G	.0	PCI/G 81.8	PR					
	MSR#05-0800	1200808785	409871	10028-17-8	Tritium	TRG	U	E906.0	BS1	74.8	9.17	PCI/G	0			31/03/2005	3:03	11	PCI/G	5.31	PCI/G	1	0	2.12	G	.5	PCI/G	PR					
	MSR#05-0800	1200808786	409925	10028-17-8	Tritium	TRG	U	E906.0	LB1	1.72	7.32	PCI/G	0	U		6/4/2005	5:28	12.8	PCI/G	6.05	PCI/G	1	0	2.08	G	PCI/G		PR					
9202-0000-135-C-10C-04	MSR#05-0800	1200808787	409925	10028-17-8	Tritium	TRG	U	E906.0	LR1	-4.97	7.22	PCI/G	0	U		6/4/2005	5:44	13.4	PCI/G	6.34	PCI/G	1	6.1	1.99	G	PCI/G	-3.3	9	PR				
9202-0000-135-C-10C-04	MSR#05-0800	1200808788	409925	10028-17-8	Tritium	TRG	U	E906.0	MS1	75	15.4	PCI/G	0			6/4/2005	6:01	19.8	PCI/G	9.39	PCI/G	1	6.1	2	G	.5	PCI/G 75.1	PR					
	MSR#05-0800	1200808789	409925	10028-17-8	Tritium	TRG	U	E906.0	BS1	67.6	10.8	PCI/G	0			5/4/2005	11:47	12.8	PCI/G	6.09	PCI/G	1	0	2.08	G	.8	PCI/G	PR					
	MSR#05-0800	1200808790	409926	10028-17-8	Tritium	TRG	U	E906.0	LB1	-0.694	5.74	PCI/G	0	U		5/4/2005	7:00	10.1	PCI/G	4.85	PCI/G	1	0	2.13	G	PCI/G		PR					
9202-0000-136-C-4C-05	MSR#05-0800	1200808791	409926	10028-17-8	Tritium	TRG	U	E906.0	LR1	2.12	6.11	PCI/G	0	U		5/4/2005	7:32	10.5	PCI/G	5.04	PCI/G	1	7.4	2.05	G	PCI/G	-1.6	8	PR				
9202-0000-136-C-4C-05	MSR#05-0800	1200808792	409926	10028-17-8	Tritium	TRG	U	E906.0	MS1	64.4	8.48	PCI/G	0			5/4/2005	8:03	10.4	PCI/G	4.98	PCI/G	1	7.4	2.08	G	.4	PCI/G 73.7	PR					
	MSR#05-0800	1200808793	409926	10028-17-8	Tritium	TRG	U	E906.0	BS1	70.8	8.4	PCI/G	0			5/4/2005	8:35	9.88	PCI/G	4.75	PCI/G	1	0	2.13	G	.1	PCI/G	PR					
	MSR#05-0800	1200814039	412129	14596-10-2	Americium-241	TRG	U	AM05RCM	LB1	0.105	0.114	PCI/G	0	U		4/4/2005	1:54	0.192	PCI/G	0.0645	PCI/G	1	0	0.266	G	PCI/G		PR					
	MSR#05-0800	1200814039	412129	OER-100-93	Curium-242	TRG	U	AM05RCM	LB1	0.0123	0.049	PCI/G	0	U		4/4/2005	1:54	0.14	PCI/G	0.0382	PCI/G	1	0	0.266	G	PCI/G		PR					
	MSR#05-0800	1200814039	412129	OER-101-57	Curium-243/244	TRG	U	AM05RCM	LB1	-0.0407	0.105	PCI/G	0	U		4/4/2005	1:54	0.321	PCI/G	0.129	PCI/G	1	0	0.266	G	PCI/G		PR					
9202-0000-133-C-6C-05	MSR#05-0800	1200814040	412129	14596-10-2	Americium-241	TRG	U	AM05RCM	LR1	0.271	0.211	PCI/G	0	U		4/4/2005	1:54	0.333	PCI/G	0.127	PCI/G	1	5	0.266	G	PCI/G	-0.0	527	PR				
9202-0000-133-C-6C-05	MSR#05-0800	1200814040	412129	OER-100-93	Curium-242	TRG	U	AM05RCM	LR1	0.00146	0.0795	PCI/G	0	U		4/4/2005	1:54	0.266	PCI/G	0.0834	PCI/G	1	5	0.266	G	PCI/G	0.02	78	PR				
9202-0000-133-C-6C-05	MSR#05-0800	1200814040	412129	OER-101-57	Curium-243/244	TRG	U	AM05RCM	LR1	0.0337	0.138	PCI/G	0	U		4/4/2005	1:54	0.343	PCI/G	0.132	PCI/G	1	5	0.266	G	PCI/G	0.05	52	PR				
9202-0000-133-C-6C-05	MSR#05-0800	1200814041	412129	14596-10-2	Americium-241	TRG	U	AM05RCM	MS1	11.3	1.03	PCI/G	0			4/4/2005	1:54	0.223	PCI/G	0.0786	PCI/G	1	5	0.262	G	.4	PCI/G 10.3	PR					
9202-0000-133-C-6C-05	MSR#05-0800	1200814041	412129	OER-100-93	Curium-242	TRG	U	AM05RCM	MS1	0.016	0.0639	PCI/G	0	U		4/4/2005	1:54	0.183	PCI/G	0.0497	PCI/G	1	5	0.262	G	PCI/G		PR					
9202-0000-133-C-6C-05	MSR#05-0800	1200814041	412129	OER-101-57	Curium-243/244	TRG	U	AM05RCM	MS1	14.6	1.18	PCI/G	0			4/4/2005	1:54	0.356	PCI/G	0.145	PCI/G	1	5	0.262	G	.9	PCI/G 13.0	PR					
	MSR#05-0800	1200814042	412129	14596-10-2	Americium-241	TRG	U	AM05RCM	BS1	10.3	0.998	PCI/G	0			4/4/2005	1:54	0.359	PCI/G	0.146	PCI/G	1	0	0.266	G	.3	PCI/G	PR					
	MSR#05-0800	1200814042	412129	OER-100-93	Curium-242	TRG	U	AM05RCM	BS1	-0.0425	0.0315	PCI/G	0	U		4/4/2005	1:54	0.221	PCI/G	0.0763	PCI/G	1	0	0.266	G	PCI/G		PR					
	MSR#05-0800	1200814042	412129	OER-101-57	Curium-243/244	TRG	U	AM05RCM	BS1	12.4	1.09	PCI/G	0			4/4/2005	1:54	0.365	PCI/G	0.149	PCI/G	1	0	0.266	G	.6	PCI/G	PR					
	MSR#05-0800	1200814047	412132	13981-16-3	Plutonium-238	TRG	U	PU11RCM	LB1	-0.0419	0.0517	PCI/G	0	U		4/4/2005	1:54	0.2	PCI/G	0.0703	PCI/G	1	0	0.266	G	PCI/G		PR					
	MSR#05-0800	1200814047	412132	OER-100-70	Plutonium-239/240	TRG	U	PU11RCM	LB1	0.0279	0.063	PCI/G	0	U		4/4/2005	1:54	0.145	PCI/G	0.043	PCI/G	1	0	0.266	G	PCI/G		PR					
9202-0000-133-C-6C-05	MSR#05-0800	1200814048	412132	13981-16-3	Plutonium-238	TRG	U	PU11RCM	LR1	-0.0323	0.0258	PCI/G	0	U		4/4/2005	1:54	0.186	PCI/G	0.0626	PCI/G	1	5	0.266	G	PCI/G	-0.0	202	PR				
9202-0000-133-C-6C-05	MSR#05-0800	1200814048	412132	OER-100-70	Plutonium-239/240	TRG	U	PU11RCM	LR1	0.00627	0.0476	PCI/G	0	U		4/4/2005	1:54	0.149	PCI/G	0.0442	PCI/G	1	5	0.266	G	PCI/G	0.00	0877	PR				
9202-0000-133-C-6C-05	MSR#05-0800	1200814049	412132	13981-16-3	Plutonium-238	TRG	U	PU11RCM	MS1	0.0685	0.0775	PCI/G	0			4/4/2005	1:54	0.0619	PCI/G	0	PCI/G	1	5	0.262	G	PCI/G		PR					
9202-0000-133-C-6C-05	MSR#05-0800	1200814049	412132	OER-100-70	Plutonium-239/240	TRG	U	PU11RCM	MS1	9.78	0.926	PCI/G	0			4/4/2005	1:54	0.114	PCI/G	0.026	PCI/G	1	5	0.262	G	12	PCI/G 9.12	PR					
	MSR#05-0800	1200814050	412132	13981-16-3	Plutonium-238	TRG	U	PU11RCM	BS1	0.000986	0.0536	PCI/G	0	U		4/4/2005	1:54	0.179	PCI/G	0.0562	PCI/G	1	0	0.266	G	PCI/G		PR					
	MSR#05-0800	1200814050	412132	OER-100-70	Plutonium-239/240	TRG	U	PU11RCM	BS1	10.8	1.01	PCI/G	0			4/4/2005	1:54	0.192	PCI/G	0.0628	PCI/G	1	0	0.266	G	99	PCI/G	PR					
	MSR#05-0800	1200814051	412133	14119-32-5	Plutonium-241	TRG	U	PU11RCM	LB1	6.75	6.71	PCI/G	0	U		5/4/2005	4:21	11.2	PCI/G	5.45	PCI/G	1	0	0.542	G	PCI/G		PR					

9202-0000-133-C-6C-05	MSR#05-0800	1200814052	412133	14119-32-5	Plutonium-241	TRG	U	PU11RCM	LR1	8.14	7.25	PCI/G	0	U		5/4/2005	4:53	12.1	PCI/G	5.86	PCI/G	1	5	0.528	G	PCI/G	-3.7		4	PR	
9202-0000-133-C-6C-05	MSR#05-0800	1200814053	412133	14119-32-5	Plutonium-241	TRG	U	PU11RCM	MS1	114	9.31	PCI/G	0			5/4/2005	5:25	10.8	PCI/G	5.26	PCI/G	1	5	0.526	G	1	PCI/G	127	PR		
	MSR#05-0800	1200814054	412133	14119-32-5	Plutonium-241	TRG	U	PU11RCM	BS1	106	9.9	PCI/G	0			5/4/2005	5:57	12.1	PCI/G	5.86	PCI/G	1	0	0.542	G	6	PCI/G		PR		
	MSR#05-0800	1200818670	414102	10098-97-2	Strontium-90	TRG	U	E905M	LB1	0.00114	0.0116	PCI/G	0	U		6/4/2005	11:30	0.0282	PCI/G	0.013	PCI/G	1	0	13.2	G	PCI/G			PR		
9202-0000-139-C-6C-03	MSR#05-0800	1200818671	414102	10098-97-2	Strontium-90	TRG	U	E905M	LR2	0.00966	0.0129	PCI/G	0	U		6/4/2005	11:31	0.0286	PCI/G	0.013	PCI/G	1	6	13.2	G	PCI/G	-0.0		0172	PR	
9202-0000-139-C-6C-03	MSR#05-0800	1200818672	414102	10098-97-2	Strontium-90	TRG	U	E905M	MS2	2.18	0.162	PCI/G	0			6/4/2005	7:45	0.0863	PCI/G	0.0391	PCI/G	1	6	6.62	G	73	PCI/G	2.73	PR		
	MSR#05-0800	1200818673	414102	10098-97-2	Strontium-90	TRG	U	E905M	BS1	1.4	0.0919	PCI/G	0			6/4/2005	7:45	0.0364	PCI/G	0.0161	PCI/G	1	0	13.2	G	36	PCI/G		PR		
	MSR#05-0800	1200819797	414564	10098-97-2	Strontium-90	TRG	U	E905M	LB1	0.000571	0.00305	PCI/G	0	U		9/4/2005	10:13	0.0061	PCI/G	0.00292	PCI/G	1	0	16	G	PCI/G			PR		
9202-0000-134-C-2C-03	MSR#05-0800	1200819798	414564	10098-97-2	Strontium-90	TRG	U	E905M	LR2	-0.00037	0.00437	PCI/G	0	U		9/4/2005	10:14	0.00892	PCI/G	0.00426	PCI/G	1	5.5	10.7	G	PCI/G	-0.0		00918	PR	
9202-0000-134-C-2C-03	MSR#05-0800	1200819799	414564	10098-97-2	Strontium-90	TRG	U	E905M	MS2	8.09	0.518	PCI/G	0			8/4/2005	8:59	0.217	PCI/G	0.0969	PCI/G	1	5.5	1.94	G	30	PCI/G	9.30	PR		
	MSR#05-0800	1200819800	414564	10098-97-2	Strontium-90	TRG	U	E905M	BS1	1.13	0.0655	PCI/G	0			8/4/2005	9:00	0.0287	PCI/G	0.0131	PCI/G	1	0	16	G	13	PCI/G		PR		
	MSR#05-0800	1200819801	414565	10098-97-2	Strontium-90	TRG	U	E905M	LB1	-0.00135	0.00855	PCI/G	0	U		8/4/2005	11:28	0.0172	PCI/G	0.00834	PCI/G	1	0	13	G	PCI/G			PR		
9202-0000-136-C-2C-03	MSR#05-0800	1200819802	414565	10098-97-2	Strontium-90	TRG	U	E905M	LR2	0.0131	0.0167	PCI/G	0	U		8/4/2005	11:28	0.0323	PCI/G	0.0158	PCI/G	1	6.2	11.1	G	PCI/G	0.00		441	PR	
9202-0000-136-C-2C-03	MSR#05-0800	1200819803	414565	10098-97-2	Strontium-90	TRG	U	E905M	MS2	7.38	0.519	PCI/G	0			8/4/2005	10:15	0.37	PCI/G	0.173	PCI/G	1	6.2	2.22	G	15	PCI/G	8.15	PR		
	MSR#05-0800	1200819804	414565	10098-97-2	Strontium-90	TRG	U	E905M	BS1	2.69	0.11	PCI/G	0			8/4/2005	10:15	0.0407	PCI/G	0.0188	PCI/G	1	0	13	G	77	PCI/G		PR		

FOLDER 5
FILE 1

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

NUCLEAR PLANT RECORDS TRANSMITTAL		NPR USE ONLY CONTROL NO. m U.N. NO. 2510
DEPARTMENT OF ORIGIN **Site Closure**	RECORDS CLASSIFICATION (SEE INSTRUCTIONS): ☐ CONFIDENTIAL ☐ SAFEGUARDS ☐ QA RECORD	DATE: **7/5/06**
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: Cable Vault Outside Containment At 5'-6" Elevation, Survey / Sampling Work Plan SSWP Number BCY-SSWP-04-01-003.

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: 7/5/06	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)
7/5/06	CY-035			

Survey/Sampling Work Plan – SSWP

GENERAL SECTION

SSWP Number: BCY-SSWP-04-01-003

Survey Unit # : 3107 series

Type of Survey: Characterization

Area Description : Cable Vault Outside Containment: 5'-6" Elevation

DATA QUALITY OBJECTIVES (DQO)

1.0 STATE THE PROBLEM

The problem: Obtain additional characterization data in concrete and soil to support remediation and 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 Integrated Site Closure Group (ISC) personnel. The primary decision maker for this plan will be the FSS Project Lead with input from the planning team.

Schedule: This project has an expected duration of 5 working days (1 week) including drilling, sample collection and sample cutting.

Resources: The primary resources needed to determine the answer to the problem are one 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 sub-grade structures and bedrock at the time of remediation, demolition and final status survey. Information is needed in concrete to establish how much remediation may be required to reduce contamination levels to allow open air building demolition. The sample media are concrete and bedrock obtained from five (5) locations taken from inside of the Cable Vault Outside Containment at the 5'-6" elevation. If soil is encountered, a grab sample will be taken.

Source of the Information: The new measurements will include collection and radionuclide-specific analysis of concrete and soil. The collection process will typically use an electrical 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. Collection and radionuclide-specific analysis of groundwater is covered under another program and is not included under this SSWP. 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 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 of the LTP and the required sensitivity or MDC for analysis

Nuclide	Concrete $DCGL_{25}$ (pCi/g)	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

4.0 DEFINE THE BOUNDARIES OF THE SURVEY.

Boundaries of the survey: The focus of this SSWP will be to collect five (5) concrete samples at predetermined locations of the Cable Vault (elevation 5'-6", refer to Attachment 1). In addition, an attempt will be made to collect soil from wall locations. This characterization data need not be linked to their specific survey units identified in the LTP. All concrete cores collected from the 3107 series survey units will be sliced for analysis and identified under a general designator of 3107.

The general orientation of the sample measurement locations (SML) are shown in Attachment 1. Sample locations may be moved slightly to accommodate decommissioning activities. Wall samples will typically be taken at approximately four feet about the floor. Many of the measurement locations have been chosen to evaluate the impact of contaminated groundwater on the concrete and soil. Additional sampling may be necessary to determine the need and amount of decontamination and remediation efforts.

Temporal boundaries: Sampling will normally be performed during the hours of a normal workday.

Constraints: Constraints include inadequate electrical supply, poor lighting, wet surfaces, cold temperatures and tight 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 (5) biased SML's for sampling under this SSWP as shown on Attachment 1. These SML's were determined by the planning team based on the output of the data quality objectives performed under SSWP 04-01-003, the potential pathway of groundwater flow relative to the Reactor Containment Building and Cable Vault and the Decommissioning Request For Proposal (CY-04-001).

DQO STEPS COMPLETE (signature signifies affirmative response)

P Hollenbeck , 2/2/04

ISC Radiological Engineer Date

GENERAL INSTRUCTIONS

1. Characterization activities will be performed under WP&IR number 24265-000-GEN-5000-00137-000.
2. Cognizant radiological engineers to review pictures, radiological surveys and plant drawings of the area.
3. Sampling equipment and supplies will consist of 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 knife, 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, 3107-0000-187C-1C01 represents the first concrete core wafer from the first core taken at SML #187. 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. The cognizant radiological engineer will ensure that hole is backfilled, covered or sealed. Also, the cognizant radiological engineer will document the method used in the Daily Survey Journal.
10. Samples will be handled in accordance with procedure RPM 5.1-5, "*Chain of Custody for Final Status Survey Samples.*"
11. Sample analyses should meet the sensitivity requirements provided in Table 1 to this SSWP.
12. Documents generated during the performance of this FSSP 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	Media	Concrete and Soil Designation
187	Concrete and Soil	3107-0000-187
188	Concrete and Soil	3107-0000-188
189	Concrete and Soil	3107-0000-189
190	Concrete and Soil	3107-0000-190
191	Concrete and Soil	3107-0000-191

   b. Implement radiological controls as required by RWP 4121 rev 0.

   c. Perform sampling at the selected location.

      (1). Setup work area with water supply, labeled water collection equipment and ground fault protected electrical supply.

      (2). Attach the drill rig to the sampling location by vacuum system or bolt. Wall samples will typically be located approximately four feet above the floor.

      (3). Drill all the way through the concrete to soil.

      (4). Identify the top by placing a "T" or arrow on the core, place into a double plastic bag and seal tightly 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). Perform soil sampling at locations 189 through 191. If encountered, perform soil sampling at locations 187 and 188.

      (7). Place the sample into a plastic bag.

      (8). Label in accordance with the designation number provided in Table 2 followed by a "C01".

   d. Generate a Sample Control and Accountability form for concrete, soil and bedrock 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 Old Chemistry Laboratory (survey area 5114) or where directed by health physics.

(2). Perform a direct frisk of the top of the two floor cores.

(3). Cut an approximately 1 inch slice from the highest reading core.

(4). Slice all remaining concrete core samples into approximately 2.5 inch wafers.

(5). Place the wafers into double plastic bags, apply tamper proof tape and label each sample with "01", "02" etc, after the core designation.

f. Generate a COC for samples being analyzed.

(1). Record Severn Trent as the analysis laboratory.

(2). Record sample IDs, date and time of collection on the COC.

(3). The media code is "CT" for concrete and "TS" for soil. The sample type code is "CR" for core or "G" for grab and the container type is "BP" for plastic bag.

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

(5). Record "H-3" as an additional analysis code for all concrete cores.

(6). Record "CHTRU" and "Sr-90" as additional analysis codes for the 1 inch slice.

3. Evaluate the data and determine appropriate actions.

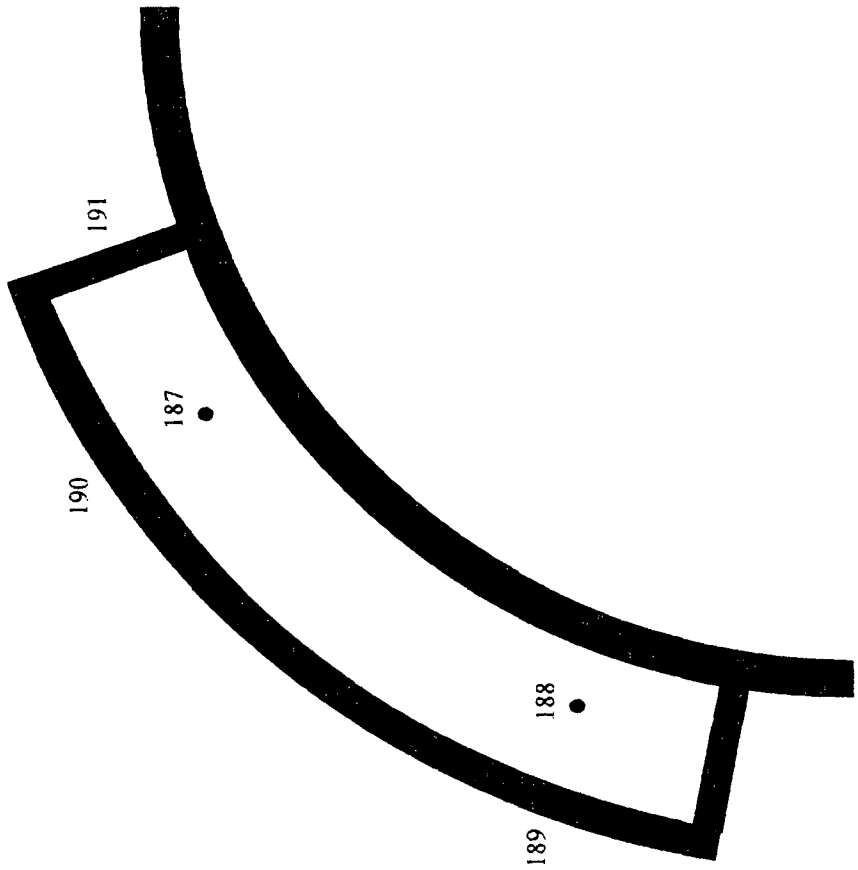
Prepared by R Ollenberk Date 2/2/04
Radiological Engineer

Reviewed by [illegible] Date 2/2/04

Survey/Sampling Work Plan – SSWP

Attachment 1 – Sample Location Map

Attachment 1



● = Hole Location

X = Wall Hole Location

NOTE: Samples 189 through 191 will be taken at approximately 4' above the floor.

Plant North

CONNECTICUT YANKEE ATOMIC POWER COMPANY
GENERAL ARRANGEMENT DRAWING
CABLE VAULT OUTSIDE CONTAINMENT
ELEVATION: 5'-6"

INITIAL CREATION DATE:	06/18/97
REVISION DATE:	06/06/01
REVISION #:	7
MAP #:	GAD2000

LEGEND:

FLOOR WALL INTERSECTION
SURVEY AREA BOUNDARY
SURVEY AREA
SURVEY UNIT BOUNDARY

Attachment A
Core Bore Sampling Specifications

Sample Number #: 187	Date: 2/2/04	Project Contact:/ ext: John Grinley X3130	Job Supervisor / ext: John Grinley X3130
WPIR: 5000-00137-000	Location: Cable Vault Outside Containment: elevation 5'- 6"		
Job Description/Scope: Underslab sub-surface soil sampling			

1. SAMPLING REQUIREMENTS

1.1 Core Sample Requirements

- Establish work area with water dams and wet vacuum to control water.
- Perform contamination survey.
- Ensure drill rig is connected to a ground fault protected circuit.
- Drill through entire floor.
- Place each core section into a double plastic bag.
- Identify core sample in accordance with SSWP number: BCY-SSWP-04-01-003.
- No drill bit decontamination is required.

1.2 Sectioning Instructions

- Section cores in accordance with SSWP number: BCY-SSWP-04-01-003.

2. LABORATORY ANALYSIS REQUIREMENTS

- Analyze core wafers in accordance with SSWP number: BCY-SSWP-04-01-003.

3. STORAGE AND SHIPMENT REQUIREMENTS

- Store all samples in the EOF rad material storage area.

Signature/Approvals

Prepared by Pete Hollenbeck PH DATE 02/02/04

Job Supervisor John Grinley JG DATE 02/02/04

Rad. Eng./Chem. Env. Engineer [signature] DATE 2/2/04

Attachment A
Core Bore Sampling Specifications

Sample Number #: 188	Date: 2/2/04	Project Contact:/ ext: John Grinley X3130	Job Supervisor / ext: John Grinley X3130
WPIR: 5000-00137-000	Location: Cable Vault Outside Containment: elevation 5'- 6"		
Job Description/Scope: Underslab sub-surface soil sampling			

1. SAMPLING REQUIREMENTS

1.1 Core Sample Requirements

- Establish work area with water dams and wet vacuum to control water.
- Perform contamination survey.
- Ensure drill rig is connected to a ground fault protected circuit.
- Drill through entire floor.
- Place each core section into a double plastic bag.
- Identify core sample in accordance with SSWP number: BCY-SSWP-04-01-003.
- No drill bit decontamination is required.

1.2 Sectioning Instructions

- Section cores in accordance with SSWP number: BCY-SSWP-04-01-003.

2. LABORATORY ANALYSIS REQUIREMENTS

- Analyze core wafers in accordance with SSWP number: BCY-SSWP-04-01-003.

3. STORAGE AND SHIPMENT REQUIREMENTS

- Store all samples in the EOF rad material storage area.

Signature/Approvals

Prepared by Pete Hollenbeck _____ DATE 02/02/04

Job Supervisor John Grinley _____ DATE 02/02/04

Rad. Eng./Chem. Env. Engineer _____ DATE 2/2/04

Attachment A
Core Bore Sampling Specifications

Sample Number #: 189	Date: 2/2/04	Project Contact:/ ext: John Grinley X3130	Job Supervisor / ext: John Grinley X3130
WPIR: 5000-00137-000	Location: Cable Vault Outside Containment: elevation 5'- 6"		
Job Description/Scope: Underslab sub-surface soil sampling			

1. SAMPLING REQUIREMENTS

1.1 Core Sample Requirements

- Use wet vacuum to control water.
- Perform contamination survey.
- Ensure drill rig is connected to a ground fault protected circuit.
- Drill through entire wall.
- Place each core section into a double plastic bag.
- Identify core sample in accordance with SSWP number: BCY-SSWP-04-01-003.
- No drill bit decontamination is required.

1.2 Sectioning Instructions

- Section cores in accordance with SSWP number: BCY-SSWP-04-01-003.

2. LABORATORY ANALYSIS REQUIREMENTS

- Analyze core wafers in accordance with SSWP number: BCY-SSWP-04-01-003.

3. STORAGE AND SHIPMENT REQUIREMENTS

- Store all samples in the EOF rad material storage area.

Signature/Approvals

Prepared by Pete Hollenbeck PH DATE 02/02/04

Job Supervisor John Grinley JG DATE 02/02/04

Rad. Eng./Chem. Env. Engineer [illegible] DATE 2/2/04

Attachment A
Core Bore Sampling Specifications

Sample Number #: 190	Date: 2/2/04	Project Contact:/ ext: John Grinley X3130	Job Supervisor / ext: John Grinley X3130
WPIR: 5000-00137-000	Location: Cable Vault Outside Containment: elevation 5'- 6"		
Job Description/Scope: Underslab sub-surface soil sampling			

1. SAMPLING REQUIREMENTS

1.1 Core Sample Requirements

- Use wet vacuum to control water.
- Perform contamination survey.
- Ensure drill rig is connected to a ground fault protected circuit.
- Drill through entire wall.
- Place each core section into a double plastic bag.
- Identify core sample in accordance with SSWP number: BCY-SSWP-04-01-003.
- No drill bit decontamination is required.

1.2 Sectioning Instructions

- Section cores in accordance with SSWP number: BCY-SSWP-04-01-003.

2. LABORATORY ANALYSIS REQUIREMENTS

- Analyze core wafers in accordance with SSWP number: BCY-SSWP-04-01-003.

3. STORAGE AND SHIPMENT REQUIREMENTS

- Store all samples in the EOF rad material storage area.

Signature/Approvals

Prepared by Pete Hollenbeck _____ DATE 02/02/04

Job Supervisor John Grinley _____ DATE 02/02/04

Rad. Eng./Chem. Env. Engineer _____ DATE 2/2/04

Attachment A
Core Bore Sampling Specifications

Sample Number #: 191	Date: 2/2/04	Project Contact:/ ext: John Grinley X3130	Job Supervisor / ext: John Grinley X3130
WPIR: 5000-00137-000	Location: Cable Vault Outside Containment: elevation 5'- 6"		
Job Description/Scope: Underslab sub-surface soil sampling			

1. SAMPLING REQUIREMENTS

1.1 Core Sample Requirements

- Use wet vacuum to control water.
- Perform contamination survey.
- Ensure drill rig is connected to a ground fault protected circuit.
- Drill through entire wall.
- Place each core section into a double plastic bag.
- Identify core sample in accordance with SSWP number: BCY-SSWP-04-01-003.
- No drill bit decontamination is required.

1.2 Sectioning Instructions

- Section cores in accordance with SSWP number: BCY-SSWP-04-01-003.

2. LABORATORY ANALYSIS REQUIREMENTS

- Analyze core wafers in accordance with SSWP number: BCY-SSWP-04-01-003.

3. STORAGE AND SHIPMENT REQUIREMENTS

- Store all samples in the EOF rad material storage area.

Signature/Approvals

Prepared by Pete Hollenbeck _____ DATE 02/02/04

Job Supervisor John Grinley _____ DATE 02/02/04

Rad. Eng./Chem. Env. Engineer _____ DATE 2/2/04

Analytical Data Package Prepared For

Connecticut Yankee

Radiochemical Analysis By

STL Richland

2800 G.W. Way, Richland Wa, 99352, (509)-375-3131.

Assigned Laboratory Code: STLR

Data Package Contains 67 *Pages*

Report No.: 25203

SDG No.	Order No.	Client Sample ID (List Order)	Lot-Sa No.	Work Order	Report DB ID	Batch No.
25173		3107-0000-187-C-1C-01	J4B110186-7	F9EPH1AA	9F9EPH10	4043468
		3107-0000-187-C-1C-01	J4B110186-7	F9EPH1AC	9F9EPH10	4043472
		3107-0000-187-C-1C-02	J4B110186-8	F9EPK1AA	9F9EPK10	4043468
		3107-0000-187-C-1C-03	J4B110186-9	F9EPL1AA	9F9EPL10	4043468
		3107-0000-187-C-1C-04	J4B110186-10	F9EPN1AA	9F9EPN10	4043468
		3107-0000-187-C-2C-05	J4B110186-11	F9EPQ1AA	9F9EPQ10	4043468
		3107-0000-187-C-2C-06	J4B110186-12	F9EPR1AA	9F9EPR10	4043468
		3107-0000-187-C-2C-06	J4B110186-12	F9EPR1AC	9F9EPR10	4043472
		3107-0000-187-C-2C-07	J4B110186-13	F9EPT1AC	9F9EPT10	4043468
		3107-0000-187-C-2C-07	J4B110186-13	F9EPT1AD	9F9EPT10	4043472
		3107-0000-187-C-2C-07	J4B110186-13	F9EPT1AA	9F9EPT10	4043475
		3107-0000-188-C-1C-01	J4B110186-31	F9ETD1AG	9F9ETD10	4043465
		3107-0000-188-C-1C-01	J4B110186-31	F9ETD1AE	9F9ETD10	4043466
		3107-0000-188-C-1C-01	J4B110186-31	F9ETD1AF	9F9ETD10	4043467
		3107-0000-188-C-1C-01	J4B110186-31	F9ETD1AC	9F9ETD10	4043471
		3107-0000-188-C-1C-01	J4B110186-31	F9ETD1AD	9F9ETD10	4043472
		3107-0000-188-C-1C-01	J4B110186-31	F9ETD1AA	9F9ETD10	4043475
		3107-0000-188-C-1C-02	J4B110186-32	F9ETM1AA	9F9ETM10	4043471
		3107-0000-188-C-1C-03	J4B110186-33	F9ETT1AA	9F9ETT10	4043471
		3107-0000-188-C-1C-04	J4B110186-34	F9ETX1AA	9F9ETX10	4043471
		3107-0000-188-C-1C-05	J4B110186-35	F9ET21AA	9F9ET210	4043471
		3107-0000-188-C-1C-05	J4B110186-35	F9ET21AC	9F9ET210	4043472
		3107-0000-188-C-1C-06	J4B110186-36	F9ET51AC	9F9ET510	4043471
		3107-0000-188-C-1C-06	J4B110186-36	F9ET51AD	9F9ET510	4043472
		3107-0000-188-C-1C-06	J4B110186-36	F9ET51AA	9F9ET510	4043475
		3107-0000-189-C-1C-01	J4B110186-1	F9EM21AA	9F9EM210	4043468

Report No.: 25203

SDG No.	Order No.	Client Sample ID (List Order)	Lot-Sa No.	Work Order	Report DB ID	Batch No.
25173		3107-0000-189-C-1C-01	J4B110186-1	F9EM21AC	9F9EM210	4043472
		3107-0000-189-C-1C-02	J4B110186-2	F9EN71AA	9F9EN710	4043468
		3107-0000-189-C-2C-03	J4B110186-3	F9EPC1AA	9F9EPC10	4043468
		3107-0000-189-C-2C-04	J4B110186-4	F9EPD1AA	9F9EPD10	4043468
		3107-0000-189-C-2C-05	J4B110186-5	F9EPE1AA	9F9EPE10	4043468
		3107-0000-189-C-2C-05	J4B110186-5	F9EPE1AC	9F9EPE10	4043472
		3107-0000-189-C-2C-06	J4B110186-6	F9EPG1AA	9F9EPG10	4043468
		3107-0000-189-C-2C-06	J4B110186-6	F9EPG1AD	9F9EPG10	4043472
		3107-0000-189-C-2C-06	J4B110186-6	F9EPG1AC	9F9EPG10	4043475
		3107-0000-190-C1C-01	J4B110186-14	F9EP41AA	9F9EP410	4043468
		3107-0000-190-C1C-01	J4B110186-14	F9EP41AC	9F9EP410	4043472
		3107-0000-190-C1C-02	J4B110186-15	F9EP81AA	9F9EP810	4043468
		3107-0000-190-C1C-03	J4B110186-16	F9EQC1AA	9F9EQC10	4043468
		3107-0000-190-C1C-04	J4B110186-17	F9EQF1AA	9F9EQF10	4043468
		3107-0000-190-C1C-05	J4B110186-18	F9EQJ1AA	9F9EQJ10	4043468
		3107-0000-190-C2C-06	J4B110186-19	F9EQQ1AA	9F9EQQ10	4043471
		3107-0000-190-C2C-06	J4B110186-19	F9EQQ1AC	9F9EQQ10	4043472
		3107-0000-190-C2C-07	J4B110186-20	F9EQX1AA	9F9EQX10	4043471
		3107-0000-190-C2C-07	J4B110186-20	F9EQX1AD	9F9EQX10	4043472
		3107-0000-190-C2C-07	J4B110186-20	F9EQX1AC	9F9EQX10	4043475
		3107-0000-191-C-1C-01	J4B110186-21	F9EQ51AA	9F9EQ510	4043471
		3107-0000-191-C-1C-01	J4B110186-21	F9EQ51AC	9F9EQ510	4043472
		3107-0000-191-C-1C-02	J4B110186-22	F9ERA1AA	9F9ERA10	4043471
		3107-0000-191-C-1C-03	J4B110186-23	F9ERD1AA	9F9ERD10	4043471
		3107-0000-191-C-1C-04	J4B110186-24	F9ERE1AA	9F9ERE10	4043471
		3107-0000-191-C-2C-05	J4B110186-25	F9ERG1AA	9F9ERG10	4043471
		3107-0000-191-C-2C-06	J4B110186-26	F9ERH1AA	9F9ERH10	4043471
		3107-0000-191-C-2C-07	J4B110186-27	F9ERM1AA	9F9ERM10	4043471
		3107-0000-191-C-2C-08	J4B110186-28	F9ERQ1AA	9F9ERQ10	4043471
		3107-0000-191-C-3C-09	J4B110186-29	F9ERW1AA	9F9ERW10	4043471
		3107-0000-191-C-3C-09	J4B110186-29	F9ERW1AC	9F9ERW10	4043472
		3107-0000-191-C-3C-10	J4B110186-30	F9ER01AA	9F9ER010	4043471
		3107-0000-191-C-3C-10	J4B110186-30	F9ER01AD	9F9ER010	4043472
		3107-0000-191-C-3C-10	J4B110186-30	F9ER01AC	9F9ER010	4043475

SEVERN TRENT STL

Certificate of Analysis

Connecticut Yankee Atomic Power
362 Injun Hollow Road
East Hampton, CT 06424

March 18, 2004

Attention: Jack McCarthy/Pete Hollenbeck

Date Received in Lab	:	February 11, 2004
Sample Type	:	Thirty Six (36) Solid
SDG Number	:	25173
Project Name/Number	:	Haddam Neck Decommissioning
COC Number	:	2004-00008, 2004-00009, 2004-00010, 2004-00011, 2004-00012

CASE NARRATIVE

I. Introduction

On February 11, 2004, thirty six solid samples were received at the STL Richland (STLR) laboratory for radiochemical analyses. The samples were assigned the STLR identification numbers as described on the cover page of the Analytical Data Package report form. The samples were assigned to Lot Number J4B110186.

II. Sample Receipt

The samples were received in good condition and no anomalies were noted during check-in.

III. Analytical Results/Methodology

The analytical results for this report are presented by laboratory sample ID. Each set of data includes sample identification information, analytical results and the appropriate associated statistical errors.

The requested analyses were:

Alpha Spectroscopy
Americium-241 by method RICH-RC-5080
Curium-243/244 by method RICH-RC-5080
Plutonium-238, -239/240 by method RICH-RC-5010
Gas Proportional Counting
Strontium-90 by method RICH-RC-5006

Liquid Scintillation Counting
Plutonium-241 by method RICH-RC-5010
Tritium by method RICH-RC-5037
Gamma Spectroscopy
Gamma by method RICH-RC-5017

IV. Quality Control

The analytical result for each analysis performed includes a minimum of one laboratory control sample (LCS), and one reagent blank sample analysis. Any exceptions have been noted in the "Comments" section.

QC and sample results are reported in the same units.

V. Comments

Americium-241 by method RICH-RC-5080:
The LCS recovery was calculated low due to the smeared spectra. The Am-241 peak smeared slightly into the Am-243 region. The sample results are below the CRDL. Except as noted, the LCS, batch blank, sample and sample duplicate results are within acceptance limits.

Curium-243/244 by method RICH-RC-5080:
The LCS recovery was calculated low due to the smeared spectra. The Am-241 peak smeared slightly into the Am-243 region. The sample results are below the CRDL. Except as noted, the LCS, batch blank, sample and sample duplicate results are within acceptance limits.

Plutonium-238, -239/240 by method RICH-RC-5010:
The LCS, batch blank, sample and sample duplicate results are within acceptance limits.

Strontium-90 by method RICH-RC-5006:
The LCS, batch blank, sample and sample duplicate results are within acceptance limits.

Plutonium-241 by method RICH-RC-5010:
The LCS, batch blank, samples and sample duplicate results are within acceptance limits.

Tritium by method RICH-RC-5037:
The LCS, batch blank, sample and sample duplicate results are within acceptance limits.

Gamma by method RICH RC 5013/5017:
There was insufficient sample volume received to perform a sample duplicate analysis from a second sample aliquot. Precision determination was performed by recounting a sample on a second detector.

The following may be false positives due to the key-line activity greater than the MDA but the identification of the radionuclide was rejected by the abundance criteria:

Isotope(s)	Sample ID(s)
Tl-208, Bi-214, Ac-228	3107-0000-189-C-1C-01, 3107-0000-189-C-2C-05, 3107-0000-187-C-2C-06, 3107-0000-190-C2C-07, 3107-0000-191-C-3C-10, 3107-0000-188-C-1C-01, 3107-0000-188-C-1C-06
Bi-212, Bi-214	3107-0000-189-C-2C-05
Bi-214, Ac-228	3107-0000-189-C-2C-06, 3107-0000-187-C-1C-01, 3107-0000-191-C-1C-01, 3107-0000-188-C-1C-05
Tl-208, Bi-214	3107-0000-187-C-2C-07, 3107-0000-190-C1C-01
Tl-208, Bi-212, Bi-214	3107-0000-190-C2C-06
Bi-214	3107-0000-191-C-3C-09

Except as noted, the LCS, batch blank, and sample results are within acceptance limits.

I certify that this Certificate of Analysis 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.

Reviewed and approved:

for Jackie Waddell
Theresa H. Kallsen
Project Management Assistant

Drinking Water Method Cross References

	DRINKING WATER ASTM METHOD CROSS REFERENCES	
Referenced Method	**Isotope(s)**	**STL Richland's SOP number**
EPA 901.1	Cs-134, I-131	RICH-RC-5017
EPA 900.0	Alpha & Beta	RICH-RC-5014
EPA 903.1	Ra-226	RICH-RC-5005
EPA 904.0	Ra-228	RICH-RC-5005
EPA 905.0	Sr89/90	RICH-RC-5006
ASTM D2460	Total Radium	RICH-RC-5027
Standard Method 7500-U-C & ASTM D5174	Uranium	RICH-RC-5058
EPA 906.0	Tritium	RICH-RC-5007
NOTE:		
The Gross Alpha LCS is prepared with Am-241 (unless otherwise specified in the case narrative)		
The Gross Beta LCS is prepared with Sr/Y-90 (unless otherwise specified in the case narrative)		

Uncertainty Estimation

STL Richland has adopted the internationally accepted approach to estimating uncertainties described in "NIST Technical Note 1297, 1994 Edition". The approach, "Law of Propagation of Errors", involves the identification of all variables in an analytical method which are used to derive a result. These variables are related to the analytical result (R) by some functional relationship, R = constants * f(x,y,z,...). The components (x,y,z) are evaluated to determine their contribution to the overall method uncertainty. The individual component uncertainties (u_i) are then combined using a statistical model that provides the most probable overall uncertainty value. All component uncertainties are categorized as type A, evaluated by statistical methods, or type B, evaluated by other means. Uncertainties not included in the components, such as sample homogeneity, are combined with the component uncertainty as the square root of the sum-of-the-squares of the individual uncertainties. The uncertainty associated with the derived result is the combined uncertainty (u_c) multiplied by the coverage factor (1,2, or 3).

When three or more sample replicates are used to derive the analytical result, the type A uncertainty is the standard deviation of the mean value (S/vn), where S is the standard deviation of the derived results. The type B uncertainties are all other random or non-random components that are not included in the standard deviation.

The derivation of the general "Law of Propagation of Errors" equations and specific example are available on request.

Report Definitions

Action Lev	An agreed upon activity level used to trigger some action when the final result is greater than or equal to the Action Level. Often the Action Level is related to the Decision Limit.
Batch	The QC preparation batch number that relates laboratory samples to QC samples that were prepared and analyzed together.
Bias	Defined by the equation (Result/Expected)-1 as defined by ANSI N13.30.
COC No	Chain of Custody Number assigned by the Client or STL Richland.
Count Error (#s)	Poisson counting statistics of the gross sample count and background. The uncertainty is absolute and in the same units as the result. For Liquid Scintillation Counting (LSC) the batch blank count is the background.
Total Uncert (#s) *u_c - Combined Uncertainty.*	All known uncertainties associated with the preparation and analysis of the sample are propagated to give a measure of the uncertainty associated with the result, *u_c the combined uncertainty.* The uncertainty is absolute and in the same units as the result.
(#s), Coverage Factor	The coverage factor defines the width of the confidence interval, 1, 2 or 3 standard deviations.
CRDL (RL)	Contractual Required Detection Limit as defined in the Client's Statement Of Work or STL Richland "default" nominal detection limit. Often referred to the reporting level (RL)
Lc	Decision Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume associated with the sample. The Type I error probability is approximately 5%. Lc=(1.645 * Sqrt(2*(BkgrndCnt/BkgrndCntMin)/SCntMin)) * (ConvFct/(Eff*Yld*Abn*Vol) * IngrFct). For LSC methods the batch blank is used as a measure of the background variability. Lc cannot be calculated when the background count is zero.
Lot-Sample No	The number assigned by the LIMS software to track samples received on the same day for a given client. The sample number is a sequential number assigned to each sample in the Lot.
MDC|MDA	Detection Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume with a Type I and II error probability of approximately 5%. MDC = (4.65 * Sqrt((BkgrndCnt/BkgrndCntMin)/SCntMin) + 2.71/SCntMin) * (ConvFct/(Eff * Yld * Abn * Vol) * IngrFct). For LSC methods the batch blank is used as a measure of the background variability.
Primary Detector	The instrument identifier associated with the analysis of the sample aliquot.
Ratio U-234/U-238	The U-234 result divided by the U-238 result. The U-234/U-238 ratio for natural uranium in NIST SRM 4321C is 1.038.
Rst/MDC	Ratio of the Result to the MDC. A value greater than 1 may indicate activity above background at a high level of confidence. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Rst/TotUcert	Ratio of the Result to the Total Uncertainty. If the uncertainty has a coverage factor of 2 a value greater than 1 may indicate activity above background at approximately the 95% level of confidence assuming a two-sided confidence interval. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Report DB No	Sample Identifier used by the report system. The number is based upon the first five digits of the **Work Order** Number.
RER	The equation Replicate Error Ratio = (S-D)/[sqrt($TPUs^2$ + $TPUd^2$)] as defined by ICPT BOA where S is the original sample result, D is the result of the duplicate, TPUs is the total uncertainty of the original sample and TPUd is the total uncertainty of the duplicate sample.
SDG	Sample Delivery Group Number assigned by the Client or assigned by STL Richland upon sample receipt.
Sum Rpt Alpha Spec Rst(s)	The sum of the reported alpha spec results for tests derived from the same sample excluding duplicate result where the results are in the same units.
Work Order	The LIMS software assign test specific identifier.
Yield	The recovery of the tracer added to the sample such as Pu-242 used to trace a Pu-239/40 method.

Sample Results Summary

STL Richland STLR

Ordered by Method, Batch No., Client Sample ID.

Date: 18-Mar-04

Report No. : 25203

SDG No: 25173

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RER2
4043475 CMUD									
	3107-0000-187-C-2C-07								
	F9EPT1AA	SR-90	2.15E-01 +- 4.43E-02		pCi/g	57%	4.38E-02	6.00E-02	
	3107-0000-188-C-1C-01								
	F9ETD1AA	SR-90	2.69E-01 +- 5.21E-02		pCi/g	51%	3.84E-02	6.00E-02	
	3107-0000-188-C-1C-06								
	F9ET51AA	SR-90	3.52E-01 +- 6.23E-02		pCi/g	57%	3.30E-02	6.00E-02	
	3107-0000-189-C-2C-06								
	F9EPG1AC	SR-90	5.84E-02 +- 2.61E-02	J	pCi/g	58%	4.27E-02	6.00E-02	
	3107-0000-189-C-2C-06 DUP								
	F9EPG1AE	SR-90	5.01E-02 +- 2.66E-02	J	pCi/g	54%	4.52E-02	6.00E-02	
	3107-0000-190-C2C-07								
	F9EQX1AC	SR-90	2.06E-01 +- 4.26E-02		pCi/g	54%	3.86E-02	6.00E-02	
	3107-0000-191-C-3C-10								
	F9ER01AC	SR-90	8.47E-02 +- 2.67E-02		pCi/g	50%	3.52E-02	6.00E-02	
4043465 RICHRC5080									
	3107-0000-188-C-1C-01								
	F9ETD1AG	AM-241	0.00E+00 +- 1.66E-02	U	pCi/g	60%	1.83E-02	1.03E+00	
		CM-242	0.00E+00 +- 1.99E-02	U	pCi/g	60%	2.20E-02		
		CM-243/244	0.00E+00 +- 1.66E-02	U	pCi/g	60%	1.84E-02	1.16E+00	
	3107-0000-188-C-1C-01 DUP								
	F9ETD1AH	AM-241	1.26E-02 +- 2.02E-02	U	pCi/g	60%	3.36E-02	1.03E+00	
		CM-242	0.00E+00 +- 2.06E-02	U	pCi/g	60%	2.28E-02		
		CM-243/244	0.00E+00 +- 1.72E-02	U	pCi/g	60%	1.91E-02	1.16E+00	
4043466 RICHRC5010									
	3107-0000-188-C-1C-01								
	F9ETD1AE	PU-238	0.00E+00 +- 1.28E-02	U	pCi/g	70%	1.41E-02	1.18E+00	
		PU239/40	0.00E+00 +- 1.27E-02	U	pCi/g	70%	1.41E-02	1.07E+00	
	3107-0000-188-C-1C-01 DUP								
	F9ETD1AJ	PU-238	1.31E-02 +- 1.86E-02	U	pCi/g	51%	1.77E-02	1.18E+00	
		PU239/40	0.00E+00 +- 1.60E-02	U	pCi/g	51%	1.77E-02	1.07E+00	
4043472 RICHRC5017									
	3107-0000-187-C-1C-01								
	F9EPH1AC	AC-228	4.16E-01 +- 1.23E-01	U	pCi/g		2.52E-01		
		AG-108M	-1.29E-02 +- 1.83E-02	U	pCi/g		3.00E-02		
		AM-241	-2.45E-03 +- 5.07E-02	U	pCi/g		7.32E-02		
		BI-212	2.97E-01 +- 3.40E-01	U	pCi/g		6.63E-01	3.00E+00	
		BI-214	4.55E-01 +- 1.08E-01	U	pCi/g		1.78E-01	1.00E+00	
		CO-60	-1.81E-02 +- 2.24E-02	U	pCi/g		3.57E-02	1.52E-01	
		CS-134	3.68E-02 +- 2.76E-02	U	pCi/g		5.63E-02	1.87E-01	

RER2 - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.

J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.
U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

Sample Results Summary

STL Richland STLR

Ordered by Method, Batch No., Client Sample ID.

Date: 18-Mar-04

Report No. : 25203

SDG No: 25173

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RER2
4043472	RICHRC5017								
	3107-0000-187-C-1C-01								
	F9EPH1AC	CS-137	4.10E-03 +- 2.24E-02	U	pCi/g		4.17E-02	3.16E-01	
		EU-152	1.91E-02 +- 6.29E-02	U	pCi/g		1.14E-01	4.04E-01	
		EU-154	6.61E-02 +- 7.41E-02	U	pCi/g		1.53E-01	3.72E-01	
		EU-155	-5.04E-03 +- 5.88E-02	U	pCi/g		1.02E-01	1.57E+01	
		K-40	6.99E+00 +- 1.18E+00		pCi/g		3.95E-01		
		MN-54	-1.37E-03 +- 2.46E-02	U	pCi/g		4.41E-02	6.96E-01	
		NB-94	-1.20E-02 +- 1.90E-02	U	pCi/g		3.15E-02	2.85E-01	
		PB-212	4.18E-01 +- 9.63E-02	J	pCi/g		9.04E-02	1.00E+00	
		PB-214	5.45E-01 +- 1.20E-01	J	pCi/g		7.57E-02	1.00E+00	
		TL-208	1.01E-01 +- 4.47E-02	J	pCi/g		3.78E-02	1.00E+00	
	3107-0000-187-C-2C-06								
	F9EPR1AC	AC-228	4.16E-01 +- 1.76E-01	U	pCi/g		2.92E-01		
		AG-108M	4.93E-04 +- 1.90E-02	U	pCi/g		3.40E-02		
		AM-241	4.58E-03 +- 6.73E-02	U	pCi/g		1.15E-01		
		BI-212	5.34E-01 +- 4.09E-01	U	pCi/g		8.05E-01	3.00E+00	
		BI-214	3.34E-01 +- 9.67E-02	U	pCi/g		1.65E-01	1.00E+00	
		CO-60	1.86E-02 +- 2.51E-02	U	pCi/g		5.30E-02	1.52E-01	
		CS-134	3.69E-02 +- 3.03E-02	U	pCi/g		6.06E-02	1.87E-01	
		CS-137	-2.97E-02 +- 2.52E-02	U	pCi/g		3.81E-02	3.16E-01	
		EU-152	-7.36E-02 +- 6.89E-02	U	pCi/g		1.07E-01	4.04E-01	
		EU-154	-3.58E-02 +- 8.58E-02	U	pCi/g		1.48E-01	3.72E-01	
		EU-155	3.40E-02 +- 5.86E-02	U	pCi/g		1.05E-01	1.57E+01	
		K-40	6.89E+00 +- 1.29E+00		pCi/g		4.24E-01		
		MN-54	-4.39E-03 +- 2.54E-02	U	pCi/g		4.49E-02	6.96E-01	
		NB-94	3.68E-03 +- 2.39E-02	U	pCi/g		4.48E-02	2.85E-01	
		PB-212	3.69E-01 +- 1.00E-01	J	pCi/g		8.71E-02	1.00E+00	
		PB-214	3.67E-01 +- 1.32E-01	J	pCi/g		8.78E-02	1.00E+00	
		TL-208	1.57E-01 +- 4.78E-02	U	pCi/g		8.04E-02	1.00E+00	
	3107-0000-187-C-2C-07								
	F9EPT1AD	AC-228	6.51E-01 +- 2.14E-01		pCi/g		1.83E-01		
		AG-108M	-3.89E-02 +- 2.63E-02	U	pCi/g		3.90E-02		
		AM-241	2.80E-02 +- 5.37E-02	U	pCi/g		8.69E-02		
		BI-212	3.11E-01 +- 5.41E-01	U	pCi/g		1.02E+00	3.00E+00	
		BI-214	3.74E-01 +- 1.50E-01	U	pCi/g		2.24E-01	1.00E+00	
		CO-60	-1.74E-02 +- 3.75E-02	U	pCi/g		6.43E-02	1.52E-01	
		CS-134	5.08E-02 +- 3.77E-02	U	pCi/g		7.84E-02	1.87E-01	
		CS-137	2.30E-02 +- 3.27E-02	U	pCi/g		6.43E-02	3.16E-01	

RER2 - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.

J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.
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Sample Results Summary

STL Richland STLR

Ordered by Method, Batch No., Client Sample ID.

Date: 18-Mar-04

Report No. : 25203 **SDG No:** 25173

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RER2
4043472	RICHRC5017								
3107-0000-187-C-2C-07									
	F9EPT1AD	EU-152	-6.82E-02 +- 8.10E-02	U	pCi/g		1.34E-01	4.04E-01	
		EU-154	-2.72E-02 +- 8.94E-02	U	pCi/g		1.60E-01	3.72E-01	
		EU-155	8.05E-02 +- 7.49E-02	U	pCi/g		1.36E-01	1.57E+01	
		K-40	7.95E+00 +- 1.57E+00		pCi/g		4.52E-01		
		MN-54	1.86E-02 +- 3.55E-02	U	pCi/g		6.82E-02	6.96E-01	
		NB-94	-2.09E-02 +- 3.20E-02	U	pCi/g		5.28E-02	2.85E-01	
		PB-212	4.20E-01 +- 9.63E-02	J	pCi/g		1.05E-01	1.00E+00	
		PB-214	4.98E-01 +- 1.45E-01	J	pCi/g		1.13E-01	1.00E+00	
		TL-208	1.71E-01 +- 7.28E-02	U	pCi/g		1.04E-01	1.00E+00	
3107-0000-188-C-1C-01									
	F9ETD1AD	AC-228	4.07E-01 +- 2.08E-01	U	pCi/g		3.18E-01		
		AG-108M	1.48E-02 +- 2.20E-02	U	pCi/g		4.19E-02		
		AM-241	1.60E-01 +- 1.59E-01	U	pCi/g		2.92E-01		
		BI-212	3.98E-01 +- 4.66E-01	U	pCi/g		8.89E-01	3.00E+00	
		BI-214	4.75E-01 +- 1.16E-01	U	pCi/g		1.96E-01	1.00E+00	
		CO-60	1.29E-02 +- 2.61E-02	U	pCi/g		5.38E-02	1.52E-01	
		CS-134	5.48E-03 +- 3.61E-02	U	pCi/g		6.55E-02	1.87E-01	
		CS-137	3.25E-02 +- 3.17E-02	U	pCi/g		6.20E-02	3.16E-01	
		EU-152	1.66E-02 +- 7.07E-02	U	pCi/g		1.27E-01	4.04E-01	
		EU-154	-3.17E-02 +- 9.72E-02	U	pCi/g		1.72E-01	3.72E-01	
		EU-155	-3.40E-02 +- 8.54E-02	U	pCi/g		1.41E-01	1.57E+01	
		K-40	7.48E+00 +- 1.45E+00		pCi/g		4.42E-01		
		MN-54	3.05E-02 +- 3.01E-02	U	pCi/g		5.96E-02	6.96E-01	
		NB-94	1.59E-02 +- 2.24E-02	U	pCi/g		4.51E-02	2.85E-01	
		PB-212	4.08E-01 +- 1.14E-01	J	pCi/g		7.69E-02	1.00E+00	
		PB-214	4.80E-01 +- 1.33E-01	J	pCi/g		9.04E-02	1.00E+00	
		TL-208	1.56E-01 +- 6.16E-02	U	pCi/g		9.27E-02	1.00E+00	
3107-0000-188-C-1C-05									
	F9ET21AC	AC-228	4.39E-01 +- 1.69E-01	U	pCi/g		2.74E-01		
		AG-108M	5.74E-03 +- 1.83E-02	U	pCi/g		3.35E-02		
		AM-241	4.78E-02 +- 4.33E-02	U	pCi/g		7.32E-02		
		BI-212	2.80E-01 +- 3.50E-01	U	pCi/g		6.72E-01	3.00E+00	
		BI-214	3.94E-01 +- 1.08E-01	U	pCi/g		1.73E-01	1.00E+00	
		CO-60	5.04E-03 +- 1.99E-02	U	pCi/g		3.95E-02	1.52E-01	
		CS-134	3.64E-02 +- 2.71E-02	U	pCi/g		5.48E-02	1.87E-01	
		CS-137	-1.03E-02 +- 2.30E-02	U	pCi/g		3.97E-02	3.16E-01	
		EU-152	3.34E-02 +- 6.35E-02	U	pCi/g		1.17E-01	4.04E-01	

STL Richland

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RER2 - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.

J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.

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Sample Results Summary

STL Richland STLR

Ordered by Method, Batch No., Client Sample ID.

Date: 18-Mar-04

Report No. : 25203 **SDG No:** 25173

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RER2
4043472 RICHRC5017									
3107-0000-188-C-1C-05									
	F9ET21AC	EU-154	3.84E-02 +- 6.65E-02	U	pCi/g		1.33E-01	3.72E-01	
		EU-155	2.99E-02 +- 5.84E-02	U	pCi/g		1.02E-01	1.57E+01	
		K-40	5.25E+00 +- 1.03E+00		pCi/g		3.90E-01		
		MN-54	-6.36E-04 +- 2.58E-02	U	pCi/g		4.61E-02	6.96E-01	
		NB-94	-7.01E-03 +- 2.23E-02	U	pCi/g		3.86E-02	2.85E-01	
		PB-212	3.64E-01 +- 9.19E-02	J	pCi/g		6.69E-02	1.00E+00	
		PB-214	4.68E-01 +- 1.14E-01	J	pCi/g		7.33E-02	1.00E+00	
		TL-208	1.43E-01 +- 4.97E-02	J	pCi/g		4.82E-02	1.00E+00	
3107-0000-188-C-1C-06									
	F9ET51AD	AC-228	5.47E-01 +- 2.80E-01	U	pCi/g		5.43E-01		
		AG-108M	-1.50E-02 +- 3.34E-02	U	pCi/g		5.70E-02		
		AM-241	-1.36E-01 +- 1.03E-01	U	pCi/g		1.56E-01		
		BI-212	1.20E+00 +- 7.19E-01	U	pCi/g		1.48E+00	3.00E+00	
		BI-214	6.27E-01 +- 1.80E-01	U	pCi/g		3.17E-01	1.00E+00	
		CO-60	1.29E-02 +- 4.88E-02	U	pCi/g		9.75E-02	1.52E-01	
		CS-134	4.17E-03 +- 5.34E-02	U	pCi/g		9.81E-02	1.87E-01	
		CS-137	-3.02E-02 +- 4.69E-02	U	pCi/g		7.73E-02	3.16E-01	
		EU-152	-5.65E-02 +- 1.11E-01	U	pCi/g		1.85E-01	4.04E-01	
		EU-154	5.81E-02 +- 1.51E-01	U	pCi/g		2.96E-01	3.72E-01	
		EU-155	2.25E-02 +- 9.81E-02	U	pCi/g		1.74E-01	1.57E+01	
		K-40	7.64E+00 +- 1.99E+00		pCi/g		6.38E-01		
		MN-54	-5.76E-03 +- 4.60E-02	U	pCi/g		8.25E-02	6.96E-01	
		NB-94	-9.22E-03 +- 4.59E-02	U	pCi/g		8.29E-02	2.85E-01	
		PB-212	5.18E-01 +- 1.33E-01	J	pCi/g		1.42E-01	1.00E+00	
		PB-214	6.47E-01 +- 1.97E-01	J	pCi/g		1.41E-01	1.00E+00	
		TL-208	1.60E-01 +- 9.94E-02	U	pCi/g		1.39E-01	1.00E+00	
3107-0000-189-C-1C-01									
	F9EM21AC	AC-228	3.70E-01 +- 1.54E-01	U	pCi/g		2.70E-01		
		AG-108M	6.43E-03 +- 2.07E-02	U	pCi/g		3.74E-02		
		AM-241	-7.76E-02 +- 1.03E-01	U	pCi/g		1.66E-01		
		BI-212	5.23E-01 +- 3.77E-01	U	pCi/g		7.43E-01	3.00E+00	
		BI-214	4.37E-01 +- 1.48E-01	U	pCi/g		1.78E-01	1.00E+00	
		CO-60	-6.10E-03 +- 2.45E-02	U	pCi/g		4.39E-02	1.52E-01	
		CS-134	1.87E-02 +- 2.71E-02	U	pCi/g		5.22E-02	1.87E-01	
		CS-137	-1.29E-02 +- 2.62E-02	U	pCi/g		4.42E-02	3.16E-01	
		EU-152	-8.39E-02 +- 7.81E-02	U	pCi/g		1.19E-01	4.04E-01	
		EU-154	-2.39E-02 +- 7.58E-02	U	pCi/g		1.34E-01	3.72E-01	

RER2 - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.

J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.
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Sample Results Summary

STL Richland STLR

Ordered by Method, Batch No., Client Sample ID.

Date: 18-Mar-04

Report No. : 25203

SDG No: 25173

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RER2
4043472 RICHRC5017									
3107-0000-189-C-1C-01									
	F9EM21AC	EU-155	9.09E-04 +- 7.57E-02	U	pCi/g		1.30E-01	1.57E+01	
		K-40	7.34E+00 +- 1.26E+00		pCi/g		4.45E-01		
		MN-54	-1.98E-03 +- 2.52E-02	U	pCi/g		4.50E-02	6.96E-01	
		NB-94	-4.34E-03 +- 2.48E-02	U	pCi/g		4.36E-02	2.85E-01	
		PB-212	3.97E-01 +- 1.04E-01	J	pCi/g		6.10E-02	1.00E+00	
		PB-214	4.81E-01 +- 1.30E-01	J	pCi/g		8.96E-02	1.00E+00	
		TL-208	8.66E-02 +- 3.58E-02	U	pCi/g		6.83E-02	1.00E+00	
3107-0000-189-C-2C-05									
	F9EPE1AC	AC-228	4.26E-01 +- 1.58E-01		pCi/g		1.54E-01		
		AG-108M	2.36E-03 +- 2.01E-02	U	pCi/g		3.65E-02		
		AM-241	-9.19E-03 +- 1.46E-01	U	pCi/g		2.54E-01		
		BI-212	8.86E-01 +- 3.68E-01	U	pCi/g		7.74E-01	3.00E+00	
		BI-214	3.79E-01 +- 1.08E-01	U	pCi/g		1.69E-01	1.00E+00	
		CO-60	9.51E-03 +- 2.50E-02	U	pCi/g		4.98E-02	1.52E-01	
		CS-134	3.03E-02 +- 3.12E-02	U	pCi/g		6.05E-02	1.87E-01	
		CS-137	-3.91E-03 +- 2.60E-02	U	pCi/g		4.64E-02	3.16E-01	
		EU-152	-1.55E-02 +- 5.97E-02	U	pCi/g		1.03E-01	4.04E-01	
		EU-154	1.07E-02 +- 7.37E-02	U	pCi/g		1.41E-01	3.72E-01	
		EU-155	-2.65E-02 +- 7.61E-02	U	pCi/g		1.26E-01	1.57E+01	
		K-40	6.08E+00 +- 1.22E+00		pCi/g		4.49E-01		
		MN-54	-9.11E-04 +- 2.36E-02	U	pCi/g		4.26E-02	6.96E-01	
		NB-94	2.70E-03 +- 1.98E-02	U	pCi/g		3.70E-02	2.85E-01	
		PB-212	3.75E-01 +- 9.33E-02	J	pCi/g		6.44E-02	1.00E+00	
		PB-214	3.67E-01 +- 1.16E-01	J	pCi/g		8.13E-02	1.00E+00	
		TL-208	1.60E-01 +- 5.85E-02	J	pCi/g		4.39E-02	1.00E+00	
3107-0000-189-C-2C-05 DUP									
	F9EPE1AD	AC-228	3.91E-01 +- 1.36E-01	U	pCi/g		2.54E-01		
		AG-108M	-1.45E-02 +- 1.99E-02	U	pCi/g		3.28E-02		
		AM-241	1.04E-02 +- 9.44E-02	U	pCi/g		1.60E-01		
		BI-212	1.91E-01 +- 3.59E-01	U	pCi/g		6.71E-01	3.00E+00	
		BI-214	5.21E-01 +- 1.16E-01	U	pCi/g		1.70E-01	1.00E+00	
		CO-60	1.05E-02 +- 2.47E-02	U	pCi/g		4.82E-02	1.52E-01	
		CS-134	1.29E-02 +- 2.78E-02	U	pCi/g		5.20E-02	1.87E-01	
		CS-137	-5.82E-03 +- 2.40E-02	U	pCi/g		4.16E-02	3.16E-01	
		EU-152	-6.60E-02 +- 8.14E-02	U	pCi/g		1.17E-01	4.04E-01	
		EU-154	-1.05E-02 +- 7.38E-02	U	pCi/g		1.33E-01	3.72E-01	
		EU-155	-8.18E-03 +- 7.48E-02	U	pCi/g		1.27E-01	1.57E+01	

RER2 - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.

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Sample Results Summary

STL Richland STLR

Ordered by Method, Batch No., Client Sample ID.

Date: 18-Mar-04

Report No. : 25203 **SDG No:** 25173

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RER2
4043472	RICHRC5017								
3107-0000-189-C-2C-05 DUP									
	F9EPE1AD	K-40	6.24E+00 +- 1.12E+00		pCi/g		4.22E-01		
		MN-54	3.30E-02 +- 3.06E-02	U	pCi/g		5.82E-02	6.96E-01	
		NB-94	1.68E-02 +- 2.45E-02	U	pCi/g		4.66E-02	2.85E-01	
		PB-212	3.77E-01 +- 1.15E-01	J	pCi/g		7.41E-02	1.00E+00	
		PB-214	4.09E-01 +- 1.14E-01	J	pCi/g		7.82E-02	1.00E+00	
		TL-208	1.47E-01 +- 4.93E-02	U	pCi/g		7.38E-02	1.00E+00	
3107-0000-189-C-2C-06									
	F9EPG1AD	AC-228	5.65E-01 +- 1.59E-01	U	pCi/g		3.00E-01		
		AG-108M	5.81E-03 +- 1.73E-02	U	pCi/g		3.24E-02		
		AM-241	8.02E-03 +- 7.92E-02	U	pCi/g		1.38E-01		
		BI-212	5.80E-01 +- 3.85E-01	U	pCi/g		7.68E-01	3.00E+00	
		BI-214	3.09E-01 +- 1.25E-01	U	pCi/g		1.68E-01	1.00E+00	
		CO-60	1.62E-02 +- 2.46E-02	U	pCi/g		5.09E-02	1.52E-01	
		CS-134	3.44E-02 +- 2.61E-02	U	pCi/g		5.36E-02	1.87E-01	
		CS-137	-1.98E-02 +- 2.06E-02	U	pCi/g		3.29E-02	3.16E-01	
		EU-152	3.90E-03 +- 6.43E-02	U	pCi/g		1.13E-01	4.04E-01	
		EU-154	-7.30E-02 +- 7.73E-02	U	pCi/g		1.22E-01	3.72E-01	
		EU-155	-1.93E-03 +- 6.42E-02	U	pCi/g		1.08E-01	1.57E+01	
		K-40	6.75E+00 +- 1.22E+00		pCi/g		4.56E-01		
		MN-54	1.31E-02 +- 2.50E-02	U	pCi/g		4.83E-02	6.96E-01	
		NB-94	-7.92E-03 +- 2.01E-02	U	pCi/g		3.54E-02	2.85E-01	
		PB-212	3.78E-01 +- 1.21E-01	J	pCi/g		7.65E-02	1.00E+00	
		PB-214	4.50E-01 +- 1.17E-01	J	pCi/g		7.64E-02	1.00E+00	
		TL-208	1.89E-01 +- 5.38E-02	J	pCi/g		4.63E-02	1.00E+00	
3107-0000-190-C1C-01									
	F9EP41AC	AC-228	4.45E-01 +- 1.86E-01		pCi/g		1.45E-01		
		AG-108M	-3.80E-04 +- 1.98E-02	U	pCi/g		3.55E-02		
		AM-241	-5.24E-03 +- 1.40E-01	U	pCi/g		2.44E-01		
		BI-212	5.87E-01 +- 3.70E-01	U	pCi/g		7.49E-01	3.00E+00	
		BI-214	4.48E-01 +- 1.36E-01	U	pCi/g		1.86E-01	1.00E+00	
		CO-60	2.06E-02 +- 2.66E-02	U	pCi/g		5.49E-02	1.52E-01	
		CS-134	3.51E-03 +- 2.71E-02	U	pCi/g		4.98E-02	1.87E-01	
		CS-137	2.10E-03 +- 2.14E-02	U	pCi/g		4.00E-02	3.16E-01	
		EU-152	2.80E-02 +- 6.10E-02	U	pCi/g		1.12E-01	4.04E-01	
		EU-154	1.11E-02 +- 7.64E-02	U	pCi/g		1.46E-01	3.72E-01	
		EU-155	6.75E-02 +- 7.56E-02	U	pCi/g		1.34E-01	1.57E+01	
		K-40	7.14E+00 +- 1.29E+00		pCi/g		4.81E-01		

STL Richland

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RER2 - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.

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Sample Results Summary

STL Richland STLR

Ordered by Method, Batch No., Client Sample ID.

Date: 18-Mar-04

Report No. : 25203 **SDG No:** 25173

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RER2
4043472	RICHRC5017								
	3107-0000-190-C1C-01								
	F9EP41AC	MN-54	-1.26E-02 +- 2.73E-02	U	pCi/g		4.63E-02	6.96E-01	
		NB-94	-2.92E-02 +- 2.72E-02	U	pCi/g		4.22E-02	2.85E-01	
		PB-212	4.37E-01 +- 9.31E-02	J	pCi/g		6.28E-02	1.00E+00	
		PB-214	4.30E-01 +- 1.23E-01	J	pCi/g		8.21E-02	1.00E+00	
		TL-208	1.58E-01 +- 5.00E-02	U	pCi/g		7.88E-02	1.00E+00	
	3107-0000-190-C2C-06								
	F9EQQ1AC	AC-228	5.29E-01 +- 1.44E-01		pCi/g		1.38E-01		
		AG-108M	-3.46E-03 +- 1.82E-02	U	pCi/g		3.19E-02		
		AM-241	-6.11E-03 +- 4.35E-02	U	pCi/g		7.12E-02		
		BI-212	7.80E-01 +- 3.36E-01	U	pCi/g		7.12E-01	3.00E+00	
		BI-214	3.34E-01 +- 1.05E-01	U	pCi/g		1.57E-01	1.00E+00	
		CO-60	8.02E-03 +- 2.37E-02	U	pCi/g		4.61E-02	1.52E-01	
		CS-134	1.52E-02 +- 2.45E-02	U	pCi/g		4.75E-02	1.87E-01	
		CS-137	-1.04E-02 +- 2.38E-02	U	pCi/g		4.11E-02	3.16E-01	
		EU-152	1.18E-02 +- 5.76E-02	U	pCi/g		1.04E-01	4.04E-01	
		EU-154	2.32E-02 +- 7.64E-02	U	pCi/g		1.45E-01	3.72E-01	
		EU-155	5.63E-02 +- 5.83E-02	U	pCi/g		1.03E-01	1.57E+01	
		K-40	6.78E+00 +- 1.20E+00		pCi/g		3.90E-01		
		MN-54	1.79E-02 +- 2.13E-02	U	pCi/g		4.25E-02	6.96E-01	
		NB-94	2.31E-02 +- 1.86E-02	U	pCi/g		3.94E-02	2.85E-01	
		PB-212	3.56E-01 +- 9.38E-02	J	pCi/g		6.69E-02	1.00E+00	
		PB-214	3.99E-01 +- 1.24E-01	J	pCi/g		7.06E-02	1.00E+00	
		TL-208	1.71E-01 +- 5.10E-02	U	pCi/g		7.52E-02	1.00E+00	
	3107-0000-190-C2C-07								
	F9EQX1AD	AC-228	4.71E-01 +- 2.41E-01	U	pCi/g		4.30E-01		
		AG-108M	-2.19E-03 +- 2.95E-02	U	pCi/g		5.21E-02		
		AM-241	1.69E-02 +- 7.93E-02	U	pCi/g		1.38E-01		
		BI-212	-1.98E-01 +- 5.96E-01	U	pCi/g		1.03E+00	3.00E+00	
		BI-214	3.30E-01 +- 1.66E-01	U	pCi/g		2.39E-01	1.00E+00	
		CO-60	2.89E-02 +- 3.93E-02	U	pCi/g		8.23E-02	1.52E-01	
		CS-134	4.33E-02 +- 4.62E-02	U	pCi/g		9.05E-02	1.87E-01	
		CS-137	-1.34E-03 +- 3.62E-02	U	pCi/g		6.46E-02	3.16E-01	
		EU-152	4.49E-02 +- 8.79E-02	U	pCi/g		1.60E-01	4.04E-01	
		EU-154	-1.51E-01 +- 1.44E-01	U	pCi/g		2.24E-01	3.72E-01	
		EU-155	2.01E-02 +- 7.80E-02	U	pCi/g		1.38E-01	1.57E+01	
		K-40	7.64E+00 +- 1.66E+00		pCi/g		5.41E-01		
		MN-54	2.29E-02 +- 4.41E-02	U	pCi/g		8.26E-02	6.96E-01	

RER2 - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.

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Sample Results Summary

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Date: 18-Mar-04

Report No. : 25203

SDG No: 25173

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RER2
4043472 RICHRC5017									
3107-0000-190-C2C-07									
	F9EQX1AD	NB-94	-2.30E-02 +- 3.31E-02	U	pCi/g		5.57E-02	2.85E-01	
		PB-212	5.04E-01 +- 1.15E-01	J	pCi/g		1.14E-01	1.00E+00	
		PB-214	4.33E-01 +- 1.51E-01	J	pCi/g		1.28E-01	1.00E+00	
		TL-208	1.94E-01 +- 8.54E-02	U	pCi/g		1.19E-01	1.00E+00	
3107-0000-191-C-1C-01									
	F9EQ51AC	AC-228	3.70E-01 +- 1.57E-01	U	pCi/g		2.81E-01		
		AG-108M	6.60E-03 +- 2.06E-02	U	pCi/g		3.80E-02		
		AM-241	4.84E-03 +- 8.53E-02	U	pCi/g		1.48E-01		
		BI-212	7.61E-01 +- 4.12E-01	U	pCi/g		8.35E-01	3.00E+00	
		BI-214	4.66E-01 +- 1.12E-01	U	pCi/g		1.83E-01	1.00E+00	
		CO-60	5.12E-02 +- 3.06E-02	U	pCi/g		6.75E-02	1.52E-01	
		CS-134	1.23E-02 +- 3.09E-02	U	pCi/g		5.75E-02	1.87E-01	
		CS-137	3.24E-01 +- 6.82E-02		pCi/g		4.73E-02	3.16E-01	
		EU-152	4.50E-02 +- 7.34E-02	U	pCi/g		1.21E-01	4.04E-01	
		EU-154	-3.14E-02 +- 6.92E-02	U	pCi/g		1.21E-01	3.72E-01	
		EU-155	1.94E-03 +- 6.77E-02	U	pCi/g		1.15E-01	1.57E+01	
		K-40	6.34E+00 +- 1.15E+00		pCi/g		3.93E-01		
		MN-54	-1.70E-03 +- 2.06E-02	U	pCi/g		3.84E-02	6.96E-01	
		NB-94	-4.00E-03 +- 2.23E-02	U	pCi/g		4.03E-02	2.85E-01	
		PB-212	4.05E-01 +- 9.42E-02	J	pCi/g		7.77E-02	1.00E+00	
		PB-214	4.01E-01 +- 1.07E-01	J	pCi/g		7.88E-02	1.00E+00	
		TL-208	1.31E-01 +- 4.87E-02	J	pCi/g		4.18E-02	1.00E+00	
3107-0000-191-C-3C-09									
	F9ERW1AC	AC-228	3.07E-01 +- 1.30E-01		pCi/g		1.23E-01		
		AG-108M	-1.37E-02 +- 1.57E-02	U	pCi/g		2.52E-02		
		AM-241	8.15E-03 +- 3.75E-02	U	pCi/g		6.40E-02		
		BI-212	1.17E-01 +- 3.19E-01	U	pCi/g		5.89E-01	3.00E+00	
		BI-214	3.50E-01 +- 8.77E-02	U	pCi/g		1.42E-01	1.00E+00	
		CO-60	3.13E-03 +- 1.78E-02	U	pCi/g		3.52E-02	1.52E-01	
		CS-134	1.34E-02 +- 2.31E-02	U	pCi/g		4.43E-02	1.87E-01	
		CS-137	-1.33E-03 +- 1.80E-02	U	pCi/g		3.27E-02	3.16E-01	
		EU-152	-4.10E-02 +- 5.04E-02	U	pCi/g		8.27E-02	4.04E-01	
		EU-154	1.56E-02 +- 6.09E-02	U	pCi/g		1.17E-01	3.72E-01	
		EU-155	2.36E-02 +- 5.02E-02	U	pCi/g		8.92E-02	1.57E+01	
		K-40	6.97E+00 +- 1.12E+00		pCi/g		2.92E-01		
		MN-54	6.15E-03 +- 1.84E-02	U	pCi/g		3.51E-02	6.96E-01	
		NB-94	-2.74E-03 +- 1.76E-02	U	pCi/g		3.14E-02	2.85E-01	

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Report No. : 25203 **SDG No:** 25173

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4043472 RICHRC5017									
3107-0000-191-C-3C-09									
	F9ERW1AC	PB-212	4.64E-01 +- 9.78E-02	J	pCi/g		7.59E-02	1.00E+00	
		PB-214	3.46E-01 +- 8.71E-02	J	pCi/g		7.09E-02	1.00E+00	
		TL-208	1.40E-01 +- 3.67E-02	J	pCi/g		2.67E-02	1.00E+00	
3107-0000-191-C-3C-10									
	F9ER01AD	AC-228	4.94E-01 +- 1.59E-01	U	pCi/g		3.14E-01		
		AG-108M	-7.92E-04 +- 2.34E-02	U	pCi/g		4.11E-02		
		AM-241	-2.87E-02 +- 1.08E-01	U	pCi/g		1.80E-01		
		BI-212	6.13E-01 +- 4.23E-01	U	pCi/g		8.33E-01	3.00E+00	
		BI-214	3.43E-01 +- 1.04E-01	U	pCi/g		1.66E-01	1.00E+00	
		CO-60	2.33E-02 +- 2.76E-02	U	pCi/g		5.69E-02	1.52E-01	
		CS-134	2.56E-02 +- 3.27E-02	U	pCi/g		6.25E-02	1.87E-01	
		CS-137	-6.39E-03 +- 2.83E-02	U	pCi/g		4.92E-02	3.16E-01	
		EU-152	-4.29E-02 +- 8.05E-02	U	pCi/g		1.25E-01	4.04E-01	
		EU-154	-2.55E-02 +- 8.67E-02	U	pCi/g		1.53E-01	3.72E-01	
		EU-155	3.41E-02 +- 8.04E-02	U	pCi/g		1.41E-01	1.57E+01	
		K-40	6.60E+00 +- 1.19E+00		pCi/g		3.45E-01		
		MN-54	-1.37E-02 +- 2.80E-02	U	pCi/g		4.76E-02	6.96E-01	
		NB-94	-5.81E-03 +- 2.79E-02	U	pCi/g		4.87E-02	2.85E-01	
		PB-212	3.39E-01 +- 1.08E-01	J	pCi/g		9.12E-02	1.00E+00	
		PB-214	5.00E-01 +- 1.25E-01	J	pCi/g		8.14E-02	1.00E+00	
		TL-208	1.67E-01 +- 6.15E-02	U	pCi/g		8.36E-02	1.00E+00	
4043467 RICHRC5010									
3107-0000-188-C-1C-01									
	F9ETD1AF	PU-241	2.41E-01 +- 5.65E-01	U	pCi/g	70%	1.00E+00	3.48E+01	
3107-0000-188-C-1C-01 DUP									
	F9ETD1AK	PU-241	2.17E-03 +- 7.70E-01	U	pCi/g	51%	1.39E+00	3.48E+01	
4043468 RICHRC5037									
3107-0000-187-C-1C-01									
	F9EPH1AA	H-3	6.43E-01 +- 4.27E-02	J	pCi/g	100%	2.74E-02	1.65E+01	
3107-0000-187-C-1C-02									
	F9EPK1AA	H-3	9.87E-01 +- 5.75E-02	J	pCi/g	100%	2.72E-02	1.65E+01	
3107-0000-187-C-1C-03									
	F9EPL1AA	H-3	1.60E+00 +- 8.39E-02	J	pCi/g	100%	2.79E-02	1.65E+01	
3107-0000-187-C-1C-04									
	F9EPN1AA	H-3	3.89E+00 +- 1.79E-01	J	pCi/g	100%	2.71E-02	1.65E+01	
3107-0000-187-C-2C-05									
	F9EPQ1AA	H-3	8.80E+00 +- 3.80E-01	J	pCi/g	100%	2.52E-02	1.65E+01	

STL Richland

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RER2 - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.

J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.

U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

Sample Results Summary

STL Richland STLR

Ordered by Method, Batch No., Client Sample ID.

Date: 18-Mar-04

Report No. : 25203 **SDG No:** 25173

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RER2
4043468 RICHRC5037									
	3107-0000-187-C-2C-06								
	F9EPR1AA	H-3	1.47E+01 +- 6.26E-01	J	pCi/g	100%	2.72E-02	1.65E+01	
	3107-0000-187-C-2C-07								
	F9EPT1AC	H-3	4.21E+00 +- 2.03E-01	J	pCi/g	100%	4.50E-02	1.65E+01	
	3107-0000-189-C-1C-01								
	F9EM21AA	H-3	5.85E-01 +- 4.08E-02	J	pCi/g	100%	2.84E-02	1.65E+01	
	3107-0000-189-C-1C-01 DUP								
	F9EM21AD	H-3	5.52E-01 +- 3.84E-02	J	pCi/g	100%	2.64E-02	1.65E+01	
	3107-0000-189-C-1C-02								
	F9EN71AA	H-3	6.46E-01 +- 4.35E-02	J	pCi/g	100%	2.84E-02	1.65E+01	
	3107-0000-189-C-2C-03								
	F9EPC1AA	H-3	3.59E-01 +- 3.00E-02	J	pCi/g	100%	2.69E-02	1.65E+01	
	3107-0000-189-C-2C-04								
	F9EPD1AA	H-3	1.78E-01 +- 2.18E-02	J	pCi/g	100%	2.83E-02	1.65E+01	
	3107-0000-189-C-2C-05								
	F9EPE1AA	H-3	1.21E-01 +- 1.80E-02	J	pCi/g	100%	2.58E-02	1.65E+01	
	3107-0000-189-C-2C-06								
	F9EPG1AA	H-3	2.05E-01 +- 2.21E-02	J	pCi/g	100%	2.55E-02	1.65E+01	
	3107-0000-190-C1C-01								
	F9EP41AA	H-3	8.82E-01 +- 5.30E-02	J	pCi/g	100%	2.72E-02	1.65E+01	
	3107-0000-190-C1C-02								
	F9EP81AA	H-3	1.08E+00 +- 6.39E-02	J	pCi/g	100%	3.15E-02	1.65E+01	
	3107-0000-190-C1C-03								
	F9EQC1AA	H-3	7.26E-01 +- 4.55E-02	J	pCi/g	100%	2.58E-02	1.65E+01	
	3107-0000-190-C1C-04								
	F9EQF1AA	H-3	2.46E-01 +- 2.45E-02	J	pCi/g	100%	2.65E-02	1.65E+01	
	3107-0000-190-C1C-05								
	F9EQJ1AA	H-3	2.41E-01 +- 2.43E-02	J	pCi/g	100%	2.67E-02	1.65E+01	
4043471 RICHRC5037									
	3107-0000-188-C-1C-01								
	F9ETD1AC	H-3	2.66E+00 +- 1.41E-01	J	pCi/g	100%	2.51E-02	1.65E+01	
	3107-0000-188-C-1C-02								
	F9ETM1AA	H-3	3.19E+00 +- 1.65E-01	J	pCi/g	100%	2.46E-02	1.65E+01	
	3107-0000-188-C-1C-03								
	F9ETT1AA	H-3	1.49E+00 +- 8.49E-02	J	pCi/g	100%	2.50E-02	1.65E+01	
	3107-0000-188-C-1C-04								
	F9ETX1AA	H-3	9.42E-01 +- 5.88E-02	J	pCi/g	100%	2.45E-02	1.65E+01	
	3107-0000-188-C-1C-05								
	F9ET21AA	H-3	1.69E+00 +- 9.45E-02	J	pCi/g	100%	2.52E-02	1.65E+01	

RER2 - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.

J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.

Sample Results Summary

STL Richland STLR

Ordered by Method, Batch No., Client Sample ID.

Date: 18-Mar-04

Report No. : 25203 **SDG No:** 25173

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RER2
4043471	RICHRC5037								
	3107-0000-188-C-1C-06								
	F9ET51AC	H-3	3.87E-01 +- 5.98E-02	J	pCi/g	100%	8.35E-02	1.65E+01	
	3107-0000-190-C2C-06								
	F9EQQ1AA	H-3	8.16E-01 +- 5.44E-02	J	pCi/g	100%	2.75E-02	1.65E+01	
	3107-0000-190-C2C-06 DUP								
	F9EQQ1AD	H-3	7.08E-01 +- 4.79E-02	J	pCi/g	100%	2.51E-02	1.65E+01	
	3107-0000-190-C2C-07								
	F9EQX1AA	H-3	5.38E-01 +- 3.96E-02	J	pCi/g	100%	2.52E-02	1.65E+01	
	3107-0000-191-C-1C-01								
	F9EQ51AA	H-3	8.52E-01 +- 5.61E-02	J	pCi/g	100%	2.79E-02	1.65E+01	
	3107-0000-191-C-1C-02								
	F9ERA1AA	H-3	8.13E-01 +- 5.41E-02	J	pCi/g	100%	2.71E-02	1.65E+01	
	3107-0000-191-C-1C-03								
	F9ERD1AA	H-3	1.38E+00 +- 8.25E-02	J	pCi/g	100%	2.99E-02	1.65E+01	
	3107-0000-191-C-1C-04								
	F9ERE1AA	H-3	1.06E+00 +- 6.61E-02	J	pCi/g	100%	2.74E-02	1.65E+01	
	3107-0000-191-C-2C-05								
	F9ERG1AA	H-3	4.25E+00 +- 2.15E-01	J	pCi/g	100%	2.53E-02	1.65E+01	
	3107-0000-191-C-2C-06								
	F9ERH1AA	H-3	3.42E+00 +- 1.76E-01	J	pCi/g	100%	2.47E-02	1.65E+01	
	3107-0000-191-C-2C-07								
	F9ERM1AA	H-3	4.42E+00 +- 2.23E-01	J	pCi/g	100%	2.51E-02	1.65E+01	
	3107-0000-191-C-2C-08								
	F9ERQ1AA	H-3	4.09E+00 +- 2.08E-01	J	pCi/g	100%	2.51E-02	1.65E+01	
	3107-0000-191-C-3C-09								
	F9ERW1AA	H-3	7.04E+00 +- 3.46E-01	J	pCi/g	100%	2.48E-02	1.65E+01	
	3107-0000-191-C-3C-10								
	F9ER01AA	H-3	4.07E+00 +- 2.06E-01	J	pCi/g	100%	2.48E-02	1.65E+01	

No. of Results: 329

RER2 - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.

J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.

QC Results Summary
STL Richland STLR

Date: 18-Mar-04

Ordered by Method, Batch No, QC Type,.

Report No. : 25203 **SDG No.:** 25173

Batch Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	Recovery	Bias	MDC|MDA
CMUD								
4043475 BLANK QC								
F9HTX1AA	SR-90	3.83E-02 +- 1.49E-02	J	pCi/g	81%			2.21E-02
4043475 LCS								
F9HTX1AC	SR-90	1.55E+00 +- 2.31E-01		pCi/g	69%	114%	0.1	2.55E-02
RICHRC5080								
4043465 BLANK QC								
F9HQH1AA	AM-241	6.51E-03 +- 1.31E-02	U	pCi/g	49%			1.77E-02
	CM-242	0.00E+00 +- 1.92E-02	U	pCi/g	49%			2.12E-02
	CM-243/244	0.00E+00 +- 1.60E-02	U	pCi/g	49%			1.77E-02
4043465 LCS								
F9HQH1AC	AM-241	3.04E+00 +- 5.80E-01		pCi/g	73%	67%	-0.3	2.52E-02
RICHRC5010								
4043466 BLANK QC								
F9HQN1AA	PU-238	0.00E+00 +- 1.56E-02	U	pCi/g	65%			1.72E-02
	PU239/40	0.00E+00 +- 1.55E-02	U	pCi/g	65%			1.72E-02
4043466 LCS								
F9HQN1AC	PU239/40	4.40E-01 +- 1.16E-01	J	pCi/g	71%	96%	0.0	1.26E-02
RICHRC5017								
4043472 BLANK QC								
F9HTJ1AA	AC-228	-1.57E-03 +- 1.08E-01	U	pCi/g				2.15E-01
	AG-108M	1.72E-02 +- 2.28E-02	U	pCi/g				4.64E-02
	AM-241	2.34E-02 +- 8.34E-02	U	pCi/g				1.51E-01
	BI-212	-1.72E-01 +- 4.70E-01	U	pCi/g				8.23E-01
	BI-214	-6.16E-02 +- 7.33E-02	U	pCi/g				1.31E-01
	CO-60	2.20E-02 +- 3.23E-02	U	pCi/g				7.23E-02
	CS-134	-7.75E-03 +- 2.96E-02	U	pCi/g				5.37E-02
	CS-137	-7.71E-03 +- 2.50E-02	U	pCi/g				4.57E-02
	EU-152	-2.12E-02 +- 7.90E-02	U	pCi/g				1.37E-01
	EU-154	9.99E-02 +- 9.72E-02	U	pCi/g				2.22E-01
	EU-155	-3.29E-02 +- 6.00E-02	U	pCi/g				9.87E-02
	K-40	-2.73E-01 +- 5.07E-01	U	pCi/g				1.11E+00
	MN-54	-1.98E-02 +- 2.73E-02	U	pCi/g				4.58E-02
	NB-94	-1.74E-02 +- 2.92E-02	U	pCi/g				5.02E-02
	PB-212	4.63E-02 +- 6.16E-02	U	pCi/g				6.66E-02
	PB-214	-6.08E-02 +- 6.36E-02	U	pCi/g				1.09E-01
	TL-208	2.13E-03 +- 3.04E-02	U	pCi/g				5.63E-02
4043472 LCS								
F9HTJ1AC	CS-137	1.18E+00 +- 1.93E-01		pCi/g		115%	0.2	5.52E-02
RICHRC5010								
4043467 BLANK QC								

Bias - (Result/Expected)-1 as defined by ANSI N13.30.

J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.

U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

QC Results Summary
STL Richland STLR

Date: 18-Mar-04

Ordered by Method, Batch No, QC Type,.

Report No. : 25203 **SDG No.:** 25173

Batch Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	Recovery	Bias	MDC|MDA
F9HQT1AA	PU-241	5.41E-01 +- 6.30E-01	U	pCi/g	65%			1.09E+00
4043467 LCS								
F9HQT1AC	PU-241	2.34E+01 +- 2.15E+00		pCi/g	71%	103%	0.0	9.87E-01
RICHRC5037								
4043468 BLANK QC								
F9HRF1AA	H-3	6.18E-02 +- 1.11E-01	U	pCi/g	100%			2.51E-01
4043468 LCS								
F9HRF1AC	H-3	6.33E+00 +- 3.70E-01	J	pCi/g	100%	93%	-0.1	2.50E-01
RICHRC5037								
4043471 BLANK QC								
F9HRT1AA	H-3	5.92E-03 +- 1.07E-01	U	pCi/g	100%			2.48E-01
4043471 LCS								
F9HRT1AC	H-3	6.82E+00 +- 4.23E-01	J	pCi/g	100%	100%	0.0	2.49E-01

No. of Results: 33

Bias - (Result/Expected)-1 as defined by ANSI N13.30.
J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.
U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	**SDG:**	25173	**Collection Date:**	2/2/2004 2:25:00 PM
Lot-Sample No.:	J4B110186-7	**Report No. :**	25203	**Received Date:**	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-187-C-1C-01	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043468	RICHRC5037			**Work Order:**	F9EPH1AA		**Report DB ID:**	9F9EPH10				
H-3	6.43E-01	J	3.26E-02	4.27E-02	2.74E-02	pCi/g	100%	(23.5)	3/9/04 03:33 a		100.2	LSC4
						1.27E-02	1.65E+01	(30.1)			G	
Batch: 4043472	RICHRC5017			**Work Order:**	F9EPH1AC		**Report DB ID:**	9F9EPH10				
AC-228	4.16E-01	U	1.23E-01	1.23E-01	2.52E-01	pCi/g		(1.6)	3/3/04 08:08 a		326.4	GER8$1
								(6.8)			g	
AG-108M	-1.29E-02	U	1.83E-02	1.83E-02	3.00E-02	pCi/g		-0.43	3/3/04 08:08 a		326.4	GER8$1
								-(1.4)			g	
AM-241	-2.45E-03	U	5.07E-02	5.07E-02	7.32E-02	pCi/g		-0.03	3/3/04 08:08 a		326.4	GER8$1
								-0.1			g	
BI-212	2.97E-01	U	3.40E-01	3.40E-01	6.63E-01	pCi/g		0.45	3/3/04 08:08 a		326.4	GER8$1
							3.00E+00	(1.7)			g	
BI-214	4.55E-01	U	1.08E-01	1.08E-01	1.78E-01	pCi/g		(2.6)	3/3/04 08:08 a		326.4	GER8$1
							1.00E+00	(8.4)			g	
CO-60	-1.81E-02	U	2.24E-02	2.24E-02	3.57E-02	pCi/g		-0.51	3/3/04 08:08 a		326.4	GER8$1
							1.52E-01	-(1.6)			g	
CS-134	3.68E-02	U	2.76E-02	2.76E-02	5.63E-02	pCi/g		0.65	3/3/04 08:08 a		326.4	GER8$1
							1.87E-01	(2.7)			g	
CS-137	4.10E-03	U	2.24E-02	2.24E-02	4.17E-02	pCi/g		0.1	3/3/04 08:08 a		326.4	GER8$1
							3.16E-01	0.37			g	
EU-152	1.91E-02	U	6.29E-02	6.29E-02	1.14E-01	pCi/g		0.17	3/3/04 08:08 a		326.4	GER8$1
							4.04E-01	0.61			g	

STL Richland
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V4.07 A97

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.
U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	**SDG:**	25173	**Collection Date:**	2/2/2004 2:25:00 PM
Lot-Sample No.:	J4B110186-7	**Report No. :**	25203	**Received Date:**	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-187-C-1C-01	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
EU-154	6.61E-02	U	7.41E-02	7.41E-02	1.53E-01	pCi/g		*0.43*	3/3/04 08:08 a		326.4	GER8$1
							3.72E-01	*(1.8)*			g	
EU-155	-5.04E-03	U	5.88E-02	5.88E-02	1.02E-01	pCi/g		*-0.05*	3/3/04 08:08 a		326.4	GER8$1
							1.57E+01	*-0.17*			g	
K-40	6.99E+00		1.18E+00	1.18E+00	3.95E-01	pCi/g		*(17.7)*	3/3/04 08:08 a		326.4	GER8$1
								(11.9)			g	
MN-54	-1.37E-03	U	2.46E-02	2.46E-02	4.41E-02	pCi/g		*-0.03*	3/3/04 08:08 a		326.4	GER8$1
							6.96E-01	*-0.11*			g	
NB-94	-1.20E-02	U	1.90E-02	1.90E-02	3.15E-02	pCi/g		*-0.38*	3/3/04 08:08 a		326.4	GER8$1
							2.85E-01	*-(1.3)*			g	
PB-212	4.18E-01	J	9.63E-02	9.63E-02	9.04E-02	pCi/g		*(4.6)*	3/3/04 08:08 a		326.4	GER8$1
							1.00E+00	*(8.7)*			g	
PB-214	5.45E-01	J	1.20E-01	1.20E-01	7.57E-02	pCi/g		*(7.2)*	3/3/04 08:08 a		326.4	GER8$1
							1.00E+00	*(9.1)*			g	
TL-208	1.01E-01	J	4.47E-02	4.47E-02	3.78E-02	pCi/g		*(2.7)*	3/3/04 08:08 a		326.4	GER8$1
							1.00E+00	*(4.5)*			g	

No. of Results: 18 **Comments:**

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.
U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	**SDG:**	25173	**Collection Date:**	2/2/2004 2:25:00 PM
Lot-Sample No.:	J4B110186-8	**Report No. :**	25203	**Received Date:**	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-187-C-1C-02	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043468	RICHRC5037			**Work Order:**	F9EPK1AA		**Report DB ID:**	9F9EPK10				
H-3	9.87E-01	J	3.95E-02	5.75E-02	2.72E-02	pCi/g	100%	*(36.4)*	3/9/04 04:15 a		100.8	LSC4
						1.26E-02	1.65E+01	*(34.4)*			G	

No. of Results: 1 **Comments:**

STL Richland
rptSTLRchSample
V4.97 A97

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.
U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	SDG:	25173	Collection Date:	2/2/2004 2:25:00 PM
Lot-Sample No.:	J4B110186-9	Report No. :	25203	Received Date:	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-187-C-1C-03	COC No. :		Matrix:	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043468	RICHRC5037			Work Order:	F9EPL1AA		Report DB ID:	9F9EPL10				
H-3	1.60E+00	J	5.03E-02	8.39E-02	2.79E-02	pCi/g	100%	*(57.4)*	3/9/04 04:58 a		100.4	LSC4
						1.29E-02	1.65E+01	*(38.2)*			G	

No. of Results: 1 Comments:

STL Richland
rptSTLRchSample
V4.07 A97

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	**SDG:**	25173	**Collection Date:**	2/2/2004 2:25:00 PM
Lot-Sample No.:	J4B110186-10	**Report No. :**	25203	**Received Date:**	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-187-C-1C-04	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043468	RICHRC5037			**Work Order:**	F9EPN1AA		**Report DB ID:**	9F9EPN10				
H-3	**3.89E+00**	J	7.62E-02	1.79E-01	2.71E-02	pCi/g	100%	*(143.8)*	3/9/04 05:40 a		100.4	LSC4
						1.26E-02	1.65E+01	*(43.6)*			G	

No. of Results: 1 **Comments:**

STL Richland
rptSTLRchSample
V4.97 A97

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	**SDG:**	25173	**Collection Date:**	2/2/2004 3:00:00 PM
Lot-Sample No.:	J4B110186-11	**Report No. :**	25203	**Received Date:**	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-187-C-2C-05	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043468	RICHRC5037			**Work Order:** F9EPQ1AA			**Report DB ID:** 9F9EPQ10					
H-3	8.80E+00	J	1.10E-01	3.80E-01	2.52E-02	pCi/g	100%	*(349.7)*	3/9/04 06:22 a		100.5	LSC4
						1.17E-02	1.65E+01	*(46.3)*			G	

No. of Results: 1 **Comments:**

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.
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FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	**SDG:**	25173	**Collection Date:**	2/2/2004 3:00:00 PM
Lot-Sample No.:	J4B110186-12	**Report No. :**	25203	**Received Date:**	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-187-C-2C-06	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043468	RICHRC5037			Work Order:	F9EPR1AA		Report DB ID:	9F9EPR10				
H-3	1.47E+01	J	1.48E-01	6.26E-01	2.72E-02	pCi/g	100%	(540.8)	3/9/04 07:05 a		100.7	LSC4
						1.26E-02	1.65E+01	(47.1)			G	
Batch: 4043472	RICHRC5017			Work Order:	F9EPR1AC		Report DB ID:	9F9EPR10				
AC-228	4.16E-01	U	1.76E-01	1.76E-01	2.92E-01	pCi/g		(1.4)	3/3/04 08:08 a		321.6	GER6$1
								(4.7)			g	
AG-108M	4.93E-04	U	1.90E-02	1.90E-02	3.40E-02	pCi/g		0.01	3/3/04 08:08 a		321.6	GER6$1
								0.05			g	
AM-241	4.58E-03	U	6.73E-02	6.73E-02	1.15E-01	pCi/g		0.04	3/3/04 08:08 a		321.6	GER6$1
								0.14			g	
BI-212	5.34E-01	U	4.09E-01	4.09E-01	8.05E-01	pCi/g		0.66	3/3/04 08:08 a		321.6	GER6$1
							3.00E+00	(2.6)			g	
BI-214	3.34E-01	U	9.67E-02	9.67E-02	1.65E-01	pCi/g		(2.)	3/3/04 08:08 a		321.6	GER6$1
							1.00E+00	(6.9)			g	
CO-60	1.86E-02	U	2.51E-02	2.51E-02	5.30E-02	pCi/g		0.35	3/3/04 08:08 a		321.6	GER6$1
							1.52E-01	(1.5)			g	
CS-134	3.69E-02	U	3.03E-02	3.03E-02	6.06E-02	pCi/g		0.61	3/3/04 08:08 a		321.6	GER6$1
							1.87E-01	(2.4)			g	
CS-137	-2.97E-02	U	2.52E-02	2.52E-02	3.81E-02	pCi/g		-0.78	3/3/04 08:08 a		321.6	GER6$1
							3.16E-01	-(2.4)			g	
EU-152	-7.36E-02	U	6.89E-02	6.89E-02	1.07E-01	pCi/g		-0.69	3/3/04 08:08 a		321.6	GER6$1
							4.04E-01	-(2.1)			g	

STL Richland
rptSTLRchSample
V4.97 A97

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FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	**SDG:**	25173	**Collection Date:**	2/2/2004 3:00:00 PM
Lot-Sample No.:	J4B110186-12	**Report No. :**	25203	**Received Date:**	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-187-C-2C-06	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
EU-154	-3.58E-02	U	8.58E-02	8.58E-02	1.48E-01	pCi/g		*-0.24*	3/3/04 08:08 a		321.6	GER6$1
							3.72E-01	*-0.83*			g	
EU-155	3.40E-02	U	5.86E-02	5.86E-02	1.05E-01	pCi/g		*0.32*	3/3/04 08:08 a		321.6	GER6$1
							1.57E+01	*(1.2)*			g	
K-40	6.89E+00		1.29E+00	1.29E+00	4.24E-01	pCi/g		*(16.3)*	3/3/04 08:08 a		321.6	GER6$1
								(10.7)			g	
MN-54	-4.39E-03	U	2.54E-02	2.54E-02	4.49E-02	pCi/g		*-0.1*	3/3/04 08:08 a		321.6	GER6$1
							6.96E-01	*-0.35*			g	
NB-94	3.68E-03	U	2.39E-02	2.39E-02	4.48E-02	pCi/g		*0.08*	3/3/04 08:08 a		321.6	GER6$1
							2.85E-01	*0.31*			g	
PB-212	3.69E-01	J	1.00E-01	1.00E-01	8.71E-02	pCi/g		*(4.2)*	3/3/04 08:08 a		321.6	GER6$1
							1.00E+00	*(7.4)*			g	
PB-214	3.67E-01	J	1.32E-01	1.32E-01	8.78E-02	pCi/g		*(4.2)*	3/3/04 08:08 a		321.6	GER6$1
							1.00E+00	*(5.5)*			g	
TL-208	1.57E-01	U	4.78E-02	4.78E-02	8.04E-02	pCi/g		*(2.)*	3/3/04 08:08 a		321.6	GER6$1
							1.00E+00	*(6.6)*			g	

No. of Results: 18 **Comments:**

STL Richland
rptSTLRchSample
V4.97 A97

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	**SDG:**	25173	**Collection Date:**	2/2/2004 3:00:00 PM
Lot-Sample No.:	J4B110186-13	**Report No. :**	25203	**Received Date:**	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-187-C-2C-07	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043468	RICHRC5037			**Work Order:** F9EPT1AC			**Report DB ID:** 9F9EPT10					
H-3	4.21E+00	J	1.03E-01	2.03E-01	4.50E-02	pCi/g	100%	*(93.7)*	3/9/04 07:47 a		59.8	LSC4
						2.08E-02	1.65E+01	*(41.5)*			G	
Batch: 4043472	RICHRC5017			**Work Order:** F9EPT1AD			**Report DB ID:** 9F9EPT10					
AC-228	6.51E-01		2.14E-01	2.14E-01	1.83E-01	pCi/g		*(3.6)*	3/3/04 08:15 a		242.0	GER5$1
								(6.1)			g	
AG-108M	-3.89E-02	U	2.63E-02	2.63E-02	3.90E-02	pCi/g		*-1.*	3/3/04 08:15 a		242.0	GER5$1
								-(3.)			g	
AM-241	2.80E-02	U	5.37E-02	5.37E-02	8.69E-02	pCi/g		*0.32*	3/3/04 08:15 a		242.0	GER5$1
								(1.)			g	
BI-212	3.11E-01	U	5.41E-01	5.41E-01	1.02E+00	pCi/g		*0.3*	3/3/04 08:15 a		242.0	GER5$1
							3.00E+00	*(1.2)*			g	
BI-214	3.74E-01	U	1.50E-01	1.50E-01	2.24E-01	pCi/g		*(1.7)*	3/3/04 08:15 a		242.0	GER5$1
							1.00E+00	*(5.)*			g	
CO-60	-1.74E-02	U	3.75E-02	3.75E-02	6.43E-02	pCi/g		*-0.27*	3/3/04 08:15 a		242.0	GER5$1
							1.52E-01	*-0.93*			g	
CS-134	5.08E-02	U	3.77E-02	3.77E-02	7.84E-02	pCi/g		*0.65*	3/3/04 08:15 a		242.0	GER5$1
							1.87E-01	*(2.7)*			g	
CS-137	2.30E-02	U	3.27E-02	3.27E-02	6.43E-02	pCi/g		*0.36*	3/3/04 08:15 a		242.0	GER5$1
							3.16E-01	*(1.4)*			g	
EU-152	-6.82E-02	U	8.10E-02	8.10E-02	1.34E-01	pCi/g		*-0.51*	3/3/04 08:15 a		242.0	GER5$1
							4.04E-01	*-(1.7)*			g	

STL Richland
rptSTLRchSample
V4.07 A97

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	**SDG:**	25173	**Collection Date:**	2/2/2004 3:00:00 PM
Lot-Sample No.:	J4B110186-13	**Report No. :**	25203	**Received Date:**	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-187-C-2C-07	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
EU-154	-2.72E-02	U	8.94E-02	8.94E-02	1.60E-01	pCi/g		*-0.17*	3/3/04 08:15 a		242.0	GER5$1
							3.72E-01	*-0.61*			g	
EU-155	8.05E-02	U	7.49E-02	7.49E-02	1.36E-01	pCi/g		*0.59*	3/3/04 08:15 a		242.0	GER5$1
							1.57E+01	*(2.2)*			g	
K-40	7.95E+00		1.57E+00	1.57E+00	4.52E-01	pCi/g		*(17.6)*	3/3/04 08:15 a		242.0	GER5$1
								(10.1)			g	
MN-54	1.86E-02	U	3.55E-02	3.55E-02	6.82E-02	pCi/g		*0.27*	3/3/04 08:15 a		242.0	GER5$1
							6.96E-01	*(1.1)*			g	
NB-94	-2.09E-02	U	3.20E-02	3.20E-02	5.28E-02	pCi/g		*-0.4*	3/3/04 08:15 a		242.0	GER5$1
							2.85E-01	*-(1.3)*			g	
PB-212	4.20E-01	J	9.63E-02	9.63E-02	1.05E-01	pCi/g		*(4.)*	3/3/04 08:15 a		242.0	GER5$1
							1.00E+00	*(8.7)*			g	
PB-214	4.98E-01	J	1.45E-01	1.45E-01	1.13E-01	pCi/g		*(4.4)*	3/3/04 08:15 a		242.0	GER5$1
							1.00E+00	*(6.9)*			g	
TL-208	1.71E-01	U	7.28E-02	7.28E-02	1.04E-01	pCi/g		*(1.6)*	3/3/04 08:15 a		242.0	GER5$1
							1.00E+00	*(4.7)*			g	
Batch: 4043475	CMUD			**Work Order:** F9EPT1AA			**Report DB ID:** 9F9EPT10					
SR-90	2.15E-01		3.12E-02	4.43E-02	4.38E-02	pCi/g	57%	*(4.9)*	3/13/04 09:17 a		10.0	GPC1D
						2.08E-02	6.00E-02	*(9.7)*			G	

No. of Results: 19 **Comments:**

STL Richland
rptSTLRchSample
V4.07 A97

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	**SDG:**	25173	**Collection Date:**	2/2/2004 10:20:00 AM
Lot-Sample No.:	J4B110186-31	**Report No. :**	25203	**Received Date:**	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-188-C-1C-01	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043465	RICHRC5080			**Work Order:** F9ETD1AG			**Report DB ID:** 9F9ETD10					
AM-241	0.00E+00	U	0.00E+00	1.66E-02	1.83E-02	pCi/g	60%	0.	3/16/04 07:13 p		2.04	ALP43
							1.03E+00	0.			G	
CM-242	0.00E+00	U	0.00E+00	1.99E-02	2.20E-02	pCi/g	60%	0.	3/16/04 07:13 p		2.04	ALP43
								0.			G	
CM-243/244	0.00E+00	U	0.00E+00	1.66E-02	1.84E-02	pCi/g	60%	0.	3/16/04 07:13 p		2.04	ALP43
							1.16E+00	0.			G	
Batch: 4043466	RICHRC5010			**Work Order:** F9ETD1AE			**Report DB ID:** 9F9ETD10					
PU-238	0.00E+00	U	0.00E+00	1.28E-02	1.41E-02	pCi/g	70%	0.	3/8/04 06:00 p		2.02	ALP127
							1.18E+00	0.			G	
PU239/40	0.00E+00	U	0.00E+00	1.27E-02	1.41E-02	pCi/g	70%	0.	3/8/04 06:00 p		2.02	ALP127
							1.07E+00	0.			G	
Batch: 4043467	RICHRC5010			**Work Order:** F9ETD1AF			**Report DB ID:** 9F9ETD10					
PU-241	2.41E-01	U	4.20E-01	5.65E-01	1.00E+00	pCi/g	70%	0.24	3/12/04 11:33 a		2.02	LSC7
						4.79E-01	3.48E+01	0.85			G	
Batch: 4043471	RICHRC5037			**Work Order:** F9ETD1AC			**Report DB ID:** 9F9ETD10					
H-3	2.66E+00	J	6.14E-02	1.41E-01	2.51E-02	pCi/g	100%	(106.)	3/10/04 10:54 a		100.4	LSC5
						1.16E-02	1.65E+01	(37.9)			G	
Batch: 4043472	RICHRC5017			**Work Order:** F9ETD1AD			**Report DB ID:** 9F9ETD10					
AC-228	4.07E-01	U	2.08E-01	2.08E-01	3.18E-01	pCi/g		(1.3)	3/3/04 11:40 a		309.8	GER4$1
								(3.9)			g	

STL Richland
rptSTLRchSample
V4.07 A97

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	**SDG:**	25173	**Collection Date:**	2/2/2004 10:20:00 AM
Lot-Sample No.:	J4B110186-31	**Report No. :**	25203	**Received Date:**	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-188-C-1C-01	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
AG-108M	1.48E-02	U	2.20E-02	2.20E-02	4.19E-02	pCi/g		0.35	3/3/04 11:40 a		309.8	GER4$1
								(1.3)			g	
AM-241	1.60E-01	U	1.59E-01	1.59E-01	2.92E-01	pCi/g		0.55	3/3/04 11:40 a		309.8	GER4$1
								(2.)			g	
BI-212	3.98E-01	U	4.66E-01	4.66E-01	8.89E-01	pCi/g		0.45	3/3/04 11:40 a		309.8	GER4$1
							3.00E+00	(1.7)			g	
BI-214	4.75E-01	U	1.16E-01	1.16E-01	1.96E-01	pCi/g		(2.4)	3/3/04 11:40 a		309.8	GER4$1
							1.00E+00	(8.2)			g	
CO-60	1.29E-02	U	2.61E-02	2.61E-02	5.38E-02	pCi/g		0.24	3/3/04 11:40 a		309.8	GER4$1
							1.52E-01	0.99			g	
CS-134	5.48E-03	U	3.61E-02	3.61E-02	6.55E-02	pCi/g		0.08	3/3/04 11:40 a		309.8	GER4$1
							1.87E-01	0.3			g	
CS-137	3.25E-02	U	3.17E-02	3.17E-02	6.20E-02	pCi/g		0.52	3/3/04 11:40 a		309.8	GER4$1
							3.16E-01	(2.)			g	
EU-152	1.66E-02	U	7.07E-02	7.07E-02	1.27E-01	pCi/g		0.13	3/3/04 11:40 a		309.8	GER4$1
							4.04E-01	0.47			g	
EU-154	-3.17E-02	U	9.72E-02	9.72E-02	1.72E-01	pCi/g		-0.18	3/3/04 11:40 a		309.8	GER4$1
							3.72E-01	-0.65			g	
EU-155	-3.40E-02	U	8.54E-02	8.54E-02	1.41E-01	pCi/g		-0.24	3/3/04 11:40 a		309.8	GER4$1
							1.57E+01	-0.8			g	
K-40	7.48E+00		1.45E+00	1.45E+00	4.42E-01	pCi/g		(16.9)	3/3/04 11:40 a		309.8	GER4$1
								(10.3)			g	

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MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.
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FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	**SDG:**	25173	**Collection Date:**	2/2/2004 10:20:00 AM
Lot-Sample No.:	J4B110186-31	**Report No. :**	25203	**Received Date:**	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-188-C-1C-01	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
MN-54	3.05E-02	U	3.01E-02	3.01E-02	5.96E-02	pCi/g		*0.51*	3/3/04 11:40 a		309.8	GER4$1
							6.96E-01	*(2.)*			g	
NB-94	1.59E-02	U	2.24E-02	2.24E-02	4.51E-02	pCi/g		*0.35*	3/3/04 11:40 a		309.8	GER4$1
							2.85E-01	*(1.4)*			g	
PB-212	4.08E-01	J	1.14E-01	1.14E-01	7.69E-02	pCi/g		*(5.3)*	3/3/04 11:40 a		309.8	GER4$1
							1.00E+00	*(7.2)*			g	
PB-214	4.80E-01	J	1.33E-01	1.33E-01	9.04E-02	pCi/g		*(5.3)*	3/3/04 11:40 a		309.8	GER4$1
							1.00E+00	*(7.2)*			g	
TL-208	1.56E-01	U	6.16E-02	6.16E-02	9.27E-02	pCi/g		*(1.7)*	3/3/04 11:40 a		309.8	GER4$1
							1.00E+00	*(5.1)*			g	
Batch: 4043475	CMUD			**Work Order:** F9ETD1AA			**Report DB ID:** 9F9ETD10					
SR-90	2.69E-01		3.39E-02	5.21E-02	3.84E-02	pCi/g	51%	*(7.)*	3/13/04 09:23 a		10.0	GPC2C
						1.77E-02	6.00E-02	*(10.3)*			G	

No. of Results: 25 **Comments:**

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MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	**SDG:**	25173	**Collection Date:**	2/2/2004 10:20:00 AM
Lot-Sample No.:	J4B110186-32	**Report No. :**	25203	**Received Date:**	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-188-C-1C-02	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043471	RICHRC5037			**Work Order:**	F9ETM1AA		**Report DB ID:**	9F9ETM10				
H-3	3.19E+00	J	6.63E-02	1.65E-01	2.46E-02	pCi/g	100%	*(129.7)*	3/10/04 10:54 a		100.6	LSC5
						1.14E-02	1.65E+01	*(38.7)*			G	

No. of Results: 1 **Comments:**

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.
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FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	**SDG:**	25173	**Collection Date:**	2/2/2004 10:20:00 AM
Lot-Sample No.:	J4B110186-33	**Report No. :**	25203	**Received Date:**	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-188-C-1C-03	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043471	RICHRC5037			**Work Order:** F9ETT1AA			**Report DB ID:** 9F9ETT10					
H-3	1.49E+00	J	4.62E-02	8.49E-02	2.50E-02	pCi/g	100%	*(59.6)*	3/10/04 10:54 a		100.3	LSC5
						1.15E-02	1.65E+01	*(35.)*			G	

No. of Results: 1 **Comments:**

STL Richland
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MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.
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FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	**SDG:**	25173	**Collection Date:**	2/2/2004 10:20:00 AM
Lot-Sample No.:	J4B110186-34	**Report No. :**	25203	**Received Date:**	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-188-C-1C-04	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043471	RICHRC5037			**Work Order:** F9ETX1AA		**Report DB ID:** 9F9ETX10						
H-3	9.42E-01	J	3.69E-02	5.88E-02	2.45E-02	pCi/g	100%	*(38.4)*	3/10/04 10:54 a		100.3	LSC5
						1.14E-02	1.65E+01	*(32.)*			G	

No. of Results: 1 **Comments:**

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	**SDG:**	25173	**Collection Date:**	2/2/2004 10:20:00 AM
Lot-Sample No.:	J4B110186-35	**Report No. :**	25203	**Received Date:**	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-188-C-1C-05	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043471	RICHRC5037			**Work Order:** F9ET21AA			**Report DB ID:** 9F9ET210					
H-3	1.69E+00	J	4.93E-02	9.45E-02	2.52E-02	pCi/g	100%	*(67.1)*	3/10/04 10:54 a		100.3	LSC5
						1.16E-02	1.65E+01	*(35.7)*			G	
Batch: 4043472	RICHRC5017			**Work Order:** F9ET21AC			**Report DB ID:** 9F9ET210					
AC-228	4.39E-01	U	1.69E-01	1.69E-01	2.74E-01	pCi/g		*(1.6)*	3/3/04 11:46 a		376.7	GER5$1
								(5.2)			g	
AG-108M	5.74E-03	U	1.83E-02	1.83E-02	3.35E-02	pCi/g		*0.17*	3/3/04 11:46 a		376.7	GER5$1
								0.63			g	
AM-241	4.78E-02	U	4.33E-02	4.33E-02	7.32E-02	pCi/g		*0.65*	3/3/04 11:46 a		376.7	GER5$1
								(2.2)			g	
BI-212	2.80E-01	U	3.50E-01	3.50E-01	6.72E-01	pCi/g		*0.42*	3/3/04 11:46 a		376.7	GER5$1
							3.00E+00	*(1.6)*			g	
BI-214	3.94E-01	U	1.08E-01	1.08E-01	1.73E-01	pCi/g		*(2.3)*	3/3/04 11:46 a		376.7	GER5$1
							1.00E+00	*(7.3)*			g	
CO-60	5.04E-03	U	1.99E-02	1.99E-02	3.95E-02	pCi/g		*0.13*	3/3/04 11:46 a		376.7	GER5$1
							1.52E-01	*0.51*			g	
CS-134	3.64E-02	U	2.71E-02	2.71E-02	5.48E-02	pCi/g		*0.66*	3/3/04 11:46 a		376.7	GER5$1
							1.87E-01	*(2.7)*			g	
CS-137	-1.03E-02	U	2.30E-02	2.30E-02	3.97E-02	pCi/g		*-0.26*	3/3/04 11:46 a		376.7	GER5$1
							3.16E-01	*-0.89*			g	
EU-152	3.34E-02	U	6.35E-02	6.35E-02	1.17E-01	pCi/g		*0.29*	3/3/04 11:46 a		376.7	GER5$1
							4.04E-01	*(1.1)*			g	

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MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	**SDG:**	25173	**Collection Date:**	2/2/2004 10:20:00 AM
Lot-Sample No.:	J4B110186-35	**Report No. :**	25203	**Received Date:**	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-188-C-1C-05	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
EU-154	3.84E-02	U	6.65E-02	6.65E-02	1.33E-01	pCi/g		*0.29*	3/3/04 11:46 a		376.7	GER5$1
							3.72E-01	*(1.2)*			g	
EU-155	2.99E-02	U	5.84E-02	5.84E-02	1.02E-01	pCi/g		*0.29*	3/3/04 11:46 a		376.7	GER5$1
							1.57E+01	*(1.)*			g	
K-40	5.25E+00		1.03E+00	1.03E+00	3.90E-01	pCi/g		*(13.4)*	3/3/04 11:46 a		376.7	GER5$1
								(10.2)			g	
MN-54	-6.36E-04	U	2.58E-02	2.58E-02	4.61E-02	pCi/g		*-0.01*	3/3/04 11:46 a		376.7	GER5$1
							6.96E-01	*-0.05*			g	
NB-94	-7.01E-03	U	2.23E-02	2.23E-02	3.86E-02	pCi/g		*-0.18*	3/3/04 11:46 a		376.7	GER5$1
							2.85E-01	*-0.63*			g	
PB-212	3.64E-01	J	9.19E-02	9.19E-02	6.69E-02	pCi/g		*(5.4)*	3/3/04 11:46 a		376.7	GER5$1
							1.00E+00	*(7.9)*			g	
PB-214	4.68E-01	J	1.14E-01	1.14E-01	7.33E-02	pCi/g		*(6.4)*	3/3/04 11:46 a		376.7	GER5$1
							1.00E+00	*(8.2)*			g	
TL-208	1.43E-01	J	4.97E-02	4.97E-02	4.82E-02	pCi/g		*(3.)*	3/3/04 11:46 a		376.7	GER5$1
							1.00E+00	*(5.8)*			g	

No. of Results: 18 **Comments:**

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	SDG:	25173	Collection Date:	2/2/2004 10:20:00 AM
Lot-Sample No.:	J4B110186-36	Report No. :	25203	Received Date:	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-188-C-1C-06	COC No. :		Matrix:	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043471	RICHRC5037			Work Order: F9ET51AC			Report DB ID: 9F9ET510					
H-3	3.87E-01	J	5.37E-02	5.98E-02	8.35E-02	pCi/g	100%	(4.6)	3/10/04 10:54 a		33.4	LSC5
						3.86E-02	1.65E+01	(13.)			G	
Batch: 4043472	RICHRC5017			Work Order: F9ET51AD			Report DB ID: 9F9ET510					
AC-228	5.47E-01	U	2.80E-01	2.80E-01	5.43E-01	pCi/g		(1.)	3/3/04 11:42 a		170.4	GER6$1
								(3.9)			g	
AG-108M	-1.50E-02	U	3.34E-02	3.34E-02	5.70E-02	pCi/g		-0.26	3/3/04 11:42 a		170.4	GER6$1
								-0.9			g	
AM-241	-1.36E-01	U	1.03E-01	1.03E-01	1.56E-01	pCi/g		-0.87	3/3/04 11:42 a		170.4	GER6$1
								-(2.6)			g	
BI-212	1.20E+00	U	7.19E-01	7.19E-01	1.48E+00	pCi/g		0.81	3/3/04 11:42 a		170.4	GER6$1
							3.00E+00	(3.3)			g	
BI-214	6.27E-01	U	1.80E-01	1.80E-01	3.17E-01	pCi/g		(2.)	3/3/04 11:42 a		170.4	GER6$1
							1.00E+00	(7.)			g	
CO-60	1.29E-02	U	4.88E-02	4.88E-02	9.75E-02	pCi/g		0.13	3/3/04 11:42 a		170.4	GER6$1
							1.52E-01	0.53			g	
CS-134	4.17E-03	U	5.34E-02	5.34E-02	9.81E-02	pCi/g		0.04	3/3/04 11:42 a		170.4	GER6$1
							1.87E-01	0.16			g	
CS-137	-3.02E-02	U	4.69E-02	4.69E-02	7.73E-02	pCi/g		-0.39	3/3/04 11:42 a		170.4	GER6$1
							3.16E-01	-(1.3)			g	
EU-152	-5.65E-02	U	1.11E-01	1.11E-01	1.85E-01	pCi/g		-0.31	3/3/04 11:42 a		170.4	GER6$1
							4.04E-01	-(1.)			g	

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MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	SDG:	25173	Collection Date:	2/2/2004 10:20:00 AM
Lot-Sample No.:	J4B110186-36	Report No. :	25203	Received Date:	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-188-C-1C-06	COC No. :		Matrix:	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
EU-154	5.81E-02	U	1.51E-01	1.51E-01	2.96E-01	pCi/g		*0.2*	3/3/04 11:42 a		170.4	GER6$1
							3.72E-01	*0.77*			g	
EU-155	2.25E-02	U	9.81E-02	9.81E-02	1.74E-01	pCi/g		*0.13*	3/3/04 11:42 a		170.4	GER6$1
							1.57E+01	*0.46*			g	
K-40	7.64E+00		1.99E+00	1.99E+00	6.38E-01	pCi/g		*(12.)*	3/3/04 11:42 a		170.4	GER6$1
								(7.7)			g	
MN-54	-5.76E-03	U	4.60E-02	4.60E-02	8.25E-02	pCi/g		*-0.07*	3/3/04 11:42 a		170.4	GER6$1
							6.96E-01	*-0.25*			g	
NB-94	-9.22E-03	U	4.59E-02	4.59E-02	8.29E-02	pCi/g		*-0.11*	3/3/04 11:42 a		170.4	GER6$1
							2.85E-01	*-0.4*			g	
PB-212	5.18E-01	J	1.33E-01	1.33E-01	1.42E-01	pCi/g		*(3.6)*	3/3/04 11:42 a		170.4	GER6$1
							1.00E+00	*(7.8)*			g	
PB-214	6.47E-01	J	1.97E-01	1.97E-01	1.41E-01	pCi/g		*(4.6)*	3/3/04 11:42 a		170.4	GER6$1
							1.00E+00	*(6.6)*			g	
TL-208	1.60E-01	U	9.94E-02	9.94E-02	1.39E-01	pCi/g		*(1.1)*	3/3/04 11:42 a		170.4	GER6$1
							1.00E+00	*(3.2)*			g	
Batch: 4043475	CMUD			**Work Order:** F9ET51AA			**Report DB ID:** 9F9ET510					
SR-90	3.52E-01		3.53E-02	6.23E-02	3.30E-02	pCi/g	57%	*(10.7)*	3/13/04 09:23 a		10.08	GPC2D
						1.51E-02	6.00E-02	*(11.3)*			G	

No. of Results: 19 **Comments:**

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V4.07 A97

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.
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FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	SDG:	25173	Collection Date:	2/4/2004 8:15:00 AM
Lot-Sample No.:	J4B110186-1	Report No. :	25203	Received Date:	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-189-C-1C-01	COC No. :		Matrix:	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043468	RICHRC5037			Work Order:	F9EM21AA		Report DB ID:	9F9EM210				
H-3	5.85E-01	J	3.20E-02	4.08E-02	2.84E-02	pCi/g	100%	(20.6)	3/8/04 10:36 p		100.2	LSC4
						1.32E-02	1.65E+01	(28.7)			G	
Batch: 4043472	RICHRC5017			Work Order:	F9EM21AC		Report DB ID:	9F9EM210				
AC-228	3.70E-01	U	1.54E-01	1.54E-01	2.70E-01	pCi/g		(1.4)	3/3/04 08:06 a		345.2	GER1$1
								(4.8)			g	
AG-108M	6.43E-03	U	2.07E-02	2.07E-02	3.74E-02	pCi/g		0.17	3/3/04 08:06 a		345.2	GER1$1
								0.62			g	
AM-241	-7.76E-02	U	1.03E-01	1.03E-01	1.66E-01	pCi/g		-0.47	3/3/04 08:06 a		345.2	GER1$1
								-(1.5)			g	
BI-212	5.23E-01	U	3.77E-01	3.77E-01	7.43E-01	pCi/g		0.7	3/3/04 08:06 a		345.2	GER1$1
							3.00E+00	(2.8)			g	
BI-214	4.37E-01	U	1.48E-01	1.48E-01	1.78E-01	pCi/g		(2.4)	3/3/04 08:06 a		345.2	GER1$1
							1.00E+00	(5.9)			g	
CO-60	-6.10E-03	U	2.45E-02	2.45E-02	4.39E-02	pCi/g		-0.14	3/3/04 08:06 a		345.2	GER1$1
							1.52E-01	-0.5			g	
CS-134	1.87E-02	U	2.71E-02	2.71E-02	5.22E-02	pCi/g		0.36	3/3/04 08:06 a		345.2	GER1$1
							1.87E-01	(1.4)			g	
CS-137	-1.29E-02	U	2.62E-02	2.62E-02	4.42E-02	pCi/g		-0.29	3/3/04 08:06 a		345.2	GER1$1
							3.16E-01	-0.98			g	
EU-152	-8.39E-02	U	7.81E-02	7.81E-02	1.19E-01	pCi/g		-0.71	3/3/04 08:06 a		345.2	GER1$1
							4.04E-01	-(2.1)			g	

STL Richland
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V4.07 A97

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	SDG:	25173	Collection Date:	2/4/2004 8:15:00 AM
Lot-Sample No.:	J4B110186-1	Report No. :	25203	Received Date:	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-189-C-1C-01	COC No. :		Matrix:	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
EU-154	-2.39E-02	U	7.58E-02	7.58E-02	1.34E-01	pCi/g		*-0.18*	3/3/04 08:06 a		345.2	GER1$1
							3.72E-01	*-0.63*			g	
EU-155	9.09E-04	U	7.57E-02	7.57E-02	1.30E-01	pCi/g		*0.01*	3/3/04 08:06 a		345.2	GER1$1
							1.57E+01	*0.02*			g	
K-40	7.34E+00		1.26E+00	1.26E+00	4.45E-01	pCi/g		*(16.5)*	3/3/04 08:06 a		345.2	GER1$1
								(11.6)			g	
MN-54	-1.98E-03	U	2.52E-02	2.52E-02	4.50E-02	pCi/g		*-0.04*	3/3/04 08:06 a		345.2	GER1$1
							6.96E-01	*-0.16*			g	
NB-94	-4.34E-03	U	2.48E-02	2.48E-02	4.36E-02	pCi/g		*-0.1*	3/3/04 08:06 a		345.2	GER1$1
							2.85E-01	*-0.35*			g	
PB-212	3.97E-01	J	1.04E-01	1.04E-01	6.10E-02	pCi/g		*(6.5)*	3/3/04 08:06 a		345.2	GER1$1
							1.00E+00	*(7.6)*			g	
PB-214	4.81E-01	J	1.30E-01	1.30E-01	8.96E-02	pCi/g		*(5.4)*	3/3/04 08:06 a		345.2	GER1$1
							1.00E+00	*(7.4)*			g	
TL-208	8.66E-02	U	3.58E-02	3.58E-02	6.83E-02	pCi/g		*(1.3)*	3/3/04 08:06 a		345.2	GER1$1
							1.00E+00	*(4.8)*			g	

No. of Results: 18 Comments:

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	**SDG:**	25173	**Collection Date:**	2/4/2004 8:15:00 AM
Lot-Sample No.:	J4B110186-2	**Report No. :**	25203	**Received Date:**	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-189-C-1C-02	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043468	RICHRC5037			**Work Order:** F9EN71AA			**Report DB ID:** 9F9EN710					
H-3	6.46E-01	J	3.34E-02	4.35E-02	2.84E-02	pCi/g	100%	*(22.8)*	3/9/04 12:00 a		100.2	LSC4
						1.31E-02	1.65E+01	*(29.7)*			G	

No. of Results: 1 **Comments:**

STL Richland
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V4.07 A97

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	**SDG:**	25173	**Collection Date:**	2/4/2004 8:30:00 AM
Lot-Sample No.:	J4B110186-3	**Report No. :**	25203	**Received Date:**	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-189-C-2C-03	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043468	RICHRC5037			**Work Order:** F9EPC1AA			**Report DB ID:** 9F9EPC10					
H-3	3.59E-01	J	2.52E-02	3.00E-02	2.69E-02	pCi/g	100%	*(13.4)*	3/9/04 12:43 a		100.7	LSC4
						1.25E-02	1.65E+01	*(24.)*			G	

No. of Results: 1 **Comments:**

STL Richland
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FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	SDG:	25173	Collection Date:	2/4/2004 8:30:00 AM
Lot-Sample No.:	J4B110186-4	Report No. :	25203	Received Date:	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-189-C-2C-04	COC No. :		Matrix:	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043468	RICHRC5037			Work Order:	F9EPD1AA		Report DB ID:	9F9EPD10				
H-3	1.78E-01	J	1.98E-02	2.18E-02	2.83E-02	pCi/g	100%	*(6.3)*	3/9/04 01:25 a		100.4	LSC4
						1.31E-02	1.65E+01	*(16.3)*			G	

No. of Results: 1 Comments:

STL Richland
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MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	SDG:	25173	Collection Date:	2/4/2004 8:30:00 AM
Lot-Sample No.:	J4B110186-5	Report No. :	25203	Received Date:	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-189-C-2C-05	COC No. :		Matrix:	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043468	RICHRC5037			Work Order:	F9EPE1AA		Report DB ID:	9F9EPE10				
H-3	1.21E-01	J	1.66E-02	1.80E-02	2.58E-02	pCi/g	100%	(4.7)	3/9/04 02:08 a		100.6	LSC4
						1.20E-02	1.65E+01	(13.5)			G	
Batch: 4043472	RICHRC5017			Work Order:	F9EPE1AC		Report DB ID:	9F9EPE10				
AC-228	4.26E-01		1.58E-01	1.58E-01	1.54E-01	pCi/g		(2.8)	3/3/04 08:07 a		362.7	GER4$1
								(5.4)			g	
AG-108M	2.36E-03	U	2.01E-02	2.01E-02	3.65E-02	pCi/g		0.06	3/3/04 08:07 a		362.7	GER4$1
								0.24			g	
AM-241	-9.19E-03	U	1.46E-01	1.46E-01	2.54E-01	pCi/g		-0.04	3/3/04 08:07 a		362.7	GER4$1
								-0.13			g	
BI-212	8.86E-01	U	3.68E-01	3.68E-01	7.74E-01	pCi/g		(1.1)	3/3/04 08:07 a		362.7	GER4$1
							3.00E+00	(4.8)			g	
BI-214	3.79E-01	U	1.08E-01	1.08E-01	1.69E-01	pCi/g		(2.2)	3/3/04 08:07 a		362.7	GER4$1
							1.00E+00	(7.)			g	
CO-60	9.51E-03	U	2.50E-02	2.50E-02	4.98E-02	pCi/g		0.19	3/3/04 08:07 a		362.7	GER4$1
							1.52E-01	0.76			g	
CS-134	3.03E-02	U	3.12E-02	3.12E-02	6.05E-02	pCi/g		0.5	3/3/04 08:07 a		362.7	GER4$1
							1.87E-01	(1.9)			g	
CS-137	-3.91E-03	U	2.60E-02	2.60E-02	4.64E-02	pCi/g		-0.08	3/3/04 08:07 a		362.7	GER4$1
							3.16E-01	-0.3			g	
EU-152	-1.55E-02	U	5.97E-02	5.97E-02	1.03E-01	pCi/g		-0.15	3/3/04 08:07 a		362.7	GER4$1
							4.04E-01	-0.52			g	

STL Richland
rptSTLRchSample
V4.07 A97

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FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	SDG:	25173	Collection Date:	2/4/2004 8:30:00 AM
Lot-Sample No.:	J4B110186-5	Report No. :	25203	Received Date:	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-189-C-2C-05	COC No. :		Matrix:	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
EU-154	1.07E-02	U	7.37E-02	7.37E-02	1.41E-01	pCi/g		*0.08*	3/3/04 08:07 a		362.7	GER4$1
							3.72E-01	*0.29*			g	
EU-155	-2.65E-02	U	7.61E-02	7.61E-02	1.26E-01	pCi/g		*-0.21*	3/3/04 08:07 a		362.7	GER4$1
							1.57E+01	*-0.7*			g	
K-40	6.08E+00		1.22E+00	1.22E+00	4.49E-01	pCi/g		*(13.5)*	3/3/04 08:07 a		362.7	GER4$1
								(9.9)			g	
MN-54	-9.11E-04	U	2.36E-02	2.36E-02	4.26E-02	pCi/g		*-0.02*	3/3/04 08:07 a		362.7	GER4$1
							6.96E-01	*-0.08*			g	
NB-94	2.70E-03	U	1.98E-02	1.98E-02	3.70E-02	pCi/g		*0.07*	3/3/04 08:07 a		362.7	GER4$1
							2.85E-01	*0.27*			g	
PB-212	3.75E-01	J	9.33E-02	9.33E-02	6.44E-02	pCi/g		*(5.8)*	3/3/04 08:07 a		362.7	GER4$1
							1.00E+00	*(8.)*			g	
PB-214	3.67E-01	J	1.16E-01	1.16E-01	8.13E-02	pCi/g		*(4.5)*	3/3/04 08:07 a		362.7	GER4$1
							1.00E+00	*(6.3)*			g	
TL-208	1.60E-01	J	5.85E-02	5.85E-02	4.39E-02	pCi/g		*(3.6)*	3/3/04 08:07 a		362.7	GER4$1
							1.00E+00	*(5.5)*			g	

No. of Results: 18 Comments:

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FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	**SDG:**	25173	**Collection Date:**	2/4/2004 8:30:00 AM
Lot-Sample No.:	J4B110186-6	**Report No. :**	25203	**Received Date:**	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-189-C-2C-06	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043468	RICHRC5037			**Work Order:** F9EPG1AA			**Report DB ID:** 9F9EPG10					
H-3	2.05E-01	J	1.96E-02	2.21E-02	2.55E-02	pCi/g	100%	*(8.1)*	3/9/04 02:50 a		100.8	LSC4
						1.18E-02	1.65E+01	*(18.6)*			G	
Batch: 4043472	RICHRC5017			**Work Order:** F9EPG1AD			**Report DB ID:** 9F9EPG10					
AC-228	5.65E-01	U	1.59E-01	1.59E-01	3.00E-01	pCi/g		*(1.9)*	3/3/04 08:07 a		355.8	GER7$1
								(7.1)			g	
AG-108M	5.81E-03	U	1.73E-02	1.73E-02	3.24E-02	pCi/g		*0.18*	3/3/04 08:07 a		355.8	GER7$1
								0.67			g	
AM-241	8.02E-03	U	7.92E-02	7.92E-02	1.38E-01	pCi/g		*0.06*	3/3/04 08:07 a		355.8	GER7$1
								0.2			g	
BI-212	5.80E-01	U	3.85E-01	3.85E-01	7.68E-01	pCi/g		*0.76*	3/3/04 08:07 a		355.8	GER7$1
							3.00E+00	*(3.)*			g	
BI-214	3.09E-01	U	1.25E-01	1.25E-01	1.68E-01	pCi/g		*(1.8)*	3/3/04 08:07 a		355.8	GER7$1
							1.00E+00	*(4.9)*			g	
CO-60	1.62E-02	U	2.46E-02	2.46E-02	5.09E-02	pCi/g		*0.32*	3/3/04 08:07 a		355.8	GER7$1
							1.52E-01	*(1.3)*			g	
CS-134	3.44E-02	U	2.61E-02	2.61E-02	5.36E-02	pCi/g		*0.64*	3/3/04 08:07 a		355.8	GER7$1
							1.87E-01	*(2.6)*			g	
CS-137	-1.98E-02	U	2.06E-02	2.06E-02	3.29E-02	pCi/g		*-0.6*	3/3/04 08:07 a		355.8	GER7$1
							3.16E-01	*-(1.9)*			g	
EU-152	3.90E-03	U	6.43E-02	6.43E-02	1.13E-01	pCi/g		*0.03*	3/3/04 08:07 a		355.8	GER7$1
							4.04E-01	*0.12*			g	

STL Richland
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V4.07 A97

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FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	**SDG:**	25173	**Collection Date:**	2/4/2004 8:30:00 AM
Lot-Sample No.:	J4B110186-6	**Report No. :**	25203	**Received Date:**	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-189-C-2C-06	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
EU-154	-7.30E-02	U	7.73E-02	7.73E-02	1.22E-01	pCi/g		-0.6	3/3/04 08:07 a		355.8	GER7$1
							3.72E-01	-(1.9)			g	
EU-155	-1.93E-03	U	6.42E-02	6.42E-02	1.08E-01	pCi/g		-0.02	3/3/04 08:07 a		355.8	GER7$1
							1.57E+01	-0.06			g	
K-40	6.75E+00		1.22E+00	1.22E+00	4.56E-01	pCi/g		(14.8)	3/3/04 08:07 a		355.8	GER7$1
								(11.1)			g	
MN-54	1.31E-02	U	2.50E-02	2.50E-02	4.83E-02	pCi/g		0.27	3/3/04 08:07 a		355.8	GER7$1
							6.96E-01	(1.)			g	
NB-94	-7.92E-03	U	2.01E-02	2.01E-02	3.54E-02	pCi/g		-0.22	3/3/04 08:07 a		355.8	GER7$1
							2.85E-01	-0.79			g	
PB-212	3.78E-01	J	1.21E-01	1.21E-01	7.65E-02	pCi/g		(4.9)	3/3/04 08:07 a		355.8	GER7$1
							1.00E+00	(6.2)			g	
PB-214	4.50E-01	J	1.17E-01	1.17E-01	7.64E-02	pCi/g		(5.9)	3/3/04 08:07 a		355.8	GER7$1
							1.00E+00	(7.7)			g	
TL-208	1.89E-01	J	5.38E-02	5.38E-02	4.63E-02	pCi/g		(4.1)	3/3/04 08:07 a		355.8	GER7$1
							1.00E+00	(7.)			g	
Batch: 4043475	CMUD			**Work Order:** F9EPG1AC			**Report DB ID:** 9F9EPG10					
SR-90	5.84E-02	J	2.28E-02	2.61E-02	4.27E-02	pCi/g	58%	(1.4)	3/13/04 09:17 a		10.05	GPC1A
						2.03E-02	6.00E-02	(4.5)			G	

No. of Results: 19 **Comments:**

STL Richland
rptSTLRchSample
V4.07 A97

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	SDG:	25173	Collection Date:	2/3/2004 1:29:00 PM
Lot-Sample No.:	J4B110186-14	Report No. :	25203	Received Date:	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-190-C1C-01	COC No. :		Matrix:	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043468	RICHRC5037			Work Order: F9EP41AA			Report DB ID: 9F9EP410					
H-3	8.82E-01	J	3.76E-02	5.30E-02	2.72E-02	pCi/g	100%	(32.4)	3/9/04 08:29 a		100.5	LSC4
						1.26E-02	1.65E+01	(33.3)			G	
Batch: 4043472	RICHRC5017			Work Order: F9EP41AC			Report DB ID: 9F9EP410					
AC-228	4.45E-01		1.86E-01	1.86E-01	1.45E-01	pCi/g		(3.1)	3/3/04 09:51 a		358.1	GER4$1
								(4.8)			g	
AG-108M	-3.80E-04	U	1.98E-02	1.98E-02	3.55E-02	pCi/g		-0.01	3/3/04 09:51 a		358.1	GER4$1
								-0.04			g	
AM-241	-5.24E-03	U	1.40E-01	1.40E-01	2.44E-01	pCi/g		-0.02	3/3/04 09:51 a		358.1	GER4$1
								-0.07			g	
BI-212	5.87E-01	U	3.70E-01	3.70E-01	7.49E-01	pCi/g		0.78	3/3/04 09:51 a		358.1	GER4$1
							3.00E+00	(3.2)			g	
BI-214	4.48E-01	U	1.36E-01	1.36E-01	1.86E-01	pCi/g		(2.4)	3/3/04 09:51 a		358.1	GER4$1
							1.00E+00	(6.6)			g	
CO-60	2.06E-02	U	2.66E-02	2.66E-02	5.49E-02	pCi/g		0.37	3/3/04 09:51 a		358.1	GER4$1
							1.52E-01	(1.5)			g	
CS-134	3.51E-03	U	2.71E-02	2.71E-02	4.98E-02	pCi/g		0.07	3/3/04 09:51 a		358.1	GER4$1
							1.87E-01	0.26			g	
CS-137	2.10E-03	U	2.14E-02	2.14E-02	4.00E-02	pCi/g		0.05	3/3/04 09:51 a		358.1	GER4$1
							3.16E-01	0.2			g	
EU-152	2.80E-02	U	6.10E-02	6.10E-02	1.12E-01	pCi/g		0.25	3/3/04 09:51 a		358.1	GER4$1
							4.04E-01	0.92			g	

STL Richland
rptSTLRchSample
V4.07 A97

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	SDG:	25173	Collection Date:	2/3/2004 1:29:00 PM
Lot-Sample No.:	J4B110186-14	Report No. :	25203	Received Date:	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-190-C1C-01	COC No. :		Matrix:	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
EU-154	1.11E-02	U	7.64E-02	7.64E-02	1.46E-01	pCi/g		*0.08*	3/3/04 09:51 a		358.1	GER4$1
							3.72E-01	*0.29*			g	
EU-155	6.75E-02	U	7.56E-02	7.56E-02	1.34E-01	pCi/g		*0.5*	3/3/04 09:51 a		358.1	GER4$1
							1.57E+01	*(1.8)*			g	
K-40	7.14E+00		1.29E+00	1.29E+00	4.81E-01	pCi/g		*(14.9)*	3/3/04 09:51 a		358.1	GER4$1
								(11.1)			g	
MN-54	-1.26E-02	U	2.73E-02	2.73E-02	4.63E-02	pCi/g		*-0.27*	3/3/04 09:51 a		358.1	GER4$1
							6.96E-01	*-0.93*			g	
NB-94	-2.92E-02	U	2.72E-02	2.72E-02	4.22E-02	pCi/g		*-0.69*	3/3/04 09:51 a		358.1	GER4$1
							2.85E-01	*-(2.1)*			g	
PB-212	4.37E-01	J	9.31E-02	9.31E-02	6.28E-02	pCi/g		*(7.)*	3/3/04 09:51 a		358.1	GER4$1
							1.00E+00	*(9.4)*			g	
PB-214	4.30E-01	J	1.23E-01	1.23E-01	8.21E-02	pCi/g		*(5.2)*	3/3/04 09:51 a		358.1	GER4$1
							1.00E+00	*(7.)*			g	
TL-208	1.58E-01	U	5.00E-02	5.00E-02	7.88E-02	pCi/g		*(2.)*	3/3/04 09:51 a		358.1	GER4$1
							1.00E+00	*(6.3)*			g	

No. of Results: 18 Comments:

STL Richland
rptSTLRchSample
V4.07 A97

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.
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FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	SDG:	25173	Collection Date:	2/3/2004 1:29:00 PM
Lot-Sample No.:	J4B110186-15	Report No. :	25203	Received Date:	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-190-C1C-02	COC No. :		Matrix:	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043468	RICHRC5037			Work Order:	F9EP81AA		Report DB ID:	9F9EP810				
H-3	1.08E+00	J	4.46E-02	6.39E-02	3.15E-02	pCi/g	100%	*(34.3)*	3/9/04 09:12 a		100.2	LSC4
						1.46E-02	1.65E+01	*(33.8)*			G	

No. of Results: 1 Comments:

STL Richland
rptSTLRchSample
V4.97 A97
52

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.
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FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	**SDG:**	25173	**Collection Date:**	2/3/2004 1:29:00 PM
Lot-Sample No.:	J4B110186-16	**Report No. :**	25203	**Received Date:**	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-190-C1C-03	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043468	RICHRC5037			**Work Order:** F9EQC1AA			**Report DB ID:** 9F9EQC10					
H-3	7.26E-01	J	3.34E-02	4.55E-02	2.58E-02	pCi/g	100%	*(28.2)*	3/9/04 09:54 a		100.5	LSC4
						1.19E-02	1.65E+01	*(31.9)*			G	

No. of Results: 1 **Comments:**

STL Richland
rptSTLRchSample
V4.97 A97
63

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.
U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	SDG:	25173	Collection Date:	2/3/2004 1:29:00 PM
Lot-Sample No.:	J4B110186-17	Report No. :	25203	Received Date:	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-190-C1C-04	COC No. :		Matrix:	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043468	RICHRC5037			Work Order:	F9EQF1AA		Report DB ID:	9F9EQF10				
H-3	2.46E-01	J	2.15E-02	2.45E-02	2.65E-02	pCi/g	100%	*(9.3)*	3/9/04 10:37 a		100.3	LSC4
						1.23E-02	1.65E+01	*(20.1)*			G	

No. of Results: 1 Comments:

STL Richland
rptSTLRchSample
V4.07 A97

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	SDG:	25173	Collection Date:	2/3/2004 1:29:00 PM
Lot-Sample No.:	J4B110186-18	Report No. :	25203	Received Date:	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-190-C1C-05	COC No. :		Matrix:	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043468	RICHRC5037			Work Order:	F9EQJ1AA		Report DB ID:	9F9EQJ10				
H-3	2.41E-01	J	2.14E-02	2.43E-02	2.67E-02	pCi/g	100%	*(9.)*	3/9/04 11:19 a		100.8	LSC4
						1.24E-02	1.65E+01	*(19.9)*			G	

No. of Results: 1 Comments:

STL Richland
rptSTLRchSample
V4.07 A97

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	SDG:	25173	Collection Date:	2/3/2004 1:45:00 PM
Lot-Sample No.:	J4B110186-19	Report No. :	25203	Received Date:	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-190-C2C-06	COC No. :		Matrix:	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043471	RICHRC5037			Work Order:	F9EQQ1AA		Report DB ID:	9F9EQQ10				
H-3	8.16E-01	J	3.68E-02	5.44E-02	2.75E-02	pCi/g	100%	(29.6)	3/10/04 10:54 a		100.5	LSC5
						1.27E-02	1.65E+01	(30.)			G	
Batch: 4043472	RICHRC5017			Work Order:	F9EQQ1AC		Report DB ID:	9F9EQQ10				
AC-228	5.29E-01		1.44E-01	1.44E-01	1.38E-01	pCi/g		(3.8)	3/3/04 09:57 a		377.1	GER5$1
								(7.4)			g	
AG-108M	-3.46E-03	U	1.82E-02	1.82E-02	3.19E-02	pCi/g		-0.11	3/3/04 09:57 a		377.1	GER5$1
								-0.38			g	
AM-241	-6.11E-03	U	4.35E-02	4.35E-02	7.12E-02	pCi/g		-0.09	3/3/04 09:57 a		377.1	GER5$1
								-0.28			g	
BI-212	7.80E-01	U	3.36E-01	3.36E-01	7.12E-01	pCi/g		(1.1)	3/3/04 09:57 a		377.1	GER5$1
							3.00E+00	(4.6)			g	
BI-214	3.34E-01	U	1.05E-01	1.05E-01	1.57E-01	pCi/g		(2.1)	3/3/04 09:57 a		377.1	GER5$1
							1.00E+00	(6.3)			g	
CO-60	8.02E-03	U	2.37E-02	2.37E-02	4.61E-02	pCi/g		0.17	3/3/04 09:57 a		377.1	GER5$1
							1.52E-01	0.68			g	
CS-134	1.52E-02	U	2.45E-02	2.45E-02	4.75E-02	pCi/g		0.32	3/3/04 09:57 a		377.1	GER5$1
							1.87E-01	(1.2)			g	
CS-137	-1.04E-02	U	2.38E-02	2.38E-02	4.11E-02	pCi/g		-0.25	3/3/04 09:57 a		377.1	GER5$1
							3.16E-01	-0.88			g	
EU-152	1.18E-02	U	5.76E-02	5.76E-02	1.04E-01	pCi/g		0.11	3/3/04 09:57 a		377.1	GER5$1
							4.04E-01	0.41			g	

STL Richland
rptSTLRchSample
V4.07 A97

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FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	SDG:	25173	Collection Date:	2/3/2004 1:45:00 PM
Lot-Sample No.:	J4B110186-19	Report No. :	25203	Received Date:	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-190-C2C-06	COC No. :		Matrix:	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
EU-154	2.32E-02	U	7.64E-02	7.64E-02	1.45E-01	pCi/g		*0.16*	3/3/04 09:57 a		377.1	GER5$1
							3.72E-01	*0.61*			g	
EU-155	5.63E-02	U	5.83E-02	5.83E-02	1.03E-01	pCi/g		*0.55*	3/3/04 09:57 a		377.1	GER5$1
							1.57E+01	*(1.9)*			g	
K-40	6.78E+00		1.20E+00	1.20E+00	3.90E-01	pCi/g		*(17.4)*	3/3/04 09:57 a		377.1	GER5$1
								(11.3)			g	
MN-54	1.79E-02	U	2.13E-02	2.13E-02	4.25E-02	pCi/g		*0.42*	3/3/04 09:57 a		377.1	GER5$1
							6.96E-01	*(1.7)*			g	
NB-94	2.31E-02	U	1.86E-02	1.86E-02	3.94E-02	pCi/g		*0.59*	3/3/04 09:57 a		377.1	GER5$1
							2.85E-01	*(2.5)*			g	
PB-212	3.56E-01	J	9.38E-02	9.38E-02	6.69E-02	pCi/g		*(5.3)*	3/3/04 09:57 a		377.1	GER5$1
							1.00E+00	*(7.6)*			g	
PB-214	3.99E-01	J	1.24E-01	1.24E-01	7.06E-02	pCi/g		*(5.6)*	3/3/04 09:57 a		377.1	GER5$1
							1.00E+00	*(6.4)*			g	
TL-208	1.71E-01	U	5.10E-02	5.10E-02	7.52E-02	pCi/g		*(2.3)*	3/3/04 09:57 a		377.1	GER5$1
							1.00E+00	*(6.7)*			g	

No. of Results: 18 Comments:

MDC|MDA,Lc - Detection, Decision Level based on Instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	**SDG:**	25173	**Collection Date:**	2/3/2004 1:45:00 PM
Lot-Sample No.:	J4B110186-20	**Report No. :**	25203	**Received Date:**	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-190-C2C-07	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043471	RICHRC5037			**Work Order:** F9EQX1AA			**Report DB ID:** 9F9EQX10					
H-3	**5.38E-01**	J	2.91E-02	3.96E-02	2.52E-02	pCi/g	100%	*(21.3)*	3/10/04 10:54 a		100.3	LSC5
						1.17E-02	1.65E+01	*(27.1)*			G	
Batch: 4043472	RICHRC5017			**Work Order:** F9EQX1AD			**Report DB ID:** 9F9EQX10					
AC-228	**4.71E-01**	U	2.41E-01	2.41E-01	4.30E-01	pCi/g		*(1.1)*	3/3/04 09:52 a		225.9	GER6$1
								(3.9)			g	
AG-108M	**-2.19E-03**	U	2.95E-02	2.95E-02	5.21E-02	pCi/g		*-0.04*	3/3/04 09:52 a		225.9	GER6$1
								-0.15			g	
AM-241	**1.69E-02**	U	7.93E-02	7.93E-02	1.38E-01	pCi/g		*0.12*	3/3/04 09:52 a		225.9	GER6$1
								0.43			g	
BI-212	**-1.98E-01**	U	5.96E-01	5.96E-01	1.03E+00	pCi/g		*-0.19*	3/3/04 09:52 a		225.9	GER6$1
							3.00E+00	*-0.66*			g	
BI-214	**3.30E-01**	U	1.66E-01	1.66E-01	2.39E-01	pCi/g		*(1.4)*	3/3/04 09:52 a		225.9	GER6$1
							1.00E+00	*(4.)*			g	
CO-60	**2.89E-02**	U	3.93E-02	3.93E-02	8.23E-02	pCi/g		*0.35*	3/3/04 09:52 a		225.9	GER6$1
							1.52E-01	*(1.5)*			g	
CS-134	**4.33E-02**	U	4.62E-02	4.62E-02	9.05E-02	pCi/g		*0.48*	3/3/04 09:52 a		225.9	GER6$1
							1.87E-01	*(1.9)*			g	
CS-137	**-1.34E-03**	U	3.62E-02	3.62E-02	6.46E-02	pCi/g		*-0.02*	3/3/04 09:52 a		225.9	GER6$1
							3.16E-01	*-0.07*			g	
EU-152	**4.49E-02**	U	8.79E-02	8.79E-02	1.60E-01	pCi/g		*0.28*	3/3/04 09:52 a		225.9	GER6$1
							4.04E-01	*(1.)*			g	

STL Richland
rptSTLRchSample
V4.07 A97

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.
U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	**SDG:**	25173	**Collection Date:**	2/3/2004 1:45:00 PM
Lot-Sample No.:	J4B110186-20	**Report No. :**	25203	**Received Date:**	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-190-C2C-07	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
EU-154	-1.51E-01	U	1.44E-01	1.44E-01	2.24E-01	pCi/g		-0.67	3/3/04 09:52 a		225.9	GER6$1
							3.72E-01	-(2.1)			g	
EU-155	2.01E-02	U	7.80E-02	7.80E-02	1.38E-01	pCi/g		0.15	3/3/04 09:52 a		225.9	GER6$1
							1.57E+01	0.51			g	
K-40	7.64E+00		1.66E+00	1.66E+00	5.41E-01	pCi/g		(14.1)	3/3/04 09:52 a		225.9	GER6$1
								(9.2)			g	
MN-54	2.29E-02	U	4.41E-02	4.41E-02	8.26E-02	pCi/g		0.28	3/3/04 09:52 a		225.9	GER6$1
							6.96E-01	(1.)			g	
NB-94	-2.30E-02	U	3.31E-02	3.31E-02	5.57E-02	pCi/g		-0.41	3/3/04 09:52 a		225.9	GER6$1
							2.85E-01	-(1.4)			g	
PB-212	5.04E-01	J	1.15E-01	1.15E-01	1.14E-01	pCi/g		(4.4)	3/3/04 09:52 a		225.9	GER6$1
							1.00E+00	(8.8)			g	
PB-214	4.33E-01	J	1.51E-01	1.51E-01	1.28E-01	pCi/g		(3.4)	3/3/04 09:52 a		225.9	GER6$1
							1.00E+00	(5.7)			g	
TL-208	1.94E-01	U	8.54E-02	8.54E-02	1.19E-01	pCi/g		(1.6)	3/3/04 09:52 a		225.9	GER6$1
							1.00E+00	(4.6)			g	
Batch: 4043475	CMUD			**Work Order:**	F9EQX1AC		**Report DB ID:**	9F9EQX10				
SR-90	2.06E-01		3.03E-02	4.26E-02	3.86E-02	pCi/g	54%	(5.3)	3/13/04 09:23 a		10.04	GPC2A
						1.80E-02	6.00E-02	(9.7)			G	

No. of Results: 19 **Comments:**

STL Richland
rptSTLRchSample
V4.07 A97

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	**SDG:**	25173	**Collection Date:**	2/3/2004 8:40:00 AM
Lot-Sample No.:	J4B110186-21	**Report No. :**	25203	**Received Date:**	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-191-C-1C-01	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043471	RICHRC5037			**Work Order:** F9EQ51AA			**Report DB ID:** 9F9EQ510					
H-3	8.52E-01	J	3.77E-02	5.61E-02	2.79E-02	pCi/g	100%	*(30.5)*	3/10/04 10:54 a		100.3	LSC5
						1.29E-02	1.65E+01	*(30.3)*			G	
Batch: 4043472	RICHRC5017			**Work Order:** F9EQ51AC			**Report DB ID:** 9F9EQ510					
AC-228	3.70E-01	U	1.57E-01	1.57E-01	2.81E-01	pCi/g		*(1.3)*	3/3/04 09:52 a		337.6	GER7$1
								(4.7)			g	
AG-108M	6.60E-03	U	2.06E-02	2.06E-02	3.80E-02	pCi/g		*0.17*	3/3/04 09:52 a		337.6	GER7$1
								0.64			g	
AM-241	4.84E-03	U	8.53E-02	8.53E-02	1.48E-01	pCi/g		*0.03*	3/3/04 09:52 a		337.6	GER7$1
								0.11			g	
BI-212	7.61E-01	U	4.12E-01	4.12E-01	8.35E-01	pCi/g		*0.91*	3/3/04 09:52 a		337.6	GER7$1
							3.00E+00	*(3.7)*			g	
BI-214	4.66E-01	U	1.12E-01	1.12E-01	1.83E-01	pCi/g		*(2.5)*	3/3/04 09:52 a		337.6	GER7$1
							1.00E+00	*(8.3)*			g	
CO-60	5.12E-02	U	3.06E-02	3.06E-02	6.75E-02	pCi/g		*0.76*	3/3/04 09:52 a		337.6	GER7$1
							1.52E-01	*(3.3)*			g	
CS-134	1.23E-02	U	3.09E-02	3.09E-02	5.75E-02	pCi/g		*0.21*	3/3/04 09:52 a		337.6	GER7$1
							1.87E-01	*0.8*			g	
CS-137	3.24E-01		6.82E-02	6.82E-02	4.73E-02	pCi/g		*(6.9)*	3/3/04 09:52 a		337.6	GER7$1
							3.16E-01	*(9.5)*			g	
EU-152	4.50E-02	U	7.34E-02	7.34E-02	1.21E-01	pCi/g		*0.37*	3/3/04 09:52 a		337.6	GER7$1
							4.04E-01	*(1.2)*			g	

STL Richland
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V4.07 A97

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	SDG:	25173	Collection Date:	2/3/2004 8:40:00 AM
Lot-Sample No.:	J4B110186-21	Report No. :	25203	Received Date:	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-191-C-1C-01	COC No. :		Matrix:	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
EU-154	-3.14E-02	U	6.92E-02	6.92E-02	1.21E-01	pCi/g		*-0.26*	3/3/04 09:52 a		337.6	GER7$1
							3.72E-01	*-0.91*			g	
EU-155	1.94E-03	U	6.77E-02	6.77E-02	1.15E-01	pCi/g		*0.02*	3/3/04 09:52 a		337.6	GER7$1
							1.57E+01	*0.06*			g	
K-40	6.34E+00		1.15E+00	1.15E+00	3.93E-01	pCi/g		*(16.1)*	3/3/04 09:52 a		337.6	GER7$1
								(11.)			g	
MN-54	-1.70E-03	U	2.06E-02	2.06E-02	3.84E-02	pCi/g		*-0.04*	3/3/04 09:52 a		337.6	GER7$1
							6.96E-01	*-0.17*			g	
NB-94	-4.00E-03	U	2.23E-02	2.23E-02	4.03E-02	pCi/g		*-0.1*	3/3/04 09:52 a		337.6	GER7$1
							2.85E-01	*-0.36*			g	
PB-212	4.05E-01	J	9.42E-02	9.42E-02	7.77E-02	pCi/g		*(5.2)*	3/3/04 09:52 a		337.6	GER7$1
							1.00E+00	*(8.6)*			g	
PB-214	4.01E-01	J	1.07E-01	1.07E-01	7.88E-02	pCi/g		*(5.1)*	3/3/04 09:52 a		337.6	GER7$1
							1.00E+00	*(7.5)*			g	
TL-208	1.31E-01	J	4.87E-02	4.87E-02	4.18E-02	pCi/g		*(3.1)*	3/3/04 09:52 a		337.6	GER7$1
							1.00E+00	*(5.4)*			g	

No. of Results: 18 Comments:

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.
U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	**SDG:**	25173	**Collection Date:**	2/3/2004 8:40:00 AM
Lot-Sample No.:	J4B110186-22	**Report No. :**	25203	**Received Date:**	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-191-C-1C-02	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043471	RICHRC5037			**Work Order:**	F9ERA1AA		**Report DB ID:**	9F9ERA10				
H-3	8.13E-01	J	3.64E-02	5.41E-02	2.71E-02	pCi/g	100%	*(30.)*	3/10/04 10:54 a		100.7	LSC5
						1.25E-02	1.65E+01	*(30.1)*			G	

No. of Results: 1 **Comments:**

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.
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FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	SDG:	25173	Collection Date:	2/3/2004 8:40:00 AM
Lot-Sample No.:	J4B110186-23	Report No. :	25203	Received Date:	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-191-C-1C-03	COC No. :		Matrix:	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043471	RICHRC5037			Work Order:	F9ERD1AA		Report DB ID:	9F9ERD10				
H-3	1.38E+00	J	4.90E-02	8.25E-02	2.99E-02	pCi/g	100%	*(46.1)*	3/10/04 10:54 a		100.8	LSC5
						1.39E-02	1.65E+01	*(33.4)*			G	

No. of Results: 1 Comments:

STL Richland
rptSTLRchSample
V4.97 A97
63

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.
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FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	SDG:	25173	Collection Date:	2/3/2004 8:40:00 AM
Lot-Sample No.:	J4B110186-24	Report No. :	25203	Received Date:	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-191-C-1C-04	COC No. :		Matrix:	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043471	RICHRC5037			Work Order:	F9ERE1AA		Report DB ID:	9F9ERE10				
H-3	1.06E+00	J	4.14E-02	6.61E-02	2.74E-02	pCi/g	100%	*(38.8)*	3/10/04 10:54 a		100.3	LSC5
						1.27E-02	1.65E+01	*(32.2)*			G	

No. of Results: 1 Comments:

STL Richland
rptSTLRchSample
V4.07 A97

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.
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FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	SDG:	25173	Collection Date:	2/3/2004 10:20:00 AM
Lot-Sample No.:	J4B110186-25	Report No. :	25203	Received Date:	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-191-C-2C-05	COC No. :		Matrix:	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043471	RICHRC5037			Work Order:	F9ERG1AA		Report DB ID:	9F9ERG10				
H-3	4.25E+00	J	7.74E-02	2.15E-01	2.53E-02	pCi/g	100%	*(168.2)*	3/10/04 10:54 a		100.6	LSC5
						1.17E-02	1.65E+01	*(39.5)*			G	

No. of Results: 1 Comments:

STL Richland
rptSTLRchSample
V4.07 A97

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	SDG:	25173	Collection Date:	2/3/2004 10:20:00 AM
Lot-Sample No.:	J4B110186-26	Report No. :	25203	Received Date:	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-191-C-2C-06	COC No. :		Matrix:	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043471	RICHRC5037			Work Order:	F9ERH1AA		Report DB ID:	9F9ERH10				
H-3	3.42E+00	J	6.88E-02	1.76E-01	2.47E-02	pCi/g	100%	*(138.5)*	3/10/04 10:54 a		100.7	LSC5
						1.14E-02	1.65E+01	*(38.9)*			G	

No. of Results: 1 Comments:

STL Richland
rptSTLRchSample
V4.07 A97

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	SDG:	25173	Collection Date:	2/3/2004 10:20:00 AM
Lot-Sample No.:	J4B110186-27	Report No. :	25203	Received Date:	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-191-C-2C-07	COC No. :		Matrix:	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043471	RICHRC5037			Work Order: F9ERM1AA			Report DB ID: 9F9ERM10					
H-3	4.42E+00	J	7.87E-02	2.23E-01	2.51E-02	pCi/g	100%	*(176.4)*	3/10/04 10:54 a		100.4	LSC5
						1.16E-02	1.65E+01	*(39.6)*			G	

No. of Results: 1 Comments:

STL Richland
rptSTLRchSample
V4.07 A97

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FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	**SDG:**	25173	**Collection Date:**	2/3/2004 10:20:00 AM
Lot-Sample No.:	J4B110186-28	**Report No. :**	25203	**Received Date:**	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-191-C-2C-08	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043471	RICHRC5037			**Work Order:**	F9ERQ1AA		**Report DB ID:**	9F9ERQ10				
H-3	4.09E+00	J	7.58E-02	2.08E-01	2.51E-02	pCi/g	100%	*(162.8)*	3/10/04 10:54 a		100.4	LSC5
						1.16E-02	1.65E+01	*(39.4)*			G	

No. of Results: 1 **Comments:**

STL Richland
rptSTLRchSample
V4.07 A97

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	**SDG:**	25173	**Collection Date:**	2/3/2004 10:20:00 AM
Lot-Sample No.:	J4B110186-29	**Report No. :**	25203	**Received Date:**	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-191-C-3C-09	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043471	RICHRC5037			**Work Order:**	F9ERW1AA		**Report DB ID:**	9F9ERW10				
H-3	7.04E+00	J	9.83E-02	3.46E-01	2.48E-02	pCi/g	100%	*(284.5)*	3/10/04 10:54 a		100.5	LSC5
						1.15E-02	1.65E+01	*(40.7)*			G	
Batch: 4043472	RICHRC5017			**Work Order:**	F9ERW1AC		**Report DB ID:**	9F9ERW10				
AC-228	3.07E-01		1.30E-01	1.30E-01	1.23E-01	pCi/g		*(2.5)*	3/3/04 09:53 a		386.1	GER8$1
								(4.7)			g	
AG-108M	-1.37E-02	U	1.57E-02	1.57E-02	2.52E-02	pCi/g		*-0.54*	3/3/04 09:53 a		386.1	GER8$1
								-(1.8)			g	
AM-241	8.15E-03	U	3.75E-02	3.75E-02	6.40E-02	pCi/g		*0.13*	3/3/04 09:53 a		386.1	GER8$1
								0.43			g	
BI-212	1.17E-01	U	3.19E-01	3.19E-01	5.89E-01	pCi/g		*0.2*	3/3/04 09:53 a		386.1	GER8$1
							3.00E+00	*0.73*			g	
BI-214	3.50E-01	U	8.77E-02	8.77E-02	1.42E-01	pCi/g		*(2.5)*	3/3/04 09:53 a		386.1	GER8$1
							1.00E+00	*(8.)*			g	
CO-60	3.13E-03	U	1.78E-02	1.78E-02	3.52E-02	pCi/g		*0.09*	3/3/04 09:53 a		386.1	GER8$1
							1.52E-01	*0.35*			g	
CS-134	1.34E-02	U	2.31E-02	2.31E-02	4.43E-02	pCi/g		*0.3*	3/3/04 09:53 a		386.1	GER8$1
							1.87E-01	*(1.2)*			g	
CS-137	-1.33E-03	U	1.80E-02	1.80E-02	3.27E-02	pCi/g		*-0.04*	3/3/04 09:53 a		386.1	GER8$1
							3.16E-01	*-0.15*			g	
EU-152	-4.10E-02	U	5.04E-02	5.04E-02	8.27E-02	pCi/g		*-0.5*	3/3/04 09:53 a		386.1	GER8$1
							4.04E-01	*-(1.6)*			g	

STL Richland
rptSTLRchSample
V4.07 A97

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.
U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	**SDG:**	25173	**Collection Date:**	2/3/2004 10:20:00 AM
Lot-Sample No.:	J4B110186-29	**Report No. :**	25203	**Received Date:**	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-191-C-3C-09	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
EU-154	1.56E-02	U	6.09E-02	6.09E-02	1.17E-01	pCi/g		*0.13*	3/3/04 09:53 a		386.1	GER8$1
							3.72E-01	*0.51*			g	
EU-155	2.36E-02	U	5.02E-02	5.02E-02	8.92E-02	pCi/g		*0.27*	3/3/04 09:53 a		386.1	GER8$1
							1.57E+01	*0.94*			g	
K-40	6.97E+00		1.12E+00	1.12E+00	2.92E-01	pCi/g		*(23.9)*	3/3/04 09:53 a		386.1	GER8$1
								(12.4)			g	
MN-54	6.15E-03	U	1.84E-02	1.84E-02	3.51E-02	pCi/g		*0.18*	3/3/04 09:53 a		386.1	GER8$1
							6.96E-01	*0.67*			g	
NB-94	-2.74E-03	U	1.76E-02	1.76E-02	3.14E-02	pCi/g		*-0.09*	3/3/04 09:53 a		386.1	GER8$1
							2.85E-01	*-0.31*			g	
PB-212	4.64E-01	J	9.78E-02	9.78E-02	7.59E-02	pCi/g		*(6.1)*	3/3/04 09:53 a		386.1	GER8$1
							1.00E+00	*(9.5)*			g	
PB-214	3.46E-01	J	8.71E-02	8.71E-02	7.09E-02	pCi/g		*(4.9)*	3/3/04 09:53 a		386.1	GER8$1
							1.00E+00	*(7.9)*			g	
TL-208	1.40E-01	J	3.67E-02	3.67E-02	2.67E-02	pCi/g		*(5.3)*	3/3/04 09:53 a		386.1	GER8$1
							1.00E+00	*(7.6)*			g	

No. of Results: 18 **Comments:**

STL Richland
rptSTLRchSample
V4.07 A97

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.
U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	**SDG:**	25173	**Collection Date:**	2/3/2004 10:20:00 AM
Lot-Sample No.:	J4B110186-30	**Report No. :**	25203	**Received Date:**	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-191-C-3C-10	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043471	RICHRC5037			**Work Order:**	F9ER01AA		**Report DB ID:**	9F9ER010				
H-3	4.07E+00	J	7.51E-02	2.06E-01	2.48E-02	pCi/g	100%	*(163.7)*	3/10/04 10:54 a		100.4	LSC5
						1.15E-02	1.65E+01	*(39.4)*			G	
Batch: 4043472	RICHRC5017			**Work Order:**	F9ER01AD		**Report DB ID:**	9F9ER010				
AC-228	4.94E-01	U	1.59E-01	1.59E-01	3.14E-01	pCi/g		*(1.6)*	3/3/04 11:40 a		314.0	GER1$1
								(6.2)			g	
AG-108M	-7.92E-04	U	2.34E-02	2.34E-02	4.11E-02	pCi/g		*-0.02*	3/3/04 11:40 a		314.0	GER1$1
								-0.07			g	
AM-241	-2.87E-02	U	1.08E-01	1.08E-01	1.80E-01	pCi/g		*-0.16*	3/3/04 11:40 a		314.0	GER1$1
								-0.53			g	
BI-212	6.13E-01	U	4.23E-01	4.23E-01	8.33E-01	pCi/g		*0.74*	3/3/04 11:40 a		314.0	GER1$1
							3.00E+00	*(2.9)*			g	
BI-214	3.43E-01	U	1.04E-01	1.04E-01	1.66E-01	pCi/g		*(2.1)*	3/3/04 11:40 a		314.0	GER1$1
							1.00E+00	*(6.6)*			g	
CO-60	2.33E-02	U	2.76E-02	2.76E-02	5.69E-02	pCi/g		*0.41*	3/3/04 11:40 a		314.0	GER1$1
							1.52E-01	*(1.7)*			g	
CS-134	2.56E-02	U	3.27E-02	3.27E-02	6.25E-02	pCi/g		*0.41*	3/3/04 11:40 a		314.0	GER1$1
							1.87E-01	*(1.6)*			g	
CS-137	-6.39E-03	U	2.83E-02	2.83E-02	4.92E-02	pCi/g		*-0.13*	3/3/04 11:40 a		314.0	GER1$1
							3.16E-01	*-0.45*			g	
EU-152	-4.29E-02	U	8.05E-02	8.05E-02	1.25E-01	pCi/g		*-0.34*	3/3/04 11:40 a		314.0	GER1$1
							4.04E-01	*-(1.1)*			g	

STL Richland
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V4.07 A97

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.
U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

FORM I

SAMPLE RESULTS

Date: 18-Mar-04

Lab Name:	STL Richland	**SDG:**	25173	**Collection Date:**	2/3/2004 10:20:00 AM
Lot-Sample No.:	J4B110186-30	**Report No. :**	25203	**Received Date:**	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-191-C-3C-10	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
EU-154	-2.55E-02	U	8.67E-02	8.67E-02	1.53E-01	pCi/g		-0.17	3/3/04 11:40 a		314.0	GER1$1
							3.72E-01	-0.59			g	
EU-155	3.41E-02	U	8.04E-02	8.04E-02	1.41E-01	pCi/g		0.24	3/3/04 11:40 a		314.0	GER1$1
							1.57E+01	0.85			g	
K-40	6.60E+00		1.19E+00	1.19E+00	3.45E-01	pCi/g		(19.1)	3/3/04 11:40 a		314.0	GER1$1
								(11.1)			g	
MN-54	-1.37E-02	U	2.80E-02	2.80E-02	4.76E-02	pCi/g		-0.29	3/3/04 11:40 a		314.0	GER1$1
							6.96E-01	-0.98			g	
NB-94	-5.81E-03	U	2.79E-02	2.79E-02	4.87E-02	pCi/g		-0.12	3/3/04 11:40 a		314.0	GER1$1
							2.85E-01	-0.42			g	
PB-212	3.39E-01	J	1.08E-01	1.08E-01	9.12E-02	pCi/g		(3.7)	3/3/04 11:40 a		314.0	GER1$1
							1.00E+00	(6.3)			g	
PB-214	5.00E-01	J	1.25E-01	1.25E-01	8.14E-02	pCi/g		(6.1)	3/3/04 11:40 a		314.0	GER1$1
							1.00E+00	(8.)			g	
TL-208	1.67E-01	U	6.15E-02	6.15E-02	8.36E-02	pCi/g		(2.)	3/3/04 11:40 a		314.0	GER1$1
							1.00E+00	(5.4)			g	
Batch: 4043475	CMUD			**Work Order:** F9ER01AC			**Report DB ID:** 9F9ER010					
SR-90	8.47E-02		2.34E-02	2.67E-02	3.52E-02	pCi/g	50%	(2.4)	3/13/04 09:23 a		10.04	GPC2B
						1.61E-02	6.00E-02	(6.3)			G	

No. of Results: 19 **Comments:**

STL Richland
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V4.07 A97

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.
U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

FORM II

Date: 18-Mar-04

DUPLICATE RESULTS

Lab Name:	STL Richland	**SDG:**	25173	**Collection Date:**	2/2/2004 10:20:00 AM
Lot-Sample No.:	J4B110186-31	**Report No. :**	25203	**Received Date:**	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-188-C-1C-01 DUP	**COC No. :**		**Matrix:**	SOLID

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043465	RICHRC5080			**Work Order:** F9ETD1AH		**Report DB ID:** F9ETD1HR			**Orig Sa DB ID:** 9F9ETD10			
AM-241	1.26E-02	U	2.00E-02	2.02E-02	3.36E-02	pCi/g	60%	0.38	3/16/04 07:14 p		2.01	ALP45
	0.00E+00	U	**RER2 1.0**			1.03E+00		(1.3)			G	
CM-242	0.00E+00	U	0.00E+00	2.06E-02	2.28E-02	pCi/g	60%	0.	3/16/04 07:14 p		2.01	ALP45
	0.00E+00	U	**RER2 0.0**					0.			G	
CM-243/244	0.00E+00	U	0.00E+00	1.72E-02	1.91E-02	pCi/g	60%	0.	3/16/04 07:14 p		2.01	ALP45
	0.00E+00	U	**RER2 0.0**			1.16E+00		0.			G	
									Alpha Spec Result Sum = 1.3E-02			
Batch: 4043466	RICHRC5010			**Work Order:** F9ETD1AJ		**Report DB ID:** F9ETD1JR			**Orig Sa DB ID:** 9F9ETD10			
PU-238	1.31E-02	U	1.85E-02	1.86E-02	1.77E-02	pCi/g	51%	0.74	3/8/04 06:01 p		1.99	ALP128
	0.00E+00	U	**RER2 1.2**			1.18E+00		(1.4)			G	
PU239/40	0.00E+00	U	0.00E+00	1.60E-02	1.77E-02	pCi/g	51%	0.	3/8/04 06:01 p		1.99	ALP128
	0.00E+00	U	**RER2 0.0**			1.07E+00		0.			G	
									Alpha Spec Result Sum = 2.6E-02			
Batch: 4043467	RICHRC5010			**Work Order:** F9ETD1AK		**Report DB ID:** F9ETD1KR			**Orig Sa DB ID:** 9F9ETD10			
PU-241	2.17E-03	U	5.72E-01	7.70E-01	1.39E+00	pCi/g	51%	0.	3/12/04 11:33 a		1.99	LSC7
	2.41E-01	U	**RER2 0.5**			3.48E+01		0.01			G	
									Alpha Spec Result Sum = 2.6E-02			

No. of Results: 6 **Comments:**

STL Richland
rptSTLRchDupV4.0
7 A97

RER2 - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.
MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

FORM II

Date: 18-Mar-04

DUPLICATE RESULTS

Lab Name:	STL Richland	SDG:	25173	Collection Date:	2/4/2004 8:15:00 AM
Lot-Sample No.:	J4B110186-1	Report No. :	25203	Received Date:	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-189-C-1C-01 DUP	COC No. :		Matrix:	SOLID

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043468	RICHRC5037			Work Order: F9EM21AD		Report DB ID: F9EM21DR			Orig Sa DB ID: 9F9EM210			
H-3	5.52E-01	J	3.00E-02	3.84E-02	2.64E-02	pCi/g	100%	(20.9)	3/8/04 11:18 p		100.3	LSC4
	5.85E-01	J	RER2 1.2			1.65E+01		(28.8)			G	

No. of Results: 1 Comments:

STL Richland
rptSTLRchDupV4.0
7 A97

RER2 - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.
MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.

FORM II

Date: 18-Mar-04

DUPLICATE RESULTS

Lab Name:	STL Richland	SDG:	25173	Collection Date:	2/4/2004 8:30:00 AM
Lot-Sample No.:	J4B110186-5	Report No. :	25203	Received Date:	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-189-C-2C-05 DUP	COC No. :		Matrix:	SOLID

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043472	RICHRC5017			Work Order: F9EPE1AD		Report DB ID: F9EPE1DR			Orig Sa DB ID: 9F9EPE10			
AC-228	3.91E-01	U	1.36E-01	1.36E-01	2.54E-01	pCi/g		(1.5)	3/3/04 09:51 a		362.7	GER1$1
	4.26E-01	U	RER2 0.3					(5.7)			g	
AG-108M	-1.45E-02	U	1.99E-02	1.99E-02	3.28E-02	pCi/g		-0.44	3/3/04 09:51 a		362.7	GER1$1
	2.36E-03	U	RER2 1.2					-(1.5)			g	
AM-241	1.04E-02	U	9.44E-02	9.44E-02	1.60E-01	pCi/g		0.06	3/3/04 09:51 a		362.7	GER1$1
	-9.19E-03	U	RER2 0.2					0.22			g	
BI-212	1.91E-01	U	3.59E-01	3.59E-01	6.71E-01	pCi/g		0.28	3/3/04 09:51 a		362.7	GER1$1
	8.86E-01	U	RER2 2.7			3.00E+00		(1.1)			g	
BI-214	5.21E-01	U	1.16E-01	1.16E-01	1.70E-01	pCi/g		(3.1)	3/3/04 09:51 a		362.7	GER1$1
	3.79E-01	U	RER2 1.8			1.00E+00		(9.)			g	
CO-60	1.05E-02	U	2.47E-02	2.47E-02	4.82E-02	pCi/g		0.22	3/3/04 09:51 a		362.7	GER1$1
	9.51E-03	U	RER2 0.1			1.52E-01		0.85			g	
CS-134	1.29E-02	U	2.78E-02	2.78E-02	5.20E-02	pCi/g		0.25	3/3/04 09:51 a		362.7	GER1$1
	3.03E-02	U	RER2 0.8			1.87E-01		0.93			g	
CS-137	-5.82E-03	U	2.40E-02	2.40E-02	4.16E-02	pCi/g		-0.14	3/3/04 09:51 a		362.7	GER1$1
	-3.91E-03	U	RER2 0.1			3.16E-01		-0.49			g	
EU-152	-6.60E-02	U	8.14E-02	8.14E-02	1.17E-01	pCi/g		-0.56	3/3/04 09:51 a		362.7	GER1$1
	-1.55E-02	U	RER2 1.0			4.04E-01		-(1.6)			g	
EU-154	-1.05E-02	U	7.38E-02	7.38E-02	1.33E-01	pCi/g		-0.08	3/3/04 09:51 a		362.7	GER1$1
	1.07E-02	U	RER2 0.4			3.72E-01		-0.29			g	
EU-155	-8.18E-03	U	7.48E-02	7.48E-02	1.27E-01	pCi/g		-0.06	3/3/04 09:51 a		362.7	GER1$1
	-2.65E-02	U	RER2 0.3			1.57E+01		-0.22			g	

STL Richland
rptSTLRchDupV4.0
7 A97

RER2 - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.
MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

FORM II

Date: 18-Mar-04

DUPLICATE RESULTS

Lab Name:	STL Richland	**SDG:**	25173	**Collection Date:**	2/4/2004 8:30:00 AM
Lot-Sample No.:	J4B110186-5	**Report No. :**	25203	**Received Date:**	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-189-C-2C-05 DUP	**COC No. :**		**Matrix:**	SOLID

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
K-40	6.24E+00		1.12E+00	1.12E+00	4.22E-01	pCi/g		(14.8)	3/3/04 09:51 a		362.7	GER1$1
	6.08E+00		**RER2 0.2**					(11.2)			g	
MN-54	3.30E-02	U	3.06E-02	3.06E-02	5.82E-02	pCi/g		0.57	3/3/04 09:51 a		362.7	GER1$1
	-9.11E-04	U	**RER2 1.8**			6.96E-01		(2.2)			g	
NB-94	1.68E-02	U	2.45E-02	2.45E-02	4.66E-02	pCi/g		0.36	3/3/04 09:51 a		362.7	GER1$1
	2.70E-03	U	**RER2 0.9**			2.85E-01		(1.4)			g	
PB-212	3.77E-01	J	1.15E-01	1.15E-01	7.41E-02	pCi/g		(5.1)	3/3/04 09:51 a		362.7	GER1$1
	3.75E-01	J	**RER2 0.0**			1.00E+00		(6.6)			g	
PB-214	4.09E-01	J	1.14E-01	1.14E-01	7.82E-02	pCi/g		(5.2)	3/3/04 09:51 a		362.7	GER1$1
	3.67E-01	J	**RER2 0.5**			1.00E+00		(7.1)			g	
TL-208	1.47E-01	U	4.93E-02	4.93E-02	7.38E-02	pCi/g		(2.)	3/3/04 09:51 a		362.7	GER1$1
	1.60E-01	U	**RER2 0.3**			1.00E+00		(6.)			g	

No. of Results: 17 **Comments:**

RER2 - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.
MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.
U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

FORM II

Date: 18-Mar-04

DUPLICATE RESULTS

Lab Name:	STL Richland	**SDG:**	25173	**Collection Date:**	2/4/2004 8:30:00 AM
Lot-Sample No.:	J4B110186-6	**Report No. :**	25203	**Received Date:**	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-189-C-2C-06 DUP	**COC No. :**		**Matrix:**	SOLID

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043475 CMUD				**Work Order:** F9EPG1AE		**Report DB ID:** F9EPG1ER			**Orig Sa DB ID:** 9F9EPG10			
SR-90	5.01E-02	J	2.58E-02	2.66E-02	4.52E-02	pCi/g	54%	(1.1)	3/13/04 09:17 a		10.07	GPC1C
	5.84E-02	J	**RER2 0.4**			6.00E-02		(3.8)			G	

No. of Results: 1 **Comments:**

STL Richland
rptSTLRchDupV4.0
7 A97

RER2 - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.
MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.

FORM II

Date: 18-Mar-04

DUPLICATE RESULTS

Lab Name:	STL Richland	SDG:	25173	Collection Date:	2/3/2004 1:45:00 PM
Lot-Sample No.:	J4B110186-19	Report No. :	25203	Received Date:	2/11/2004 10:15:00 AM
Client Sample ID:	3107-0000-190-C2C-06 DUP	COC No. :		Matrix:	SOLID

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043471	RICHRC5037			Work Order: F9EQQ1AD		Report DB ID: F9EQQ1DR			Orig Sa DB ID: 9F9EQQ10			
H-3	7.08E-01	J	3.28E-02	4.79E-02	2.51E-02	pCi/g	100%	(28.2)	3/10/04 10:54 a		100.4	LSC5
	8.16E-01	J	RER2 3.0			1.65E+01		(29.6)			G	

No. of Results: 1 Comments:

STL Richland
rptSTLRchDupV4.0
7 A97
8/8

RER2 - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.
MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.

FORM II

BLANK RESULTS

Date: 18-Mar-04

Lab Name: STL Richland

Matrix: SOLID

SDG: 25173

Report No. : 25203

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Lc	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4043465	RICHRC5080			**Work Order:** F9HQH1AA		**Report DB ID:** F9HQH1AB						
AM-241	6.51E-03	U	1.30E-02	1.31E-02	1.77E-02	pCi/g	49%	0.37	3/16/04 07:15 p		2.0	ALP47
						1.03E+00		1.			G	
CM-242	0.00E+00	U	0.00E+00	1.92E-02	2.12E-02	pCi/g	49%	0.	3/16/04 07:15 p		2.0	ALP47
								0.			G	
CM-243/244	0.00E+00	U	0.00E+00	1.60E-02	1.77E-02	pCi/g	49%	0.	3/16/04 07:15 p		2.0	ALP47
						1.16E+00		0.			G	
Batch: 4043466	RICHRC5010			**Work Order:** F9HQN1AA		**Report DB ID:** F9HQN1AB						
PU-238	0.00E+00	U	0.00E+00	1.56E-02	1.72E-02	pCi/g	65%	0.	3/8/04 06:02 p		2.0	ALP131
						1.18E+00		0.			G	
PU239/40	0.00E+00	U	0.00E+00	1.55E-02	1.72E-02	pCi/g	65%	0.	3/8/04 06:02 p		2.0	ALP131
						1.07E+00		0.			G	
Batch: 4043467	RICHRC5010			**Work Order:** F9HQT1AA		**Report DB ID:** F9HQT1AB						
PU-241	5.41E-01	U	4.67E-01	6.30E-01	1.09E+00	pCi/g	65%	0.5	3/12/04 11:33 a		2.0	LSC7
					5.20E-01	3.48E+01		(1.7)			G	
Batch: 4043468	RICHRC5037			**Work Order:** F9HRF1AA		**Report DB ID:** F9HRF1AB						
H-3	6.18E-02	U	1.04E-01	1.11E-01	2.51E-01	pCi/g	100%	0.25	3/8/04 09:10 p		10.0	LSC4
					1.17E-01	1.65E+01		(1.1)			G	
Batch: 4043471	RICHRC5037			**Work Order:** F9HRT1AA		**Report DB ID:** F9HRT1AB						
H-3	5.92E-03	U	9.90E-02	1.07E-01	2.48E-01	pCi/g	100%	0.02	3/10/04 10:54 a		10.0	LSC5
					1.15E-01	1.65E+01		0.11			G	
Batch: 4043472	RICHRC5017			**Work Order:** F9HTJ1AA		**Report DB ID:** F9HTJ1AB						

STL Richland
rptSTLRchBlank
V4.07 A97

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

FORM II

BLANK RESULTS

Date: 18-Mar-04

Lab Name: STL Richland

Matrix: SOLID

SDG: 25173

Report No. : 25203

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Lc	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
AC-228	-1.57E-03	U	1.08E-01	1.08E-01	2.15E-01	pCi/g		-0.01	3/3/04 11:42 a		200.0	GER7$1
								-0.03			g	
AG-108M	1.72E-02	U	2.28E-02	2.28E-02	4.64E-02	pCi/g		0.37	3/3/04 11:42 a		200.0	GER7$1
								(1.5)			g	
AM-241	2.34E-02	U	8.34E-02	8.34E-02	1.51E-01	pCi/g		0.15	3/3/04 11:42 a		200.0	GER7$1
								0.56			g	
BI-212	-1.72E-01	U	4.70E-01	4.70E-01	8.23E-01	pCi/g		-0.21	3/3/04 11:42 a		200.0	GER7$1
						3.00E+00		-0.73			g	
BI-214	-6.16E-02	U	7.33E-02	7.33E-02	1.31E-01	pCi/g		-0.47	3/3/04 11:42 a		200.0	GER7$1
						1.00E+00		-(1.7)			g	
CO-60	2.20E-02	U	3.23E-02	3.23E-02	7.23E-02	pCi/g		0.3	3/3/04 11:42 a		200.0	GER7$1
						1.52E-01		(1.4)			g	
CS-134	-7.75E-03	U	2.96E-02	2.96E-02	5.37E-02	pCi/g		-0.14	3/3/04 11:42 a		200.0	GER7$1
						1.87E-01		-0.52			g	
CS-137	-7.71E-03	U	2.50E-02	2.50E-02	4.57E-02	pCi/g		-0.17	3/3/04 11:42 a		200.0	GER7$1
						3.16E-01		-0.62			g	
EU-152	-2.12E-02	U	7.90E-02	7.90E-02	1.37E-01	pCi/g		-0.15	3/3/04 11:42 a		200.0	GER7$1
						4.04E-01		-0.54			g	
EU-154	9.99E-02	U	9.72E-02	9.72E-02	2.22E-01	pCi/g		0.45	3/3/04 11:42 a		200.0	GER7$1
						3.72E-01		(2.1)			g	
EU-155	-3.29E-02	U	6.00E-02	6.00E-02	9.87E-02	pCi/g		-0.33	3/3/04 11:42 a		200.0	GER7$1
						1.57E+01		-(1.1)			g	
K-40	-2.73E-01	U	5.07E-01	5.07E-01	1.11E+00	pCi/g		-0.24	3/3/04 11:42 a		200.0	GER7$1
								-(1.1)			g	

STL Richland
rptSTLRchBlank
V4.07 A97

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

FORM II

BLANK RESULTS

Date: 18-Mar-04

Lab Name: STL Richland **SDG:** 25173

Matrix: SOLID **Report No. :** 25203

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Lc	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
MN-54	-1.98E-02	U	2.73E-02	2.73E-02	4.58E-02	pCi/g		-0.43	3/3/04 11:42 a		200.0	GER7$1
						6.96E-01		-(1.5)			g	
NB-94	-1.74E-02	U	2.92E-02	2.92E-02	5.02E-02	pCi/g		-0.35	3/3/04 11:42 a		200.0	GER7$1
						2.85E-01		-(1.2)			g	
PB-212	4.63E-02	U	6.16E-02	6.16E-02	6.66E-02	pCi/g		0.7	3/3/04 11:42 a		200.0	GER7$1
						1.00E+00		(1.5)			g	
PB-214	-6.08E-02	U	6.36E-02	6.36E-02	1.09E-01	pCi/g		-0.56	3/3/04 11:42 a		200.0	GER7$1
						1.00E+00		-(1.9)			g	
TL-208	2.13E-03	U	3.04E-02	3.04E-02	5.63E-02	pCi/g		0.04	3/3/04 11:42 a		200.0	GER7$1
						1.00E+00		0.14			g	
Batch: 4043475	CMUD			**Work Order:**	F9HTX1AA	**Report DB ID:**	F9HTX1AB					
SR-90	3.83E-02	J	1.39E-02	1.49E-02	2.21E-02	pCi/g	81%	(1.7)	3/13/04 09:19 a		10.0	GPC3A
					1.01E-02	6.00E-02		(5.1)			G	

No. of Results: 26 **Comments:**

STL Richland
rptSTLRchBlank
V4.07 A97

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.
U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

FORM II

LCS RESULTS

Date: 18-Mar-04

Lab Name: STL Richland

Matrix: SOLID

SDG: 25173

Report No. : 25203

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA	Report Unit	Yield	Expected	Expected Uncert	Recovery, Bias	Analysis, Prep Date	Aliquot Size	Primary Detector
Batch: 4043465	RICHRC5080			**Work Order:**	F9HQH1AC		**Report DB ID:**	F9HQH1CS					
AM-241	3.04E+00		2.33E-01	5.80E-01	2.52E-02	pCi/g	73%	4.55E+00	1.52E-01	67%	3/16/04 07:17 p	2.0	ALP130
							Rec Limits:	70	130	-0.3		G	
Batch: 4043466	RICHRC5010			**Work Order:**	F9HQN1AC		**Report DB ID:**	F9HQN1CS					
PU239/40	4.40E-01		9.04E-02	1.16E-01	1.26E-02	pCi/g	71%	4.61E-01	2.32E-02	96%	3/8/04 06:03 p	2.0	ALP132
							Rec Limits:	70	130	0.0		G	
Batch: 4043467	RICHRC5010			**Work Order:**	F9HQT1AC		**Report DB ID:**	F9HQT1CS					
PU-241	2.34E+01		9.43E-01	2.15E+00	9.87E-01	pCi/g	71%	2.27E+01	1.03E+00	103%	3/12/04 11:33 a	2.0	LSC7
							Rec Limits:	70	130	0.0		G	
Batch: 4043468	RICHRC5037			**Work Order:**	F9HRF1AC		**Report DB ID:**	F9HRF1CS					
H-3	6.33E+00		3.09E-01	3.70E-01	2.50E-01	pCi/g	100%	6.84E+00	2.35E-01	93%	3/8/04 09:53 p	10.0	LSC4
							Rec Limits:	70	130	-0.1		G	
Batch: 4043471	RICHRC5037			**Work Order:**	F9HRT1AC		**Report DB ID:**	F9HRT1CS					
H-3	6.82E+00		3.21E-01	4.23E-01	2.49E-01	pCi/g	100%	6.79E+00	2.34E-01	100%	3/10/04 10:54 a	10.0	LSC5
							Rec Limits:	70	130	0.0		G	
Batch: 4043472	RICHRC5017			**Work Order:**	F9HTJ1AC		**Report DB ID:**	F9HTJ1CS					
CS-137	1.18E+00		1.93E-01	1.93E-01	5.52E-02	pCi/g		1.02E+00	3.56E-02	115%	3/3/04 11:42 a	200.0	GER8$1
							Rec Limits:	70	130	0.2		g	
Batch: 4043475	CMUD			**Work Order:**	F9HTX1AC		**Report DB ID:**	F9HTX1CS					
SR-90	1.55E+00		6.00E-02	2.31E-01	2.55E-02	pCi/g	69%	1.36E+00	1.65E-02	114%	3/13/04 09:19 a	10.0	GPC3B
							Rec Limits:	70	130	0.1		G	

No. of Results: 7 **Comments:**

STL Richland Bias - (Result/Expected)-1 as defined by ANSI N13.30.

rptSTLRchLcs
V4.97 A97

Q-55100 LYH. 1000 0-10

 J4B110186 SDG 25173

Connecticut Yankee Atomic Power Company

362 Injun Hollow Road, East Hampton, CT 06424
860-267-2556

Chain of Custody Form

No. 2004-00010

Project Name: Haddam Neck Decommissioning

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

Analytical Lab (Name, City, State):
STL, 2800 George Washington Way, Richland, WA 99352 Theresa Kallsen (509) 375-3131 x144

Priority: ☒ 45 D. ☐ 30 D. ☐ 15 D. ☐ 7 D.
Other:

Lab Use Only
Comments:
TRX 7900 5299 4850

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	CHGAM		Sr-90		H-3		Comment, Preservation	Lab Sample ID
3107-0000-189-C-1C-01	2/4/04	0815	CT	CR	BP	X				X			F9EM2
3107-0000-189-C-1C-02	2/4/04	0815	CT	CR	BP					X			F9EN7
3107-0000-189-C-2C-03	2/4/04	0830	CT	CR	BP					X			F9EPC
3107-0000-189-C-2C-04	2/4/04	0830	CT	CR	BP					X			F9EPD
3107-0000-189-C-2C-05	2/4/04	0830	CT	CR	BP	X				X			F9EPE
3107-0000-189-C-2C-06	2/4/04	0830	CT	CR	BP	X		X		X			F9EPG

NOTES: PO #: 002092 MSR #: 04-0337 ☐ LTP QA ☐ Radwaste QA ☒ Non QA

NOTE: Save a portion of each sample for potential future Hard-To-Detect radionuclide analysis.

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 2/10/04 1400	2) Received By [signature] 2100 Date/Time 2/11/04 @ 10:15
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. 2004-00008

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):
STL, 2800 George Washington Way, Richland, WA 99352 Theresa Kallsen (509) 375-3131 x144

Priority: ☒ 45 D. ☐ 30 D. ☐ 15 D. ☐ 7 D.
Other:

Lab Use Only
Comments:
TRX# 7900 5299 4850

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	CHGAM		Sr-90		H-3		Comment, Preservation	Lab Sample ID
3107-0000-187-C-1C-01	2/2/04	1425	CT	CR	BP	X				X			F9EPH
3107-0000-187-C-1C-02	2/2/04	1425	CT	CR	BP					X			F9EPK
3107-0000-187-C-1C-03	2/2/04	1425	CT	CR	BP					X			F9EPL
3107-0000-187-C-1C-04	2/2/04	1425	CT	CR	BP					X			F9EPN
3107-0000-187-C-2C-05	2/2/04	1500	CT	CR	BP					X			F9EPQ
3107-0000-187-C-2C-06	2/2/04	1500	CT	CR	BP	X				X			F9EPR
3107-0000-187-C-2C-07	2/2/04	1500	CT	CR	BP	X		X		X			F9EPT

NOTES: PO #: 002092 MSR #: 04-0337 ☐ LTP QA ☐ Radwaste QA ☒ Non QA

NOTE: Save a portion of each sample for potential future Hard-To-Detect radionuclide analysis.

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: 2/10/04/1400	2) Received By: [signature] <100 cpm Date/Time: 2/11/04 @ 10:15
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. 2004-00011

Project Name: Haddam Neck Decommissioning

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

Analytical Lab (Name, City, State):
STL, 2800 George Washington Way, Richland, WA 99352 Theresa Kallsen (509) 375-3131 x144

Priority: ☒ 45 D. ☐ 30 D. ☐ 15 D. ☐ 7 D.
Other:

Lab Use Only
Comments:
TRX 7900 5299 4850

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	CHGAM		Sr-90		H-3		Comment, Preservation	Lab Sample ID
3107-0000-190-C1C-01	2/3/04	1329	CT	CR	BP	X				X			F9EP4
3107-0000-190-C1C-02	2/3/04	1329	CT	CR	BP					X			F9EP8
3107-0000-190-C1C-03	2/3/04	1329	CT	CR	BP					X			F9EQC
3107-0000-190-C1C-04	2/3/04	1329	CT	CR	BP					X			F9EQF
3107-0000-190-C1C-05	2/3/04	1329	CT	CR	BP					X			F9EQJ
3107-0000-190-C2C-06	2/3/04	1345	CT	CR	BP	X				X			F9EQQ
3107-0000-190-C2C-07	2/3/04	1345	CT	CR	BP	X		X		X			F9EQX

NOTES: PO #: 002092 MSR #: 04-0337 ☐ LTP QA ☐ Radwaste QA ☒ Non QA

NOTE: Save a portion of each sample for potential future Hard-To-Detect radionuclide analysis.

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 2/10/04 1400	2) Received By [signature] <1004pm Date/Time 2/11/04 @10:15
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. 2004-00012

Project Name: Haddam Neck Decommissioning

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

Analytical Lab (Name, City, State):
STL, 2800 George Washington Way, Richland, WA 99352 Theresa Kallsen (509) 375-3131 x144

Priority: ☒ 45 D. ☐ 30 D. ☐ 15 D. ☐ 7 D.
Other:

Lab Use Only
Comments:
TRX 7900 5299 4850

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	CHGAM		Sr-90		H-3		Comment, Preservation	Lab Sample ID
3107-0000-191-C-1C-01	2/3/04	0840	CT	CR	BP	X				X			F9EQ5
3107-0000-191-C-1C-02	2/3/04	0840	CT	CR	BP					X			F9ERA
3107-0000-191-C-1C-03	2/3/04	0840	CT	CR	BP					X			F9ERD
3107-0000-191-C-1C-04	2/3/04	0840	CT	CR	BP					X			F9ERE
3107-0000-191-C-2C-05	2/3/04	1020	CT	CR	BP					X			F9ERG
3107-0000-191-C-2C-06	2/3/04	1020	CT	CR	BP					X			F9ERH
3107-0000-191-C-2C-07	2/3/04	1020	CT	CR	BP					X			F9ERM
3107-0000-191-C-2C-08	2/3/04	1020	CT	CR	BP					X			F9ERQ
3107-0000-191-C-3C-09	2/3/04	1030	CT	CR	BP	X				X			F9ERW
3107-0000-191-C-3C-10	2/3/04	1030	CT	CR	BP	X		X		X			F9ERO

NOTES: PO #: 002092 MSR #: 04-0337 ☐ LTP QA ☐ Radwaste QA ☒ Non QA

NOTE: Save a portion of each sample for potential future Hard-To-Detect radionuclide analysis.

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 2/10/04 1400	2) Received By [signature] <100 cpm Date/Time 2/11/04 @ 10:15
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. 2004-00009

Project Name: Haddam Neck Decommissioning

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

Analytical Lab (Name, City, State):
STL, 2800 George Washington Way, Richland, WA 99352 Theresa Kallsen (509) 375-3131 x144

Priority: ☒ 45 D. ☐ 30 D. ☐ 15 D. ☐ 7 D.
Other:

Lab Use Only
Comments:
TRX # 7900 5299 4850

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	CHGAM		Sr-90	TRU	H-3		Comment, Preservation	Lab Sample ID
3107-0000-188-C-1C-01	2/2/04	1020	CT	CR	BP	X		X	X	X			F9ETD
3107-0000-188-C-1C-02	2/2/04	1020	CT	CR	BP					X			F9ETM
3107-0000-188-C-1C-03	2/2/04	1020	CT	CR	BP					X			F9ETT
3107-0000-188-C-1C-04	2/2/04	1020	CT	CR	BP					X			F9ETX
3107-0000-188-C-1C-05	2/2/04	1020	CT	CR	BP	X				X			F9ET2
3107-0000-188-C-1C-06	2/2/04	1020	CT	CR	BP	X		X		X			F9ET5

NOTES: PO #: 002092 MSR #: 04-0337 ☐ LTP QA ☐ Radwaste QA ☒ Non QA

NOTE: Save a portion of each sample for potential future Hard-To-Detect radionuclide analysis.

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 2/10/04/1400	2) Received By [signature] 2100 hrs Date/Time 2/11/04 @ 10:15
3) Relinquished By Date/Time	4) Received By Date/Time
5) Relinquished By Date/Time	6) Received By Date/Time

Table 5

F.12

Analytical Data Package Prepared For

Connecticut Yankee

Radiochemical Analysis By

STL Richland

2800 G.W. Way, Richland Wa, 99352, (509)-375-3131.

Assigned Laboratory Code: STLR

Data Package Contains _____ Pages

Report No.: 28635

SDG No.	Order No.	Client Sample ID (List Order)	Lot-Sa No.	Work Order	Report DB ID	Batch No.
28704		3107-0000-194-C-1C-01	J5D150180-1	G8FQQ1AD	9G8FQQ10	5105267
		3107-0000-194-C-1C-01	J5D150180-1	G8FQQ1AC	9G8FQQ10	5105278
		3107-0000-194-C-1C-01	J5D150180-1	G8FQQ1AA	9G8FQQ10	5105290
		3107-0000-194-C-1C-02	J5D150180-2	G8FQX1AD	9G8FQX10	5105267
		3107-0000-194-C-1C-02	J5D150180-2	G8FQX1AC	9G8FQX10	5105278
		3107-0000-194-C-1C-02	J5D150180-2	G8FQX1AA	9G8FQX10	5105290
		3107-0000-194-C-1C-03	J5D150180-3	G8FQ01AD	9G8FQ010	5105267
		3107-0000-194-C-1C-03	J5D150180-3	G8FQ01AC	9G8FQ010	5105278
		3107-0000-194-C-1C-03	J5D150180-3	G8FQ01AA	9G8FQ010	5105290
		3107-0000-194-C-1C-04	J5D150180-4	G8FQ11AD	9G8FQ110	5105267
		3107-0000-194-C-1C-04	J5D150180-4	G8FQ11AC	9G8FQ110	5105278
		3107-0000-194-C-1C-04	J5D150180-4	G8FQ11AA	9G8FQ110	5105290
		3107-0000-194-C-1C-05	J5D150180-5	G8FQ21AD	9G8FQ210	5105267
		3107-0000-194-C-1C-05	J5D150180-5	G8FQ21AC	9G8FQ210	5105278
		3107-0000-194-C-1C-05	J5D150180-5	G8FQ21AA	9G8FQ210	5105290
		3107-0000-194-C-2C-06	J5D150180-6	G8FQ31AD	9G8FQ310	5105267
		3107-0000-194-C-2C-06	J5D150180-6	G8FQ31AC	9G8FQ310	5105278
		3107-0000-194-C-2C-06	J5D150180-6	G8FQ31AA	9G8FQ310	5105290
		3107-0000-195-C-1C-01	J5D150180-7	G8FQ71AD	9G8FQ710	5105267
		3107-0000-195-C-1C-01	J5D150180-7	G8FQ71AC	9G8FQ710	5105278
		3107-0000-195-C-1C-01	J5D150180-7	G8FQ71AA	9G8FQ710	5105290
		3107-0000-195-C-1C-02	J5D150180-8	G8FQ91AD	9G8FQ910	5105267
		3107-0000-195-C-1C-02	J5D150180-8	G8FQ91AC	9G8FQ910	5105278
		3107-0000-195-C-1C-02	J5D150180-8	G8FQ91AA	9G8FQ910	5105290
		3107-0000-195-C-1C-03	J5D150180-9	G8FRA1AD	9G8FRA10	5105267
		3107-0000-195-C-1C-03	J5D150180-9	G8FRA1AC	9G8FRA10	5105278

Report No.: 28635

SDG No.	Order No.	Client Sample ID (List Order)	Lot-Sa No.	Work Order	Report DB ID	Batch No.
28704		3107-0000-195-C-1C-03	J5D150180-9	G8FRA1AA	9G8FRA10	5105290
		3107-0000-195-C-1C-04	J5D150180-10	G8FRC1AD	9G8FRC10	5105267
		3107-0000-195-C-1C-04	J5D150180-10	G8FRC1AC	9G8FRC10	5105278
		3107-0000-195-C-1C-04	J5D150180-10	G8FRC1AA	9G8FRC10	5105290
		3107-0000-195-C-2C-05	J5D150180-11	G8FRF1AD	9G8FRF10	5105267
		3107-0000-195-C-2C-05	J5D150180-11	G8FRF1AC	9G8FRF10	5105278
		3107-0000-195-C-2C-05	J5D150180-11	G8FRF1AA	9G8FRF10	5105290
		3107-0000-195-C-2C-06	J5D150180-12	G8FRG1AD	9G8FRG10	5105267
		3107-0000-195-C-2C-06	J5D150180-12	G8FRG1AC	9G8FRG10	5105278
		3107-0000-195-C-2C-06	J5D150180-12	G8FRG1AA	9G8FRG10	5105290
		3107-0000-196-C-1C-01	J5D150180-13	G8FRH1AD	9G8FRH10	5105267
		3107-0000-196-C-1C-01	J5D150180-13	G8FRH1AC	9G8FRH10	5105278
		3107-0000-196-C-1C-01	J5D150180-13	G8FRH1AA	9G8FRH10	5105290
		3107-0000-196-C-1C-02	J5D150180-14	G8FRK1AD	9G8FRK10	5105267
		3107-0000-196-C-1C-02	J5D150180-14	G8FRK1AC	9G8FRK10	5105278
		3107-0000-196-C-1C-02	J5D150180-14	G8FRK1AA	9G8FRK10	5105290
		3107-0000-196-C-1C-03	J5D150180-15	G8FRN1AD	9G8FRN10	5105267
		3107-0000-196-C-1C-03	J5D150180-15	G8FRN1AC	9G8FRN10	5105278
		3107-0000-196-C-1C-03	J5D150180-15	G8FRN1AA	9G8FRN10	5105290
		3107-0000-196-C-2C-04	J5D150180-16	G8FRQ1AD	9G8FRQ10	5105271
		3107-0000-196-C-2C-04	J5D150180-16	G8FRQ1AC	9G8FRQ10	5105284
		3107-0000-196-C-2C-04	J5D150180-16	G8FRQ1AA	9G8FRQ10	5105292
		3107-0000-196-C-2C-05	J5D150180-17	G8FRR1AD	9G8FRR10	5105271
		3107-0000-196-C-2C-05	J5D150180-17	G8FRR1AC	9G8FRR10	5105284
		3107-0000-196-C-2C-05	J5D150180-17	G8FRR1AA	9G8FRR10	5105292
		3107-0000-196-C-2C-06	J5D150180-18	G8FRT1AD	9G8FRT10	5105271
		3107-0000-196-C-2C-06	J5D150180-18	G8FRT1AC	9G8FRT10	5105284
		3107-0000-196-C-2C-06	J5D150180-18	G8FRT1AA	9G8FRT10	5105292
		3107-0000-197-C-1C-01	J5D150180-19	G8FRV1AD	9G8FRV10	5105271
		3107-0000-197-C-1C-01	J5D150180-19	G8FRV1AC	9G8FRV10	5105284
		3107-0000-197-C-1C-01	J5D150180-19	G8FRV1AA	9G8FRV10	5105292
		3107-0000-197-C-1C-02	J5D150180-20	G8FRW1AD	9G8FRW10	5105271
		3107-0000-197-C-1C-02	J5D150180-20	G8FRW1AC	9G8FRW10	5105284
		3107-0000-197-C-1C-02	J5D150180-20	G8FRW1AA	9G8FRW10	5105292
		3107-0000-197-C-1C-03	J5D150180-21	G8FRX1AD	9G8FRX10	5105271
		3107-0000-197-C-1C-03	J5D150180-21	G8FRX1AC	9G8FRX10	5105284
		3107-0000-197-C-1C-03	J5D150180-21	G8FRX1AA	9G8FRX10	5105292
		3107-0000-197-C-1C-04	J5D150180-22	G8FR21AD	9G8FR210	5105271
		3107-0000-197-C-1C-04	J5D150180-22	G8FR21AC	9G8FR210	5105284

Report No.: 28635

SDG No.	Order No.	Client Sample ID (List Order)	Lot-Sa No.	Work Order	Report DB ID	Batch No.
28704		3107-0000-197-C-1C-04	J5D150180-22	G8FR21AA	9G8FR210	5105292
		3107-0000-197-C-1C-05	J5D150180-23	G8FR31AD	9G8FR310	5105271
		3107-0000-197-C-1C-05	J5D150180-23	G8FR31AC	9G8FR310	5105284
		3107-0000-197-C-1C-05	J5D150180-23	G8FR31AA	9G8FR310	5105292
		3107-0000-197-C-1C-06	J5D150180-24	G8FR51AD	9G8FR510	5105271
		3107-0000-197-C-1C-06	J5D150180-24	G8FR51AC	9G8FR510	5105284
		3107-0000-197-C-1C-06	J5D150180-24	G8FR51AA	9G8FR510	5105292
		3107-0000-198-C-1C-01	J5D150180-25	G8FR71AD	9G8FR710	5105271
		3107-0000-198-C-1C-01	J5D150180-25	G8FR71AC	9G8FR710	5105284
		3107-0000-198-C-1C-01	J5D150180-25	G8FR71AA	9G8FR710	5105292
		3107-0000-198-C-1C-02	J5D150180-26	G8FR81AD	9G8FR810	5105271
		3107-0000-198-C-1C-02	J5D150180-26	G8FR81AC	9G8FR810	5105284
		3107-0000-198-C-1C-02	J5D150180-26	G8FR81AA	9G8FR810	5105292
		3107-0000-198-C-1C-03	J5D150180-27	G8FR91AD	9G8FR910	5105271
		3107-0000-198-C-1C-03	J5D150180-27	G8FR91AC	9G8FR910	5105284
		3107-0000-198-C-1C-03	J5D150180-27	G8FR91AA	9G8FR910	5105292
		3107-0000-198-C-1C-04	J5D150180-28	G8FTC1AD	9G8FTC10	5105271
		3107-0000-198-C-1C-04	J5D150180-28	G8FTC1AC	9G8FTC10	5105284
		3107-0000-198-C-1C-04	J5D150180-28	G8FTC1AA	9G8FTC10	5105292
		3107-0000-198-C-1C-05	J5D150180-29	G8FTD1AD	9G8FTD10	5105271
		3107-0000-198-C-1C-05	J5D150180-29	G8FTD1AC	9G8FTD10	5105284
		3107-0000-198-C-1C-05	J5D150180-29	G8FTD1AA	9G8FTD10	5105292
		3107-0000-198-C-1C-06	J5D150180-30	G8FTE1AD	9G8FTE10	5105271
		3107-0000-198-C-1C-06	J5D150180-30	G8FTE1AC	9G8FTE10	5105284
		3107-0000-198-C-1C-06	J5D150180-30	G8FTE1AA	9G8FTE10	5105292
		3107-0000-199-C-1C-01	J5D150180-31	G8FTG1AD	9G8FTG10	5105275
		3107-0000-199-C-1C-01	J5D150180-31	G8FTG1AC	9G8FTG10	5105287
		3107-0000-199-C-1C-01	J5D150180-31	G8FTG1AA	9G8FTG10	5105297
		3107-0000-199-C-1C-02	J5D150180-32	G8FTH1AD	9G8FTH10	5105275
		3107-0000-199-C-1C-02	J5D150180-32	G8FTH1AC	9G8FTH10	5105287
		3107-0000-199-C-1C-02	J5D150180-32	G8FTH1AA	9G8FTH10	5105297
		3107-0000-199-C-1C-03	J5D150180-33	G8FTJ1AD	9G8FTJ10	5105275
		3107-0000-199-C-1C-03	J5D150180-33	G8FTJ1AC	9G8FTJ10	5105287
		3107-0000-199-C-1C-03	J5D150180-33	G8FTJ1AA	9G8FTJ10	5105297
		3107-0000-199-C-1C-04	J5D150180-34	G8FTK1AD	9G8FTK10	5105275
		3107-0000-199-C-1C-04	J5D150180-34	G8FTK1AC	9G8FTK10	5105287
		3107-0000-199-C-1C-04	J5D150180-34	G8FTK1AA	9G8FTK10	5105297
		3107-0000-199-C-1C-05	J5D150180-35	G8FTL1AD	9G8FTL10	5105275
		3107-0000-199-C-1C-05	J5D150180-35	G8FTL1AC	9G8FTL10	5105287

Report No.: 28635

SDG No.	Order No.	Client Sample ID (List Order)	Lot-Sa No.	Work Order	Report DB ID	Batch No.
28704		3107-0000-199-C-1C-05	J5D150180-35	G8FTL1AA	9G8FTL10	5105297
		3107-0000-199-C-2C-06	J5D150180-36	G8FTM1AD	9G8FTM10	5105275
		3107-0000-199-C-2C-06	J5D150180-36	G8FTM1AC	9G8FTM10	5105287
		3107-0000-199-C-2C-06	J5D150180-36	G8FTM1AA	9G8FTM10	5105297
		9801-0000-030-RA-01	J5D150180-37	G8FTN1AD	9G8FTN10	5105275
		9801-0000-030-RA-01	J5D150180-37	G8FTN1AC	9G8FTN10	5105287
		9801-0000-030-RA-01	J5D150180-37	G8FTN1AA	9G8FTN10	5105297
		9801-0000-031-RA-01	J5D150180-38	G8FTX1AD	9G8FTX10	5105275
		9801-0000-031-RA-01	J5D150180-38	G8FTX1AC	9G8FTX10	5105287
		9801-0000-031-RA-01	J5D150180-38	G8FTX1AA	9G8FTX10	5105297
		9801-0000-032-RA-01	J5D150180-39	G8FT01AD	9G8FT010	5105275
		9801-0000-032-RA-01	J5D150180-39	G8FT01AC	9G8FT010	5105287
		9801-0000-032-RA-01	J5D150180-39	G8FT01AA	9G8FT010	5105297
		9801-0000-033-RA-01	J5D150180-40	G8FT11AD	9G8FT110	5105275
		9801-0000-033-RA-01	J5D150180-40	G8FT11AC	9G8FT110	5105287
		9801-0000-033-RA-01	J5D150180-40	G8FT11AA	9G8FT110	5105297
		9801-0000-034-RA-01	J5D150180-41	G8FT21AD	9G8FT210	5105275
		9801-0000-034-RA-01	J5D150180-41	G8FT21AC	9G8FT210	5105287
		9801-0000-034-RA-01	J5D150180-41	G8FT21AA	9G8FT210	5105297
		9801-0000-039-RA	J5D150180-43	G8FT61AD	9G8FT610	5105275
		9801-0000-039-RA	J5D150180-43	G8FT61AC	9G8FT610	5105287
		9801-0000-039-RA	J5D150180-43	G8FT61AA	9G8FT610	5105297
		9801-0000-040-RA-01	J5D150180-42	G8FT41AD	9G8FT410	5105275
		9801-0000-040-RA-01	J5D150180-42	G8FT41AC	9G8FT410	5105287
		9801-0000-040-RA-01	J5D150180-42	G8FT41AA	9G8FT410	5105297

SEVERN TRENT STL

STL Richland
2800 George Washington Way
Richland, WA 99354

Tel: 509 375 3131 Fax: 509 375 5590
www.stl-inc.com

Certificate of Analysis

Connecticut Yankee Atomic Power Company
362 Injun Hollow Road
East Hampton, CT 06424

April 21, 2005

Attention: Pete Hollenbeck

Date Received in Lab	:	April 15, 2005
Number of Samples / Type	:	Forty-Three (43) / Concrete, Bedrock, Soil
SDG Number	:	28704
Project Name/Number	:	Haddam Neck Decommissioning
COC Number(s)	:	2005-00136, 2005-00137, 2005-00138, 2005-00139, 2005-00140
Purchase Order Number	:	002133
MSR	:	05-1144

CASE NARRATIVE

I. Introduction

On April 15, 2005, forty-three concrete, bedrock, and soil samples were received at STL Richland (STLR). Upon receipt, the samples were assigned the STLR identification numbers as described on the cover page of the Analytical Data Package report form. The samples were assigned to Lot Number J5D150180.

II. Sample Receipt

The samples were received in good condition and no anomalies were noted during check-in.

The requested priority was 7-days. The following exceptions to the FSS project requirements were confirmed via email from D. Keefer on 3/29/05:

- The Total Strontium method would be performed in lieu of Strontium-90 due to the priority turnaround time required.
- The Strontium RDL requested is 0.025 pCi/g.

III. Analytical Results/Methodology

The analytical results for this report are presented by laboratory sample ID. Each set of data includes sample identification information, analytical results and the appropriate associated statistical errors.

The requested analyses were: **Gas Proportional Counting**
Total Strontium by method RICH-RC-5006
Gamma Spectroscopy
Gamma Spec by method RICH-RC-5017
Liquid Scintillation Counting
Tritium by method RICH-RC-5037

IV. Quality Control

The analytical result for each analysis performed includes a minimum of one laboratory control sample (LCS), and one reagent blank sample analysis. Any exceptions have been noted in the "Comments" section.

QC and sample results are reported in the same units.

V. Comments

The samples were processed in three (four for Tritium) separate analysis batches. Notes for each analytical batch are detailed below.

Gas Proportional Counting
Total Strontium by method RICH-RC-5006:
Batch 5105271: The LCS, batch blank, sample, and sample duplicate (3107-0000-197-C-1C-03) results are within acceptance limits.

Batch 5105267: The LCS, batch blank, sample, and sample duplicate (3107-0000-194-C-1C-01) results are within acceptance limits.

Batch 5105275: The achieved MDAs for samples 3107-0000-199-C-1C-02 (0.0306 pCi/g), 3107-0000-199-C-1C-04 (0.0290 pCi/g) and 9801-0000-033-RA-01 (0.0273 pCi/g) are greater than the RDL (0.025 pCi/g) due to tracer yields less than 50%. The tracer yields for these samples are greater than the minimum acceptance limits, therefore the results are included in the report. Except as noted, the LCS, batch blank, sample, and sample duplicate (3107-0000-199-C-1C-01) results are within acceptance limits.

Gamma Spectroscopy
Gamma Spec by method RICH-RC-5017:
Batch 5105290: The LCS, batch blank, sample, and sample duplicate (3107-0000-194-C-1C-01) results are within acceptance limits.

Batch 5105292: The LCS, batch blank, sample, and sample duplicate (3107-0000-196-C-2C-04) results are within acceptance limits.

Batch 5105297: The LCS, batch blank, sample, and sample duplicate (3107-0000-199-C-1C-01) results are within acceptance limits.

Liquid Scintillation Counting
Tritium by method RICH-RC-5037:
Batch 5105284: The LCS, batch blank, sample, and sample duplicate (3107-0000-194-C-2C-06) results are within acceptance limits.

Batch 5105287: The LCS, batch blank, sample, and sample duplicate (3107-0000-199-C-1C-01) results are within acceptance limits.

Batch 5105278: The LCS, batch blank, sample, and sample duplicate (3107-0000-194-C-1C-04) results are within acceptance limits.

I certify that this Certificate of Analysis 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.

Reviewed and approved:

for Jackie Waddell
Jackie Waddell
Laboratory Director

Drinking Water Method Cross References

	DRINKING WATER ASTM METHOD CROSS REFERENCES	
Referenced Method	**Isotope(s)**	**STL Richland's SOP number**
EPA 901.1	Cs-134, I-131	RICH-RC-5017
EPA 900.0	Alpha & Beta	RICH-RC-5014
EPA 903.1	Ra-226	RICH-RC-5005
EPA 904.0	Ra-228	RICH-RC-5005
EPA 905.0	Sr89/90	RICH-RC-5006
ASTM D2460	Total Radium	RICH-RC-5027
Standard Method 7500-U-C & ASTM D5174	Uranium	RICH-RC-5058
EPA 906.0	Tritium	RICH-RC-5007
NOTE:		
The Gross Alpha LCS is prepared with Am-241 (unless otherwise specified in the case narrative)		
The Gross Beta LCS is prepared with Sr/Y-90 (unless otherwise specified in the case narrative)		

Uncertainty Estimation

STL Richland has adopted the internationally accepted approach to estimating uncertainties described in "NIST Technical Note 1297, 1994 Edition". The approach, "Law of Propagation of Errors", involves the identification of all variables in an analytical method which are used to derive a result. These variables are related to the analytical result (R) by some functional relationship, R = constants * f(x,y,z,...). The components (x,y,z) are evaluated to determine their contribution to the overall method uncertainty. The individual component uncertainties (u_i) are then combined using a statistical model that provides the most probable overall uncertainty value. All component uncertainties are categorized as type A, evaluated by statistical methods, or type B, evaluated by other means. Uncertainties not included in the components, such as sample homogeneity, are combined with the component uncertainty as the square root of the sum-of-the-squares of the individual uncertainties. The uncertainty associated with the derived result is the combined uncertainty (u_c) multiplied by the coverage factor (1,2, or 3).

When three or more sample replicates are used to derive the analytical result, the type A uncertainty is the standard deviation of the mean value (S/vn), where S is the standard deviation of the derived results. The type B uncertainties are all other random or non-random components that are not included in the standard deviation.

The derivation of the general "Law of Propagation of Errors" equations and specific example are available on request.

Report Definitions

Action Lev	An agreed upon activity level used to trigger some action when the final result is greater than or equal to the Action Level. Often the Action Level is related to the Decision Limit.
Batch	The QC preparation batch number that relates laboratory samples to QC samples that were prepared and analyzed together.
Bias	Defined by the equation (Result/Expected)-1 as defined by ANSI N13.30.
COC No	Chain of Custody Number assigned by the Client or STL Richland.
Count Error (#s)	Poisson counting statistics of the gross sample count and background. The uncertainty is absolute and in the same units as the result. For Liquid Scintillation Counting (LSC) the batch blank count is the background.
Total Uncert (#s) ***u_c - Combined Uncertainty.***	All known uncertainties associated with the preparation and analysis of the sample are propagated to give a measure of the uncertainty associated with the result, ***u_c the combined uncertainty.*** The uncertainty is absolute and in the same units as the result.
(#s), Coverage Factor	The coverage factor defines the width of the confidence interval, 1, 2 or 3 standard deviations.
CRDL (RL)	Contractual Required Detection Limit as defined in the Client's Statement Of Work or STL Richland "default" nominal detection limit. Often referred to the reporting level (RL)
Lc	Decision Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume associated with the sample. The Type I error probability is approximately 5%. Lc=(1.645 * Sqrt(2*(BkgrndCnt/BkgrndCntMin)/SCntMin)) * (ConvFct/(Eff*Yld*Abn*Vol) * IngrFct). For LSC methods the batch blank is used as a measure of the background variability. Lc cannot be calculated when the background count is zero.
Lot-Sample No	The number assigned by the LIMS software to track samples received on the same day for a given client. The sample number is a sequential number assigned to each sample in the Lot.
MDC|MDA	Detection Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume with a Type I and II error probability of approximately 5%. MDC = (4.65 * Sqrt((BkgrndCnt/BkgrndCntMin)/SCntMin) + 2.71/SCntMin) * (ConvFct/(Eff * Yld * Abn * Vol) * IngrFct). For LSC methods the batch blank is used as a measure of the background variability.
Primary Detector	The instrument identifier associated with the analysis of the sample aliquot.
Ratio U-234/U-238	The U-234 result divided by the U-238 result. The U-234/U-238 ratio for natural uranium in NIST SRM 4321C is 1.038.
Rst/MDC	Ratio of the Result to the MDC. A value greater than 1 may indicate activity above background at a high level of confidence. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Rst/TotUcert	Ratio of the Result to the Total Uncertainty. If the uncertainty has a coverage factor of 2 a value greater than 1 may indicate activity above background at approximately the 95% level of confidence assuming a two-sided confidence interval. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Report DB No	Sample Identifier used by the report system. The number is based upon the first five digits of the **Work Order** Number.
RER	The equation Replicate Error Ratio = (S-D)/[sqrt($TPUs^2$ + $TPUd^2$)] as defined by ICPT BOA where S is the original sample result, D is the result of the duplicate, TPUs is the total uncertainty of the original sample and TPUd is the total uncertainty of the duplicate sample.
SDG	Sample Delivery Group Number assigned by the Client or assigned by STL Richland upon sample receipt.
Sum Rpt Alpha Spec Rst(s)	The sum of the reported alpha spec results for tests derived from the same sample excluding duplicate result where the results are in the same units.
Work Order	The LIMS software assign test specific identifier.
Yield	The recovery of the tracer added to the sample such as Pu-242 used to trace a Pu-239/40 method.

Sample Results Summary

Date: 21-Apr-05

STL Richland STLR

Ordered by Method, Batch No., Client Sample ID.

Report No. : 28635 **SDG No:** 28704

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RER2
5105290	RICHRC5017								
3107-0000-194-C-1C-01									
	G8FQQ1AA	AC-228	4.10E-01 +- 1.74E-01	U	pCi/g		3.33E-01		
		AG-108M	1.60E-02 +- 2.56E-02	U	pCi/g		4.80E-02		
		AM-241	1.78E-02 +- 8.76E-02	U	pCi/g		1.55E-01		
		BI-212	5.33E-01 +- 4.66E-01	U	pCi/g		9.13E-01		
		BI-214	3.21E-01 +- 1.61E-01	U	pCi/g		1.99E-01		
		CO-60	1.89E-02 +- 3.43E-02	U	pCi/g		6.91E-02	3.00E+00	
		CS-134	2.99E-03 +- 3.13E-02	U	pCi/g		5.83E-02	1.00E+01	
		CS-137	1.15E-02 +- 2.93E-02	U	pCi/g		5.53E-02	2.00E+01	
		EU-152	-6.49E-02 +- 9.38E-02	U	pCi/g		1.31E-01	9.00E+00	
		EU-154	-6.34E-02 +- 9.71E-02	U	pCi/g		1.64E-01	7.00E+00	
		EU-155	7.20E-02 +- 7.26E-02	U	pCi/g		1.31E-01	3.00E+02	
		K-40	7.92E+00 +- 1.49E+00		pCi/g		5.64E-01		
		MN-54	2.50E-03 +- 3.33E-02	U	pCi/g		6.05E-02	2.00E+00	
		NB-94	-8.07E-03 +- 2.30E-02	U	pCi/g		4.06E-02	3.00E-01	
		PB-212	3.97E-01 +- 9.99E-02		pCi/g		1.08E-01		
		PB-214	3.17E-01 +- 1.75E-01		pCi/g		1.07E-01		
		RA-226	3.21E-01 +- 1.61E-01	U	pCi/g		1.99E-01		
		TL-208	1.75E-01 +- 6.16E-02	U	pCi/g		9.20E-02		
3107-0000-194-C-1C-01 DUP									
	G8FQQ1AH	AC-228	4.47E-01 +- 1.77E-01	U	pCi/g		3.46E-01		
		AG-108M	-1.48E-02 +- 2.85E-02	U	pCi/g		4.83E-02		
		AM-241	-2.48E-01 +- 1.41E-01	U	pCi/g		2.13E-01		
		BI-212	2.85E-01 +- 4.58E-01	U	pCi/g		8.55E-01		
		BI-214	4.65E-01 +- 1.23E-01	U	pCi/g		2.02E-01		
		CO-60	1.93E-02 +- 3.36E-02	U	pCi/g		6.64E-02	3.00E+00	
		CS-134	3.08E-02 +- 3.76E-02	U	pCi/g		7.11E-02	1.00E+01	
		CS-137	1.50E-02 +- 3.29E-02	U	pCi/g		6.08E-02	2.00E+01	
		EU-152	-2.61E-01 +- 1.36E-01	U	pCi/g		1.56E-01	9.00E+00	
		EU-154	-4.81E-02 +- 1.13E-01	U	pCi/g		1.93E-01	7.00E+00	
		EU-155	3.23E-02 +- 9.83E-02	U	pCi/g		1.71E-01	3.00E+02	
		K-40	7.12E+00 +- 1.40E+00		pCi/g		5.05E-01		
		MN-54	-4.06E-03 +- 3.06E-02	U	pCi/g		5.45E-02	2.00E+00	
		NB-94	1.24E-02 +- 2.74E-02	U	pCi/g		5.24E-02	3.00E-01	
		PB-212	6.00E-01 +- 1.42E-01		pCi/g		9.07E-02		
		PB-214	2.48E-01 +- 1.04E-01		pCi/g		1.03E-01		
		RA-226	4.65E-01 +- 1.23E-01	U	pCi/g		2.02E-01		

STL Richland

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RER2 - Replicate Error Ratio = (S-D)/|sqrt(sq(TPUs)+sq(TPUd))| as defined by ICPT BOA.

U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

Sample Results Summary

STL Richland STLR

Ordered by Method, Batch No., Client Sample ID.

Date: 21-Apr-05

Report No. : 28635

SDG No: 28704

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RER2
5105290	**RICHRC5017**								
3107-0000-194-C-1C-01 DUP									
	G8FQQ1AH	TL-208	1.17E-01 +- 6.76E-02	U	pCi/g		8.84E-02		
3107-0000-194-C-1C-02									
	G8FQX1AA	AC-228	3.17E-01 +- 1.30E-01	U	pCi/g		2.04E-01		
		AG-108M	-1.32E-02 +- 1.48E-02	U	pCi/g		2.37E-02		
		AM-241	-5.77E-03 +- 6.60E-02	U	pCi/g		1.14E-01		
		BI-212	5.82E-01 +- 2.67E-01	U	pCi/g		5.48E-01		
		BI-214	5.08E-01 +- 9.70E-02		pCi/g		6.35E-02		
		CO-60	-8.34E-03 +- 1.77E-02	U	pCi/g		3.03E-02	3.00E+00	
		CS-134	1.73E-02 +- 1.95E-02	U	pCi/g		3.83E-02	1.00E+01	
		CS-137	1.51E-04 +- 2.01E-02	U	pCi/g		3.55E-02	2.00E+01	
		EU-152	-1.90E-02 +- 4.98E-02	U	pCi/g		8.52E-02	9.00E+00	
		EU-154	2.95E-02 +- 5.44E-02	U	pCi/g		1.06E-01	7.00E+00	
		EU-155	2.34E-03 +- 5.94E-02	U	pCi/g		1.02E-01	3.00E+02	
		K-40	7.63E+00 +- 1.20E+00		pCi/g		3.18E-01		
		MN-54	5.18E-03 +- 1.95E-02	U	pCi/g		3.58E-02	2.00E+00	
		NB-94	-1.03E-02 +- 1.88E-02	U	pCi/g		3.16E-02	3.00E-01	
		PB-212	3.64E-01 +- 7.42E-02		pCi/g		6.87E-02		
		PB-214	4.74E-01 +- 1.06E-01		pCi/g		6.45E-02		
		RA-226	5.08E-01 +- 9.70E-02		pCi/g		6.35E-02		
		TL-208	1.20E-01 +- 2.93E-02		pCi/g		2.94E-02		
3107-0000-194-C-1C-03									
	G8FQ01AA	AC-228	5.45E-01 +- 1.36E-01	U	pCi/g		2.32E-01		
		AG-108M	1.16E-02 +- 1.52E-02	U	pCi/g		2.85E-02		
		AM-241	-5.47E-02 +- 1.22E-01	U	pCi/g		2.04E-01		
		BI-212	3.55E-01 +- 2.90E-01	U	pCi/g		5.67E-01		
		BI-214	7.08E-01 +- 1.36E-01		pCi/g		6.27E-02		
		CO-60	1.12E-02 +- 1.90E-02	U	pCi/g		3.81E-02	3.00E+00	
		CS-134	1.94E-02 +- 2.05E-02	U	pCi/g		4.02E-02	1.00E+01	
		CS-137	-2.69E-02 +- 2.67E-02	U	pCi/g		4.80E-02	2.00E+01	
		EU-152	5.57E-02 +- 4.99E-02	U	pCi/g		9.52E-02	9.00E+00	
		EU-154	1.66E-02 +- 5.65E-02	U	pCi/g		1.08E-01	7.00E+00	
		EU-155	5.22E-02 +- 6.23E-02	U	pCi/g		1.15E-01	3.00E+02	
		K-40	7.46E+00 +- 1.54E+00		pCi/g		3.20E-01		
		MN-54	-1.07E-02 +- 1.92E-02	U	pCi/g		3.20E-02	2.00E+00	
		NB-94	-7.19E-03 +- 1.71E-02	U	pCi/g		2.90E-02	3.00E-01	
		PB-212	4.72E-01 +- 9.15E-02		pCi/g		4.97E-02		
		PB-214	8.57E-01 +- 1.56E-01		pCi/g		6.78E-02		

STL Richland **RER2 - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.**

rptSTLRchSaSummary2 V4.12 A97 **U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.**

Sample Results Summary

STL Richland STLR

Ordered by Method, Batch No., Client Sample ID.

Date: 21-Apr-05

Report No. : 28635

SDG No: 28704

Batch	Client Id / Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RER2
5105290	RICHRC5017								
	3107-0000-194-C-1C-03								
	G8FQ01AA	RA-226	7.08E-01 +- 1.36E-01		pCi/g		6.27E-02		
		TL-208	1.59E-01 +- 4.55E-02	U	pCi/g		6.54E-02		
	3107-0000-194-C-1C-04								
	G8FQ11AA	AC-228	5.62E-01 +- 1.67E-01		pCi/g		1.35E-01		
		AG-108M	-1.04E-02 +- 2.03E-02	U	pCi/g		3.43E-02		
		AM-241	-5.48E-02 +- 1.38E-01	U	pCi/g		2.37E-01		
		BI-212	7.02E-01 +- 4.19E-01	U	pCi/g		8.38E-01		
		BI-214	4.85E-01 +- 1.12E-01	U	pCi/g		1.95E-01		
		CO-60	-7.14E-04 +- 2.17E-02	U	pCi/g		4.23E-02	3.00E+00	
		CS-134	2.85E-02 +- 2.88E-02	U	pCi/g		5.78E-02	1.00E+01	
		CS-137	-2.35E-02 +- 2.40E-02	U	pCi/g		3.77E-02	2.00E+01	
		EU-152	-1.08E-02 +- 6.11E-02	U	pCi/g		1.05E-01	9.00E+00	
		EU-154	3.92E-02 +- 7.40E-02	U	pCi/g		1.52E-01	7.00E+00	
		EU-155	3.75E-02 +- 7.61E-02	U	pCi/g		1.33E-01	3.00E+02	
		K-40	6.84E+00 +- 1.35E+00		pCi/g		4.40E-01		
		MN-54	-2.65E-02 +- 2.50E-02	U	pCi/g		3.91E-02	2.00E+00	
		NB-94	-7.83E-03 +- 2.45E-02	U	pCi/g		4.29E-02	3.00E-01	
		PB-212	3.69E-01 +- 9.46E-02		pCi/g		8.05E-02		
		PB-214	5.01E-01 +- 1.36E-01		pCi/g		8.67E-02		
		RA-226	4.85E-01 +- 1.12E-01		pCi/g		8.82E-02		
		TL-208	1.49E-01 +- 4.85E-02	U	pCi/g		8.16E-02		
	3107-0000-194-C-1C-05								
	G8FQ21AA	AC-228	3.59E-01 +- 1.92E-01	U	pCi/g		2.93E-01		
		AG-108M	2.42E-02 +- 2.19E-02	U	pCi/g		4.19E-02		
		AM-241	2.99E-02 +- 7.93E-02	U	pCi/g		1.35E-01		
		BI-212	5.30E-01 +- 3.86E-01	U	pCi/g		7.74E-01		
		BI-214	3.72E-01 +- 1.14E-01	U	pCi/g		1.81E-01		
		CO-60	1.62E-02 +- 2.43E-02	U	pCi/g		5.09E-02	3.00E+00	
		CS-134	1.26E-02 +- 2.74E-02	U	pCi/g		5.24E-02	1.00E+01	
		CS-137	-6.91E-03 +- 2.43E-02	U	pCi/g		4.21E-02	2.00E+01	
		EU-152	-1.18E-02 +- 5.98E-02	U	pCi/g		1.05E-01	9.00E+00	
		EU-154	3.59E-02 +- 8.06E-02	U	pCi/g		1.59E-01	7.00E+00	
		EU-155	4.76E-02 +- 6.54E-02	U	pCi/g		1.19E-01	3.00E+02	
		K-40	6.40E+00 +- 1.24E+00		pCi/g		4.64E-01		
		MN-54	-5.54E-03 +- 2.65E-02	U	pCi/g		4.65E-02	2.00E+00	
		NB-94	-1.12E-03 +- 2.48E-02	U	pCi/g		4.45E-02	3.00E-01	
		PB-212	3.51E-01 +- 8.89E-02		pCi/g		8.55E-02		

STL Richland

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RER2 - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.

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Sample Results Summary

STL Richland STLR

Ordered by Method, Batch No., Client Sample ID.

Date: 21-Apr-05

Report No. : 28635

SDG No: 28704

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RER2
5105290	RICHRC5017								
	3107-0000-194-C-1C-05								
	G8FQ21AA	PB-214	5.67E-01 +- 1.47E-01		pCi/g		7.78E-02		
		RA-226	3.72E-01 +- 1.14E-01	U	pCi/g		1.81E-01		
		TL-208	1.02E-01 +- 5.58E-02		pCi/g		4.74E-02		
	3107-0000-194-C-2C-06								
	G8FQ31AA	AC-228	4.54E-01 +- 1.72E-01	U	pCi/g		2.81E-01		
		AG-108M	4.50E-03 +- 1.93E-02	U	pCi/g		3.49E-02		
		AM-241	2.31E-02 +- 4.76E-02	U	pCi/g		7.32E-02		
		BI-212	3.78E-01 +- 3.94E-01	U	pCi/g		7.61E-01		
		BI-214	5.03E-01 +- 1.14E-01	U	pCi/g		1.89E-01		
		CO-60	-1.38E-03 +- 2.50E-02	U	pCi/g		4.76E-02	3.00E+00	
		CS-134	2.47E-02 +- 2.88E-02	U	pCi/g		5.63E-02	1.00E+01	
		CS-137	7.31E-03 +- 2.53E-02	U	pCi/g		4.70E-02	2.00E+01	
		EU-152	-3.43E-02 +- 6.17E-02	U	pCi/g		1.03E-01	9.00E+00	
		EU-154	2.03E-02 +- 8.72E-02	U	pCi/g		1.64E-01	7.00E+00	
		EU-155	-5.46E-02 +- 6.39E-02	U	pCi/g		1.04E-01	3.00E+02	
		K-40	6.41E+00 +- 1.18E+00		pCi/g		3.65E-01		
		MN-54	5.97E-03 +- 2.34E-02	U	pCi/g		4.37E-02	2.00E+00	
		NB-94	-3.42E-03 +- 1.98E-02	U	pCi/g		3.64E-02	3.00E-01	
		PB-212	3.60E-01 +- 9.05E-02		pCi/g		9.50E-02		
		PB-214	5.73E-01 +- 1.36E-01		pCi/g		8.11E-02		
		RA-226	5.03E-01 +- 1.14E-01		pCi/g		6.85E-02		
		TL-208	9.30E-02 +- 5.52E-02		pCi/g		4.47E-02		
	3107-0000-195-C-1C-01								
	G8FQ71AA	AC-228	3.36E-01 +- 1.13E-01	U	pCi/g		2.13E-01		
		AG-108M	-7.50E-03 +- 1.42E-02	U	pCi/g		2.36E-02		
		AM-241	-1.49E-02 +- 1.08E-01	U	pCi/g		1.83E-01		
		BI-212	9.70E-01 +- 4.48E-01	U	pCi/g		5.44E-01		
		BI-214	4.96E-01 +- 1.17E-01	U	pCi/g		1.48E-01		
		CO-60	-1.28E-03 +- 1.74E-02	U	pCi/g		3.26E-02	3.00E+00	
		CS-134	1.37E-02 +- 2.20E-02	U	pCi/g		4.17E-02	1.00E+01	
		CS-137	3.78E-02 +- 2.84E-02	J	pCi/g		3.76E-02	2.00E+01	
		EU-152	1.06E-02 +- 4.61E-02	U	pCi/g		8.39E-02	9.00E+00	
		EU-154	4.90E-03 +- 5.96E-02	U	pCi/g		1.11E-01	7.00E+00	
		EU-155	2.51E-02 +- 5.78E-02	U	pCi/g		1.04E-01	3.00E+02	
		K-40	7.64E+00 +- 1.56E+00		pCi/g		2.79E-01		
		MN-54	3.70E-03 +- 1.80E-02	U	pCi/g		3.31E-02	2.00E+00	
		NB-94	3.55E-03 +- 1.78E-02	U	pCi/g		3.27E-02	3.00E-01	

STL Richland

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RER2 - Replicate Error Ratio = (S-D)/|sqrt(sq(TPUs)+sq(TPUd))| as defined by ICPT BOA.

J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.

U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

Sample Results Summary

STL Richland STLR

Ordered by Method, Batch No., Client Sample ID.

Date: 21-Apr-05

Report No. : 28635

SDG No: 28704

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RER2
5105290	RICHRC5017								
	3107-0000-195-C-1C-01								
	G8FQ71AA	PB-212	4.14E-01 +- 8.01E-02		pCi/g		4.91E-02		
		PB-214	5.41E-01 +- 1.16E-01		pCi/g		5.93E-02		
		RA-226	4.96E-01 +- 1.17E-01		pCi/g		5.27E-02		
		TL-208	1.39E-01 +- 3.80E-02	U	pCi/g		6.16E-02		
	3107-0000-195-C-1C-02								
	G8FQ91AA	AC-228	2.71E-01 +- 1.36E-01	U	pCi/g		2.67E-01		
		AG-108M	4.33E-03 +- 2.35E-02	U	pCi/g		4.20E-02		
		AM-241	-5.50E-02 +- 1.16E-01	U	pCi/g		1.91E-01		
		BI-212	4.49E-01 +- 4.44E-01	U	pCi/g		8.32E-01		
		BI-214	4.69E-01 +- 1.11E-01	U	pCi/g		1.81E-01		
		CO-60	-1.47E-02 +- 3.06E-02	U	pCi/g		5.21E-02	3.00E+00	
		CS-134	-5.66E-03 +- 3.16E-02	U	pCi/g		5.48E-02	1.00E+01	
		CS-137	9.81E-03 +- 2.86E-02	U	pCi/g		5.21E-02	2.00E+01	
		EU-152	-1.27E-01 +- 1.00E-01	U	pCi/g		1.29E-01	9.00E+00	
		EU-154	-9.65E-02 +- 9.21E-02	U	pCi/g		1.43E-01	7.00E+00	
		EU-155	-1.84E-02 +- 8.35E-02	U	pCi/g		1.41E-01	3.00E+02	
		K-40	5.77E+00 +- 1.08E+00		pCi/g		3.32E-01		
		MN-54	-5.51E-03 +- 2.58E-02	U	pCi/g		4.56E-02	2.00E+00	
		NB-94	-1.13E-02 +- 2.55E-02	U	pCi/g		4.39E-02	3.00E-01	
		PB-212	4.21E-01 +- 1.14E-01		pCi/g		7.75E-02		
		PB-214	5.31E-01 +- 1.32E-01		pCi/g		8.64E-02		
		RA-226	4.69E-01 +- 1.11E-01	U	pCi/g		1.81E-01		
		TL-208	1.02E-01 +- 3.75E-02	U	pCi/g		7.19E-02		
	3107-0000-195-C-1C-03								
	G8FRA1AA	AC-228	4.70E-01 +- 2.06E-01	U	pCi/g		3.18E-01		
		AG-108M	2.43E-02 +- 2.07E-02	U	pCi/g		4.08E-02		
		AM-241	4.16E-02 +- 1.29E-01	U	pCi/g		2.33E-01		
		BI-212	4.61E-01 +- 3.74E-01	U	pCi/g		7.47E-01		
		BI-214	4.13E-01 +- 1.24E-01	U	pCi/g		1.80E-01		
		CO-60	-3.05E-03 +- 2.60E-02	U	pCi/g		4.89E-02	3.00E+00	
		CS-134	1.83E-02 +- 2.56E-02	U	pCi/g		5.14E-02	1.00E+01	
		CS-137	2.05E-02 +- 2.57E-02	U	pCi/g		5.03E-02	2.00E+01	
		EU-152	4.90E-03 +- 7.13E-02	U	pCi/g		1.25E-01	9.00E+00	
		EU-154	-1.17E-02 +- 8.49E-02	U	pCi/g		1.57E-01	7.00E+00	
		EU-155	3.04E-02 +- 7.16E-02	U	pCi/g		1.26E-01	3.00E+02	
		K-40	7.45E+00 +- 1.45E+00		pCi/g		5.34E-01		
		MN-54	1.14E-02 +- 2.40E-02	U	pCi/g		4.66E-02	2.00E+00	

STL Richland **RER2** - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.

rptSTLRchSaSummary2 V4.12 A97 **U Qual** - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

Sample Results Summary

Date: 21-Apr-05

STL Richland STLR

Ordered by Method, Batch No., Client Sample ID.

Report No. : 28635 **SDG No:** 28704

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RER2
5105290	RICHRC5017								
3107-0000-195-C-1C-03									
	G8FRA1AA	NB-94	-3.48E-03 +- 2.24E-02	U	pCi/g		4.04E-02	3.00E-01	
		PB-212	4.12E-01 +- 1.03E-01		pCi/g		8.24E-02		
		PB-214	4.42E-01 +- 1.31E-01		pCi/g		8.53E-02		
		RA-226	4.13E-01 +- 1.24E-01	U	pCi/g		1.80E-01		
		TL-208	8.34E-02 +- 6.44E-02		pCi/g		4.00E-02		
3107-0000-195-C-1C-04									
	G8FRC1AA	AC-228	5.00E-01 +- 1.96E-01	U	pCi/g		3.28E-01		
		AG-108M	7.88E-03 +- 2.48E-02	U	pCi/g		4.49E-02		
		AM-241	-2.24E-03 +- 8.81E-02	U	pCi/g		1.51E-01		
		BI-212	5.20E-01 +- 4.41E-01	U	pCi/g		8.76E-01		
		BI-214	3.22E-01 +- 1.12E-01	U	pCi/g		1.93E-01		
		CO-60	4.84E-04 +- 2.43E-02	U	pCi/g		4.76E-02	3.00E+00	
		CS-134	1.33E-03 +- 3.12E-02	U	pCi/g		5.71E-02	1.00E+01	
		CS-137	-3.05E-03 +- 2.75E-02	U	pCi/g		4.88E-02	2.00E+01	
		EU-152	1.78E-02 +- 7.26E-02	U	pCi/g		1.33E-01	9.00E+00	
		EU-154	6.84E-02 +- 8.91E-02	U	pCi/g		1.84E-01	7.00E+00	
		EU-155	5.07E-02 +- 7.23E-02	U	pCi/g		1.31E-01	3.00E+02	
		K-40	8.18E+00 +- 1.47E+00		pCi/g		6.01E-01		
		MN-54	-2.10E-02 +- 2.66E-02	U	pCi/g		4.32E-02	2.00E+00	
		NB-94	-1.26E-02 +- 2.79E-02	U	pCi/g		4.75E-02	3.00E-01	
		PB-212	3.73E-01 +- 1.06E-01		pCi/g		1.04E-01		
		PB-214	5.10E-01 +- 1.24E-01		pCi/g		9.27E-02		
		RA-226	3.22E-01 +- 1.12E-01		pCi/g		9.45E-02		
		TL-208	9.81E-02 +- 5.29E-02		pCi/g		4.50E-02		
3107-0000-195-C-2C-05									
	G8FRF1AA	AC-228	3.52E-01 +- 1.32E-01	U	pCi/g		2.73E-01		
		AG-108M	1.33E-02 +- 1.86E-02	U	pCi/g		3.53E-02		
		AM-241	-4.04E-02 +- 4.27E-02	U	pCi/g		7.05E-02		
		BI-212	4.37E-01 +- 3.68E-01	U	pCi/g		7.34E-01		
		BI-214	5.01E-01 +- 1.13E-01	U	pCi/g		1.85E-01		
		CO-60	-2.50E-02 +- 2.41E-02	U	pCi/g		3.71E-02	3.00E+00	
		CS-134	2.11E-02 +- 3.15E-02	U	pCi/g		6.00E-02	1.00E+01	
		CS-137	-3.33E-03 +- 2.48E-02	U	pCi/g		4.42E-02	2.00E+01	
		EU-152	-8.54E-03 +- 7.15E-02	U	pCi/g		1.15E-01	9.00E+00	
		EU-154	9.34E-02 +- 8.23E-02	U	pCi/g		1.74E-01	7.00E+00	
		EU-155	1.37E-03 +- 6.43E-02	U	pCi/g		1.11E-01	3.00E+02	
		K-40	7.69E+00 +- 1.36E+00		pCi/g		4.47E-01		

STL Richland

rptSTLRchSaSummary2 V4.12 A97

RER2 - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.

U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

Sample Results Summary

Date: 21-Apr-05

STL Richland STLR

Ordered by Method, Batch No., Client Sample ID.

Report No. : 28635 **SDG No:** 28704

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RER2
5105290	RICHRC5017								
	3107-0000-195-C-2C-05								
	G8FRF1AA	MN-54	2.75E-02 +- 2.49E-02	U	pCi/g		5.04E-02	2.00E+00	
		NB-94	1.89E-03 +- 2.13E-02	U	pCi/g		4.05E-02	3.00E-01	
		PB-212	3.94E-01 +- 9.41E-02		pCi/g		7.23E-02		
		PB-214	4.51E-01 +- 1.10E-01		pCi/g		8.50E-02		
		RA-226	5.01E-01 +- 1.13E-01	U	pCi/g		1.85E-01		
		TL-208	9.84E-02 +- 5.35E-02	U	pCi/g		7.84E-02		
	3107-0000-195-C-2C-06								
	G8FRG1AA	AC-228	5.61E-01 +- 1.82E-01	U	pCi/g		2.33E-01		
		AG-108M	-3.30E-03 +- 1.47E-02	U	pCi/g		2.52E-02		
		AM-241	-3.39E-02 +- 1.29E-01	U	pCi/g		2.14E-01		
		BI-212	6.36E-01 +- 2.89E-01	U	pCi/g		5.94E-01		
		BI-214	5.90E-01 +- 1.03E-01	U	pCi/g		1.58E-01		
		CO-60	1.60E-02 +- 1.75E-02	U	pCi/g		3.71E-02	3.00E+00	
		CS-134	1.21E-02 +- 2.16E-02	U	pCi/g		4.09E-02	1.00E+01	
		CS-137	4.50E-03 +- 2.40E-02	U	pCi/g		4.75E-02	2.00E+01	
		EU-152	-2.19E-02 +- 4.71E-02	U	pCi/g		8.06E-02	9.00E+00	
		EU-154	-2.88E-02 +- 5.98E-02	U	pCi/g		1.03E-01	7.00E+00	
		EU-155	2.15E-02 +- 5.61E-02	U	pCi/g		1.01E-01	3.00E+02	
		K-40	7.54E+00 +- 1.56E+00		pCi/g		2.69E-01		
		MN-54	-7.40E-03 +- 2.01E-02	U	pCi/g		3.45E-02	2.00E+00	
		NB-94	-1.59E-02 +- 1.55E-02	U	pCi/g		2.38E-02	3.00E-01	
		PB-212	4.44E-01 +- 8.73E-02		pCi/g		5.14E-02		
		PB-214	6.84E-01 +- 1.35E-01		pCi/g		5.90E-02		
		RA-226	5.90E-01 +- 1.03E-01	U	pCi/g		1.58E-01		
		TL-208	1.12E-01 +- 3.56E-02		pCi/g		2.85E-02		
	3107-0000-196-C-1C-01								
	G8FRH1AA	AC-228	4.81E-01 +- 2.05E-01	U	pCi/g		3.30E-01		
		AG-108M	-6.07E-03 +- 2.48E-02	U	pCi/g		4.31E-02		
		AM-241	-1.60E-01 +- 1.45E-01	U	pCi/g		2.30E-01		
		BI-212	4.37E-01 +- 4.71E-01	U	pCi/g		8.85E-01		
		BI-214	5.71E-01 +- 1.36E-01	U	pCi/g		2.11E-01		
		CO-60	1.76E-02 +- 3.19E-02	U	pCi/g		6.27E-02	3.00E+00	
		CS-134	-8.43E-03 +- 3.44E-02	U	pCi/g		5.94E-02	1.00E+01	
		CS-137	8.15E-03 +- 3.39E-02	U	pCi/g		6.12E-02	2.00E+01	
		EU-152	-1.17E-01 +- 1.21E-01	U	pCi/g		1.67E-01	9.00E+00	
		EU-154	5.87E-02 +- 1.07E-01	U	pCi/g		2.03E-01	7.00E+00	
		EU-155	3.20E-02 +- 9.58E-02	U	pCi/g		1.66E-01	3.00E+02	

STL Richland **RER2** - Replicate Error Ratio = (S-D)/|sqrt(sq(TPUs)+sq(TPUd))| as defined by ICPT BOA.

rptSTLRchSaSummary2 V4.12 A97 **U Qual** - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

Sample Results Summary

STL Richland STLR

Ordered by Method, Batch No., Client Sample ID.

Date: 21-Apr-05

Report No. : 28635

SDG No: 28704

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RER2
5105290	RICHRC5017								
3107-0000-196-C-1C-01									
	G8FRH1AA	K-40	7.19E+00 +- 1.33E+00		pCi/g		5.24E-01		
		MN-54	1.45E-02 +- 3.12E-02	U	pCi/g		5.82E-02	2.00E+00	
		NB-94	1.18E-02 +- 3.27E-02	U	pCi/g		6.01E-02	3.00E-01	
		PB-212	6.38E-01 +- 1.51E-01		pCi/g		8.99E-02		
		PB-214	6.54E-01 +- 1.41E-01		pCi/g		1.11E-01		
		RA-226	5.71E-01 +- 1.36E-01	U	pCi/g		2.11E-01		
		TL-208	1.79E-01 +- 4.99E-02	U	pCi/g		9.09E-02		
3107-0000-196-C-1C-02									
	G8FRK1AA	AC-228	4.72E-01 +- 1.76E-01	U	pCi/g		3.09E-01		
		AG-108M	-2.01E-03 +- 2.19E-02	U	pCi/g		3.86E-02		
		AM-241	5.31E-02 +- 1.30E-01	U	pCi/g		2.36E-01		
		BI-212	6.76E-01 +- 4.05E-01	U	pCi/g		8.19E-01		
		BI-214	5.72E-01 +- 1.29E-01	U	pCi/g		2.10E-01		
		CO-60	-1.16E-02 +- 2.69E-02	U	pCi/g		4.75E-02	3.00E+00	
		CS-134	2.56E-03 +- 3.27E-02	U	pCi/g		5.97E-02	1.00E+01	
		CS-137	-9.63E-03 +- 2.64E-02	U	pCi/g		4.55E-02	2.00E+01	
		EU-152	1.81E-02 +- 7.10E-02	U	pCi/g		1.26E-01	9.00E+00	
		EU-154	4.31E-02 +- 8.25E-02	U	pCi/g		1.66E-01	7.00E+00	
		EU-155	1.21E-01 +- 8.30E-02	U	pCi/g		1.51E-01	3.00E+02	
		K-40	7.14E+00 +- 1.42E+00		pCi/g		3.93E-01		
		MN-54	-2.95E-03 +- 2.31E-02	U	pCi/g		4.20E-02	2.00E+00	
		NB-94	5.23E-03 +- 2.39E-02	U	pCi/g		4.49E-02	3.00E-01	
		PB-212	5.25E-01 +- 1.11E-01		pCi/g		7.36E-02		
		PB-214	6.54E-01 +- 1.41E-01		pCi/g		8.74E-02		
		RA-226	5.72E-01 +- 1.29E-01		pCi/g		8.15E-02		
		TL-208	1.59E-01 +- 6.46E-02	U	pCi/g		8.88E-02		
3107-0000-196-C-1C-03									
	G8FRN1AA	AC-228	1.65E-01 +- 1.60E-01	U	pCi/g		2.66E-01		
		AG-108M	-3.00E-03 +- 2.01E-02	U	pCi/g		3.50E-02		
		AM-241	5.47E-02 +- 7.89E-02	U	pCi/g		1.40E-01		
		BI-212	4.51E-01 +- 3.25E-01	U	pCi/g		6.72E-01		
		BI-214	4.54E-01 +- 1.12E-01	U	pCi/g		1.87E-01		
		CO-60	-1.16E-02 +- 2.95E-02	U	pCi/g		5.16E-02	3.00E+00	
		CS-134	4.68E-02 +- 2.73E-02	U	pCi/g		5.75E-02	1.00E+01	
		CS-137	-6.83E-03 +- 2.59E-02	U	pCi/g		4.47E-02	2.00E+01	
		EU-152	4.56E-02 +- 7.14E-02	U	pCi/g		1.32E-01	9.00E+00	
		EU-154	-2.06E-02 +- 8.21E-02	U	pCi/g		1.47E-01	7.00E+00	

STL Richland **RER2** - Replicate Error Ratio = (S-D)/|sqrt(sq(TPUs)+sq(TPUd))| as defined by ICPT BOA.

rptSTLRchSaSummary2 V4.12 A97 **U Qual** - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

Sample Results Summary

STL Richland STLR

Ordered by Method, Batch No., Client Sample ID.

Date: 21-Apr-05

Report No. : 28635

SDG No: 28704

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RER2
5105290 RICHRC5017									
3107-0000-196-C-1C-03									
	G8FRN1AA	EU-155	4.71E-02 +- 6.22E-02	U	pCi/g		1.13E-01	3.00E+02	
		K-40	6.92E+00 +- 1.28E+00		pCi/g		4.28E-01		
		MN-54	-1.41E-03 +- 2.52E-02	U	pCi/g		4.52E-02	2.00E+00	
		NB-94	-1.96E-02 +- 2.39E-02	U	pCi/g		3.84E-02	3.00E-01	
		PB-212	4.87E-01 +- 1.06E-01		pCi/g		9.28E-02		
		PB-214	4.44E-01 +- 1.40E-01		pCi/g		8.61E-02		
		RA-226	4.54E-01 +- 1.12E-01	U	pCi/g		1.87E-01		
		TL-208	1.42E-01 +- 4.62E-02	U	pCi/g		7.60E-02		
5105292 RICHRC5017									
3107-0000-196-C-2C-04									
	G8FRQ1AA	AC-228	7.46E-01 +- 2.02E-01	U	pCi/g		3.19E-01		
		AG-108M	1.13E-02 +- 1.83E-02	U	pCi/g		3.38E-02		
		AM-241	-3.08E-02 +- 6.76E-02	U	pCi/g		1.14E-01		
		BI-212	1.12E+00 +- 6.61E-01	U	pCi/g		8.22E-01		
		BI-214	5.45E-01 +- 1.18E-01		pCi/g		8.27E-02		
		CO-60	1.20E-04 +- 2.71E-02	U	pCi/g		5.00E-02	3.00E+00	
		CS-134	4.48E-02 +- 2.82E-02	U	pCi/g		5.66E-02	1.00E+01	
		CS-137	-1.35E-03 +- 2.18E-02	U	pCi/g		3.86E-02	2.00E+01	
		EU-152	2.07E-02 +- 5.27E-02	U	pCi/g		9.76E-02	9.00E+00	
		EU-154	-1.01E-02 +- 7.94E-02	U	pCi/g		1.44E-01	7.00E+00	
		EU-155	6.13E-03 +- 6.02E-02	U	pCi/g		1.07E-01	3.00E+02	
		K-40	9.10E+00 +- 1.61E+00		pCi/g		3.90E-01		
		MN-54	-7.91E-03 +- 2.31E-02	U	pCi/g		3.99E-02	2.00E+00	
		NB-94	1.62E-02 +- 2.28E-02	U	pCi/g		4.38E-02	3.00E-01	
		PB-212	6.34E-01 +- 1.22E-01		pCi/g		6.57E-02		
		PB-214	5.66E-01 +- 1.26E-01		pCi/g		7.02E-02		
		RA-226	5.45E-01 +- 1.18E-01		pCi/g		8.27E-02		
		TL-208	1.63E-01 +- 5.04E-02		pCi/g		4.29E-02		
3107-0000-196-C-2C-04 DUP									
	G8FRQ1AH	AC-228	5.84E-01 +- 2.27E-01	U	pCi/g		3.81E-01		
		AG-108M	-4.47E-03 +- 2.69E-02	U	pCi/g		4.65E-02		
		AM-241	-6.59E-02 +- 1.60E-01	U	pCi/g		2.62E-01		
		BI-212	1.26E+00 +- 5.35E-01	U	pCi/g		1.02E+00		
		BI-214	5.52E-01 +- 1.62E-01	U	pCi/g		2.44E-01		
		CO-60	3.82E-03 +- 3.58E-02	U	pCi/g		6.85E-02	3.00E+00	
		CS-134	8.36E-02 +- 3.48E-02	U	pCi/g		7.97E-02	1.00E+01	
		CS-137	-1.53E-02 +- 3.35E-02	U	pCi/g		5.63E-02	2.00E+01	

STL Richland RER2 - Replicate Error Ratio = (S-D)/|sqrt(sq(TPUs)+sq(TPUd))| as defined by ICPT BOA.

rptSTLRchSaSummary2 V4.12 A97 U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

Sample Results Summary

STL Richland STLR

Ordered by Method, Batch No., Client Sample ID.

Date: 21-Apr-05

Report No. : 28635

SDG No: 28704

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RER2
5105292	**RICHRC5017**								
3107-0000-196-C-2C-04 DUP									
	G8FRQ1AH	EU-152	-1.78E-02 +- 7.92E-02	U	pCi/g		1.38E-01	9.00E+00	
		EU-154	6.78E-02 +- 1.11E-01	U	pCi/g		2.22E-01	7.00E+00	
		EU-155	1.14E-02 +- 9.39E-02	U	pCi/g		1.65E-01	3.00E+02	
		K-40	7.72E+00 +- 1.51E+00		pCi/g		4.50E-01		
		MN-54	2.18E-02 +- 2.89E-02	U	pCi/g		5.77E-02	2.00E+00	
		NB-94	-1.65E-02 +- 2.91E-02	U	pCi/g		4.87E-02	3.00E-01	
		PB-212	5.13E-01 +- 1.37E-01		pCi/g		1.13E-01		
		PB-214	5.66E-01 +- 1.42E-01		pCi/g		1.06E-01		
		RA-226	5.52E-01 +- 1.62E-01	U	pCi/g		2.44E-01		
		TL-208	2.04E-01 +- 6.87E-02		pCi/g		5.42E-02		
3107-0000-196-C-2C-05									
	G8FRR1AA	AC-228	4.40E-01 +- 1.67E-01	U	pCi/g		3.22E-01		
		AG-108M	-1.79E-02 +- 2.82E-02	U	pCi/g		4.63E-02		
		AM-241	-1.37E-01 +- 1.28E-01	U	pCi/g		2.08E-01		
		BI-212	6.75E-01 +- 4.92E-01	U	pCi/g		9.35E-01		
		BI-214	5.13E-01 +- 1.62E-01	U	pCi/g		2.03E-01		
		CO-60	4.38E-03 +- 3.28E-02	U	pCi/g		6.13E-02	3.00E+00	
		CS-134	3.18E-02 +- 3.81E-02	U	pCi/g		7.17E-02	1.00E+01	
		CS-137	-3.02E-02 +- 3.11E-02	U	pCi/g		5.01E-02	2.00E+01	
		EU-152	-1.41E-01 +- 1.10E-01	U	pCi/g		1.59E-01	9.00E+00	
		EU-154	-6.19E-03 +- 9.97E-02	U	pCi/g		1.80E-01	7.00E+00	
		EU-155	6.55E-02 +- 9.41E-02	U	pCi/g		1.63E-01	3.00E+02	
		K-40	7.71E+00 +- 1.39E+00		pCi/g		4.29E-01		
		MN-54	-3.51E-03 +- 3.18E-02	U	pCi/g		5.61E-02	2.00E+00	
		NB-94	2.29E-02 +- 2.84E-02	U	pCi/g		5.46E-02	3.00E-01	
		PB-212	6.08E-01 +- 1.57E-01		pCi/g		8.47E-02		
		PB-214	5.14E-01 +- 1.44E-01		pCi/g		1.11E-01		
		RA-226	5.13E-01 +- 1.62E-01	U	pCi/g		2.03E-01		
		TL-208	1.60E-01 +- 5.31E-02	U	pCi/g		8.69E-02		
3107-0000-196-C-2C-06									
	G8FRT1AA	AC-228	6.81E-01 +- 2.09E-01		pCi/g		1.49E-01		
		AG-108M	9.67E-03 +- 2.35E-02	U	pCi/g		4.28E-02		
		AM-241	4.72E-02 +- 1.65E-01	U	pCi/g		2.85E-01		
		BI-212	9.73E-01 +- 5.31E-01	U	pCi/g		8.89E-01		
		BI-214	5.79E-01 +- 1.38E-01	U	pCi/g		2.15E-01		
		CO-60	-3.48E-04 +- 2.91E-02	U	pCi/g		5.52E-02	3.00E+00	
		CS-134	3.94E-02 +- 3.15E-02	U	pCi/g		6.40E-02	1.00E+01	

STL Richland **RER2** - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.

rptSTLRchSaSummary2 V4.12 A97 **U Qual** - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

Sample Results Summary

STL Richland STLR

Ordered by Method, Batch No., Client Sample ID.

Date: 21-Apr-05

Report No. : 28635

SDG No: 28704

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RER2
5105292	RICHRC5017								
3107-0000-196-C-2C-06									
	G8FRT1AA	CS-137	-7.96E-03 +- 2.92E-02	U	pCi/g		5.03E-02	2.00E+01	
		EU-152	-1.17E-02 +- 7.70E-02	U	pCi/g		1.35E-01	9.00E+00	
		EU-154	1.42E-02 +- 7.26E-02	U	pCi/g		1.44E-01	7.00E+00	
		EU-155	1.14E-01 +- 8.27E-02	U	pCi/g		1.54E-01	3.00E+02	
		K-40	6.86E+00 +- 1.42E+00		pCi/g		2.47E-01		
		MN-54	-1.44E-02 +- 2.98E-02	U	pCi/g		5.05E-02	2.00E+00	
		NB-94	1.13E-02 +- 2.23E-02	U	pCi/g		4.40E-02	3.00E-01	
		PB-212	7.14E-01 +- 1.38E-01		pCi/g		9.52E-02		
		PB-214	6.06E-01 +- 1.40E-01		pCi/g		8.59E-02		
		RA-226	5.79E-01 +- 1.38E-01	U	pCi/g		2.15E-01		
		TL-208	1.92E-01 +- 5.77E-02	U	pCi/g		9.56E-02		
3107-0000-197-C-1C-01									
	G8FRV1AA	AC-228	6.27E-01 +- 1.81E-01	U	pCi/g		3.42E-01		
		AG-108M	1.06E-02 +- 1.86E-02	U	pCi/g		3.58E-02		
		AM-241	-1.96E-02 +- 7.83E-02	U	pCi/g		1.35E-01		
		BI-212	8.52E-01 +- 4.63E-01	U	pCi/g		9.34E-01		
		BI-214	3.62E-01 +- 1.48E-01	U	pCi/g		1.90E-01		
		CO-60	1.94E-03 +- 2.49E-02	U	pCi/g		4.90E-02	3.00E+00	
		CS-134	1.81E-02 +- 2.81E-02	U	pCi/g		5.56E-02	1.00E+01	
		CS-137	-8.33E-03 +- 2.87E-02	U	pCi/g		4.98E-02	2.00E+01	
		EU-152	3.47E-02 +- 7.70E-02	U	pCi/g		1.39E-01	9.00E+00	
		EU-154	2.60E-02 +- 8.59E-02	U	pCi/g		1.69E-01	7.00E+00	
		EU-155	2.51E-02 +- 7.31E-02	U	pCi/g		1.27E-01	3.00E+02	
		K-40	6.61E+00 +- 1.28E+00		pCi/g		4.13E-01		
		MN-54	3.38E-03 +- 2.46E-02	U	pCi/g		4.62E-02	2.00E+00	
		NB-94	8.79E-03 +- 2.33E-02	U	pCi/g		4.54E-02	3.00E-01	
		PB-212	4.12E-01 +- 1.01E-01		pCi/g		9.34E-02		
		PB-214	4.46E-01 +- 1.17E-01		pCi/g		8.23E-02		
		RA-226	3.62E-01 +- 1.48E-01	U	pCi/g		1.91E-01		
		TL-208	1.53E-01 +- 4.44E-02	U	pCi/g		8.27E-02		
3107-0000-197-C-1C-02									
	G8FRW1AA	AC-228	4.09E-01 +- 1.65E-01		pCi/g		1.31E-01		
		AG-108M	2.11E-03 +- 1.81E-02	U	pCi/g		3.23E-02		
		AM-241	4.55E-03 +- 4.30E-02	U	pCi/g		7.23E-02		
		BI-212	2.71E-01 +- 3.88E-01	U	pCi/g		7.31E-01		
		BI-214	4.42E-01 +- 1.13E-01	U	pCi/g		1.79E-01		
		CO-60	1.48E-02 +- 2.62E-02	U	pCi/g		5.27E-02	3.00E+00	

STL Richland RER2 - Replicate Error Ratio = (S-D)/|sqrt(sq(TPUs)+sq(TPUd))| as defined by ICPT BOA.

rptSTLRchSaSummary2 V4.12 A97 U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

Sample Results Summary

Date: 21-Apr-05

STL Richland STLR

Ordered by Method, Batch No., Client Sample ID.

Report No. : 28635 **SDG No:** 28704

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RER2
5105292	RICHRC5017								
	3107-0000-197-C-1C-02								
	G8FRW1AA	CS-134	1.49E-02 +- 2.40E-02	U	pCi/g		4.69E-02	1.00E+01	
		CS-137	3.55E-02 +- 2.59E-02	U	pCi/g		5.17E-02	2.00E+01	
		EU-152	-7.64E-03 +- 6.15E-02	U	pCi/g		1.04E-01	9.00E+00	
		EU-154	2.90E-02 +- 5.96E-02	U	pCi/g		1.23E-01	7.00E+00	
		EU-155	-3.64E-03 +- 6.01E-02	U	pCi/g		1.04E-01	3.00E+02	
		K-40	6.26E+00 +- 1.13E+00		pCi/g		3.57E-01		
		MN-54	-2.02E-03 +- 2.41E-02	U	pCi/g		4.29E-02	2.00E+00	
		NB-94	-9.82E-03 +- 2.08E-02	U	pCi/g		3.53E-02	3.00E-01	
		PB-212	4.15E-01 +- 9.40E-02		pCi/g		9.53E-02		
		PB-214	4.71E-01 +- 1.12E-01		pCi/g		7.44E-02		
		RA-226	4.42E-01 +- 1.13E-01	U	pCi/g		1.79E-01		
		TL-208	1.66E-01 +- 4.67E-02		pCi/g		3.39E-02		
	3107-0000-197-C-1C-03								
	G8FRX1AA	AC-228	4.20E-01 +- 1.48E-01	U	pCi/g		2.48E-01		
		AG-108M	-1.18E-02 +- 1.74E-02	U	pCi/g		2.85E-02		
		AM-241	2.39E-02 +- 8.07E-02	U	pCi/g		1.42E-01		
		BI-212	4.17E-01 +- 3.31E-01	U	pCi/g		6.39E-01		
		BI-214	5.92E-01 +- 1.28E-01		pCi/g		7.26E-02		
		CO-60	-3.33E-03 +- 2.18E-02	U	pCi/g		3.93E-02	3.00E+00	
		CS-134	4.01E-02 +- 2.61E-02	U	pCi/g		5.22E-02	1.00E+01	
		CS-137	3.72E-03 +- 2.30E-02	U	pCi/g		4.13E-02	2.00E+01	
		EU-152	1.92E-02 +- 6.11E-02	U	pCi/g		1.10E-01	9.00E+00	
		EU-154	-7.17E-02 +- 6.96E-02	U	pCi/g		1.08E-01	7.00E+00	
		EU-155	7.46E-02 +- 6.58E-02	U	pCi/g		1.19E-01	3.00E+02	
		K-40	7.72E+00 +- 1.23E+00		pCi/g		3.69E-01		
		MN-54	-1.04E-02 +- 2.17E-02	U	pCi/g		3.70E-02	2.00E+00	
		NB-94	-1.22E-03 +- 1.86E-02	U	pCi/g		3.37E-02	3.00E-01	
		PB-212	4.19E-01 +- 9.04E-02		pCi/g		6.71E-02		
		PB-214	6.76E-01 +- 1.46E-01		pCi/g		7.75E-02		
		RA-226	5.92E-01 +- 1.28E-01		pCi/g		7.26E-02		
		TL-208	1.36E-01 +- 4.96E-02	U	pCi/g		6.93E-02		
	3107-0000-197-C-1C-04								
	G8FR21AA	AC-228	4.16E-01 +- 1.07E-01		pCi/g		9.10E-02		
		AG-108M	-2.43E-03 +- 1.06E-02	U	pCi/g		1.77E-02		
		AM-241	2.95E-03 +- 2.93E-02	U	pCi/g		4.99E-02		
		BI-212	6.87E-01 +- 2.32E-01	U	pCi/g		4.04E-01		
		BI-214	3.62E-01 +- 8.94E-02		pCi/g		4.42E-02		

STL Richland **RER2 - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.**

rptSTLRchSaSummary2 V4.12 A97 **U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.**

Sample Results Summary

STL Richland STLR

Ordered by Method, Batch No., Client Sample ID.

Date: 21-Apr-05

Report No. : 28635

SDG No: 28704

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RER2
5105292	RICHRC5017								
3107-0000-197-C-1C-04									
	G8FR21AA	CO-60	2.48E-02 +- 1.85E-02	U	pCi/g		3.36E-02	3.00E+00	
		CS-134	2.90E-02 +- 1.66E-02	U	pCi/g		2.94E-02	1.00E+01	
		CS-137	-2.69E-03 +- 1.46E-02	U	pCi/g		2.44E-02	2.00E+01	
		EU-152	-1.09E-03 +- 3.27E-02	U	pCi/g		5.62E-02	9.00E+00	
		EU-154	9.17E-03 +- 4.82E-02	U	pCi/g		8.43E-02	7.00E+00	
		EU-155	4.09E-02 +- 2.62E-02	U	pCi/g		4.63E-02	3.00E+02	
		K-40	7.28E+00 +- 1.18E+00		pCi/g		3.02E-01		
		MN-54	-6.29E-03 +- 1.42E-02	U	pCi/g		2.36E-02	2.00E+00	
		NB-94	-6.07E-03 +- 1.41E-02	U	pCi/g		2.34E-02	3.00E-01	
		PB-212	4.04E-01 +- 7.37E-02		pCi/g		2.95E-02		
		PB-214	3.36E-01 +- 8.77E-02		pCi/g		3.98E-02		
		RA-226	3.62E-01 +- 8.94E-02		pCi/g		4.42E-02		
		TL-208	1.35E-01 +- 3.31E-02		pCi/g		2.20E-02		
3107-0000-197-C-1C-05									
	G8FR31AA	AC-228	2.75E-01 +- 1.61E-01	U	pCi/g		2.26E-01		
		AG-108M	-2.76E-03 +- 1.50E-02	U	pCi/g		2.58E-02		
		AM-241	-5.25E-02 +- 1.11E-01	U	pCi/g		1.85E-01		
		BI-212	3.21E-01 +- 4.84E-01	U	pCi/g		5.45E-01		
		BI-214	3.87E-01 +- 9.62E-02	U	pCi/g		1.40E-01		
		CO-60	7.84E-03 +- 2.12E-02	U	pCi/g		4.07E-02	3.00E+00	
		CS-134	2.46E-02 +- 1.98E-02	U	pCi/g		3.97E-02	1.00E+01	
		CS-137	1.19E-02 +- 2.91E-02	U	pCi/g		3.15E-02	2.00E+01	
		EU-152	7.51E-03 +- 4.16E-02	U	pCi/g		7.60E-02	9.00E+00	
		EU-154	-4.32E-03 +- 5.15E-02	U	pCi/g		9.47E-02	7.00E+00	
		EU-155	-1.25E-02 +- 5.30E-02	U	pCi/g		9.27E-02	3.00E+02	
		K-40	7.80E+00 +- 1.60E+00		pCi/g		3.39E-01		
		MN-54	1.05E-02 +- 1.85E-02	U	pCi/g		3.49E-02	2.00E+00	
		NB-94	-6.16E-03 +- 1.75E-02	U	pCi/g		2.99E-02	3.00E-01	
		PB-212	4.23E-01 +- 8.18E-02		pCi/g		4.70E-02		
		PB-214	4.37E-01 +- 9.65E-02		pCi/g		5.70E-02		
		RA-226	3.87E-01 +- 9.62E-02	U	pCi/g		1.40E-01		
		TL-208	1.65E-01 +- 4.44E-02		pCi/g		3.04E-02		
3107-0000-197-C-1C-06									
	G8FR51AA	AC-228	3.60E-01 +- 1.53E-01	U	pCi/g		3.01E-01		
		AG-108M	-1.19E-02 +- 2.62E-02	U	pCi/g		4.37E-02		
		AM-241	-1.38E-01 +- 1.32E-01	U	pCi/g		2.15E-01		
		BI-212	5.74E-01 +- 4.89E-01	U	pCi/g		9.25E-01		

STL Richland

rptSTLRchSaSummary2 V4.12 A97

RER2 - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.

U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

Sample Results Summary

STL Richland STLR

Ordered by Method, Batch No., Client Sample ID.

Date: 21-Apr-05

Report No. : 28635

SDG No: 28704

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RER2
5105292	RICHRC5017								
3107-0000-197-C-1C-06									
	G8FR51AA	BI-214	4.73E-01 +- 1.20E-01	U	pCi/g		1.92E-01		
		CO-60	1.23E-02 +- 3.17E-02	U	pCi/g		6.15E-02	3.00E+00	
		CS-134	-7.18E-03 +- 3.64E-02	U	pCi/g		6.38E-02	1.00E+01	
		CS-137	1.88E-02 +- 2.85E-02	U	pCi/g		5.38E-02	2.00E+01	
		EU-152	-1.77E-01 +- 1.20E-01	U	pCi/g		1.48E-01	9.00E+00	
		EU-154	7.48E-02 +- 1.03E-01	U	pCi/g		2.01E-01	7.00E+00	
		EU-155	-6.45E-02 +- 9.14E-02	U	pCi/g		1.49E-01	3.00E+02	
		K-40	7.66E+00 +- 1.39E+00		pCi/g		4.43E-01		
		MN-54	1.89E-02 +- 2.81E-02	U	pCi/g		5.38E-02	2.00E+00	
		NB-94	-3.25E-02 +- 3.08E-02	U	pCi/g		4.88E-02	3.00E-01	
		PB-212	4.14E-01 +- 1.04E-01		pCi/g		9.20E-02		
		PB-214	4.93E-01 +- 1.40E-01		pCi/g		1.03E-01		
		RA-226	4.73E-01 +- 1.20E-01	U	pCi/g		1.92E-01		
		TL-208	1.52E-01 +- 4.83E-02	U	pCi/g		8.28E-02		
3107-0000-198-C-1C-01									
	G8FR71AA	AC-228	4.31E-01 +- 1.88E-01		pCi/g		1.45E-01		
		AG-108M	-1.46E-02 +- 1.86E-02	U	pCi/g		3.05E-02		
		AM-241	-9.59E-03 +- 7.45E-02	U	pCi/g		1.29E-01		
		BI-212	3.43E-01 +- 3.83E-01	U	pCi/g		7.35E-01		
		BI-214	4.73E-01 +- 1.03E-01	U	pCi/g		1.78E-01		
		CO-60	1.57E-02 +- 2.56E-02	U	pCi/g		5.29E-02	3.00E+00	
		CS-134	-6.17E-03 +- 2.83E-02	U	pCi/g		5.04E-02	1.00E+01	
		CS-137	-1.37E-02 +- 2.45E-02	U	pCi/g		4.11E-02	2.00E+01	
		EU-152	-5.39E-02 +- 6.50E-02	U	pCi/g		1.04E-01	9.00E+00	
		EU-154	-8.02E-02 +- 8.42E-02	U	pCi/g		1.35E-01	7.00E+00	
		EU-155	4.44E-02 +- 6.17E-02	U	pCi/g		1.10E-01	3.00E+02	
		K-40	7.56E+00 +- 1.33E+00		pCi/g		3.63E-01		
		MN-54	-1.67E-02 +- 2.25E-02	U	pCi/g		3.71E-02	2.00E+00	
		NB-94	-9.84E-03 +- 2.22E-02	U	pCi/g		3.83E-02	3.00E-01	
		PB-212	4.35E-01 +- 8.72E-02		pCi/g		7.55E-02		
		PB-214	4.44E-01 +- 1.19E-01		pCi/g		9.35E-02		
		RA-226	4.73E-01 +- 1.03E-01	U	pCi/g		1.78E-01		
		TL-208	1.44E-01 +- 5.83E-02	U	pCi/g		7.76E-02		
3107-0000-198-C-1C-02									
	G8FR81AA	AC-228	4.72E-01 +- 1.40E-01		pCi/g		1.42E-01		
		AG-108M	-2.63E-02 +- 1.80E-02	U	pCi/g		2.64E-02		
		AM-241	2.59E-02 +- 4.78E-02	U	pCi/g		7.11E-02		

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RER2 - Replicate Error Ratio = (S-D)/|sqrt(sq(TPUs)+sq(TPUd))| as defined by ICPT BOA.

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Sample Results Summary

STL Richland STLR

Ordered by Method, Batch No., Client Sample ID.

Date: 21-Apr-05

Report No. : 28635

SDG No: 28704

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)		Qual	Units	Yield	MDC or MDA	CRDL	RER2
5105292	**RICHRC5017**									
3107-0000-198-C-1C-02										
	G8FR81AA	BI-212	5.53E-01	+- 3.22E-01	U	pCi/g		6.72E-01		
		BI-214	3.38E-01	+- 1.10E-01		pCi/g		7.80E-02		
		CO-60	-1.08E-03	+- 2.28E-02	U	pCi/g		4.29E-02	3.00E+00	
		CS-134	1.33E-02	+- 2.16E-02	U	pCi/g		4.30E-02	1.00E+01	
		CS-137	-3.14E-03	+- 2.12E-02	U	pCi/g		3.81E-02	2.00E+01	
		EU-152	3.11E-02	+- 6.19E-02	U	pCi/g		1.13E-01	9.00E+00	
		EU-154	4.75E-02	+- 5.93E-02	U	pCi/g		1.28E-01	7.00E+00	
		EU-155	8.87E-03	+- 5.76E-02	U	pCi/g		1.01E-01	3.00E+02	
		K-40	6.23E+00	+- 1.16E+00		pCi/g		5.98E-01		
		MN-54	-1.33E-02	+- 2.42E-02	U	pCi/g		4.06E-02	2.00E+00	
		NB-94	-3.08E-03	+- 2.24E-02	U	pCi/g		3.99E-02	3.00E-01	
		PB-212	4.09E-01	+- 8.96E-02		pCi/g		7.69E-02		
		PB-214	4.52E-01	+- 1.09E-01		pCi/g		7.43E-02		
		RA-226	3.38E-01	+- 1.10E-01		pCi/g		7.80E-02		
		TL-208	1.28E-01	+- 4.57E-02	U	pCi/g		7.13E-02		
3107-0000-198-C-1C-03										
	G8FR91AA	AC-228	3.78E-01	+- 1.83E-01		pCi/g		1.37E-01		
		AG-108M	7.73E-04	+- 1.82E-02	U	pCi/g		3.19E-02		
		AM-241	-8.94E-03	+- 7.35E-02	U	pCi/g		1.27E-01		
		BI-212	6.64E-01	+- 3.33E-01	U	pCi/g		6.60E-01		
		BI-214	3.85E-01	+- 1.00E-01	U	pCi/g		1.53E-01		
		CO-60	-1.50E-03	+- 2.08E-02	U	pCi/g		3.79E-02	3.00E+00	
		CS-134	3.27E-02	+- 2.42E-02	U	pCi/g		4.80E-02	1.00E+01	
		CS-137	1.08E-03	+- 1.95E-02	U	pCi/g		3.50E-02	2.00E+01	
		EU-152	-2.97E-02	+- 5.22E-02	U	pCi/g		8.79E-02	9.00E+00	
		EU-154	2.59E-02	+- 6.30E-02	U	pCi/g		1.21E-01	7.00E+00	
		EU-155	1.74E-02	+- 6.41E-02	U	pCi/g		1.11E-01	3.00E+02	
		K-40	7.18E+00	+- 1.18E+00		pCi/g		3.13E-01		
		MN-54	-2.00E-03	+- 1.88E-02	U	pCi/g		3.36E-02	2.00E+00	
		NB-94	-9.15E-03	+- 1.75E-02	U	pCi/g		2.97E-02	3.00E-01	
		PB-212	3.85E-01	+- 8.68E-02		pCi/g		6.05E-02		
		PB-214	5.15E-01	+- 1.03E-01		pCi/g		6.88E-02		
		RA-226	3.85E-01	+- 1.00E-01		pCi/g		7.25E-02		
		TL-208	1.25E-01	+- 5.17E-02		pCi/g		3.21E-02		
3107-0000-198-C-1C-04										
	G8FTC1AA	AC-228	4.21E-01	+- 1.14E-01	U	pCi/g		1.96E-01		
		AG-108M	3.92E-03	+- 1.58E-02	U	pCi/g		2.81E-02		

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RER2 - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.

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Sample Results Summary

STL Richland STLR

Ordered by Method, Batch No., Client Sample ID.

Date: 21-Apr-05

Report No. : 28635

SDG No: 28704

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RER2
5105292 RICHRC5017									
3107-0000-198-C-1C-04									
	G8FTC1AA	AM-241	3.44E-02 +- 1.04E-01	U	pCi/g		1.85E-01		
		BI-212	3.94E-01 +- 2.76E-01	U	pCi/g		5.43E-01		
		BI-214	4.05E-01 +- 1.10E-01	U	pCi/g		1.43E-01		
		CO-60	-1.37E-02 +- 2.14E-02	U	pCi/g		3.54E-02	3.00E+00	
		CS-134	1.36E-02 +- 1.83E-02	U	pCi/g		3.55E-02	1.00E+01	
		CS-137	-2.58E-02 +- 2.43E-02	U	pCi/g		4.38E-02	2.00E+01	
		EU-152	1.40E-02 +- 4.37E-02	U	pCi/g		8.00E-02	9.00E+00	
		EU-154	-7.58E-03 +- 4.90E-02	U	pCi/g		8.94E-02	7.00E+00	
		EU-155	3.36E-02 +- 5.38E-02	U	pCi/g		9.86E-02	3.00E+02	
		K-40	7.03E+00 +- 1.46E+00		pCi/g		2.82E-01		
		MN-54	1.53E-02 +- 1.73E-02	U	pCi/g		3.36E-02	2.00E+00	
		NB-94	-1.18E-02 +- 1.68E-02	U	pCi/g		2.72E-02	3.00E-01	
		PB-212	3.96E-01 +- 8.07E-02		pCi/g		4.71E-02		
		PB-214	5.53E-01 +- 1.12E-01		pCi/g		5.66E-02		
		RA-226	4.05E-01 +- 1.10E-01		pCi/g		5.09E-02		
		TL-208	1.46E-01 +- 4.08E-02	U	pCi/g		5.92E-02		
3107-0000-198-C-1C-05									
	G8FTD1AA	AC-228	3.30E-01 +- 1.53E-01	U	pCi/g		2.95E-01		
		AG-108M	-3.70E-03 +- 2.36E-02	U	pCi/g		4.06E-02		
		AM-241	-1.43E-01 +- 1.21E-01	U	pCi/g		1.94E-01		
		BI-212	1.41E-01 +- 4.21E-01	U	pCi/g		7.63E-01		
		BI-214	3.62E-01 +- 1.16E-01	U	pCi/g		1.86E-01		
		CO-60	-6.79E-03 +- 3.08E-02	U	pCi/g		5.51E-02	3.00E+00	
		CS-134	1.13E-02 +- 3.46E-02	U	pCi/g		6.33E-02	1.00E+01	
		CS-137	3.90E-04 +- 2.86E-02	U	pCi/g		5.09E-02	2.00E+01	
		EU-152	-8.05E-02 +- 1.01E-01	U	pCi/g		1.40E-01	9.00E+00	
		EU-154	6.01E-02 +- 9.76E-02	U	pCi/g		1.89E-01	7.00E+00	
		EU-155	-3.84E-03 +- 8.97E-02	U	pCi/g		1.51E-01	3.00E+02	
		K-40	6.24E+00 +- 1.22E+00		pCi/g		4.43E-01		
		MN-54	3.61E-03 +- 3.00E-02	U	pCi/g		5.42E-02	2.00E+00	
		NB-94	9.46E-03 +- 2.82E-02	U	pCi/g		5.20E-02	3.00E-01	
		PB-212	3.12E-01 +- 1.17E-01		pCi/g		1.00E-01		
		PB-214	6.24E-01 +- 1.48E-01		pCi/g		9.26E-02		
		RA-226	3.62E-01 +- 1.16E-01	U	pCi/g		1.86E-01		
		TL-208	2.28E-01 +- 5.42E-02		pCi/g		4.52E-02		
3107-0000-198-C-1C-06									
	G8FTE1AA	AC-228	4.13E-01 +- 1.65E-01	U	pCi/g		3.00E-01		

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Sample Results Summary

STL Richland STLR

Ordered by Method, Batch No., Client Sample ID.

Date: 21-Apr-05

Report No. : 28635

SDG No: 28704

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RER2
5105292 RICHRC5017									
3107-0000-198-C-1C-06									
	G8FTE1AA	AG-108M	1.42E-03 +- 2.09E-02	U	pCi/g		3.71E-02		
		AM-241	-1.24E-02 +- 1.46E-01	U	pCi/g		2.46E-01		
		BI-212	3.69E-01 +- 3.90E-01	U	pCi/g		7.63E-01		
		BI-214	3.52E-01 +- 1.32E-01	U	pCi/g		1.78E-01		
		CO-60	-1.03E-02 +- 2.63E-02	U	pCi/g		4.67E-02	3.00E+00	
		CS-134	2.60E-02 +- 3.05E-02	U	pCi/g		5.98E-02	1.00E+01	
		CS-137	-9.26E-03 +- 2.54E-02	U	pCi/g		4.34E-02	2.00E+01	
		EU-152	1.74E-02 +- 7.65E-02	U	pCi/g		1.27E-01	9.00E+00	
		EU-154	7.31E-02 +- 8.37E-02	U	pCi/g		1.74E-01	7.00E+00	
		EU-155	5.04E-02 +- 7.99E-02	U	pCi/g		1.44E-01	3.00E+02	
		K-40	6.72E+00 +- 1.35E+00		pCi/g		4.65E-01		
		MN-54	3.00E-02 +- 2.35E-02	U	pCi/g		4.90E-02	2.00E+00	
		NB-94	8.01E-05 +- 2.49E-02	U	pCi/g		4.52E-02	3.00E-01	
		PB-212	5.19E-01 +- 1.12E-01		pCi/g		9.30E-02		
		PB-214	4.51E-01 +- 1.15E-01		pCi/g		7.55E-02		
		RA-226	3.52E-01 +- 1.32E-01	U	pCi/g		1.78E-01		
		TL-208	1.40E-01 +- 5.00E-02		pCi/g		3.85E-02		
5105297 RICHRC5017									
3107-0000-199-C-1C-01									
	G8FTG1AA	AC-228	6.54E-01 +- 1.68E-01		pCi/g		1.07E-01		
		AG-108M	1.25E-02 +- 1.43E-02	U	pCi/g		2.47E-02		
		AM-241	1.64E-02 +- 2.38E-02	U	pCi/g		3.66E-02		
		BI-212	5.44E-01 +- 2.82E-01	U	pCi/g		5.05E-01		
		BI-214	3.99E-01 +- 1.02E-01		pCi/g		5.83E-02		
		CO-60	-3.54E-03 +- 2.10E-02	U	pCi/g		3.65E-02	3.00E+00	
		CS-134	2.69E-02 +- 2.06E-02	U	pCi/g		3.69E-02	1.00E+01	
		CS-137	2.63E-03 +- 1.84E-02	U	pCi/g		3.17E-02	2.00E+01	
		EU-152	1.98E-02 +- 4.57E-02	U	pCi/g		7.81E-02	9.00E+00	
		EU-154	-1.81E-02 +- 5.41E-02	U	pCi/g		9.13E-02	7.00E+00	
		EU-155	5.06E-03 +- 3.50E-02	U	pCi/g		5.91E-02	3.00E+02	
		K-40	7.24E+00 +- 1.13E+00		pCi/g		3.11E-01		
		MN-54	1.31E-02 +- 1.90E-02	U	pCi/g		3.33E-02	2.00E+00	
		NB-94	-1.88E-04 +- 1.78E-02	U	pCi/g		3.09E-02	3.00E-01	
		PB-212	3.12E-01 +- 7.66E-02		pCi/g		4.91E-02		
		PB-214	4.20E-01 +- 1.01E-01		pCi/g		5.58E-02		
		RA-226	3.99E-01 +- 1.02E-01		pCi/g		5.84E-02		
		TL-208	1.58E-01 +- 3.65E-02		pCi/g		2.81E-02		

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RER2 - Replicate Error Ratio = (S-D)/|sqrt(sq(TPUs)+sq(TPUd))| as defined by ICPT BOA.

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Sample Results Summary

STL Richland STLR

Ordered by Method, Batch No., Client Sample ID.

Date: 21-Apr-05

Report No. : 28635

SDG No: 28704

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RER2
5105297	**RICHRC5017**								
3107-0000-199-C-1C-01 DUP									
	G8FTG1AH	AC-228	3.99E-01 +- 1.81E-01		pCi/g		1.51E-01		
		AG-108M	3.72E-03 +- 1.95E-02	U	pCi/g		3.32E-02		
		AM-241	-1.51E-01 +- 7.99E-02	U	pCi/g		1.24E-01		
		BI-212	4.00E-01 +- 3.69E-01	U	pCi/g		6.38E-01		
		BI-214	3.74E-01 +- 1.09E-01	U	pCi/g		1.22E-01		
		CO-60	1.44E-03 +- 2.67E-02	U	pCi/g		4.56E-02	3.00E+00	
		CS-134	1.19E-02 +- 2.87E-02	U	pCi/g		4.90E-02	1.00E+01	
		CS-137	2.30E-02 +- 2.57E-02	U	pCi/g		4.48E-02	2.00E+01	
		EU-152	3.44E-02 +- 9.29E-02	U	pCi/g		1.07E-01	9.00E+00	
		EU-154	-5.16E-02 +- 7.88E-02	U	pCi/g		1.29E-01	7.00E+00	
		EU-155	6.63E-02 +- 5.57E-02	U	pCi/g		9.43E-02	3.00E+02	
		K-40	7.51E+00 +- 1.50E+00		pCi/g		3.63E-01		
		MN-54	5.00E-03 +- 2.56E-02	U	pCi/g		4.40E-02	2.00E+00	
		NB-94	6.73E-04 +- 2.38E-02	U	pCi/g		4.07E-02	3.00E-01	
		PB-212	5.64E-01 +- 1.15E-01		pCi/g		5.47E-02		
		PB-214	4.34E-01 +- 1.03E-01		pCi/g		7.30E-02		
		RA-226	3.74E-01 +- 1.09E-01	U	pCi/g		1.22E-01		
		TL-208	1.35E-01 +- 3.69E-02		pCi/g		3.91E-02		
3107-0000-199-C-1C-02									
	G8FTH1AA	AC-228	3.89E-01 +- 1.45E-01		pCi/g		1.55E-01		
		AG-108M	-1.15E-02 +- 1.94E-02	U	pCi/g		3.20E-02		
		AM-241	-1.04E-02 +- 4.28E-02	U	pCi/g		7.35E-02		
		BI-212	4.02E-01 +- 3.67E-01	U	pCi/g		7.23E-01		
		BI-214	3.46E-01 +- 1.08E-01	U	pCi/g		1.74E-01		
		CO-60	1.05E-03 +- 2.54E-02	U	pCi/g		4.89E-02	3.00E+00	
		CS-134	5.06E-03 +- 2.70E-02	U	pCi/g		4.98E-02	1.00E+01	
		CS-137	-1.94E-02 +- 2.31E-02	U	pCi/g		3.74E-02	2.00E+01	
		EU-152	-4.11E-02 +- 6.29E-02	U	pCi/g		1.04E-01	9.00E+00	
		EU-154	-3.09E-02 +- 7.44E-02	U	pCi/g		1.29E-01	7.00E+00	
		EU-155	8.84E-04 +- 6.00E-02	U	pCi/g		1.04E-01	3.00E+02	
		K-40	7.11E+00 +- 1.24E+00		pCi/g		3.63E-01		
		MN-54	1.44E-02 +- 2.37E-02	U	pCi/g		4.59E-02	2.00E+00	
		NB-94	-1.06E-02 +- 2.28E-02	U	pCi/g		3.97E-02	3.00E-01	
		PB-212	3.40E-01 +- 7.87E-02		pCi/g		8.53E-02		
		PB-214	4.66E-01 +- 1.14E-01		pCi/g		7.51E-02		
		RA-226	3.46E-01 +- 1.08E-01		pCi/g		7.86E-02		

STL Richland

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RER2 - Replicate Error Ratio = (S-D)/|sqrt(sq(TPUs)+sq(TPUd))| as defined by ICPT BOA.

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Sample Results Summary

Date: 21-Apr-05

STL Richland STLR

Ordered by Method, Batch No., Client Sample ID.

Report No. : 28635 **SDG No:** 28704

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RER2
5105297	**RICHRC5017**								
3107-0000-199-C-1C-02									
	G8FTH1AA	TL-208	1.50E-01 +- 4.13E-02		pCi/g		4.35E-02		
3107-0000-199-C-1C-03									
	G8FTJ1AA	AC-228	4.62E-01 +- 1.55E-01	U	pCi/g		2.21E-01		
		AG-108M	2.80E-03 +- 1.39E-02	U	pCi/g		2.48E-02		
		AM-241	8.31E-02 +- 1.07E-01	U	pCi/g		1.92E-01		
		BI-212	5.35E-01 +- 2.95E-01	U	pCi/g		5.84E-01		
		BI-214	4.91E-01 +- 9.44E-02		pCi/g		5.31E-02		
		CO-60	9.81E-03 +- 1.85E-02	U	pCi/g		3.66E-02	3.00E+00	
		CS-134	1.90E-02 +- 1.96E-02	U	pCi/g		3.84E-02	1.00E+01	
		CS-137	4.40E-03 +- 2.19E-02	U	pCi/g		2.97E-02	2.00E+01	
		EU-152	-1.97E-03 +- 4.49E-02	U	pCi/g		7.79E-02	9.00E+00	
		EU-154	7.56E-03 +- 4.97E-02	U	pCi/g		9.48E-02	7.00E+00	
		EU-155	3.13E-02 +- 5.41E-02	U	pCi/g		9.79E-02	3.00E+02	
		K-40	7.78E+00 +- 1.59E+00		pCi/g		2.78E-01		
		MN-54	1.10E-02 +- 1.76E-02	U	pCi/g		3.34E-02	2.00E+00	
		NB-94	-2.22E-03 +- 1.55E-02	U	pCi/g		2.74E-02	3.00E-01	
		PB-212	3.85E-01 +- 7.65E-02		pCi/g		4.97E-02		
		PB-214	4.99E-01 +- 9.76E-02		pCi/g		6.49E-02		
		RA-226	4.91E-01 +- 9.44E-02		pCi/g		5.31E-02		
		TL-208	1.43E-01 +- 3.92E-02		pCi/g		2.87E-02		
3107-0000-199-C-1C-04									
	G8FTK1AA	AC-228	2.96E-01 +- 2.07E-01	U	pCi/g		2.90E-01		
		AG-108M	5.60E-03 +- 1.94E-02	U	pCi/g		3.58E-02		
		AM-241	-5.01E-02 +- 1.17E-01	U	pCi/g		2.00E-01		
		BI-212	7.71E-01 +- 4.18E-01	U	pCi/g		8.45E-01		
		BI-214	3.60E-01 +- 1.09E-01	U	pCi/g		1.79E-01		
		CO-60	1.56E-02 +- 2.79E-02	U	pCi/g		5.71E-02	3.00E+00	
		CS-134	6.90E-03 +- 2.77E-02	U	pCi/g		5.21E-02	1.00E+01	
		CS-137	-2.02E-03 +- 2.49E-02	U	pCi/g		4.45E-02	2.00E+01	
		EU-152	-1.13E-02 +- 5.73E-02	U	pCi/g		9.89E-02	9.00E+00	
		EU-154	-5.84E-02 +- 8.13E-02	U	pCi/g		1.36E-01	7.00E+00	
		EU-155	6.76E-02 +- 7.43E-02	U	pCi/g		1.33E-01	3.00E+02	
		K-40	5.78E+00 +- 1.29E+00		pCi/g		3.87E-01		
		MN-54	6.89E-04 +- 2.37E-02	U	pCi/g		4.38E-02	2.00E+00	
		NB-94	-3.62E-03 +- 2.32E-02	U	pCi/g		4.17E-02	3.00E-01	
		PB-212	4.23E-01 +- 9.41E-02		pCi/g		6.47E-02		
		PB-214	4.56E-01 +- 1.21E-01		pCi/g		8.98E-02		

STL Richland **RER2 - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.**

rptSTLRchSaSummary2 V4.12 A97 **U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.**

Sample Results Summary

STL Richland STLR

Ordered by Method, Batch No., Client Sample ID.

Date: 21-Apr-05

Report No. : 28635

SDG No: 28704

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RER2
5105297	RICHRC5017								
3107-0000-199-C-1C-04									
	G8FTK1AA	RA-226	3.60E-01 +- 1.09E-01	U	pCi/g		1.79E-01		
		TL-208	1.49E-01 +- 5.58E-02	U	pCi/g		8.49E-02		
3107-0000-199-C-1C-05									
	G8FTL1AA	AC-228	4.60E-01 +- 1.88E-01		pCi/g		1.51E-01		
		AG-108M	-7.98E-03 +- 2.26E-02	U	pCi/g		3.85E-02		
		AM-241	-6.56E-03 +- 8.46E-02	U	pCi/g		1.44E-01		
		BI-212	3.11E-01 +- 3.84E-01	U	pCi/g		7.41E-01		
		BI-214	6.08E-01 +- 1.36E-01	U	pCi/g		2.16E-01		
		CO-60	-2.29E-02 +- 2.27E-02	U	pCi/g		3.47E-02	3.00E+00	
		CS-134	1.23E-02 +- 3.16E-02	U	pCi/g		5.88E-02	1.00E+01	
		CS-137	-4.59E-03 +- 2.85E-02	U	pCi/g		4.96E-02	2.00E+01	
		EU-152	-3.32E-02 +- 7.94E-02	U	pCi/g		1.22E-01	9.00E+00	
		EU-154	2.93E-02 +- 8.77E-02	U	pCi/g		1.68E-01	7.00E+00	
		EU-155	5.02E-03 +- 6.80E-02	U	pCi/g		1.19E-01	3.00E+02	
		K-40	6.36E+00 +- 1.18E+00		pCi/g		4.58E-01		
		MN-54	-1.81E-02 +- 2.71E-02	U	pCi/g		4.49E-02	2.00E+00	
		NB-94	2.25E-02 +- 2.75E-02	U	pCi/g		5.31E-02	3.00E-01	
		PB-212	3.60E-01 +- 1.05E-01		pCi/g		1.04E-01		
		PB-214	6.80E-01 +- 1.43E-01		pCi/g		8.43E-02		
		RA-226	6.08E-01 +- 1.36E-01	U	pCi/g		2.16E-01		
		TL-208	1.17E-01 +- 5.41E-02	U	pCi/g		7.95E-02		
3107-0000-199-C-2C-06									
	G8FTM1AA	AC-228	5.02E-01 +- 1.51E-01	U	pCi/g		2.19E-01		
		AG-108M	-4.37E-04 +- 1.34E-02	U	pCi/g		2.34E-02		
		AM-241	-7.88E-02 +- 1.09E-01	U	pCi/g		1.73E-01		
		BI-212	1.24E-01 +- 2.58E-01	U	pCi/g		4.82E-01		
		BI-214	4.37E-01 +- 8.50E-02		pCi/g		4.87E-02		
		CO-60	2.91E-03 +- 1.61E-02	U	pCi/g		3.12E-02	3.00E+00	
		CS-134	1.92E-02 +- 1.87E-02	U	pCi/g		3.69E-02	1.00E+01	
		CS-137	-1.41E-02 +- 2.07E-02	U	pCi/g		3.89E-02	2.00E+01	
		EU-152	3.73E-02 +- 4.12E-02	U	pCi/g		7.76E-02	9.00E+00	
		EU-154	-2.49E-02 +- 5.54E-02	U	pCi/g		9.61E-02	7.00E+00	
		EU-155	2.17E-02 +- 5.12E-02	U	pCi/g		9.21E-02	3.00E+02	
		K-40	6.86E+00 +- 1.45E+00		pCi/g		2.43E-01		
		MN-54	9.75E-03 +- 1.50E-02	U	pCi/g		2.92E-02	2.00E+00	
		NB-94	7.61E-03 +- 1.60E-02	U	pCi/g		3.02E-02	3.00E-01	
		PB-212	4.22E-01 +- 7.72E-02		pCi/g		4.37E-02		

STL Richland

rptSTLRchSaSummary2 V4.12 A97

RER2 - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.

U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

Sample Results Summary

STL Richland STLR

Ordered by Method, Batch No., Client Sample ID.

Date: 21-Apr-05

Report No. : 28635

SDG No: 28704

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RER2
5105297	RICHRC5017								
3107-0000-199-C-2C-06									
	G8FTM1AA	PB-214	4.55E-01 +- 9.65E-02		pCi/g		5.97E-02		
		RA-226	4.37E-01 +- 8.50E-02		pCi/g		4.87E-02		
		TL-208	1.51E-01 +- 3.72E-02		pCi/g		2.67E-02		
9801-0000-030-RA-01									
	G8FTN1AA	AC-228	3.91E-01 +- 2.17E-01	U	pCi/g		3.22E-01		
		AG-108M	4.82E-03 +- 2.71E-02	U	pCi/g		4.79E-02		
		AM-241	-4.84E-02 +- 2.09E-01	U	pCi/g		3.57E-01		
		BI-212	4.25E-01 +- 4.69E-01	U	pCi/g		8.72E-01		
		BI-214	3.55E+00 +- 4.77E-01		pCi/g		1.09E-01		
		CO-60	2.12E-02 +- 3.34E-02	U	pCi/g		6.61E-02	1.50E-01	
		CS-134	2.20E-02 +- 3.25E-02	U	pCi/g		6.19E-02	1.80E-01	
		CS-137	-4.37E-02 +- 3.47E-02	U	pCi/g		5.35E-02	3.00E-01	
		EU-152	-4.54E-02 +- 1.03E-01	U	pCi/g		1.70E-01	4.00E-01	
		EU-154	1.24E-02 +- 9.91E-02	U	pCi/g		1.84E-01	3.50E-01	
		EU-155	-3.15E-02 +- 1.12E-01	U	pCi/g		1.83E-01	1.50E+01	
		K-40	3.23E+00 +- 9.07E-01		pCi/g		5.20E-01		
		MN-54	2.10E-03 +- 3.23E-02	U	pCi/g		5.77E-02	6.50E-01	
		NB-94	-2.28E-03 +- 3.01E-02	U	pCi/g		5.32E-02	2.50E-01	
		PB-212	3.56E-01 +- 1.16E-01		pCi/g		1.09E-01		
		PB-214	3.78E+00 +- 5.62E-01		pCi/g		1.23E-01		
		RA-226	3.55E+00 +- 4.77E-01		pCi/g		1.09E-01		
		TL-208	1.28E-01 +- 6.51E-02	U	pCi/g		8.19E-02		
9801-0000-031-RA-01									
	G8FTX1AA	AC-228	2.09E-01 +- 8.34E-02		pCi/g		6.79E-02		
		AG-108M	3.67E-04 +- 8.23E-03	U	pCi/g		1.40E-02		
		AM-241	2.10E-02 +- 2.26E-02	U	pCi/g		3.91E-02		
		BI-212	6.58E-02 +- 1.52E-01	U	pCi/g		2.62E-01		
		BI-214	1.81E-01 +- 5.25E-02	U	pCi/g		5.64E-02		
		CO-60	-7.86E-03 +- 1.32E-02	U	pCi/g		2.18E-02	1.50E-01	
		CS-134	1.66E-02 +- 1.21E-02	U	pCi/g		2.19E-02	1.80E-01	
		CS-137	4.48E-03 +- 1.12E-02	U	pCi/g		1.94E-02	3.00E-01	
		EU-152	2.08E-02 +- 2.62E-02	U	pCi/g		4.44E-02	4.00E-01	
		EU-154	-1.94E-02 +- 3.71E-02	U	pCi/g		6.16E-02	3.50E-01	
		EU-155	1.79E-02 +- 2.05E-02	U	pCi/g		3.60E-02	1.50E+01	
		K-40	1.90E+00 +- 5.60E-01		pCi/g		2.09E-01		
		MN-54	5.54E-03 +- 1.15E-02	U	pCi/g		2.02E-02	6.50E-01	
		NB-94	7.62E-03 +- 1.09E-02	U	pCi/g		1.93E-02	2.50E-01	

STL Richland

rptSTLRchSaSummary2 V4.12 A97

RER2 - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.

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Sample Results Summary

STL Richland STLR

Ordered by Method, Batch No., Client Sample ID.

Date: 21-Apr-05

Report No. : 28635

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Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RER2
5105297	RICHRC5017								
9801-0000-031-RA-01									
	G8FTX1AA	PB-212	1.53E-01 +- 3.34E-02		pCi/g		2.54E-02		
		PB-214	1.34E-01 +- 5.23E-02		pCi/g		3.20E-02		
		RA-226	1.81E-01 +- 5.25E-02		pCi/g		3.59E-02		
		TL-208	5.23E-02 +- 1.85E-02	U	pCi/g		2.31E-02		
9801-0000-032-RA-01									
	G8FT01AA	AC-228	1.25E-01 +- 9.26E-02	U	pCi/g		1.92E-01		
		AG-108M	-4.93E-04 +- 1.62E-02	U	pCi/g		2.88E-02		
		AM-241	2.31E-03 +- 5.72E-02	U	pCi/g		9.92E-02		
		BI-212	1.94E-01 +- 3.01E-01	U	pCi/g		5.84E-01		
		BI-214	2.08E-01 +- 8.40E-02	U	pCi/g		1.30E-01		
		CO-60	-7.99E-03 +- 1.85E-02	U	pCi/g		3.28E-02	1.50E-01	
		CS-134	1.78E-02 +- 2.05E-02	U	pCi/g		4.19E-02	1.80E-01	
		CS-137	3.03E-03 +- 2.12E-02	U	pCi/g		3.87E-02	3.00E-01	
		EU-152	4.58E-02 +- 5.58E-02	U	pCi/g		1.06E-01	4.00E-01	
		EU-154	-4.66E-02 +- 5.57E-02	U	pCi/g		9.00E-02	3.50E-01	
		EU-155	2.84E-02 +- 4.60E-02	U	pCi/g		8.47E-02	1.50E+01	
		K-40	2.65E+00 +- 6.88E-01		pCi/g		2.46E-01		
		MN-54	1.46E-02 +- 1.92E-02	U	pCi/g		3.83E-02	6.50E-01	
		NB-94	-4.35E-03 +- 1.81E-02	U	pCi/g		3.22E-02	2.50E-01	
		PB-212	2.54E-01 +- 7.92E-02		pCi/g		4.72E-02		
		PB-214	1.95E-01 +- 9.20E-02		pCi/g		7.29E-02		
		RA-226	2.08E-01 +- 8.40E-02	U	pCi/g		1.30E-01		
		TL-208	6.02E-02 +- 2.91E-02		pCi/g		3.63E-02		
9801-0000-033-RA-01									
	G8FT11AA	AC-228	3.38E+00 +- 6.10E-01		pCi/g		1.63E-01		
		AG-108M	9.45E-03 +- 2.49E-02	U	pCi/g		4.27E-02		
		AM-241	-4.11E-02 +- 2.31E-01	U	pCi/g		3.77E-01		
		BI-212	3.44E+00 +- 9.80E-01	U	pCi/g		1.18E+00		
		BI-214	2.58E+00 +- 3.40E-01		pCi/g		9.05E-02		
		CO-60	6.53E-03 +- 2.84E-02	U	pCi/g		5.11E-02	1.50E-01	
		CS-134	2.19E-01 +- 7.04E-02	U	pCi/g		7.58E-02	1.80E-01	
		CS-137	-1.93E-02 +- 3.37E-02	U	pCi/g		5.75E-02	3.00E-01	
		EU-152	-9.34E-02 +- 7.83E-02	U	pCi/g		1.26E-01	4.00E-01	
		EU-154	7.28E-02 +- 9.11E-02	U	pCi/g		1.67E-01	3.50E-01	
		EU-155	2.60E-01 +- 1.16E-01	U	pCi/g		2.01E-01	1.50E+01	
		K-40	2.51E+01 +- 4.70E+00		pCi/g		4.66E-01		
		MN-54	3.94E-02 +- 2.97E-02	U	pCi/g		5.37E-02	6.50E-01	

STL Richland **RER2** - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.

rptSTLRchSaSummary2 V4.12 A97 **U Qual** - Analyzed for, but the result is less than the Mdc/Mda/Total Uncert or gamma scan software did not identify the nuclide.

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5105297	RICHRC5017								
9801-0000-033-RA-01									
	G8FT11AA	NB-94	3.19E-04 +- 2.58E-02	U	pCi/g		4.44E-02	2.50E-01	
		PB-212	3.65E+00 +- 5.34E-01		pCi/g		8.65E-02		
		PB-214	3.10E+00 +- 4.42E-01		pCi/g		9.71E-02		
		RA-226	2.58E+00 +- 3.40E-01		pCi/g		9.05E-02		
		TL-208	1.08E+00 +- 1.52E-01		pCi/g		5.02E-02		
9801-0000-034-RA-01									
	G8FT21AA	AC-228	5.38E-01 +- 1.67E-01		pCi/g		1.21E-01		
		AG-108M	-1.53E-02 +- 1.92E-02	U	pCi/g		3.13E-02		
		AM-241	-6.37E-03 +- 1.27E-01	U	pCi/g		2.23E-01		
		BI-212	2.75E-01 +- 3.61E-01	U	pCi/g		6.84E-01		
		BI-214	4.75E-01 +- 1.11E-01	U	pCi/g		1.77E-01		
		CO-60	8.14E-03 +- 1.94E-02	U	pCi/g		4.10E-02	1.50E-01	
		CS-134	3.51E-02 +- 2.82E-02	U	pCi/g		5.66E-02	1.80E-01	
		CS-137	-3.40E-03 +- 2.45E-02	U	pCi/g		4.32E-02	3.00E-01	
		EU-152	7.81E-03 +- 6.23E-02	U	pCi/g		1.09E-01	4.00E-01	
		EU-154	5.20E-02 +- 7.50E-02	U	pCi/g		1.53E-01	3.50E-01	
		EU-155	7.78E-02 +- 6.67E-02	U	pCi/g		1.21E-01	1.50E+01	
		K-40	3.74E+00 +- 8.70E-01		pCi/g		3.80E-01		
		MN-54	1.43E-02 +- 2.36E-02	U	pCi/g		4.54E-02	6.50E-01	
		NB-94	1.15E-02 +- 2.12E-02	U	pCi/g		4.13E-02	2.50E-01	
		PB-212	4.51E-01 +- 9.59E-02		pCi/g		5.76E-02		
		PB-214	5.57E-01 +- 1.21E-01		pCi/g		7.20E-02		
		RA-226	4.75E-01 +- 1.11E-01		pCi/g		7.39E-02		
		TL-208	1.78E-01 +- 5.16E-02		pCi/g		3.48E-02		
9801-0000-039-RA									
	G8FT61AA	AC-228	5.61E-01 +- 1.72E-01		pCi/g		1.30E-01		
		AG-108M	9.29E-03 +- 1.95E-02	U	pCi/g		3.41E-02		
		AM-241	1.68E-02 +- 1.32E-01	U	pCi/g		2.21E-01		
		BI-212	6.50E-01 +- 3.08E-01	U	pCi/g		5.93E-01		
		BI-214	5.38E-01 +- 1.02E-01		pCi/g		6.34E-02		
		CO-60	4.53E-01 +- 1.03E-01		pCi/g		3.06E-02	1.50E-01	
		CS-134	4.37E-02 +- 2.31E-02	U	pCi/g		4.47E-02	1.80E-01	
		CS-137	2.24E+00 +- 2.80E-01		pCi/g		3.70E-02	3.00E-01	
		EU-152	3.48E-02 +- 5.73E-02	U	pCi/g		1.02E-01	4.00E-01	
		EU-154	3.40E-02 +- 6.02E-02	U	pCi/g		1.14E-01	3.50E-01	
		EU-155	6.15E-02 +- 6.72E-02	U	pCi/g		1.19E-01	1.50E+01	
		K-40	9.12E+00 +- 1.80E+00		pCi/g		1.89E-01		

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RER2 - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.

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Sample Results Summary

STL Richland STLR

Ordered by Method, Batch No., Client Sample ID.

Date: 21-Apr-05

Report No. : 28635

SDG No: 28704

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RER2
5105297 RICHRC5017									
9801-0000-039-RA									
	G8FT61AA	MN-54	8.88E-03 +- 1.74E-02	U	pCi/g		3.20E-02	6.50E-01	
		NB-94	4.20E-03 +- 1.94E-02	U	pCi/g		3.45E-02	2.50E-01	
		PB-212	5.77E-01 +- 1.09E-01		pCi/g		6.03E-02		
		PB-214	5.83E-01 +- 1.19E-01		pCi/g		7.30E-02		
		RA-226	5.38E-01 +- 1.02E-01		pCi/g		6.34E-02		
		TL-208	1.94E-01 +- 4.44E-02		pCi/g		3.35E-02		
9801-0000-040-RA-01									
	G8FT41AA	AC-228	4.81E-01 +- 2.08E-01		pCi/g		1.95E-01		
		AG-108M	-1.31E-03 +- 2.66E-02	U	pCi/g		4.72E-02		
		AM-241	1.02E-02 +- 1.12E-01	U	pCi/g		1.93E-01		
		BI-212	5.82E-01 +- 4.51E-01	U	pCi/g		9.38E-01		
		BI-214	4.74E-01 +- 1.38E-01	U	pCi/g		2.34E-01		
		CO-60	3.10E-02 +- 3.80E-02	U	pCi/g		7.99E-02	1.50E-01	
		CS-134	2.39E-02 +- 3.85E-02	U	pCi/g		7.51E-02	1.80E-01	
		CS-137	-3.15E-02 +- 3.69E-02	U	pCi/g		5.89E-02	3.00E-01	
		EU-152	-4.75E-02 +- 8.24E-02	U	pCi/g		1.37E-01	4.00E-01	
		EU-154	2.20E-02 +- 1.12E-01	U	pCi/g		2.16E-01	3.50E-01	
		EU-155	-1.58E-02 +- 9.09E-02	U	pCi/g		1.58E-01	1.50E+01	
		K-40	8.13E+00 +- 1.60E+00		pCi/g		5.21E-01		
		MN-54	-1.16E-02 +- 3.28E-02	U	pCi/g		5.72E-02	6.50E-01	
		NB-94	1.13E-02 +- 3.59E-02	U	pCi/g		6.72E-02	2.50E-01	
		PB-212	4.98E-01 +- 1.27E-01		pCi/g		1.27E-01		
		PB-214	5.99E-01 +- 1.61E-01		pCi/g		1.19E-01		
		RA-226	4.74E-01 +- 1.38E-01	U	pCi/g		2.34E-01		
		TL-208	1.57E-01 +- 6.15E-02		pCi/g		6.52E-02		
5105267 RICHRC5006									
3107-0000-194-C-1C-01									
	G8FQQ1AD	STRONTIUM	2.62E-02 +- 1.26E-02		pCi/g	82%	1.89E-02	1.00E-02	
3107-0000-194-C-1C-01 DUP									
	G8FQQ1AF	STRONTIUM	3.25E-02 +- 1.29E-02		pCi/g	84%	1.66E-02	1.00E-02	0.7
3107-0000-194-C-1C-02									
	G8FQX1AD	STRONTIUM	2.32E-02 +- 1.08E-02		pCi/g	88%	1.57E-02	1.00E-02	
3107-0000-194-C-1C-03									
	G8FQ01AD	STRONTIUM	4.03E-03 +- 8.90E-03	U	pCi/g	81%	1.76E-02	1.00E-02	
3107-0000-194-C-1C-04									
	G8FQ11AD	STRONTIUM	5.53E-02 +- 1.79E-02		pCi/g	89%	1.54E-02	1.00E-02	
3107-0000-194-C-1C-05									

STL Richland

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Sample Results Summary

STL Richland STLR

Ordered by Method, Batch No., Client Sample ID.

Date: 21-Apr-05

Report No. : 28635

SDG No: 28704

Batch	Client Id / Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RER2
5105267 RICHRC5006									
	3107-0000-194-C-1C-05								
	G8FQ21AD	STRONTIUM	1.60E-02 +- 9.26E-03		pCi/g	88%	1.51E-02	1.00E-02	
	3107-0000-194-C-2C-06								
	G8FQ31AD	STRONTIUM	7.92E-02 +- 2.37E-02		pCi/g	79%	1.61E-02	1.00E-02	
	3107-0000-195-C-1C-01								
	G8FQ71AD	STRONTIUM	9.41E-02 +- 2.71E-02		pCi/g	89%	1.56E-02	1.00E-02	
	3107-0000-195-C-1C-02								
	G8FQ91AD	STRONTIUM	1.10E-01 +- 3.15E-02		pCi/g	84%	1.70E-02	1.00E-02	
	3107-0000-195-C-1C-03								
	G8FRA1AD	STRONTIUM	2.82E-02 +- 1.22E-02		pCi/g	79%	1.66E-02	1.00E-02	
	3107-0000-195-C-1C-04								
	G8FRC1AD	STRONTIUM	1.25E-01 +- 3.50E-02		pCi/g	96%	1.51E-02	1.00E-02	
	3107-0000-195-C-2C-05								
	G8FRF1AD	STRONTIUM	2.00E-01 +- 5.43E-02		pCi/g	88%	1.59E-02	1.00E-02	
	3107-0000-195-C-2C-06								
	G8FRG1AD	STRONTIUM	1.57E-01 +- 4.41E-02		pCi/g	86%	1.67E-02	1.00E-02	
	3107-0000-196-C-1C-01								
	G8FRH1AD	STRONTIUM	1.86E-01 +- 5.14E-02		pCi/g	87%	1.60E-02	1.00E-02	
	3107-0000-196-C-1C-02								
	G8FRK1AD	STRONTIUM	1.46E-01 +- 4.10E-02		pCi/g	83%	1.65E-02	1.00E-02	
	3107-0000-196-C-1C-03								
	G8FRN1AD	STRONTIUM	4.63E-02 +- 1.62E-02		pCi/g	80%	1.70E-02	1.00E-02	
5105271 RICHRC5006									
	3107-0000-196-C-2C-04								
	G8FRQ1AD	STRONTIUM	2.36E-01 +- 6.43E-02		pCi/g	77%	1.90E-02	1.00E-02	
	3107-0000-196-C-2C-05								
	G8FRR1AD	STRONTIUM	8.81E-02 +- 2.58E-02		pCi/g	83%	1.62E-02	1.00E-02	
	3107-0000-196-C-2C-06								
	G8FRT1AD	STRONTIUM	1.34E-01 +- 3.72E-02		pCi/g	89%	1.51E-02	1.00E-02	
	3107-0000-197-C-1C-01								
	G8FRV1AD	STRONTIUM	2.79E-01 +- 7.55E-02		pCi/g	70%	1.90E-02	1.00E-02	
	3107-0000-197-C-1C-02								
	G8FRW1AD	STRONTIUM	1.05E-01 +- 3.04E-02		pCi/g	84%	1.54E-02	1.00E-02	
	3107-0000-197-C-1C-03								
	G8FRX1AD	STRONTIUM	7.55E-02 +- 2.29E-02		pCi/g	78%	1.61E-02	1.00E-02	
	3107-0000-197-C-1C-03 DUP								
	G8FRX1AF	STRONTIUM	1.97E-01 +- 5.35E-02		pCi/g	100%	1.28E-02	1.00E-02	4.2
	3107-0000-197-C-1C-04								
	G8FR21AD	STRONTIUM	5.08E-02 +- 1.62E-02		pCi/g	93%	1.45E-02	1.00E-02	

STL Richland **RER2** - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.

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Sample Results Summary

STL Richland STLR

Ordered by Method, Batch No., Client Sample ID.

Date: 21-Apr-05

Report No. : 28635

SDG No: 28704

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RER2
5105271	**RICHRC5006**								
	3107-0000-197-C-1C-05								
	G8FR31AD	STRONTIUM	7.79E-02 +- 2.29E-02		pCi/g	97%	1.45E-02	1.00E-02	
	3107-0000-197-C-1C-06								
	G8FR51AD	STRONTIUM	8.96E-02 +- 2.58E-02		pCi/g	97%	1.36E-02	1.00E-02	
	3107-0000-198-C-1C-01								
	G8FR71AD	STRONTIUM	2.43E-01 +- 6.59E-02		pCi/g	76%	1.74E-02	1.00E-02	
	3107-0000-198-C-1C-02								
	G8FR81AD	STRONTIUM	1.50E-01 +- 4.14E-02		pCi/g	86%	1.54E-02	1.00E-02	
	3107-0000-198-C-1C-03								
	G8FR91AD	STRONTIUM	6.66E-02 +- 2.06E-02		pCi/g	89%	1.56E-02	1.00E-02	
	3107-0000-198-C-1C-04								
	G8FTC1AD	STRONTIUM	1.39E-01 +- 3.90E-02		pCi/g	84%	1.56E-02	1.00E-02	
	3107-0000-198-C-1C-05								
	G8FTD1AD	STRONTIUM	1.76E-01 +- 4.89E-02		pCi/g	81%	1.62E-02	1.00E-02	
	3107-0000-198-C-1C-06								
	G8FTE1AD	STRONTIUM	1.50E-01 +- 4.16E-02		pCi/g	90%	1.49E-02	1.00E-02	
5105275	**RICHRC5006**								
	3107-0000-199-C-1C-01								
	G8FTG1AD	STRONTIUM	5.71E-01 +- 1.58E-01		pCi/g	56%	2.19E-02	1.00E-02	
	3107-0000-199-C-1C-01 DUP								
	G8FTG1AF	STRONTIUM	4.17E-01 +- 1.14E-01		pCi/g	54%	2.17E-02	1.00E-02	1.6
	3107-0000-199-C-1C-02								
	G8FTH1AD	STRONTIUM	1.83E-01 +- 5.45E-02		pCi/g	35%	3.06E-02	1.00E-02	
	3107-0000-199-C-1C-03								
	G8FTJ1AD	STRONTIUM	1.53E-01 +- 4.66E-02		pCi/g	65%	2.08E-02	1.00E-02	
	3107-0000-199-C-1C-04								
	G8FTK1AD	STRONTIUM	1.58E-01 +- 4.70E-02		pCi/g	41%	2.90E-02	1.00E-02	
	3107-0000-199-C-1C-05								
	G8FTL1AD	STRONTIUM	2.30E-01 +- 6.35E-02		pCi/g	63%	1.93E-02	1.00E-02	
	3107-0000-199-C-2C-06								
	G8FTM1AD	STRONTIUM	2.13E-01 +- 5.87E-02		pCi/g	70%	1.77E-02	1.00E-02	
	9801-0000-030-RA-01								
	G8FTN1AD	STRONTIUM	2.17E-02 +- 1.01E-02	J	pCi/g	88%	1.47E-02	5.00E-02	
	9801-0000-031-RA-01								
	G8FTX1AD	STRONTIUM	7.24E-02 +- 2.18E-02		pCi/g	89%	1.43E-02	5.00E-02	
	9801-0000-032-RA-01								
	G8FT01AD	STRONTIUM	1.86E-03 +- 7.53E-03	U	pCi/g	81%	1.51E-02	5.00E-02	
	9801-0000-033-RA-01								
	G8FT11AD	STRONTIUM	1.58E-02 +- 1.49E-02	U	pCi/g	40%	2.73E-02	5.00E-02	

STL Richland

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Sample Results Summary

STL Richland STLR

Ordered by Method, Batch No., Client Sample ID.

Date: 21-Apr-05

Report No. : 28635

SDG No: 28704

Batch	Client Id / Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RER2
5105275	**RICHRC5006**								
	9801-0000-034-RA-01								
	G8FT21AD	STRONTIUM	5.94E-03 +- 1.06E-02	U	pCi/g	58%	2.08E-02	5.00E-02	
	9801-0000-039-RA								
	G8FT61AD	STRONTIUM	2.11E-01 +- 5.77E-02		pCi/g	80%	1.54E-02	5.00E-02	
	9801-0000-040-RA-01								
	G8FT41AD	STRONTIUM	3.31E+00 +- 8.63E-01		pCi/g	76%	1.73E-02	5.00E-02	
5105278	**RICHRC5037**								
	3107-0000-194-C-1C-01								
	G8FQQ1AC	H-3	6.51E+00 +- 3.02E-01		pCi/g	100%	4.75E-02	3.00E+00	
	3107-0000-194-C-1C-02								
	G8FQX1AC	H-3	1.37E+01 +- 6.00E-01		pCi/g	100%	4.21E-02	3.00E+00	
	3107-0000-194-C-1C-03								
	G8FQ01AC	H-3	1.19E+01 +- 5.17E-01		pCi/g	100%	3.57E-02	3.00E+00	
	3107-0000-194-C-1C-04								
	G8FQ11AC	H-3	1.12E+01 +- 4.91E-01		pCi/g	100%	3.68E-02	3.00E+00	
	3107-0000-194-C-1C-04 DUP								
	G8FQ11AF	H-3	1.12E+01 +- 4.92E-01		pCi/g	100%	3.83E-02	3.00E+00	0.0
	3107-0000-194-C-1C-05								
	G8FQ21AC	H-3	6.14E+00 +- 2.80E-01		pCi/g	100%	3.59E-02	3.00E+00	
	3107-0000-194-C-2C-06								
	G8FQ31AC	H-3	1.58E+00 +- 9.35E-02	J	pCi/g	100%	4.51E-02	3.00E+00	
	3107-0000-195-C-1C-01								
	G8FQ71AC	H-3	4.95E+00 +- 2.41E-01		pCi/g	100%	5.51E-02	3.00E+00	
	3107-0000-195-C-1C-02								
	G8FQ91AC	H-3	1.30E+01 +- 5.66E-01		pCi/g	100%	4.11E-02	3.00E+00	
	3107-0000-195-C-1C-03								
	G8FRA1AC	H-3	1.79E+01 +- 7.73E-01		pCi/g	100%	4.26E-02	3.00E+00	
	3107-0000-195-C-1C-04								
	G8FRC1AC	H-3	1.31E+01 +- 5.71E-01		pCi/g	100%	3.90E-02	3.00E+00	
	3107-0000-195-C-2C-05								
	G8FRF1AC	H-3	1.13E+01 +- 4.96E-01		pCi/g	100%	3.59E-02	3.00E+00	
	3107-0000-195-C-2C-06								
	G8FRG1AC	H-3	7.50E+00 +- 3.38E-01		pCi/g	100%	3.88E-02	3.00E+00	
	3107-0000-196-C-1C-01								
	G8FRH1AC	H-3	5.55E+00 +- 2.62E-01		pCi/g	100%	4.77E-02	3.00E+00	
	3107-0000-196-C-1C-02								
	G8FRK1AC	H-3	6.98E+00 +- 3.22E-01		pCi/g	100%	4.84E-02	3.00E+00	
	3107-0000-196-C-1C-03								
	G8FRN1AC	H-3	4.18E+00 +- 2.00E-01		pCi/g	100%	4.05E-02	3.00E+00	

STL Richland

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Sample Results Summary

STL Richland STLR

Ordered by Method, Batch No., Client Sample ID.

Date: 21-Apr-05

Report No. : 28635

SDG No: 28704

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RER2
5105284	**RICHRC5037**								
	3107-0000-196-C-2C-04								
	G8FRQ1AC	H-3	1.08E+01 +- 4.74E-01		pCi/g	100%	2.65E-02	3.00E+00	
	3107-0000-196-C-2C-05								
	G8FRR1AC	H-3	1.33E+01 +- 5.80E-01		pCi/g	100%	2.55E-02	3.00E+00	
	3107-0000-196-C-2C-06								
	G8FRT1AC	H-3	1.58E+01 +- 6.96E-01		pCi/g	100%	3.94E-02	3.00E+00	
	3107-0000-197-C-1C-01								
	G8FRV1AC	H-3	2.19E+00 +- 1.09E-01	J	pCi/g	100%	2.55E-02	3.00E+00	
	3107-0000-197-C-1C-02								
	G8FRW1AC	H-3	5.65E+00 +- 2.59E-01		pCi/g	100%	3.03E-02	3.00E+00	
	3107-0000-197-C-1C-03								
	G8FRX1AC	H-3	3.50E+00 +- 1.68E-01		pCi/g	100%	3.11E-02	3.00E+00	
	3107-0000-197-C-1C-04								
	G8FR21AC	H-3	4.42E+00 +- 2.05E-01		pCi/g	100%	2.75E-02	3.00E+00	
	3107-0000-197-C-1C-05								
	G8FR31AC	H-3	3.71E+00 +- 1.72E-01		pCi/g	100%	2.30E-02	3.00E+00	
	3107-0000-197-C-1C-05 DUP								
	G8FR31AF	H-3	4.87E+00 +- 2.22E-01		pCi/g	100%	2.42E-02	3.00E+00	8.2
	3107-0000-197-C-1C-06								
	G8FR51AC	H-3	5.24E+00 +- 2.37E-01		pCi/g	100%	2.33E-02	3.00E+00	
	3107-0000-198-C-1C-01								
	G8FR71AC	H-3	4.17E+00 +- 1.91E-01		pCi/g	100%	2.28E-02	3.00E+00	
	3107-0000-198-C-1C-02								
	G8FR81AC	H-3	7.78E+00 +- 3.46E-01		pCi/g	100%	2.46E-02	3.00E+00	
	3107-0000-198-C-1C-03								
	G8FR91AC	H-3	8.31E+00 +- 3.66E-01		pCi/g	100%	2.17E-02	3.00E+00	
	3107-0000-198-C-1C-04								
	G8FTC1AC	H-3	6.25E+00 +- 2.80E-01		pCi/g	100%	2.34E-02	3.00E+00	
	3107-0000-198-C-1C-05								
	G8FTD1AC	H-3	8.21E+00 +- 3.63E-01		pCi/g	100%	2.31E-02	3.00E+00	
	3107-0000-198-C-1C-06								
	G8FTE1AC	H-3	6.46E+00 +- 2.88E-01		pCi/g	100%	2.27E-02	3.00E+00	
5105287	**RICHRC5037**								
	3107-0000-199-C-1C-01								
	G8FTG1AC	H-3	1.77E+00 +- 1.19E-01	J	pCi/g	100%	7.71E-02	3.00E+00	
	3107-0000-199-C-1C-01 DUP								
	G8FTG1AG	H-3	1.84E+00 +- 1.05E-01	J	pCi/g	100%	4.49E-02	3.00E+00	0.8
	3107-0000-199-C-1C-02								
	G8FTH1AC	H-3	1.40E+00 +- 8.15E-02	J	pCi/g	100%	3.58E-02	3.00E+00	

STL Richland **RER2** - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.

rptSTLRchSaSummary2 V4.12 A97 **J Qual** - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.

Sample Results Summary

STL Richland STLR

Ordered by Method, Batch No., Client Sample ID.

Date: 21-Apr-05

Report No. : 28635

SDG No: 28704

Batch	Client Id / Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RER2
5105287	RICHRC5037								
	3107-0000-199-C-1C-03								
	G8FTJ1AC	H-3	4.29E-01 +- 3.74E-02	J	pCi/g	100%	3.37E-02	3.00E+00	
	3107-0000-199-C-1C-04								
	G8FTK1AC	H-3	2.71E-01 +- 3.02E-02	J	pCi/g	100%	3.48E-02	3.00E+00	
	3107-0000-199-C-1C-05								
	G8FTL1AC	H-3	6.54E-01 +- 4.73E-02	J	pCi/g	100%	3.30E-02	3.00E+00	
	3107-0000-199-C-2C-06								
	G8FTM1AC	H-3	8.49E-01 +- 5.67E-02	J	pCi/g	100%	3.42E-02	3.00E+00	
	9801-0000-030-RA-01								
	G8FTN1AC	H-3	2.59E-01 +- 2.89E-02	J	pCi/g	100%	3.32E-02	1.50E+01	
	9801-0000-031-RA-01								
	G8FTX1AC	H-3	9.93E-03 +- 1.48E-02	U	pCi/g	100%	3.31E-02	1.50E+01	
	9801-0000-032-RA-01								
	G8FT01AC	H-3	2.34E-02 +- 1.56E-02	U	pCi/g	100%	3.27E-02	1.50E+01	
	9801-0000-033-RA-01								
	G8FT11AC	H-3	5.15E-02 +- 1.72E-02	J	pCi/g	100%	3.22E-02	1.50E+01	
	9801-0000-034-RA-01								
	G8FT21AC	H-3	8.67E-03 +- 1.46E-02	U	pCi/g	100%	3.26E-02	1.50E+01	
	9801-0000-039-RA								
	G8FT61AC	H-3	7.26E-01 +- 5.44E-02	J	pCi/g	100%	4.00E-02	1.50E+01	
	9801-0000-040-RA-01								
	G8FT41AC	H-3	5.59E-01 +- 4.37E-02	J	pCi/g	100%	3.44E-02	1.50E+01	

No. of Results: 920

RER2 - Replicate Error Ratio = (S-D)/|sqrt(sq(TPUs)+sq(TPUd))| as defined by ICPT BOA.

J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.

U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

QC Results Summary

STL Richland STLR

Ordered by Method, Batch No, QC Type,.

Date: 21-Apr-05

Report No. : 28635

SDG No.: 28704

Batch Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	Recovery	Bias	MDC|MDA
RICHRC5017								
5105290 BLANK QC								
G8GGE1AA	AC-228	-1.34E-02 +- 8.15E-02	U	pCi/g				1.46E-01
	AG-108M	-6.03E-03 +- 1.43E-02	U	pCi/g				2.47E-02
	AM-241	-7.00E-03 +- 4.73E-02	U	pCi/g				8.43E-02
	BI-212	6.79E-02 +- 3.13E-01	U	pCi/g				5.95E-01
	BI-214	-3.98E-02 +- 5.64E-02	U	pCi/g				9.44E-02
	CO-60	-1.75E-02 +- 2.39E-02	U	pCi/g				3.94E-02
	CS-134	4.53E-03 +- 2.33E-02	U	pCi/g				4.45E-02
	CS-137	-1.31E-03 +- 2.23E-02	U	pCi/g				4.04E-02
	EU-152	-5.06E-03 +- 5.26E-02	U	pCi/g				9.54E-02
	EU-154	-3.82E-02 +- 6.27E-02	U	pCi/g				1.07E-01
	EU-155	3.09E-03 +- 4.09E-02	U	pCi/g				7.63E-02
	K-40	-1.07E-01 +- 4.77E-01	U	pCi/g				1.03E+00
	MN-54	2.00E-02 +- 2.11E-02	U	pCi/g				4.37E-02
	NB-94	5.95E-03 +- 2.12E-02	U	pCi/g				4.08E-02
	PB-212	5.85E-03 +- 2.85E-02	U	pCi/g				5.21E-02
	PB-214	-3.91E-02 +- 4.39E-02	U	pCi/g				7.57E-02
	RA-226	-3.99E-02 +- 5.63E-02	U	pCi/g				9.44E-02
	TL-208	9.91E-03 +- 2.37E-02	U	pCi/g				4.38E-02
5105290 LCS								
G8GGE1AC	CS-137	1.14E+00 +- 1.63E-01		pCi/g		112%	0.1	4.52E-02
RICHRC5017								
5105292 BLANK QC								
G8GHF1AA	AC-228	7.73E-03 +- 6.88E-02	U	pCi/g				1.32E-01
	AG-108M	4.12E-03 +- 1.72E-02	U	pCi/g				3.19E-02
	AM-241	5.04E-02 +- 4.47E-02	U	pCi/g				8.99E-02
	BI-212	-1.09E-01 +- 2.80E-01	U	pCi/g				4.97E-01
	BI-214	-1.56E-02 +- 5.31E-02	U	pCi/g				9.33E-02
	CO-60	-2.60E-03 +- 2.38E-02	U	pCi/g				4.51E-02
	CS-134	2.41E-03 +- 2.35E-02	U	pCi/g				4.44E-02
	CS-137	1.57E-02 +- 2.43E-02	U	pCi/g				4.71E-02
	EU-152	-2.06E-02 +- 5.35E-02	U	pCi/g				9.39E-02
	EU-154	1.69E-02 +- 7.10E-02	U	pCi/g				1.41E-01
	EU-155	-1.39E-02 +- 4.04E-02	U	pCi/g				7.22E-02
	K-40	6.92E-02 +- 5.06E-01	U	pCi/g				1.09E+00
	MN-54	-3.28E-03 +- 1.87E-02	U	pCi/g				3.42E-02
	NB-94	1.93E-02 +- 2.34E-02	U	pCi/g				4.71E-02
	PB-212	-5.22E-03 +- 2.64E-02	U	pCi/g				4.68E-02

STL Richland **Bias** - (Result/Expected)-1 as defined by ANSI N13.30.

rptSTLRchQcSummary V4.12 A97 **U Qual** - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

QC Results Summary
STL Richland STLR

Date: 21-Apr-05

Ordered by Method, Batch No, QC Type,.

Report No. : 28635 **SDG No.**: 28704

Batch Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	Recovery	Bias	MDC|MDA
G8GHF1AA	PB-214	3.08E-02 +- 5.65E-02	U	pCi/g				9.03E-02
	RA-226	-1.56E-02 +- 5.31E-02	U	pCi/g				9.33E-02
	TL-208	1.42E-02 +- 2.42E-02	U	pCi/g				4.55E-02
5105292 LCS								
G8GHF1AC	CS-137	1.13E+00 +- 1.77E-01		pCi/g		111%	0.1	5.52E-02
RICHRC5017								
5105297 BLANK QC								
G8GHT1AA	AC-228	-3.28E-02 +- 7.56E-02	U	pCi/g				1.32E-01
	AG-108M	-1.67E-02 +- 1.84E-02	U	pCi/g				2.96E-02
	AM-241	1.71E-02 +- 4.43E-02	U	pCi/g				8.34E-02
	BI-212	1.28E-01 +- 2.79E-01	U	pCi/g				5.46E-01
	BI-214	1.51E-02 +- 4.84E-02	U	pCi/g				9.13E-02
	CO-60	6.87E-03 +- 2.09E-02	U	pCi/g				4.35E-02
	CS-134	-3.91E-03 +- 2.00E-02	U	pCi/g				3.71E-02
	CS-137	6.46E-03 +- 2.05E-02	U	pCi/g				3.96E-02
	EU-152	-3.91E-02 +- 4.98E-02	U	pCi/g				7.95E-02
	EU-154	-4.26E-02 +- 7.00E-02	U	pCi/g				1.18E-01
	EU-155	-1.64E-02 +- 4.17E-02	U	pCi/g				7.36E-02
	K-40	-3.47E-02 +- 4.71E-01	U	pCi/g				1.03E+00
	MN-54	1.46E-02 +- 2.02E-02	U	pCi/g				4.14E-02
	NB-94	-8.58E-03 +- 1.99E-02	U	pCi/g				3.49E-02
	PB-212	1.78E-02 +- 2.79E-02	U	pCi/g				5.31E-02
	PB-214	-1.86E-02 +- 4.60E-02	U	pCi/g				7.87E-02
	RA-226	1.27E-02 +- 4.87E-02	U	pCi/g				9.14E-02
	TL-208	6.95E-03 +- 2.00E-02	U	pCi/g				3.87E-02
5105297 LCS								
G8GHT1AC	CS-137	1.17E+00 +- 1.88E-01		pCi/g		115%	0.1	6.51E-02
RICHRC5006								
5105267 BLANK QC								
G8GCJ1AA	STRONTIUM	2.42E-03 +- 8.11E-03	U	pCi/g	89%			1.62E-02
5105267 LCS								
G8GCJ1AC	STRONTIUM	2.48E-01 +- 6.85E-02		pCi/g	87%	91%	-0.1	1.55E-02
RICHRC5006								
5105271 BLANK QC								
G8GC11AA	STRONTIUM	-6.21E-04 +- 7.47E-03	U	pCi/g	91%			1.53E-02
5105271 LCS								
G8GC11AC	STRONTIUM	2.46E-01 +- 6.80E-02		pCi/g	74%	90%	-0.1	1.70E-02
RICHRC5006								
5105275 BLANK QC								
G8GDD1AA	STRONTIUM	-5.18E-04 +- 7.08E-03	U	pCi/g	92%			1.45E-02
5105275 LCS								

STL Richland **Bias** - (Result/Expected)-1 as defined by ANSI N13.30.

rptSTLRchQcSummary V4.12 A97 **U Qual** - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

QC Results Summary

STL Richland STLR

Ordered by Method, Batch No, QC Type,.

Date: 21-Apr-05

Report No. : 28635

SDG No.: 28704

Batch Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	Recovery	Bias	MDC|MDA
G8GDD1AC	STRONTIUM	2.55E-01 +- 6.82E-02		pCi/g	91%	94%	-0.1	1.43E-02
RICHRC5037								
5105278 BLANK QC								
G8GDP1AA	H-3	-3.76E-02 +- 1.46E-01	U	pCi/g	100%			3.47E-01
5105278 LCS								
G8GDP1AC	H-3	1.19E+00 +- 2.18E-01	J	pCi/g	100%	87%	-0.1	3.50E-01
RICHRC5037								
5105284 BLANK QC								
G8GFG1AA	H-3	-8.33E-02 +- 8.75E-02	U	pCi/g	100%			2.17E-01
5105284 LCS								
G8GFG1AC	H-3	5.54E+00 +- 3.27E-01	J	pCi/g	100%	81%	-0.2	2.16E-01
RICHRC5037								
5105287 BLANK QC								
G8GF01AA	H-3	-9.29E-02 +- 1.34E-01	U	pCi/g	100%			3.29E-01
5105287 LCS								
G8GF01AC	H-3	6.26E+00 +- 4.26E-01	J	pCi/g	100%	92%	-0.1	3.32E-01

No. of Results: 69

STL Richland

rptSTLRchQcSummary V4.12 A97

Bias - (Result/Expected)-1 as defined by ANSI N13.30.

J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.

U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

STL RICHLAND

FORM I

SAMPLE RESULTS

Date: 21-Apr-05

Lab Name:	STL Richland	**SDG:**	28704	**Collection Date:**	4/7/2005 1:50:00 PM
Lot-Sample No.:	J5D150180-1	**Report No. :**	28635	**Received Date:**	4/15/2005 9:00:00 AM
Client Sample ID:	3107-0000-194-C-1C-01	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5105267	RICHRC5006			**Work Order:**	G8FQQ1AD		**Report DB ID:**	9G8FQQ10				
STRONTIUM	***2.62E-02***		1.05E-02	1.26E-02	1.89E-02	pCi/g	82%	*(1.4)*	4/20/05 09:53 a		25.0	GPC26A
						9.16E-03	1.00E-02	*(4.2)*			G	
Batch: 5105278	RICHRC5037			**Work Order:**	G8FQQ1AC		**Report DB ID:**	9G8FQQ10				
H-3	***6.51E+00***		1.32E-01	3.02E-01	4.75E-02	pCi/g	100%	*(137.1)*	4/18/05 07:58 p		100.9	LSC3
						2.20E-02	3.00E+00	*(43.1)*			G	
Batch: 5105290	RICHRC5017			**Work Order:**	G8FQQ1AA		**Report DB ID:**	9G8FQQ10				
AC-228	***4.10E-01***	U	1.74E-01	1.74E-01	3.33E-01	pCi/g		*(1.2)*	4/16/05 12:11 p		273.4	GER7$1
								(4.7)			g	
AG-108M	***1.60E-02***	U	2.56E-02	2.56E-02	4.80E-02	pCi/g		*0.33*	4/16/05 12:11 p		273.4	GER7$1
								(1.3)			g	
AM-241	***1.78E-02***	U	8.76E-02	8.76E-02	1.55E-01	pCi/g		*0.11*	4/16/05 12:11 p		273.4	GER7$1
								0.41			g	
BI-212	***5.33E-01***	U	4.66E-01	4.66E-01	9.13E-01	pCi/g		*0.58*	4/16/05 12:11 p		273.4	GER7$1
								(2.3)			g	
BI-214	***3.21E-01***	U	1.61E-01	1.61E-01	1.99E-01	pCi/g		*(1.6)*	4/16/05 12:11 p		273.4	GER7$1
								(4.)			g	
CO-60	***1.89E-02***	U	3.43E-02	3.43E-02	6.91E-02	pCi/g		*0.27*	4/16/05 12:11 p		273.4	GER7$1
							3.00E+00	*(1.1)*			g	
CS-134	***2.99E-03***	U	3.13E-02	3.13E-02	5.83E-02	pCi/g		*0.05*	4/16/05 12:11 p		273.4	GER7$1
							1.00E+01	*0.19*			g	

STL Richland
rptSTLRchSample
V4.12 A97

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.
U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

FORM I

SAMPLE RESULTS

Date: 21-Apr-05

Lab Name: STL Richland
SDG: 28704
Collection Date: 4/7/2005 1:50:00 PM
Lot-Sample No.: J5D150180-1
Report No. : 28635
Received Date: 4/15/2005 9:00:00 AM
Client Sample ID: 3107-0000-194-C-1C-01
COC No. :
Matrix: SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC | MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
CS-137	***1.15E-02***	U	2.93E-02	2.93E-02	5.53E-02	pCi/g		*0.21*	4/16/05 12:11 p		273.4	GER7$1
							2.00E+01	*0.79*			g	
EU-152	***-6.49E-02***	U	9.38E-02	9.38E-02	1.31E-01	pCi/g		*-0.5*	4/16/05 12:11 p		273.4	GER7$1
							9.00E+00	*-(1.4)*			g	
EU-154	***-6.34E-02***	U	9.71E-02	9.71E-02	1.64E-01	pCi/g		*-0.39*	4/16/05 12:11 p		273.4	GER7$1
							7.00E+00	*-(1.3)*			g	
EU-155	***7.20E-02***	U	7.26E-02	7.26E-02	1.31E-01	pCi/g		*0.55*	4/16/05 12:11 p		273.4	GER7$1
							3.00E+02	*(2.)*			g	
K-40	***7.92E+00***		1.49E+00	1.49E+00	5.64E-01	pCi/g		*(14.)*	4/16/05 12:11 p		273.4	GER7$1
								(10.6)			g	
MN-54	***2.50E-03***	U	3.33E-02	3.33E-02	6.05E-02	pCi/g		*0.04*	4/16/05 12:11 p		273.4	GER7$1
							2.00E+00	*0.15*			g	
NB-94	***-8.07E-03***	U	2.30E-02	2.30E-02	4.06E-02	pCi/g		*-0.2*	4/16/05 12:11 p		273.4	GER7$1
							3.00E-01	*-0.7*			g	
PB-212	***3.97E-01***		9.99E-02	9.99E-02	1.08E-01	pCi/g		*(3.7)*	4/16/05 12:11 p		273.4	GER7$1
								(7.9)			g	
PB-214	***3.17E-01***		1.75E-01	1.75E-01	1.07E-01	pCi/g		*(3.)*	4/16/05 12:11 p		273.4	GER7$1
								(3.6)			g	
RA-226	***3.21E-01***	U	1.61E-01	1.61E-01	1.99E-01	pCi/g		*(1.6)*	4/16/05 12:11 p		273.4	GER7$1
								(4.)			g	
TL-208	***1.75E-01***	U	6.16E-02	6.16E-02	9.20E-02	pCi/g		*(1.9)*	4/16/05 12:11 p		273.4	GER7$1
								(5.7)			g	

STL Richland
rptSTLRchSample
V4.12 A97

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.
U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

FORM I

SAMPLE RESULTS

Date: 21-Apr-05

Lab Name:	**STL Richland**	**SDG:**	28704	**Collection Date:**	4/7/2005 1:50:00 PM
Lot-Sample No.:	**J5D150180-1**	**Report No. :**	28635	**Received Date:**	4/15/2005 9:00:00 AM
Client Sample ID:	**3107-0000-194-C-1C-01**	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector

No. of Results: 20 **Comments:**

STL Richland
rptSTLRchSample
V4.12 A97

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.
U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

FORM I

SAMPLE RESULTS

Date: 21-Apr-05

Lab Name: STL Richland | **SDG:** 28704 | **Collection Date:** 4/7/2005 1:50:00 PM

Lot-Sample No.: J5D150180-2 | **Report No. :** 28635 | **Received Date:** 4/15/2005 9:00:00 AM

Client Sample ID: 3107-0000-194-C-1C-02 | **COC No. :** | **Matrix:** SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5105267	RICHRC5006			**Work Order:**	G8FQX1AD		**Report DB ID:**	9G8FQX10				
STRONTIUM	***2.32E-02***		8.93E-03	1.08E-02	1.57E-02	pCi/g	88%	*(1.5)*	4/20/05 09:53 a		25.1	GPC26C
						7.57E-03	1.00E-02	*(4.3)*			G	
Batch: 5105278	RICHRC5037			**Work Order:**	G8FQX1AC		**Report DB ID:**	9G8FQX10				
H-3	***1.37E+01***		1.79E-01	6.00E-01	4.21E-02	pCi/g	100%	*(326.7)*	4/18/05 08:40 p		100.1	LSC3
						1.95E-02	3.00E+00	*(45.8)*			G	
Batch: 5105290	RICHRC5017			**Work Order:**	G8FQX1AA		**Report DB ID:**	9G8FQX10				
AC-228	***3.17E-01***	U	1.30E-01	1.30E-01	2.04E-01	pCi/g		*(1.6)*	4/16/05 12:12 p		339.2	GER10$1
								(4.9)			g	
AG-108M	***-1.32E-02***	U	1.48E-02	1.48E-02	2.37E-02	pCi/g		*-0.56*	4/16/05 12:12 p		339.2	GER10$1
								-(1.8)			g	
AM-241	***-5.77E-03***	U	6.60E-02	6.60E-02	1.14E-01	pCi/g		*-0.05*	4/16/05 12:12 p		339.2	GER10$1
								-0.18			g	
BI-212	***5.82E-01***	U	2.67E-01	2.67E-01	5.48E-01	pCi/g		*(1.1)*	4/16/05 12:12 p		339.2	GER10$1
								(4.4)			g	
BI-214	***5.08E-01***		9.70E-02	9.70E-02	6.35E-02	pCi/g		*(8.)*	4/16/05 12:12 p		339.2	GER10$1
								(10.5)			g	
CO-60	***-8.34E-03***	U	1.77E-02	1.77E-02	3.03E-02	pCi/g		*-0.28*	4/16/05 12:12 p		339.2	GER10$1
							3.00E+00	*-0.94*			g	
CS-134	***1.73E-02***	U	1.95E-02	1.95E-02	3.83E-02	pCi/g		*0.45*	4/16/05 12:12 p		339.2	GER10$1
							1.00E+01	*(1.8)*			g	

STL Richland
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FORM I

SAMPLE RESULTS

Date: 21-Apr-05

Lab Name:	STL Richland	**SDG:**	28704	**Collection Date:**	4/7/2005 1:50:00 PM
Lot-Sample No.:	J5D150180-2	**Report No. :**	28635	**Received Date:**	4/15/2005 9:00:00 AM
Client Sample ID:	3107-0000-194-C-1C-02	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
CS-137	***1.51E-04***	U	2.01E-02	2.01E-02	3.55E-02	pCi/g		*0.*	4/16/05 12:12 p		339.2	GER10$1
							2.00E+01	*0.02*			g	
EU-152	***-1.90E-02***	U	4.98E-02	4.98E-02	8.52E-02	pCi/g		*-0.22*	4/16/05 12:12 p		339.2	GER10$1
							9.00E+00	*-0.76*			g	
EU-154	***2.95E-02***	U	5.44E-02	5.44E-02	1.06E-01	pCi/g		*0.28*	4/16/05 12:12 p		339.2	GER10$1
							7.00E+00	*(1.1)*			g	
EU-155	***2.34E-03***	U	5.94E-02	5.94E-02	1.02E-01	pCi/g		*0.02*	4/16/05 12:12 p		339.2	GER10$1
							3.00E+02	*0.08*			g	
K-40	***7.63E+00***		1.20E+00	1.20E+00	3.18E-01	pCi/g		*(24.)*	4/16/05 12:12 p		339.2	GER10$1
								(12.7)			g	
MN-54	***5.18E-03***	U	1.95E-02	1.95E-02	3.58E-02	pCi/g		*0.14*	4/16/05 12:12 p		339.2	GER10$1
							2.00E+00	*0.53*			g	
NB-94	***-1.03E-02***	U	1.88E-02	1.88E-02	3.16E-02	pCi/g		*-0.33*	4/16/05 12:12 p		339.2	GER10$1
							3.00E-01	*-(1.1)*			g	
PB-212	***3.64E-01***		7.42E-02	7.42E-02	6.87E-02	pCi/g		*(5.3)*	4/16/05 12:12 p		339.2	GER10$1
								(9.8)			g	
PB-214	***4.74E-01***		1.06E-01	1.06E-01	6.45E-02	pCi/g		*(7.3)*	4/16/05 12:12 p		339.2	GER10$1
								(8.9)			g	
RA-226	***5.08E-01***		9.70E-02	9.70E-02	6.35E-02	pCi/g		*(8.)*	4/16/05 12:12 p		339.2	GER10$1
								(10.5)			g	
TL-208	***1.20E-01***		2.93E-02	2.93E-02	2.94E-02	pCi/g		*(4.1)*	4/16/05 12:12 p		339.2	GER10$1
								(8.2)			g	

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FORM I

SAMPLE RESULTS

Date: 21-Apr-05

Lab Name:	STL Richland	**SDG:**	28704	**Collection Date:**	4/7/2005 1:50:00 PM
Lot-Sample No.:	J5D150180-2	**Report No. :**	28635	**Received Date:**	4/15/2005 9:00:00 AM
Client Sample ID:	3107-0000-194-C-1C-02	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC | MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector

No. of Results: 20 **Comments:**

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM I

SAMPLE RESULTS

Date: 21-Apr-05

Lab Name:	**STL Richland**	**SDG:**	28704	**Collection Date:**	4/7/2005 1:50:00 PM
Lot-Sample No.:	**J5D150180-3**	**Report No. :**	28635	**Received Date:**	4/15/2005 9:00:00 AM
Client Sample ID:	**3107-0000-194-C-1C-03**	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5105267	RICHRC5006			**Work Order:**	G8FQ01AD		**Report DB ID:**	9G8FQ010				
STRONTIUM	***4.03E-03***	U	8.84E-03	8.90E-03	1.76E-02	pCi/g	81%	*0.23*	4/20/05 09:53 a		25.04	GPC26D
						8.47E-03	1.00E-02	*0.91*			G	
Batch: 5105278	RICHRC5037			**Work Order:**	G8FQ01AC		**Report DB ID:**	9G8FQ010				
H-3	***1.19E+01***		1.53E-01	5.17E-01	3.57E-02	pCi/g	100%	*(332.6)*	4/18/05 09:22 p		100.9	LSC3
						1.65E-02	3.00E+00	*(45.8)*			G	
Batch: 5105290	RICHRC5017			**Work Order:**	G8FQ01AA		**Report DB ID:**	9G8FQ010				
AC-228	***5.45E-01***	U	1.36E-01	1.36E-01	2.32E-01	pCi/g		*(2.3)*	4/16/05 12:13 p		299.9	GER11$1
								(8.)			g	
AG-108M	***1.16E-02***	U	1.52E-02	1.52E-02	2.85E-02	pCi/g		*0.41*	4/16/05 12:13 p		299.9	GER11$1
								(1.5)			g	
AM-241	***-5.47E-02***	U	1.22E-01	1.22E-01	2.04E-01	pCi/g		*-0.27*	4/16/05 12:13 p		299.9	GER11$1
								-0.9			g	
BI-212	***3.55E-01***	U	2.90E-01	2.90E-01	5.67E-01	pCi/g		*0.63*	4/16/05 12:13 p		299.9	GER11$1
								(2.4)			g	
BI-214	***7.08E-01***		1.36E-01	1.36E-01	6.27E-02	pCi/g		*(11.3)*	4/16/05 12:13 p		299.9	GER11$1
								(10.4)			g	
CO-60	***1.12E-02***	U	1.90E-02	1.90E-02	3.81E-02	pCi/g		*0.29*	4/16/05 12:13 p		299.9	GER11$1
							3.00E+00	*(1.2)*			g	
CS-134	***1.94E-02***	U	2.05E-02	2.05E-02	4.02E-02	pCi/g		*0.48*	4/16/05 12:13 p		299.9	GER11$1
							1.00E+01	*(1.9)*			g	

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FORM I

SAMPLE RESULTS

Date: 21-Apr-05

Lab Name:	STL Richland	**SDG:**	28704	**Collection Date:**	4/7/2005 1:50:00 PM
Lot-Sample No.:	J5D150180-3	**Report No. :**	28635	**Received Date:**	4/15/2005 9:00:00 AM
Client Sample ID:	3107-0000-194-C-1C-03	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
CS-137	***-2.69E-02***	U	2.67E-02	2.67E-02	4.80E-02	pCi/g		*-0.56*	4/16/05 12:13 p		299.9	GER11$1
							2.00E+01	*-(2.)*			g	
EU-152	***5.57E-02***	U	4.99E-02	4.99E-02	9.52E-02	pCi/g		*0.59*	4/16/05 12:13 p		299.9	GER11$1
							9.00E+00	*(2.2)*			g	
EU-154	***1.66E-02***	U	5.65E-02	5.65E-02	1.08E-01	pCi/g		*0.15*	4/16/05 12:13 p		299.9	GER11$1
							7.00E+00	*0.59*			g	
EU-155	***5.22E-02***	U	6.23E-02	6.23E-02	1.15E-01	pCi/g		*0.46*	4/16/05 12:13 p		299.9	GER11$1
							3.00E+02	*(1.7)*			g	
K-40	***7.46E+00***		1.54E+00	1.54E+00	3.20E-01	pCi/g		*(23.3)*	4/16/05 12:13 p		299.9	GER11$1
								(9.7)			g	
MN-54	***-1.07E-02***	U	1.92E-02	1.92E-02	3.20E-02	pCi/g		*-0.33*	4/16/05 12:13 p		299.9	GER11$1
							2.00E+00	*-(1.1)*			g	
NB-94	***-7.19E-03***	U	1.71E-02	1.71E-02	2.90E-02	pCi/g		*-0.25*	4/16/05 12:13 p		299.9	GER11$1
							3.00E-01	*-0.84*			g	
PB-212	***4.72E-01***		9.15E-02	9.15E-02	4.97E-02	pCi/g		*(9.5)*	4/16/05 12:13 p		299.9	GER11$1
								(10.3)			g	
PB-214	***8.57E-01***		1.56E-01	1.56E-01	6.78E-02	pCi/g		*(12.6)*	4/16/05 12:13 p		299.9	GER11$1
								(11.)			g	
RA-226	***7.08E-01***		1.36E-01	1.36E-01	6.27E-02	pCi/g		*(11.3)*	4/16/05 12:13 p		299.9	GER11$1
								(10.4)			g	
TL-208	***1.59E-01***	U	4.55E-02	4.55E-02	6.54E-02	pCi/g		*(2.4)*	4/16/05 12:13 p		299.9	GER11$1
								(7.)			g	

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FORM I

SAMPLE RESULTS

Date: 21-Apr-05

Lab Name:	STL Richland	**SDG:**	28704	**Collection Date:**	4/7/2005 1:50:00 PM
Lot-Sample No.:	J5D150180-3	**Report No. :**	28635	**Received Date:**	4/15/2005 9:00:00 AM
Client Sample ID:	3107-0000-194-C-1C-03	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC | MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector

No. of Results: 20 Comments:

STL Richland
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V4.12 A97

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FORM I

SAMPLE RESULTS

Date: 21-Apr-05

Lab Name: STL Richland | **SDG:** 28704 | **Collection Date:** 4/7/2005 1:50:00 PM

Lot-Sample No.: J5D150180-4 | **Report No. :** 28635 | **Received Date:** 4/15/2005 9:00:00 AM

Client Sample ID: 3107-0000-194-C-1C-04 | **COC No. :** | **Matrix:** SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5105267	RICHRC5006			**Work Order:**	G8FQ11AD		**Report DB ID:**	9G8FQ110				
STRONTIUM	***5.53E-02***		1.02E-02	1.79E-02	1.54E-02	pCi/g	89%	*(3.6)*	4/20/05 09:53 a		25.07	GPC27A
						7.41E-03	1.00E-02	*(6.2)*			G	
Batch: 5105278	RICHRC5037			**Work Order:**	G8FQ11AC		**Report DB ID:**	9G8FQ110				
H-3	***1.12E+01***		1.51E-01	4.91E-01	3.68E-02	pCi/g	100%	*(304.9)*	4/18/05 10:05 p		100.6	LSC3
						1.70E-02	3.00E+00	*(45.7)*			G	
Batch: 5105290	RICHRC5017			**Work Order:**	G8FQ11AA		**Report DB ID:**	9G8FQ110				
AC-228	***5.62E-01***		1.67E-01	1.67E-01	1.35E-01	pCi/g		*(4.2)*	4/18/05 06:04 a		311.1	GER4$1
								(6.7)			g	
AG-108M	***-1.04E-02***	U	2.03E-02	2.03E-02	3.43E-02	pCi/g		*-0.3*	4/18/05 06:04 a		311.1	GER4$1
								-(1.)			g	
AM-241	***-5.48E-02***	U	1.38E-01	1.38E-01	2.37E-01	pCi/g		*-0.23*	4/18/05 06:04 a		311.1	GER4$1
								-0.79			g	
BI-212	***7.02E-01***	U	4.19E-01	4.19E-01	8.38E-01	pCi/g		*0.84*	4/18/05 06:04 a		311.1	GER4$1
								(3.4)			g	
BI-214	***4.85E-01***	U	1.12E-01	1.12E-01	1.95E-01	pCi/g		*(2.5)*	4/18/05 06:04 a		311.1	GER4$1
								(8.7)			g	
CO-60	***-7.14E-04***	U	2.17E-02	2.17E-02	4.23E-02	pCi/g		*-0.02*	4/18/05 06:04 a		311.1	GER4$1
							3.00E+00	*-0.07*			g	
CS-134	***2.85E-02***	U	2.88E-02	2.88E-02	5.78E-02	pCi/g		*0.49*	4/18/05 06:04 a		311.1	GER4$1
							1.00E+01	*(2.)*			g	

STL Richland
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FORM I

SAMPLE RESULTS

Date: 21-Apr-05

Lab Name:	STL Richland	**SDG:**	28704	**Collection Date:**	4/7/2005 1:50:00 PM
Lot-Sample No.:	J5D150180-4	**Report No. :**	28635	**Received Date:**	4/15/2005 9:00:00 AM
Client Sample ID:	3107-0000-194-C-1C-04	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
CS-137	***-2.35E-02***	U	2.40E-02	2.40E-02	3.77E-02	pCi/g		*-0.62*	4/18/05 06:04 a		311.1	GER4$1
							2.00E+01	*-(2.)*			g	
EU-152	***-1.08E-02***	U	6.11E-02	6.11E-02	1.05E-01	pCi/g		*-0.1*	4/18/05 06:04 a		311.1	GER4$1
							9.00E+00	*-0.35*			g	
EU-154	***3.92E-02***	U	7.40E-02	7.40E-02	1.52E-01	pCi/g		*0.26*	4/18/05 06:04 a		311.1	GER4$1
							7.00E+00	*(1.1)*			g	
EU-155	***3.75E-02***	U	7.61E-02	7.61E-02	1.33E-01	pCi/g		*0.28*	4/18/05 06:04 a		311.1	GER4$1
							3.00E+02	*0.98*			g	
K-40	***6.84E+00***		1.35E+00	1.35E+00	4.40E-01	pCi/g		*(15.5)*	4/18/05 06:04 a		311.1	GER4$1
								(10.1)			g	
MN-54	***-2.65E-02***	U	2.50E-02	2.50E-02	3.91E-02	pCi/g		*-0.68*	4/18/05 06:04 a		311.1	GER4$1
							2.00E+00	*-(2.1)*			g	
NB-94	***-7.83E-03***	U	2.45E-02	2.45E-02	4.29E-02	pCi/g		*-0.18*	4/18/05 06:04 a		311.1	GER4$1
							3.00E-01	*-0.64*			g	
PB-212	***3.69E-01***		9.46E-02	9.46E-02	8.05E-02	pCi/g		*(4.6)*	4/18/05 06:04 a		311.1	GER4$1
								(7.8)			g	
PB-214	***5.01E-01***		1.36E-01	1.36E-01	8.67E-02	pCi/g		*(5.8)*	4/18/05 06:04 a		311.1	GER4$1
								(7.4)			g	
RA-226	***4.85E-01***		1.12E-01	1.12E-01	8.82E-02	pCi/g		*(5.5)*	4/18/05 06:04 a		311.1	GER4$1
								(8.7)			g	
TL-208	***1.49E-01***	U	4.85E-02	4.85E-02	8.16E-02	pCi/g		*(1.8)*	4/18/05 06:04 a		311.1	GER4$1
								(6.2)			g	

STL Richland
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FORM I

SAMPLE RESULTS

Date: 21-Apr-05

Lab Name:	STL Richland	**SDG:**	28704	**Collection Date:**	4/7/2005 1:50:00 PM
Lot-Sample No.:	J5D150180-4	**Report No. :**	28635	**Received Date:**	4/15/2005 9:00:00 AM
Client Sample ID:	3107-0000-194-C-1C-04	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector

No. of Results: 20 **Comments:**

STL Richland
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V4.12 A97

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J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.
U Qual - Analyzed for, but the result is less than the Mdc/Mda|Total Uncert or gamma scan software did not identify the nuclide.

FORM I

SAMPLE RESULTS

Date: 21-Apr-05

Lab Name:	STL Richland	**SDG:**	28704	**Collection Date:**	4/7/2005 1:50:00 PM
Lot-Sample No.:	J5D150180-5	**Report No. :**	28635	**Received Date:**	4/15/2005 9:00:00 AM
Client Sample ID:	3107-0000-194-C-1C-05	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC | MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5105267	RICHRC5006			**Work Order:**	G8FQ21AD		**Report DB ID:**	9G8FQ210				
STRONTIUM	***1.60E-02***		8.25E-03	9.26E-03	1.51E-02	pCi/g	88%	*(1.1)*	4/20/05 09:53 a		25.06	GPC27B
						7.27E-03	1.00E-02	*(3.5)*			G	
Batch: 5105278	RICHRC5037			**Work Order:**	G8FQ21AC		**Report DB ID:**	9G8FQ210				
H-3	***6.14E+00***		1.11E-01	2.80E-01	3.59E-02	pCi/g	100%	*(171.)*	4/18/05 11:29 p		100.5	LSC3
						1.66E-02	3.00E+00	*(44.)*			G	
Batch: 5105290	RICHRC5017			**Work Order:**	G8FQ21AA		**Report DB ID:**	9G8FQ210				
AC-228	***3.59E-01***	U	1.92E-01	1.92E-01	2.93E-01	pCi/g		*(1.2)*	4/18/05 06:05 a		334.8	GER7$1
								(3.7)			g	
AG-108M	***2.42E-02***	U	2.19E-02	2.19E-02	4.19E-02	pCi/g		*0.58*	4/18/05 06:05 a		334.8	GER7$1
								(2.2)			g	
AM-241	***2.99E-02***	U	7.93E-02	7.93E-02	1.35E-01	pCi/g		*0.22*	4/18/05 06:05 a		334.8	GER7$1
								0.75			g	
BI-212	***5.30E-01***	U	3.86E-01	3.86E-01	7.74E-01	pCi/g		*0.68*	4/18/05 06:05 a		334.8	GER7$1
								(2.7)			g	
BI-214	***3.72E-01***	U	1.14E-01	1.14E-01	1.81E-01	pCi/g		*(2.1)*	4/18/05 06:05 a		334.8	GER7$1
								(6.5)			g	
CO-60	***1.62E-02***	U	2.43E-02	2.43E-02	5.09E-02	pCi/g		*0.32*	4/18/05 06:05 a		334.8	GER7$1
							3.00E+00	*(1.3)*			g	
CS-134	***1.26E-02***	U	2.74E-02	2.74E-02	5.24E-02	pCi/g		*0.24*	4/18/05 06:05 a		334.8	GER7$1
							1.00E+01	*0.92*			g	

STL Richland
rptSTLRchSample
V4.12 A97

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM I

SAMPLE RESULTS

Date: 21-Apr-05

Lab Name: STL Richland
SDG: 28704
Collection Date: 4/7/2005 1:50:00 PM
Lot-Sample No.: J5D150180-5
Report No. : 28635
Received Date: 4/15/2005 9:00:00 AM
Client Sample ID: 3107-0000-194-C-1C-05
COC No. :
Matrix: SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
CS-137	***-6.91E-03***	U	2.43E-02	2.43E-02	4.21E-02	pCi/g		*-0.16*	4/18/05 06:05 a		334.8	GER7$1
							2.00E+01	*-0.57*			g	
EU-152	***-1.18E-02***	U	5.98E-02	5.98E-02	1.05E-01	pCi/g		*-0.11*	4/18/05 06:05 a		334.8	GER7$1
							9.00E+00	*-0.39*			g	
EU-154	***3.59E-02***	U	8.06E-02	8.06E-02	1.59E-01	pCi/g		*0.23*	4/18/05 06:05 a		334.8	GER7$1
							7.00E+00	*0.89*			g	
EU-155	***4.76E-02***	U	6.54E-02	6.54E-02	1.19E-01	pCi/g		*0.4*	4/18/05 06:05 a		334.8	GER7$1
							3.00E+02	*(1.5)*			g	
K-40	***6.40E+00***		1.24E+00	1.24E+00	4.64E-01	pCi/g		*(13.8)*	4/18/05 06:05 a		334.8	GER7$1
								(10.3)			g	
MN-54	***-5.54E-03***	U	2.65E-02	2.65E-02	4.65E-02	pCi/g		*-0.12*	4/18/05 06:05 a		334.8	GER7$1
							2.00E+00	*-0.42*			g	
NB-94	***-1.12E-03***	U	2.48E-02	2.48E-02	4.45E-02	pCi/g		*-0.03*	4/18/05 06:05 a		334.8	GER7$1
							3.00E-01	*-0.09*			g	
PB-212	***3.51E-01***		8.89E-02	8.89E-02	8.55E-02	pCi/g		*(4.1)*	4/18/05 06:05 a		334.8	GER7$1
								(7.9)			g	
PB-214	***5.67E-01***		1.47E-01	1.47E-01	7.78E-02	pCi/g		*(7.3)*	4/18/05 06:05 a		334.8	GER7$1
								(7.7)			g	
RA-226	***3.72E-01***	U	1.14E-01	1.14E-01	1.81E-01	pCi/g		*(2.1)*	4/18/05 06:05 a		334.8	GER7$1
								(6.5)			g	
TL-208	***1.02E-01***		5.58E-02	5.58E-02	4.74E-02	pCi/g		*(2.2)*	4/18/05 06:05 a		334.8	GER7$1
								(3.7)			g	

STL Richland
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V4.12 A97

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM I

SAMPLE RESULTS

Date: 21-Apr-05

Lab Name:	STL Richland	**SDG:**	28704	**Collection Date:**	4/7/2005 1:50:00 PM
Lot-Sample No.:	J5D150180-5	**Report No. :**	28635	**Received Date:**	4/15/2005 9:00:00 AM
Client Sample ID:	3107-0000-194-C-1C-05	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector

No. of Results: 20 Comments:

STL Richland
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V4.12 A97

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM I

SAMPLE RESULTS

Date: 21-Apr-05

Lab Name: STL Richland
SDG: 28704
Collection Date: 4/7/2005 2:10:00 PM
Lot-Sample No.: J5D150180-6
Report No. : 28635
Received Date: 4/15/2005 9:00:00 AM
Client Sample ID: 3107-0000-194-C-2C-06
COC No. :
Matrix: SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5105267	RICHRC5006			**Work Order:**	G8FQ31AD		**Report DB ID:**	9G8FQ310				
STRONTIUM	***7.92E-02***		1.17E-02	2.37E-02	1.61E-02	pCi/g	79%	*(4.9)*	4/20/05 09:53 a		25.08	GPC27C
						7.75E-03	1.00E-02	*(6.7)*			G	
Batch: 5105278	RICHRC5037			**Work Order:**	G8FQ31AC		**Report DB ID:**	9G8FQ310				
H-3	***1.58E+00***	J	6.49E-02	9.35E-02	4.51E-02	pCi/g	100%	*(35.1)*	4/19/05 12:12 a		98.7	LSC3
						2.09E-02	3.00E+00	*(33.9)*			G	
Batch: 5105290	RICHRC5017			**Work Order:**	G8FQ31AA		**Report DB ID:**	9G8FQ310				
AC-228	***4.54E-01***	U	1.72E-01	1.72E-01	2.81E-01	pCi/g		*(1.6)*	4/18/05 06:05 a		299.8	GER8$1
								(5.3)			g	
AG-108M	***4.50E-03***	U	1.93E-02	1.93E-02	3.49E-02	pCi/g		*0.13*	4/18/05 06:05 a		299.8	GER8$1
								0.47			g	
AM-241	***2.31E-02***	U	4.76E-02	4.76E-02	7.32E-02	pCi/g		*0.31*	4/18/05 06:05 a		299.8	GER8$1
								0.97			g	
BI-212	***3.78E-01***	U	3.94E-01	3.94E-01	7.61E-01	pCi/g		*0.5*	4/18/05 06:05 a		299.8	GER8$1
								(1.9)			g	
BI-214	***5.03E-01***	U	1.14E-01	1.14E-01	1.89E-01	pCi/g		*(2.7)*	4/18/05 06:05 a		299.8	GER8$1
								(8.8)			g	
CO-60	***-1.38E-03***	U	2.50E-02	2.50E-02	4.76E-02	pCi/g		*-0.03*	4/18/05 06:05 a		299.8	GER8$1
							3.00E+00	*-0.11*			g	
CS-134	***2.47E-02***	U	2.88E-02	2.88E-02	5.63E-02	pCi/g		*0.44*	4/18/05 06:05 a		299.8	GER8$1
							1.00E+01	*(1.7)*			g	

STL Richland
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V4.12 A97

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FORM I

SAMPLE RESULTS

Date: 21-Apr-05

Lab Name:	**STL Richland**	**SDG:**	28704	**Collection Date:**	4/7/2005 2:10:00 PM
Lot-Sample No.:	**J5D150180-6**	**Report No. :**	28635	**Received Date:**	4/15/2005 9:00:00 AM
Client Sample ID:	**3107-0000-194-C-2C-06**	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
CS-137	***7.31E-03***	U	2.53E-02	2.53E-02	4.70E-02	pCi/g		*0.16*	4/18/05 06:05 a		299.8	GER8$1
							2.00E+01	*0.58*			g	
EU-152	***-3.43E-02***	U	6.17E-02	6.17E-02	1.03E-01	pCi/g		*-0.33*	4/18/05 06:05 a		299.8	GER8$1
							9.00E+00	*-(1.1)*			g	
EU-154	***2.03E-02***	U	8.72E-02	8.72E-02	1.64E-01	pCi/g		*0.12*	4/18/05 06:05 a		299.8	GER8$1
							7.00E+00	*0.47*			g	
EU-155	***-5.46E-02***	U	6.39E-02	6.39E-02	1.04E-01	pCi/g		*-0.52*	4/18/05 06:05 a		299.8	GER8$1
							3.00E+02	*-(1.7)*			g	
K-40	***6.41E+00***		1.18E+00	1.18E+00	3.65E-01	pCi/g		*(17.6)*	4/18/05 06:05 a		299.8	GER8$1
								(10.9)			g	
MN-54	***5.97E-03***	U	2.34E-02	2.34E-02	4.37E-02	pCi/g		*0.14*	4/18/05 06:05 a		299.8	GER8$1
							2.00E+00	*0.51*			g	
NB-94	***-3.42E-03***	U	1.98E-02	1.98E-02	3.64E-02	pCi/g		*-0.09*	4/18/05 06:05 a		299.8	GER8$1
							3.00E-01	*-0.34*			g	
PB-212	***3.60E-01***		9.05E-02	9.05E-02	9.50E-02	pCi/g		*(3.8)*	4/18/05 06:05 a		299.8	GER8$1
								(7.9)			g	
PB-214	***5.73E-01***		1.36E-01	1.36E-01	8.11E-02	pCi/g		*(7.1)*	4/18/05 06:05 a		299.8	GER8$1
								(8.4)			g	
RA-226	***5.03E-01***		1.14E-01	1.14E-01	6.85E-02	pCi/g		*(7.3)*	4/18/05 06:05 a		299.8	GER8$1
								(8.8)			g	
TL-208	***9.30E-02***		5.52E-02	5.52E-02	4.47E-02	pCi/g		*(2.1)*	4/18/05 06:05 a		299.8	GER8$1
								(3.4)			g	

STL Richland
rptSTLRchSample V4.12 A97

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FORM I

SAMPLE RESULTS

Date: 21-Apr-05

Lab Name:	STL Richland	SDG:	28704	Collection Date:	4/7/2005 2:10:00 PM
Lot-Sample No.:	J5D150180-6	Report No. :	28635	Received Date:	4/15/2005 9:00:00 AM
Client Sample ID:	3107-0000-194-C-2C-06	COC No. :		Matrix:	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector

No. of Results: 20 Comments:

STL Richland
rptSTLRchSample
V4.12 A97

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM I

SAMPLE RESULTS

Date: 21-Apr-05

Lab Name: STL Richland | **SDG:** 28704 | **Collection Date:** 4/7/2005 11:10:00 AM

Lot-Sample No.: J5D150180-7 | **Report No. :** 28635 | **Received Date:** 4/15/2005 9:00:00 AM

Client Sample ID: 3107-0000-195-C-1C-01 | **COC No. :** | **Matrix:** SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC | MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5105267	RICHRC5006			**Work Order:**	G8FQ71AD		**Report DB ID:**	9G8FQ710				
STRONTIUM	***9.41E-02***		1.17E-02	2.71E-02	1.56E-02	pCi/g	89%	*(6.)*	4/20/05 09:53 a		25.03	GPC27D
						7.51E-03	1.00E-02	*(7.)*			G	
Batch: 5105278	RICHRC5037			**Work Order:**	G8FQ71AC		**Report DB ID:**	9G8FQ710				
H-3	***4.95E+00***		1.24E-01	2.41E-01	5.51E-02	pCi/g	100%	*(89.8)*	4/19/05 12:54 a		100.9	LSC3
						2.55E-02	3.00E+00	*(41.)*			G	
Batch: 5105290	RICHRC5017			**Work Order:**	G8FQ71AA		**Report DB ID:**	9G8FQ710				
AC-228	***3.36E-01***	U	1.13E-01	1.13E-01	2.13E-01	pCi/g		*(1.6)*	4/18/05 06:06 a		300.8	GER11$1
								(6.)			g	
AG-108M	***-7.50E-03***	U	1.42E-02	1.42E-02	2.36E-02	pCi/g		*-0.32*	4/18/05 06:06 a		300.8	GER11$1
								-(1.1)			g	
AM-241	***-1.49E-02***	U	1.08E-01	1.08E-01	1.83E-01	pCi/g		*-0.08*	4/18/05 06:06 a		300.8	GER11$1
								-0.28			g	
BI-212	***9.70E-01***	U	4.48E-01	4.48E-01	5.44E-01	pCi/g		*(1.8)*	4/18/05 06:06 a		300.8	GER11$1
								(4.3)			g	
BI-214	***4.96E-01***	U	1.17E-01	1.17E-01	1.48E-01	pCi/g		*(3.3)*	4/18/05 06:06 a		300.8	GER11$1
								(8.5)			g	
CO-60	***-1.28E-03***	U	1.74E-02	1.74E-02	3.26E-02	pCi/g		*-0.04*	4/18/05 06:06 a		300.8	GER11$1
							3.00E+00	*-0.15*			g	
CS-134	***1.37E-02***	U	2.20E-02	2.20E-02	4.17E-02	pCi/g		*0.33*	4/18/05 06:06 a		300.8	GER11$1
							1.00E+01	*(1.2)*			g	

STL Richland
rptSTLRchSample
V4.12 A97

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FORM I

SAMPLE RESULTS

Date: 21-Apr-05

Lab Name:	**STL Richland**	**SDG:**	28704	**Collection Date:**	4/7/2005 11:10:00 AM
Lot-Sample No.:	**J5D150180-7**	**Report No. :**	28635	**Received Date:**	4/15/2005 9:00:00 AM
Client Sample ID:	**3107-0000-195-C-1C-01**	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
CS-137	***3.78E-02***	J	2.84E-02	2.84E-02	3.76E-02	pCi/g		*(1.)*	4/18/05 06:06 a		300.8	GER11$1
							2.00E+01	*(2.7)*			g	
EU-152	***1.06E-02***	U	4.61E-02	4.61E-02	8.39E-02	pCi/g		*0.13*	4/18/05 06:06 a		300.8	GER11$1
							9.00E+00	*0.46*			g	
EU-154	***4.90E-03***	U	5.96E-02	5.96E-02	1.11E-01	pCi/g		*0.04*	4/18/05 06:06 a		300.8	GER11$1
							7.00E+00	*0.16*			g	
EU-155	***2.51E-02***	U	5.78E-02	5.78E-02	1.04E-01	pCi/g		*0.24*	4/18/05 06:06 a		300.8	GER11$1
							3.00E+02	*0.87*			g	
K-40	***7.64E+00***		1.56E+00	1.56E+00	2.79E-01	pCi/g		*(27.4)*	4/18/05 06:06 a		300.8	GER11$1
								(9.8)			g	
MN-54	***3.70E-03***	U	1.80E-02	1.80E-02	3.31E-02	pCi/g		*0.11*	4/18/05 06:06 a		300.8	GER11$1
							2.00E+00	*0.41*			g	
NB-94	***3.55E-03***	U	1.78E-02	1.78E-02	3.27E-02	pCi/g		*0.11*	4/18/05 06:06 a		300.8	GER11$1
							3.00E-01	*0.4*			g	
PB-212	***4.14E-01***		8.01E-02	8.01E-02	4.91E-02	pCi/g		*(8.4)*	4/18/05 06:06 a		300.8	GER11$1
								(10.3)			g	
PB-214	***5.41E-01***		1.16E-01	1.16E-01	5.93E-02	pCi/g		*(9.1)*	4/18/05 06:06 a		300.8	GER11$1
								(9.3)			g	
RA-226	***4.96E-01***		1.17E-01	1.17E-01	5.27E-02	pCi/g		*(9.4)*	4/18/05 06:06 a		300.8	GER11$1
								(8.5)			g	
TL-208	***1.39E-01***	U	3.80E-02	3.80E-02	6.16E-02	pCi/g		*(2.2)*	4/18/05 06:06 a		300.8	GER11$1
								(7.3)			g	

STL Richland
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MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
J Qual - No U|< qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.
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FORM I

SAMPLE RESULTS

Date: 21-Apr-05

Lab Name:	STL Richland	**SDG:**	28704	**Collection Date:**	4/7/2005 11:10:00 AM
Lot-Sample No.:	J5D150180-7	**Report No. :**	28635	**Received Date:**	4/15/2005 9:00:00 AM
Client Sample ID:	3107-0000-195-C-1C-01	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector

No. of Results: 20 Comments:

STL Richland
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V4.12 A97

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM I

SAMPLE RESULTS

Date: 21-Apr-05

Lab Name: STL Richland | **SDG:** 28704 | **Collection Date:** 4/7/2005 11:10:00 AM

Lot-Sample No.: J5D150180-8 | **Report No. :** 28635 | **Received Date:** 4/15/2005 9:00:00 AM

Client Sample ID: 3107-0000-195-C-1C-02 | **COC No. :** | **Matrix:** SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC | MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5105267	RICHRC5006			**Work Order:**	G8FQ91AD		**Report DB ID:**	9G8FQ910				
STRONTIUM	***1.10E-01***		1.31E-02	3.15E-02	1.70E-02	pCi/g	84%	*(6.4)*	4/20/05 09:53 a		25.0	GPC28A
						8.21E-03	1.00E-02	*(7.)*			G	
Batch: 5105278	RICHRC5037			**Work Order:**	G8FQ91AC		**Report DB ID:**	9G8FQ910				
H-3	***1.30E+01***		1.72E-01	5.66E-01	4.11E-02	pCi/g	100%	*(315.3)*	4/19/05 01:37 a		100.4	LSC3
						1.90E-02	3.00E+00	*(45.7)*			G	
Batch: 5105290	RICHRC5017			**Work Order:**	G8FQ91AA		**Report DB ID:**	9G8FQ910				
AC-228	***2.71E-01***	U	1.36E-01	1.36E-01	2.67E-01	pCi/g		*(1.)*	4/18/05 07:48 a		328.5	GER1$1
								(4.)			g	
AG-108M	***4.33E-03***	U	2.35E-02	2.35E-02	4.20E-02	pCi/g		*0.1*	4/18/05 07:48 a		328.5	GER1$1
								0.37			g	
AM-241	***-5.50E-02***	U	1.16E-01	1.16E-01	1.91E-01	pCi/g		*-0.29*	4/18/05 07:48 a		328.5	GER1$1
								-0.95			g	
BI-212	***4.49E-01***	U	4.44E-01	4.44E-01	8.32E-01	pCi/g		*0.54*	4/18/05 07:48 a		328.5	GER1$1
								(2.)			g	
BI-214	***4.69E-01***	U	1.11E-01	1.11E-01	1.81E-01	pCi/g		*(2.6)*	4/18/05 07:48 a		328.5	GER1$1
								(8.5)			g	
CO-60	***-1.47E-02***	U	3.06E-02	3.06E-02	5.21E-02	pCi/g		*-0.28*	4/18/05 07:48 a		328.5	GER1$1
							3.00E+00	*-0.96*			g	
CS-134	***-5.66E-03***	U	3.16E-02	3.16E-02	5.48E-02	pCi/g		*-0.1*	4/18/05 07:48 a		328.5	GER1$1
							1.00E+01	*-0.36*			g	

STL Richland
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V4.12 A97

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FORM I

SAMPLE RESULTS

Date: 21-Apr-05

Lab Name: STL Richland
SDG: 28704
Collection Date: 4/7/2005 11:10:00 AM
Lot-Sample No.: J5D150180-8
Report No. : 28635
Received Date: 4/15/2005 9:00:00 AM
Client Sample ID: 3107-0000-195-C-1C-02
COC No. :
Matrix: SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
CS-137	***9.81E-03***	U	2.86E-02	2.86E-02	5.21E-02	pCi/g		*0.19*	4/18/05 07:48 a		328.5	GER1$1
							2.00E+01	*0.69*			g	
EU-152	***-1.27E-01***	U	1.00E-01	1.00E-01	1.29E-01	pCi/g		*-0.99*	4/18/05 07:48 a		328.5	GER1$1
							9.00E+00	*-(2.5)*			g	
EU-154	***-9.65E-02***	U	9.21E-02	9.21E-02	1.43E-01	pCi/g		*-0.67*	4/18/05 07:48 a		328.5	GER1$1
							7.00E+00	*-(2.1)*			g	
EU-155	***-1.84E-02***	U	8.35E-02	8.35E-02	1.41E-01	pCi/g		*-0.13*	4/18/05 07:48 a		328.5	GER1$1
							3.00E+02	*-0.44*			g	
K-40	***5.77E+00***		1.08E+00	1.08E+00	3.32E-01	pCi/g		*(17.4)*	4/18/05 07:48 a		328.5	GER1$1
								(10.7)			g	
MN-54	***-5.51E-03***	U	2.58E-02	2.58E-02	4.56E-02	pCi/g		*-0.12*	4/18/05 07:48 a		328.5	GER1$1
							2.00E+00	*-0.43*			g	
NB-94	***-1.13E-02***	U	2.55E-02	2.55E-02	4.39E-02	pCi/g		*-0.26*	4/18/05 07:48 a		328.5	GER1$1
							3.00E-01	*-0.89*			g	
PB-212	***4.21E-01***		1.14E-01	1.14E-01	7.75E-02	pCi/g		*(5.4)*	4/18/05 07:48 a		328.5	GER1$1
								(7.4)			g	
PB-214	***5.31E-01***		1.32E-01	1.32E-01	8.64E-02	pCi/g		*(6.1)*	4/18/05 07:48 a		328.5	GER1$1
								(8.1)			g	
RA-226	***4.69E-01***	U	1.11E-01	1.11E-01	1.81E-01	pCi/g		*(2.6)*	4/18/05 07:48 a		328.5	GER1$1
								(8.5)			g	
TL-208	***1.02E-01***	U	3.75E-02	3.75E-02	7.19E-02	pCi/g		*(1.4)*	4/18/05 07:48 a		328.5	GER1$1
								(5.4)			g	

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FORM I

SAMPLE RESULTS

Date: 21-Apr-05

Lab Name:	**STL Richland**	**SDG:**	28704	**Collection Date:**	4/7/2005 11:10:00 AM
Lot-Sample No.:	**J5D150180-8**	**Report No. :**	28635	**Received Date:**	4/15/2005 9:00:00 AM
Client Sample ID:	**3107-0000-195-C-1C-02**	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector

No. of Results: 20 **Comments:**

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM I

SAMPLE RESULTS

Date: 21-Apr-05

Lab Name:	STL Richland	**SDG:**	28704	**Collection Date:**	4/7/2005 11:10:00 AM
Lot-Sample No.:	J5D150180-9	**Report No. :**	28635	**Received Date:**	4/15/2005 9:00:00 AM
Client Sample ID:	3107-0000-195-C-1C-03	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5105267	RICHRC5006			**Work Order:**	G8FRA1AD		**Report DB ID:**	9G8FRA10				
STRONTIUM	***2.82E-02***		9.65E-03	1.22E-02	1.66E-02	pCi/g	79%	*(1.7)*	4/20/05 09:53 a		25.08	GPC28B
						7.99E-03	1.00E-02	*(4.6)*			G	
Batch: 5105278	RICHRC5037			**Work Order:**	G8FRA1AC		**Report DB ID:**	9G8FRA10				
H-3	***1.79E+01***		2.05E-01	7.73E-01	4.26E-02	pCi/g	100%	*(420.1)*	4/19/05 02:19 a		100.9	LSC3
						1.97E-02	3.00E+00	*(46.3)*			G	
Batch: 5105290	RICHRC5017			**Work Order:**	G8FRA1AA		**Report DB ID:**	9G8FRA10				
AC-228	***4.70E-01***	U	2.06E-01	2.06E-01	3.18E-01	pCi/g		*(1.5)*	4/18/05 07:48 a		302.3	GER4$1
								(4.6)			g	
AG-108M	***2.43E-02***	U	2.07E-02	2.07E-02	4.08E-02	pCi/g		*0.59*	4/18/05 07:48 a		302.3	GER4$1
								(2.3)			g	
AM-241	***4.16E-02***	U	1.29E-01	1.29E-01	2.33E-01	pCi/g		*0.18*	4/18/05 07:48 a		302.3	GER4$1
								0.64			g	
BI-212	***4.61E-01***	U	3.74E-01	3.74E-01	7.47E-01	pCi/g		*0.62*	4/18/05 07:48 a		302.3	GER4$1
								(2.5)			g	
BI-214	***4.13E-01***	U	1.24E-01	1.24E-01	1.80E-01	pCi/g		*(2.3)*	4/18/05 07:48 a		302.3	GER4$1
								(6.7)			g	
CO-60	***-3.05E-03***	U	2.60E-02	2.60E-02	4.89E-02	pCi/g		*-0.06*	4/18/05 07:48 a		302.3	GER4$1
							3.00E+00	*-0.23*			g	
CS-134	***1.83E-02***	U	2.56E-02	2.56E-02	5.14E-02	pCi/g		*0.36*	4/18/05 07:48 a		302.3	GER4$1
							1.00E+01	*(1.4)*			g	

STL Richland
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FORM I

SAMPLE RESULTS

Date: 21-Apr-05

Lab Name:	STL Richland	**SDG:**	28704	**Collection Date:**	4/7/2005 11:10:00 AM
Lot-Sample No.:	J5D150180-9	**Report No. :**	28635	**Received Date:**	4/15/2005 9:00:00 AM
Client Sample ID:	3107-0000-195-C-1C-03	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
CS-137	***2.05E-02***	U	2.57E-02	2.57E-02	5.03E-02	pCi/g		*0.41*	4/18/05 07:48 a		302.3	GER4$1
							2.00E+01	*(1.6)*			g	
EU-152	***4.90E-03***	U	7.13E-02	7.13E-02	1.25E-01	pCi/g		*0.04*	4/18/05 07:48 a		302.3	GER4$1
							9.00E+00	*0.14*			g	
EU-154	***-1.17E-02***	U	8.49E-02	8.49E-02	1.57E-01	pCi/g		*-0.07*	4/18/05 07:48 a		302.3	GER4$1
							7.00E+00	*-0.28*			g	
EU-155	***3.04E-02***	U	7.16E-02	7.16E-02	1.26E-01	pCi/g		*0.24*	4/18/05 07:48 a		302.3	GER4$1
							3.00E+02	*0.85*			g	
K-40	***7.45E+00***		1.45E+00	1.45E+00	5.34E-01	pCi/g		*(14.)*	4/18/05 07:48 a		302.3	GER4$1
								(10.3)			g	
MN-54	***1.14E-02***	U	2.40E-02	2.40E-02	4.66E-02	pCi/g		*0.24*	4/18/05 07:48 a		302.3	GER4$1
							2.00E+00	*0.95*			g	
NB-94	***-3.48E-03***	U	2.24E-02	2.24E-02	4.04E-02	pCi/g		*-0.09*	4/18/05 07:48 a		302.3	GER4$1
							3.00E-01	*-0.31*			g	
PB-212	***4.12E-01***		1.03E-01	1.03E-01	8.24E-02	pCi/g		*(5.)*	4/18/05 07:48 a		302.3	GER4$1
								(8.)			g	
PB-214	***4.42E-01***		1.31E-01	1.31E-01	8.53E-02	pCi/g		*(5.2)*	4/18/05 07:48 a		302.3	GER4$1
								(6.8)			g	
RA-226	***4.13E-01***	U	1.24E-01	1.24E-01	1.80E-01	pCi/g		*(2.3)*	4/18/05 07:48 a		302.3	GER4$1
								(6.7)			g	
TL-208	***8.34E-02***		6.44E-02	6.44E-02	4.00E-02	pCi/g		*(2.1)*	4/18/05 07:48 a		302.3	GER4$1
								(2.6)			g	

STL Richland
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FORM I

SAMPLE RESULTS

Date: 21-Apr-05

Lab Name:	STL Richland	**SDG:**	28704	**Collection Date:**	4/7/2005 11:10:00 AM
Lot-Sample No.:	J5D150180-9	**Report No. :**	28635	**Received Date:**	4/15/2005 9:00:00 AM
Client Sample ID:	3107-0000-195-C-1C-03	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector

No. of Results: 20 Comments:

STL Richland
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MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM I

SAMPLE RESULTS

Date: 21-Apr-05

Lab Name:	**STL Richland**	**SDG:**	28704	**Collection Date:**	4/7/2005 11:10:00 AM
Lot-Sample No.:	**J5D150180-10**	**Report No. :**	28635	**Received Date:**	4/15/2005 9:00:00 AM
Client Sample ID:	**3107-0000-195-C-1C-04**	**COC No. :**		**Matrix:**	SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5105267	RICHRC5006			**Work Order:**	G8FRC1AD		**Report DB ID:**	9G8FRC10				
STRONTIUM	***1.25E-01***		1.26E-02	3.50E-02	1.51E-02	pCi/g	96%	*(8.3)*	4/20/05 09:53 a		25.01	GPC28C
						7.26E-03	1.00E-02	*(7.2)*			G	
Batch: 5105278	RICHRC5037			**Work Order:**	G8FRC1AC		**Report DB ID:**	9G8FRC10				
H-3	***1.31E+01***		1.68E-01	5.71E-01	3.90E-02	pCi/g	100%	*(335.5)*	4/19/05 03:02 a		100.4	LSC3
						1.81E-02	3.00E+00	*(45.9)*			G	
Batch: 5105290	RICHRC5017			**Work Order:**	G8FRC1AA		**Report DB ID:**	9G8FRC10				
AC-228	***5.00E-01***	U	1.96E-01	1.96E-01	3.28E-01	pCi/g		*(1.5)*	4/18/05 07:48 a		287.9	GER7$1
								(5.1)			g	
AG-108M	***7.88E-03***	U	2.48E-02	2.48E-02	4.49E-02	pCi/g		*0.18*	4/18/05 07:48 a		287.9	GER7$1
								0.64			g	
AM-241	***-2.24E-03***	U	8.81E-02	8.81E-02	1.51E-01	pCi/g		*-0.01*	4/18/05 07:48 a		287.9	GER7$1
								-0.05			g	
BI-212	***5.20E-01***	U	4.41E-01	4.41E-01	8.76E-01	pCi/g		*0.59*	4/18/05 07:48 a		287.9	GER7$1
								(2.4)			g	
BI-214	***3.22E-01***	U	1.12E-01	1.12E-01	1.93E-01	pCi/g		*(1.7)*	4/18/05 07:48 a		287.9	GER7$1
								(5.7)			g	
CO-60	***4.84E-04***	U	2.43E-02	2.43E-02	4.76E-02	pCi/g		*0.01*	4/18/05 07:48 a		287.9	GER7$1
							3.00E+00	*0.04*			g	
CS-134	***1.33E-03***	U	3.12E-02	3.12E-02	5.71E-02	pCi/g		*0.02*	4/18/05 07:48 a		287.9	GER7$1
							1.00E+01	*0.09*			g	

STL Richland
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