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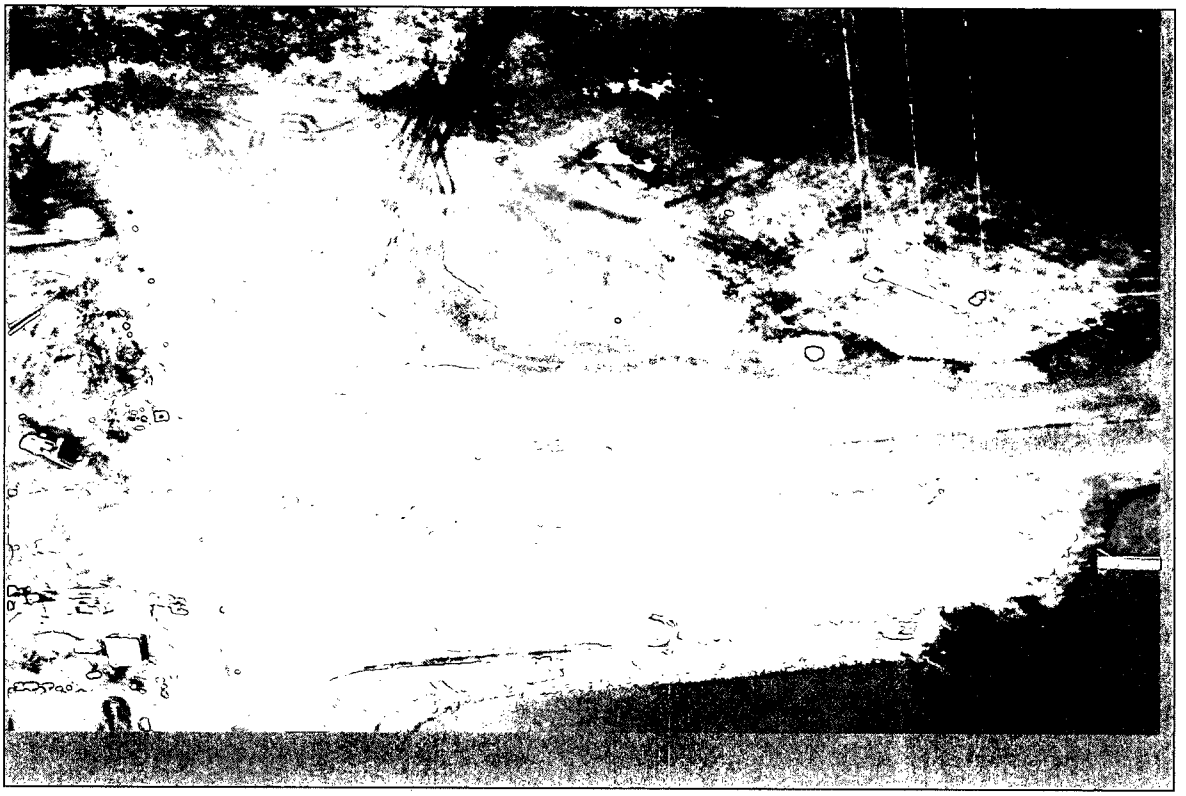

Final Status Survey
Final Report Phase VI

Appendix A10
Survey Unit Release Record
9522-0005, Southeast Site Grounds (Non-Protected Area)

February 2007

CYAPCO
FINAL STATUS SURVEY RELEASE RECORD
SOUTHEAST SITE GROUNDS (NON-PROTECTED AREA)
SURVEY UNIT 9522-0005

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Revision 0

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1. SURVEY UNIT DESCRIPTION

Survey Unit 9522-0005 (Southeast Site Grounds (non-protected area) is designated as Final Status Survey (FSS) Class 1 and consists of approximately one thousand nine hundred and forty seven square meters (1,947 m^2) of uninhabited, undeveloped land and is located approximately eight hundred and sixty four feet (864 ft) from the reference coordinate system benchmark used at Haddam Neck Plant (HNP) (see Attachment 1). The survey unit is bounded as follows: land Survey Unit 9312-0008 and land Survey Unit 9306-0000 to the north (called north as oriented with the north to south flow of the Connecticut River), land Survey Unit 9520-0001 and the discharge canal to the west, land Survey Unit 9522-0004 to the south, and land Survey Unit 9522-0006 to the east. The survey unit is located in the northwest corner of Survey Area 9522. The majority of the survey unit is flat and de-vegetated. This is a result of soil grading in support of previous remediation. The southwest boundary of the survey unit includes a steep bank to the discharge canal. The survey unit has a moderate slope running from east to west.

The reference coordinates associated with this survey unit are E007 through E011 by S072 through S075 (refer to "*HNP License Termination Plan*" (LTP) Section 5.4.4). The reference coordinates provide the maximum dimensions of a rectangle containing this survey unit. Some areas contained in this rectangle may not be part of this survey unit. The boundary of the survey unit was defined using a Global Positioning System (GPS) based on the Connecticut State Plane System North American Datum (NAD) 1927.

2. CLASSIFICATION BASIS

The survey unit was classified in accordance with Procedure RPM 5.1-10, *"Survey Unit Classification."*

The *"Classification Basis Summary"* conducted for Survey Unit 9522-0005 consisted of:

a) A review of the 10CFR50.75 (g) (1) database,

b) A review of the *"Initial Characterization Report"* and the *"Historic Site Assessment Supplement,"*

c) Historic and current survey records review,

d) Visual inspections and a "walk-down."

A review of the *"Initial and Supplemental Characterization Reports"* as well as the previous *"Classification Basis Summaries"* was performed. Survey Area 9522 includes a former survey area, 9308, that was consolidated into Survey Area 9522 in 2006. This survey area was initially designated as Class 2 during the development of the LTP.

The source documents, the "*Connecticut Yankee Haddam Neck Characterization Report*" and "*Initial Classification for Survey Areas at Connecticut Yankee*", were incorporated by reference in LTP, Revision 0. Survey Unit 9522-0002 was created in 2006 under Revision 4 of the LTP and was designated as Class 1.

Open land Survey Area 9522 was at one time an area immediately adjacent to the southern boundary of the Radiologically Controlled Area (RCA) and security fences. Initially, only a small section of the north side of the unit was paved, with the remainder of the unit gradually sloping down to the original site elevation. The industrial area was expanded to support plant operations and control exposure to radiation. According to the "*Haddam Neck Plant Historic Site Assessment Supplement,*" plant photos revealed that the area was gradually filled in from approximately 1972 to between 1974 and 1976, with soil that may have originated from on-site sources. The introduction of fill material raised the elevation up to site grade and thereby facilitating a reconfiguration and expansion of the RCA and security protected area. Photos taken in 1976 show that the area was landscaped with grass and small trees and was probably given the name "ball-field" at that time. Over the next several years, additional fill was brought in. By 1987, photos show that half of the survey area was paved and occupied with buildings. It is estimated that the elevation in the survey area may have increased by up to five (5) feet from the original site grade.

Survey Area 9522 was impacted by several radiologically significant events during plant operations. These include the discovery of several discrete sources of elevated activity on the ball-field in March 1980, the spill of radioactive liquid into an uncontrolled drain system in February of 1989 and the discovery of several discrete particles outside of the RCA in 1995. Additionally, a portion of Survey Area 9522 was used as a temporary laydown area for the Steam Generator Lower Assemblies (SGLAs) and the Pressurizer until these components where shipped off-site for disposal in 2001. All of these events occurred in the northern portion of Survey Area 9522.

According to Plant Information Report (PIR) 89-35, a section of Survey Area 9522 was contaminated in February 1989 following the release of radioactive material into an uncontrolled drain in the Spent Fuel Building. The drain discharged directly to an open trench that drained into a marshy area of the site. Freezing conditions limited the amount of radioactive material that left the protected area. The unanticipated release of radioactive material was identified during a routine radiological surveillance of the site. The area was remediated in 1989 to the established release criteria at the time (1E-5 μCi/g) and, according to memo CH 89-854, the Chemistry Group initiated a sampling program at the drainage site to monitor activity.

Adverse Condition Report (ACR) 95-0250 states that in 1995, several discrete particles were found outside of the RCA, but within the Industrial Area in Survey Area 9522. In addition, two (2) other areas exhibiting elevated activity were identified in 1997. In all cases, the areas of elevated activity were removed upon discovery.

In May of 2005, a Survey and Sampling Work Plan (SSWP №. 05-05-008) was developed and implemented to characterize the surface soil in this survey area. Seventeen (17) soil samples were collected as part of the effort to provide sample data with regard to types and quantities of radioactive material present in the surface soil. The soil samples were analyzed by the on-site laboratory. A review of this sample data shows Cs-137 and Co-60 to be the primary radionuclides of concern, which both isotopes reported at fairly low concentrations.

As part of the groundwater characterization effort, a large number of surface and sub-surface soil samples were taken and analyzed for the full suite of "Hard-to-Detect" (HTD) radionuclides specified in the LTP, Table 2-12, "*Radionuclides Potentially Present at Haddam Neck Plant*" and as provided in Table 2. In some cases, soil was removed to meet the screening criteria in effect for groundwater dose compliance. No HTD radionuclides were positively identified in concentrations greater than the screening criteria upon completion of these surveys and the restoration of the affected areas using off-site fill. Radionuclide screening or de-selection is a process where an individual radionuclide or aggregates may be considered insignificant and eliminated from the FSS. The criteria for de-selection are concentrations less than 5% for individual radionuclides and less than 10% for aggregates. Based upon the results of the previous surveys, it was determined to be unlikely that HTD radionuclides would be present in any significant concentration. Therefore, none of the soil samples taken as part of this characterization survey were analyzed for HTD radionuclides. Statistical quantities (mean, median and standard deviation) from the 2005 characterization survey conducted under SSWP 05-05-008 are provided in Table 1.

Table 1 – Basic Statistical Quantities for Cs-137 and Co-60 from the 2005 Characterization Survey

	Cs-137 (ρCi/g)	Co-60 (ρCi/g)
Minimum Value :	6.98E-05	-6.69E-02
Maximum Value :	4.01E+00	1.16E+00
Mean :	9.85E-01	1.60E-01
Median :	3.50E-01	2.10E-02
Standard Deviation :	1.28E+00	3.52E-01

The FSS Engineer performed a visual inspection and walk-down during September 2006 to assess the physical condition of the survey unit, evaluate access points, travel paths and identify potentially hazardous conditions.

This survey area is affected by existing groundwater (reference CY memo ISC 06-024) which will be a source of dose from residual radioactivity, as discussed in Section 3 under the Data Quality Objectives.

Based upon the previous identification of radioactive material above the Derived Concentration Guideline Levels (DCGLs), and the need for radiological remediation, it was concluded that there was some probability for residual radioactivity in concentrations greater than the DCGLs, justifying a final survey unit classification of Class 1 (refer to Section 3).

3. DATA QUALITY OBJECTIVES (DQO)

FSS design and planning used the Data Quality Objective (DQO) process as described by the LTP, Procedure RPM 5.1-11, *"Preparation of Final Status Survey Plan,"* and the *"Multi-Agency Radiation Survey and Site Investigation Manual"* (MARSSIM). A summary of the main features of the DQO process are provided herein.

The DQO process incorporated hypothesis testing and probabilistic sampling distributions to control decision errors during data analysis. Hypothesis testing is a process based on the scientific method that compares a baseline condition to an alternate condition. The baseline condition is technically known as the null hypothesis. Hypothesis testing rests on the premise that the null hypothesis is true and that sufficient evidence must be provided for rejection. In designing the survey plan, the underlying assumption, or null hypothesis was that residual activity in the survey unit exceeded the release criteria. Rejection of the null hypothesis would indicate that residual activity within the survey unit does not exceed the release criteria. Therefore, the survey unit would satisfy the primary objective of the FSS plan.

The primary objective of the FSS plan was to demonstrate that the level of residual radioactivity in Survey Unit 9522-0005 did not exceed the release criteria specified in the LTP and that the potential dose from residual radioactivity is As Low As Reasonably Achievable (ALARA).

A fundamental precursor to survey design is to establish a relationship between the release criteria and some measurable quantity. This is done through the development of DCGLs. The DCGLs represent average levels of radioactivity above background levels and are presented in terms of surface or mass activity concentrations. Chapter 6 of the LTP describes in detail the modeling used to develop the DCGLs for soil (called Base Case Soil DCGL), existing groundwater radioactivity and future groundwater radioactivity that will be contributed by building basements and footings.

The DCGLs presented in Chapter 6 of the LTP were developed for exposures from three (3) components, that is, residual radioactivity in soil, existing groundwater radioactivity, and future groundwater radioactivity from the burial of concrete foundations or footings from site buildings containing residual radioactivity. Equation 1 shows the mathematical relationship between the three (3) components and the total dose.

Equation 1

$$H_{Total} = H_{Soil} + H_{ExistingGW} + H_{FutureGW}$$

The total dose under the LTP criteria is twenty-five (25) mrem/yr Total Effective Dose Equivalent (TEDE) from all three (3) components. The allowable total dose under the Connecticut Department of Environmental Protection (CTDEP) radiological remediation standard for CY is nineteen (19) mrem/yr TEDE. To satisfy both the LTP and CY CTDEP criteria, the dose from soil must be reduced when using the existing and future groundwater dose values discussed above.

This survey area is affected by existing groundwater (reference CY memo ISC 06-024). Therefore, the dose contribution from existing groundwater is bounded by two (2) mrem/yr TEDE.

This survey unit is considered impacted by future groundwater radioactive contamination, as there are underground foundations containing residual radioactive material within the groundwater saturated zone in the area (reference CY memo ISC 06-024). The dose contribution from future groundwater, the third dose component, is bounded by two (2) mrem/yr TEDE.

Equation 2

$$19\ \text{mrem/yr}_{Total} = 15\ \text{mrem/yr}_{Soil} + 2\ \text{mrem/yr}_{Existing\ GW} + 2\ \text{mrem/yr}_{FutureGW}$$

The allowable dose for soil in this survey unit is fifteen (15) mrem/yr TEDE as shown by Equation 2 above. The concentration of residual radioactivity resulting in fifteen (15) mrem/yr TEDE is designated as the Operational DCGL, and has been established for the radionuclides of concern as provided in Table 2.

Table 2 – Radionuclide Specific Base Case Soil DCGLs, Operational DCGLs and Required Minimum Detectable Concentrations (MDCs)

Radionuclide (1)	Base Case Soil DCGL (ρC/g) (2)	Operational DCGL (ρC/g) (3)	Required MDC (ρC/g) (4)
H-3	4.12E+02	2.47E+02	1.65E+01
C-14	5.66E+00	3.40E+00	2.26E-01
Mn-54	1.74E+01	1.04E+01	6.96E-01
Fe-55	2.74E+04	1.64E+04	1.10E+03
Co-60	3.81E+00	2.29E+00	1.52E-01
Ni-63	7.23E+02	4.34E+02	2.89E+01
Sr-90	1.55E+00	9.30E-01	6.20E-02
Nb-94	7.12E+00	4.27E+00	2.85E-01
Tc-99	1.26E+01	7.56E+00	5.04E-01
Ag-108m	7.14E+00	4.28E+00	2.86E-01
Cs-134	4.67E+00	2.80E+00	1.87E-01
Cs-137	7.91E+00	4.75E+00	3.16E-01
Eu-152	1.01E+01	6.06E+00	4.04E-01
Eu-154	9.29E+00	5.57E+00	3.72E-01
Eu-155	3.92E+02	2.35E+02	1.57E+01
Pu-238	2.96E+01	1.78E+01	1.18E+00
Pu-239/240	2.67E+01	1.60E+01	1.07E+00
Am-241 (5)	2.58E+01	1.55E+01	1.03E+00
Pu-241	8.70E+02	5.22E+02	3.48E+01
Cm-243/244	2.90E+01	1.74E+01	1.16E+00

(1) Bold indicates those radionucldies considered Hard to Detect (HTD)

(2) The Base Case Soil DCGL(s) are specified by the LTP in Chapter 6 and are equivalent to twenty-five (25) mrem/yr TEDE

(3) The Operational DCGL is equivalent to achieving fifteen (15) mrem/yr TEDE

(4) The required MDC is equivalent to achieving one (1) mrem/yr TEDE

(5) Americium-241 can be analyzed by gamma and alpha spectroscopy and is considered to be Easy to Detect (ETD). The preferred result is the alpha spectroscopy's when both analyses are performed

Another important facet of the DQO process is to identify the radionuclides of concern and determine the concentration variability. Surface soil samples were collected in 2005 to establish the radiological condition of Survey Area 9522 for FSS. Cs-137 and Co-60 were the only two (2) gamma emitting radionuclides reported in concentrations with the potential for exceeding the screening criteria. The characterization data were used for the survey design and are provided in Table 1.

Instrument DQOs included a verification of the ability of the survey instrument to detect the radiation(s) of interest relative to the DCGL. Survey instrument response checks were required prior to issue and after the instrument had been used. Control and accountability of survey instruments was required to assure the quality and prevent the loss of data.

As part of the DQOs applied to laboratory processes, analysis results were reported as actual calculated results. Results reported as less than Minimum Detectable Concentration (MDC) were not accepted for FSS. Sample report summaries included unique sample identification, analytical method, radionuclide, result, and uncertainty to two (2) standard deviations, laboratory data qualifiers, units, and the required and observed MDC.

4. SURVEY DESIGN

The level of effort associated with planning a survey is based on the complexity of the survey and nature of the hazards. Guidance for preparing FSS plans is provided in Procedure RPM 5.1-11, "*Preparation of Final Status Survey Plans*". The FSS plan uses an integrated sample design that combines scanning surveys and sampling which can be either random or biased.

The DQO process determined that both Cs-137 and Co-60 would be the radionuclides of concern in Survey Unit 9522-0005 (refer to Section 3). The characterization survey did not include any HTD radionuclides of concern for this survey unit. Based on other survey data, surrogate DCGLs were not required as part of the survey design for this survey unit via screening under LTP Section 5.4.7.2, "*Gross Activity DCGLs*". Other radionuclides that were positively identified in concentrations greater than the screening criteria during the performance of this FSS would be evaluated to ensure adequate survey design.

As the survey unit is classified as a Class 1 surface soils area, and discrete, elevated areas of contamination was possible, the application of the Elevated Measurement Comparison (EMC) remained an option.

The Sign Test was selected as the non-parametric statistical test. The use of the Sign Test did not require the selection or use of a background reference area, which simplified survey design and implementation. This approach was conservative since it included background Cs-137 as part of the sample set.

The number of soil samples for FSS was determined in accordance with Procedure RPM 5.1-12, "*Determination of the Number of Surface Samples for Final Status Survey.*" The Lower Bound of the Gray Region (LBGR) was set in accordance with Procedure RPM 5.1-11 to 0.5 to maintain the relative shift (Δ/σ) in the range of 1 and 3. The resulting relative shift was 1.61. A Prospective Power Curve was generated using COMPASS, a software package developed under the sponsorship of the United States Nuclear Regulatory Commission (USNRC) for implementation of the MARSSIM in support of the decommissioning license termination rule (10CFR20, Subpart E). The result of the COMPASS computer run showed adequate power for the survey design. The survey design specified seventeen (17) surface soil samples for non-parametric statistical testing. Based upon a review of the historical information and characterization survey data, the acquisition of additional judgmental surface soil samples from within this survey unit was deemed unnecessary.

The grid pattern and locations of the soil samples were determined using Visual Sample Plan (VSP) in accordance with Procedure RPM 5.1-14, "*Identifying, and Marking Surface Sample Locations for Final Status Survey.*" Visual Sample Plan was created by Pacific Northwest National Laboratory (PNNL) for the United States Department of Energy. A systematic triangular grid pattern with a random starting point was selected for sample design, which is appropriate for a Class 1 area.

Sample locations were identified using AutoCAD-LT, a commercially available plotting software package with coordinates consistent with the Connecticut State Plane System. These coordinates were integrated with a GPS to locate sample locations in the field. Sample measurement locations for the design are listed with the GPS coordinates in Table 3.

Table 3 - Sample Measurement Locations with Associated GPS Coordinates

Designation	Northing	Easting
9522-0005-001F	236362.19	668928.16
9522-0005-002F	236329.51	668871.56
9522-0005-003F	236329.51	668909.29
9522-0005-004F	236329.51	668947.03
9522-0005-005F	236329.51	668984.76
9522-0005-006F	236296.83	668852.69
9522-0005-007F	236296.83	668890.43
9522-0005-008F	236296.83	668928.16
9522-0005-009F	236296.83	668965.90

Table 3 - (continued)

Designation	Northing	Easting
9522-0005-010F	236296.83	669003.63
9522-0005-011F	236296.83	669041.36
9522-0005-012F	236264.16	668833.82
9522-0005-013F	236264.16	668871.56
9520-0003-014F	236264.16	668947.03
9522-0005-015F	236264.16	668984.76
9522-0005-016F	236264.16	669022.50
9522-0005-017F	236231.48	669003.63

Procedure RPM 5.1-11 specifies that 5% of the samples are required to be selected for HTD analysis. Two (2) soil samples, or about 10% of the number of samples that would be used for non-parametric statistical testing were randomly selected for HTD radionuclide analysis using the Microsoft Excel "RANDBETWEEN" function. Each sample was sent off-site for a full suite analysis of the HTD radionuclides specified in the LTP, Table 2-12, "*Radionuclides Potentially Present at Haddam Neck Plant*" and as provided in Table 2.

The implementation of quality control measures as referenced by Procedure RPM 5.1-24, "*Split Sample Assessment for Final Status Survey*," included the collection of one (1) soil sample for "split sample" analysis by the off-site laboratory. This location was selected randomly using the Microsoft Excel "RANDBETWEEN" function.

The LTP specifies a required scanning coverage of 100% for outdoor Class 1 areas.

For this Class 1 survey unit, the "Investigation Level" for area scanning and soil sample measurement results are those levels specified in LTP, Table 5-8. Table 4 provides a synopsis of the survey design.

Table 4 – Synopsis of the Survey Design

Feature	Design Criteria	Basis
Survey Unit Land Area	1,947 m^2	Based on AutoCAD-LT
Number of Measurements	17 (17 systematic grid)	Type 1 and Type 2 errors were 0.05, sigma was 0.31 ρCi/g, the LBGR was set at 0.5 to maintain Relative Shift in the range of 1 and 3
Grid Spacing	11.49 m	Based on triangular grid
Operational DCGL	4.75 ρCi/g Cs-137 2.29 ρCi/g Co-60	Administratively set to achieve fifteen (15) mrem/yr TEDE (1)
Soil Investigation Level	4.75 ρCi/g Cs-137 2.29 ρCi/g Co-60	The Operational DCGL meets the LTP criteria for a Class 1 survey unit
Scan Survey Area Coverage	Approximately 100% of the area	The LTP requires 100% area coverage for Class 1 survey units
Scan Investigation Level	An instrument response greater than the Scan MDC($DCGL_{EMC}$) of 2,744 cpm	Based upon a Minimum Detectable Count Rate (MDCR) of 1,597 cpm and a corresponding MDC_{scan} of 7 ρCi/g Cs-137 and 1.83 ρCi/g Co-60

(1) The allowable dose for soil in this survey unit is fifteen (15) mrem/yr TEDE as the bounding dose from existing and future groundwater has been established based on field data (reference CY memo ISC 06-024)

5. SURVEY IMPLEMENTATION

Final status survey field activities were conducted under Work Plan and Inspection Record (WP&IR) 2006-0047. The WP&IR package included a detailed FSS plan, job safety analysis, job planning checklist and related procedures for reference. Daily briefings were conducted to discuss the expectations for job performance and the safety aspects of the survey. The "Daily Survey Journal" was used to document field activities and other information pertaining to the FSS.

A single scan area was established that constituted approximately 100% of the surface area of Survey Unit 9522-0005. Grid lines, one (1) meter wide, were painted on the ground of the scan area. A background survey was performed around the survey unit and it was determined that, using an Eberline E-600 with a SPA-3 sodium iodide detector, background ranged from 6,370 counts per minute (cpm) up to 13,300 cpm.

The scan area was established and scanned for elevated readings (see Attachment 2 for all scan results). Scanning was performed with an Eberline E-600 using a SPA-3 sodium iodide detector. The E-600 was operated in the rate-meter mode and used with audio response. The probe was positioned as close to the ground as possible and was moved at a scan speed of about 0.5 meters per second. 100% of the surface area within the survey unit was scanned.

Measurement locations were identified in North American Datum (NAD) 1927 coordinates using GPS; sample locations were identified and marked with a surveyor's flag or paint for identification. At each sample location, a one (1) meter radius around the sample flag or paint mark was scanned for elevated radiation levels.

Seventeen (17) surface soil samples were collected and packaged in accordance with Haddam Neck Plant (HNP) Procedure RPM 5.1-3, "*Collection of Sample Media for Final Status Survey*" and FSS design. Samples were controlled, transported, stored, and transferred to the off-site laboratory using Chain-of-Custody (COC) protocol in accordance with Procedure RPM 5.1-5, "*Chain of Custody for Final Status Survey Samples*."

Two (2) samples (9522-0005-005F and 9522-0005-013F) were randomly selected for HTD radionuclide analysis.

The implementation of survey specific quality control measures included the collection of one (1) sample (9522-0005-001F) for "split sample" analysis.

6. SURVEY RESULTS

All field survey activities were conducted between November 30, 2006 and December 11, 2006.

The sample locations identified in the FSS plan were scanned over approximately a one (1) meter radius for elevated radiation levels. Table 5 provides an overview of the scan results for sample measurement locations. Scan results for the entire survey unit are provided in Attachment 2.

Table 5 – Scan Results for Sample Measurement Locations

Sample Measurement Location	Highest Logged Reading (kcpm)	Action Level (1) (kcpm)	> Action Level (2)
1	8.49	11.90	NO
2	12.40	13.70	NO
3	11.40	12.80	NO
4	8.20	8.90	NO
5	8.10	9.33	NO
6	10.90	12.70	NO
7	7.42	9.13	NO
8	7.47	10.60	NO
9	7.36	9.54	NO
10	9.09	9.49	NO
11	8.60	9.86	NO
12	10.20	10.90	NO
13	10.60	11.40	NO
14	7.25	7.69	NO
15	6.46	9.00	NO
16	14.70	14.70	NO
17	7.92	7.41	YES

(1) The action level is based on a measurement above ambient background in accordance with the FSS plan

(2) The FSS plan requires movement of the sample measurement location to the area within the 1 meter radius yielding the response above the action level. Sample location 9522-0005-017F was moved accordingly.

The scan areas, that comprised approximately 100% of the total surface area for the survey unit, were scanned for elevated radiation levels. The areas were scanned in accordance with the FSS plan on December 06, 2006 through December 11, 2006. Several elevated measurement locations were identified during scanning. Table 6 provides an overview of the scan area survey. Complete scan results are provided in Attachment 2.

Table 6 - Scan Area Results

Scan Strips	Highest Logged Reading (kcpm)	Action Level (1) (kcpm)	Elevated Reading Identification (2)	Investigation Sample
1 thru 10	11.30	9.43	9522-05-ER-00-05-1	9522-0005-018I
			9522-05-ER-00-06-1	9522-0005-019I
11 thru 20	10.40	9.94	9522-05-ER-00-17-1	9522-0005-020I
			9522-05-ER-00-18-1	9522-0005-021I
			9522-05-ER-00-19-1	9522-0005-022I
			9522-05-ER-00-20-1	9522-0005-023I
21 thru 30	10.70	8.36	9522-05-ER-00-24-1	9522-0005-024I
			9522-05-ER-00-25-1	9522-0005-025I
			9522-05-ER-00-26-1	9522-0005-026I
			9522-05-ER-00-28-2	9522-0005-027I
			9522-05-ER-00-29-1	9522-0005-028I
			9522-05-ER-00-30-1	9522-0005-029I
31 thru 40	11.30	9.35	9522-05-ER-00-37-1	9522-0005-030I
			9522-05-ER-00-39-1	9522-0005-031I
41 thru 50	16.40	13.80	9522-05-ER-00-43-1	9522-0005-032I
			9522-05-ER-00-45-1	9522-0005-033I
			9522-05-ER-00-46-1	9522-0005-034I
			9522-05-ER-00-49-1	9522-0005-035I
51 thru 60	14.60	11.40	9522-05-ER-00-54-1	9522-0005-036I
			9522-05-ER-00-55-1	9522-0005-037I
			9522-05-ER-00-56-1	9522-0005-038I
			9522-05-ER-00-57-1	9522-0005-039I

Table 6 - Scan Area Results

Scan Strips	Highest Logged Reading (kcpm)	Action Level (1) (kcpm)	Elevated Reading Identification (2)	Investigation Sample
61 thru 70	16.50	12.20	9522-05-ER-00-64-1	9522-0005-040I
			9522-05-ER-00-64-2	9522-0005-041I
			9522-05-ER-00-67-1	9522-0005-042I
			9522-05-ER-00-67-2	9522-0005-043I
			9522-05-ER-00-68-1	9522-0005-044I
			9522-05-ER-00-69-1	9522-0005-045I
			9522-05-ER-00-69-2	9522-0005-046I
			9522-05-ER-00-70-1	9522-0005-047I
71 thru 79	16.40	13.40	9522-05-ER-00-71-1	9522-0005-048I
			9522-05-ER-00-72-1	9522-0005-049I
			9522-05-ER-00-73-1	9522-0005-050I
			9522-05-ER-00-73-2	9522-0005-051I
			9522-05-ER-00-74-1	9522-0005-052I
			9522-05-ER-00-75-1	9522-0005-053I
			9522-05-ER-00-77-1	9522-0005-054I
			9522-05-ER-00-78-1	9522-0005-055I

(1) The action level is based on a measurement above ambient background

(2) The ER abbreviations is associated with the barcodes used in the field where ER stands for Elevated Reading

A large portion of the thirty-eight (38) investigative samples taken were located close together in a large area along the northwest quadrant of the survey unit. During the performance of the FSS, scan survey results in this area were identifying additional investigative sample locations in accordance with the FSS plan instructions. At the time of the survey, remediation activities were on-going in the survey area to the north and radioactive material containers were being stored to the northwest. Both of these activities had the potential for affecting ambient background in Survey Unit 9522-0005. Subsequently, in lieu of taking additional investigative samples in this specific area and in addition to the investigative samples taken above, four (4) additional investigative samples were taken at the approximate corners of the large area of elevated activity identified. These additional investigative samples were taken to ensure that the area of

elevated activity that was identified was adequately bounded. The bounding sample locations identified were scanned over approximately a one (1) meter radius for elevated radiation levels. Table 7 provides an overview of the scan results for the bounding sample measurement locations.

Table 7 – Scan Results for Bounding Sample Measurement Locations

Sample Measurement Location	Highest Logged Reading (kcpm)	Action Level (1) (kcpm)	> Action Level (2)
9522-0005-056I	9.92	10.70	NO
9522-0005-057I	16.40	12.30	YES
9522-0005-058I	12.80	10.80	YES
9522-0005-059I	12.04	12.20	NO

(1) The action level is based on a measurement above ambient background in accordance with the FSS plan

(2) The FSS plan requires movement of the sample measurement location to the area within the 1 meter radius yielding the response above the action level. Sample locations 9522-0005-057I and 9522-0005-058I were moved accordingly.

The off-site laboratory employed for the radiological analyses of samples was General Engineering Laboratories, LLC. The laboratory analyzed the seventeen (17) samples collected for non-parametric statistical testing, the associated field split and the forty-two (42) investigative samples using gamma spectroscopy. Gamma spectroscopy analysis was performed to the required MDCs. Gamma spectroscopy results identified some radionuclides meeting the accepted criteria for detection (i.e., a result greater than two (2) standard deviations uncertainty). However, Cs-137 and Co-60 were the only gamma-emitting radionuclides reported in concentrations exceeding the de-selection criteria.

Cs-137 was identified in seven (7) and Co-60 was identified in one (1) of the seventeen (17) samples collected for non-parametric statistical testing. The mean of the gamma spectroscopic analysis results for the sample population indicated that Cs-137 was present at levels lower than the concentrations of Cs-137 found in soil at off-site locations within the vicinity of the HNP as presented in the Health Physics TSD BCY-HP-0063. A summary of the seventeen (17) samples collected for non-parametric statistical testing results is provided in Table 8.

Table 8 - Summary of Gamma Spectroscopy Results for Surface Soil Samples Comprising the Statistical Sample Population

Sample Number	Cs-137 pCi/g	Co-60 pCi/g
9522-0005-001F	6.45E-01	1.55E-02
9522-0005-002F	1.52E-02	8.69E-03
9522-0005-003F	1.42E-02	-2.48E-03
9522-0005-004F	3.54E-02	4.89E-04
9522-0005-005F	4.84E-02	8.70E-03
9522-0005-006F	4.95E-03	-8.79E-03
9522-0005-007F	2.00E-03	-5.10E-03
9522-0005-008F	-4.72E-03	1.75E-03
9522-0005-009F	1.65E-03	7.64E-03
9522-0005-010F	3.24E-02	1.99E-02
9522-0005-011F	3.09E-02	-9.64E-03
9522-0005-012F	-6.22E-03	2.30E-03
9522-0005-013F	-8.15E-03	-4.65E-03
9522-0005-014F	1.84E-02	-2.27E-03
9522-0005-015F	0.00E+00	-2.33E-03
9522-0005-016F	2.38E-03	7.22E-03
9522-0005-017F	3.21E-02	4.05E-03

The off-site laboratory also processed two (2) samples for HTD analysis as required by the sample plan. The requested analyses included alpha spectroscopy, gas proportional counting, and liquid scintillation depending on the radionuclide and the measurement method. All analyses performed met the required minimum MDC.

As previously stated in Section 4 of this report, the criteria for de-selection of a radionuclide is a concentration that is less than 5% of the Operational DCGL for individual radionuclides and less than 10% of the Operational DCGLs for aggregates. HTD radionuclides were not present in concentrations sufficient for detection (i.e., a result greater than two (2) standard deviations uncertainty) in the two (2) samples selected for HTD analysis. Subsequently, no HTD radionuclides will be considered in the final dose determination for this survey unit.

The "sum-of-fractions" or "unity rule" is the mathematical test used to evaluate compliance with radiological criteria for license termination when more than one radionuclide has been determined to be potentially present. The unity rule is:

Equation 3

$$\frac{C_1}{DCGL_1} + \frac{C_2}{DCGL_2} + \ldots\ldots \frac{C_n}{DCGL_n} \leq 1$$

Where: C_n = concentration of radionuclide *n* and
$DCGL_n$ = DCGL of radionuclide *n*.

The results of the unity rule calculation for the radionuclides of concern in the statistical sample population for Survey Unit 9522-0005 are provided in Table 9 below.

Table 9 – Results of Unity Calculation for Surface Soil Samples Comprising the Statistical Sample Population

Sample Number	**Fraction of the Operational DCGL[(1)(2)]**		Unity
	Cs-137	Co-60	
9522-0005-001F	0.14	-	0.14
9522-0005-002F	-	-	-
9522-0005-003F	-	-	-
9522-0005-004F	0.01	-	0.01
9522-0005-005F	0.01	-	0.01
9522-0005-006F	-	-	-
9522-0005-007F	-	-	-
9522-0005-008F	-	-	-
9522-0005-009F	-	-	-
9522-0005-010F	0.01	0.01	0.02
9522-0005-011F	0.01	-	0.01
9522-0005-012F	-	-	-
9522-0005-013F	-	-	-
9522-0005-014F	0.00	-	0.00
9522-0005-015F	-	-	-

Table 9 – (continued)

Sample Number	Fraction of the Operational DCGL[(1)(2)]		Unity
	Cs-137	Co-60	
9522-0005-016F	-	-	-
9522-0005-017F	0.01	-	0.01

(1) The Operational DCGL from Table 2 is 4.75 ρCi/g for Cs-137 and 2.29 ρCi/g for Co-60 to achieve fifteen (15) mrem/yr TEDE respectively.

(2) - indicates that the radionuclide was not positively detected in the sample

7. QUALITY CONTROL

The off-site laboratory processed the split samples and performed gamma spectroscopy analysis. One sample location was selected for analysis, which exceeds the 5% minimum required by the LTP. The data were evaluated using USNRC acceptance criteria specified in Inspection Procedure 84750 as detailed in HNP Procedure RPM 5.1-24, "*Split Sample Assessment for Final Status Survey*". Cs-137 was detected in sufficient quantities in both samples to evaluate in accordance with procedure.

Analysis of the split sample results found the comparison ratio for Cs-137 to be slightly outside of the acceptable agreement range for the established resolution. Cs-137 has a likelihood to be tightly bound to various media in the sample matrix. Subsequently, it is presumed that there was inadequate homogeneous mixing of the sample-split matrix as the process is not very effective in dispersing material uniformly throughout the aliquot. Since K-40 was found to be present at an acceptable level of agreement, no further action is warranted.

The sample analysis vendor, General Engineering Laboratories, LLC, maintains quality control and quality assurance plans as part of normal operation. Refer to Attachment 4 for data and data quality analysis results.

8. INVESTIGATIONS AND RESULTS

Thirty-eight (38) investigative surface soil samples and four (4) bounding samples were collected from scan areas exhibiting elevated scan readings. The investigative soil samples were analyzed for Cs-137 and Co-60 in accordance with the DQOs used during the survey design. The samples are denoted as shown in Table 6, with the sample results shown in Table 10 below.

Table 10 - Investigative Sample Results

Sample Number	Cs-137 pCi/g	Co-60 pCi/g	Unity Fraction (1) (2)
9522-0005-018I	3.94E-02	1.44E-02	0.01
9522-0005-019I	2.12E-02	7.60E-03	0.01
9522-0005-020I	0.00E+00	1.62E-03	-
9522-0005-021I	1.11E-02	3.69E-03	-
9522-0005-022I	2.31E-02	8.97E-03	0.01
9522-0005-023I	1.67E-02	1.30E-03	0.00
9522-0005-024I	1.07E-02	1.71E-02	-
9522-0005-025I	1.86E-02	8.11E-04	0.00
9522-0005-026I	2.16E-02	4.93E-03	0.01
9522-0005-027I	8.70E-03	1.05E-02	0.01
9522-0005-028I	5.32E-03	4.45E-03	-
9522-0005-029I	-7.18E-03	7.57E-03	-
9522-0005-030I	2.59E-02	3.55E-02	-
9522-0005-031I	4.34E-02	4.06E-03	0.01
9522-0005-032I	8.42E-03	-7.45E-03	-
9522-0005-033I	6.39E-02	-2.25E-03	0.01
9522-0005-034I	5.39E-02	5.83E-03	-
9522-0005-035I	-1.67E-02	-1.37E-03	-
9522-0005-036I	2.16E-02	5.94E-03	-
9522-0005-037I	5.34E-02	5.58E-03	0.01
9522-0005-038I	2.08E-02	-1.50E-03	-
9522-0005-039I	2.37E-02	1.36E-02	-
9522-0005-040	0.00E+00	-9.14E-04	-
9522-0005-041I	6.41E-03	-3.87E-03	-
9522-0005-042I	0.00E+00	5.96E-03	-
9522-0005-043I	1.77E-02	6.65E-03	-
9522-0005-044I	2.06E-02	4.42E-03	-

Table 10 – (continued)

Sample Number	Cs-137 pCi/g	Co-60 pCi/g	Unity Fraction (1) (2)
9522-0005-045I	2.07E-03	-2.99E-03	-
9522-0005-046I	-4.16E-02	-1.26E-03	-
9522-0005-047I	-1.13E-02	-2.33E-02	-
9522-0005-048I	-2.65E-02	-1.54E-02	-
9522-0005-049I	3.64E-02	1.08E-02	0.01
9522-0005-050I	1.73E-02	1.35E-02	-
9522-0005-051I	1.71E-02	3.22E-02	0.02
9522-0005-052I	3.57E-02	1.51E-02	0.01
9522-0005-053I	1.93E-02	-3.34E-03	-
9522-0005-054I	3.05E-02	3.24E-03	-
9522-0005-055I	-1.68E-03	-1.28E-02	-
9522-0005-056I	5.64E-03	2.61E-02	0.01
9522-0005-057I	2.31E-02	3.32E-03	-
9522-0005-058I	3.74E-02	-1.85E-02	0.00
9522-0005-059I	0.00E+00	1.96E-02	-

(1) The Operational DCGL from Table 2 is 4.75 pCi/g for Cs-137 and 2.29 pCi/g for Co-60 to achieve fifteen (15) mrem/yr TEDE respectively.

(2) - indicates that no radionuclides were positively detected in the sample

9. REMEDIATION AND RESULTS

Significant remediation activities occurred in this survey unit prior to FSS. All above grade and below grade commodities and facility systems were removed and properly dispositioned. Contaminated soils that exceeded the screening criteria in effect for groundwater dose compliance were identified, excavated and removed as part of the "Zone 12" and "Excavation 7" remediation projects. All excavations were characterized and backfilled with "clean" fill prior to performing FSS. As a byproduct of remediation activities, the ground area is comprised of barren dirt with no vegetation, and the soils have been graded relatively flat to the corresponding elevation of the survey units to the north and east. The western edge of this survey unit is comprised of a steep bank along the discharge canal. Health Physics TSD BCY-HP-0078, "*ALARA Evaluation of Soil Remediation in Support of Final Status Survey,*" determined that remediation beyond that required to meet the release criteria is unnecessary and that the remaining residual radioactivity in soil was ALARA.

10. CHANGES FROM THE FINAL STATUS SURVEY PLAN

No changes were made to the FSS plan for this survey unit.

11. DATA QUALITY ASSESSMENT (DQA)

The DQO sample design and data were reviewed in accordance with Procedure RPM 5.1-23, *"Data Quality Assessment,"* for completeness and consistency. The sampling design had adequate power as indicated by the Retrospective Power Curve. The Sign Test was performed on the data and compared to the original assumptions of the DQOs. The evaluation of the Sign Test results demonstrates that the survey unit passes the unrestricted release criteria, thus, the null hypothesis is rejected.

Documentation was complete and legible. Surveys and sample collection were consistent with the DQOs and were sufficient to ensure that the survey unit was properly designated as Class 1.

The preliminary data review consisted of calculating basic statistical quantities (e.g., mean, median, standard deviation). The mean and median values are well below the Operational DCGL. Also, the retrospective power curve shows that a sufficient number of samples were collected to achieve the desired power. Therefore, the survey unit meets the unrestricted release criteria with adequate power as required by the DQOs. The basic statistical quantities for the statistical sample population are provided below in Table 11.

Table 11 – Basic Statistical Quantities for Cs-137 and Co-60 from the Final Status Survey

	Cs-137 ρCi/g	Co-60 ρCi/g
$DCGL_{op}$:	4.75E+00	2.29E+00
Minimum Value:	-8.15E-03	-9.64E-03
Maximum Value:	6.45E-01	1.99E-02
Mean:	5.08E-02	2.41E-03
Median:	1.42E-02	1.75E-03
Standard Deviation:	1.54E-01	8.13E-03

For Cs-137, the range of the data, about four (4) standard deviations, was not a particularly large variation considering that the levels were essentially at existing environmental levels where such variation is to be expected. The difference between the mean and median was about 30% of the standard deviation which indicates some skewness in the data. The data was represented graphically through posting plots, a frequency plot, and a quantile plot. The frequency plot indicates positive skewness as confirmed by the calculated skew of 4.04.

Co-60, although included in the FSS plan for compliance purposes, was positively identified in only one (1) of the seventeen (17) samples collected for non-parametric statistical testing. Data assessment and graphical representation of Co-60 was not considered useful given the limited number of data points to represent the distribution.

All data, assessments, and graphical representations are provided in Attachment 4.

12. ANOMALIES

No anomalies were noted.

13. CONCLUSION

Survey Unit 9522-0005 has met the final DQOs of the FSS plan. The ALARA criteria for soils as specified in Chapter 4 of the LTP were achieved. Elevated Measurement Comparison was not required.

Cs-137 was used for statistical testing to determine the adequacy of the survey unit for FSS.

The sample data passed the Sign Test. The null hypothesis was rejected. The Retrospective Power Curve generated using COMPASS shows adequate power was achieved. The survey unit is properly designated as Class 1.

The dose contribution from soil is 0.176 mrem/yr TEDE based on the average radionuclide concentrations in the samples used for non-parametric statistical sampling.

This survey area is affected by existing groundwater (reference CY memo ISC 06-024); therefore the dose contribution from existing groundwater is bounded at two (2) mrem/yr TEDE.

This survey unit is considered impacted by future groundwater radioactive contamination, as there are underground foundations containing residual radioactive material within the groundwater saturated zone in the area (reference CY memo ISC 06-024). The dose contribution from future groundwater, the third dose component, is bounded by two (2) mrem/yr TEDE.

The average total dose from residual radioactivity in this survey unit, including exposures from the three (3) components as described in Section 3, that is, residual radioactivity in soil, existing groundwater radioactivity, and future groundwater radioactivity from the burial of concrete foundations or footings from site buildings containing residual radioactivity, will not exceed 4.176 mrem/yr TEDE. Therefore, Survey Unit 9522-0005 is acceptable for unrestricted release.

14. ATTACHMENTS

14.1 Attachment 1 – Figures

14.2 Attachment 2 – Scan Results

14.3 Attachment 3 – Laboratory Data

14.4 Attachment 4 – DQA Results

ATTACHMENT 1 (FIGURES)

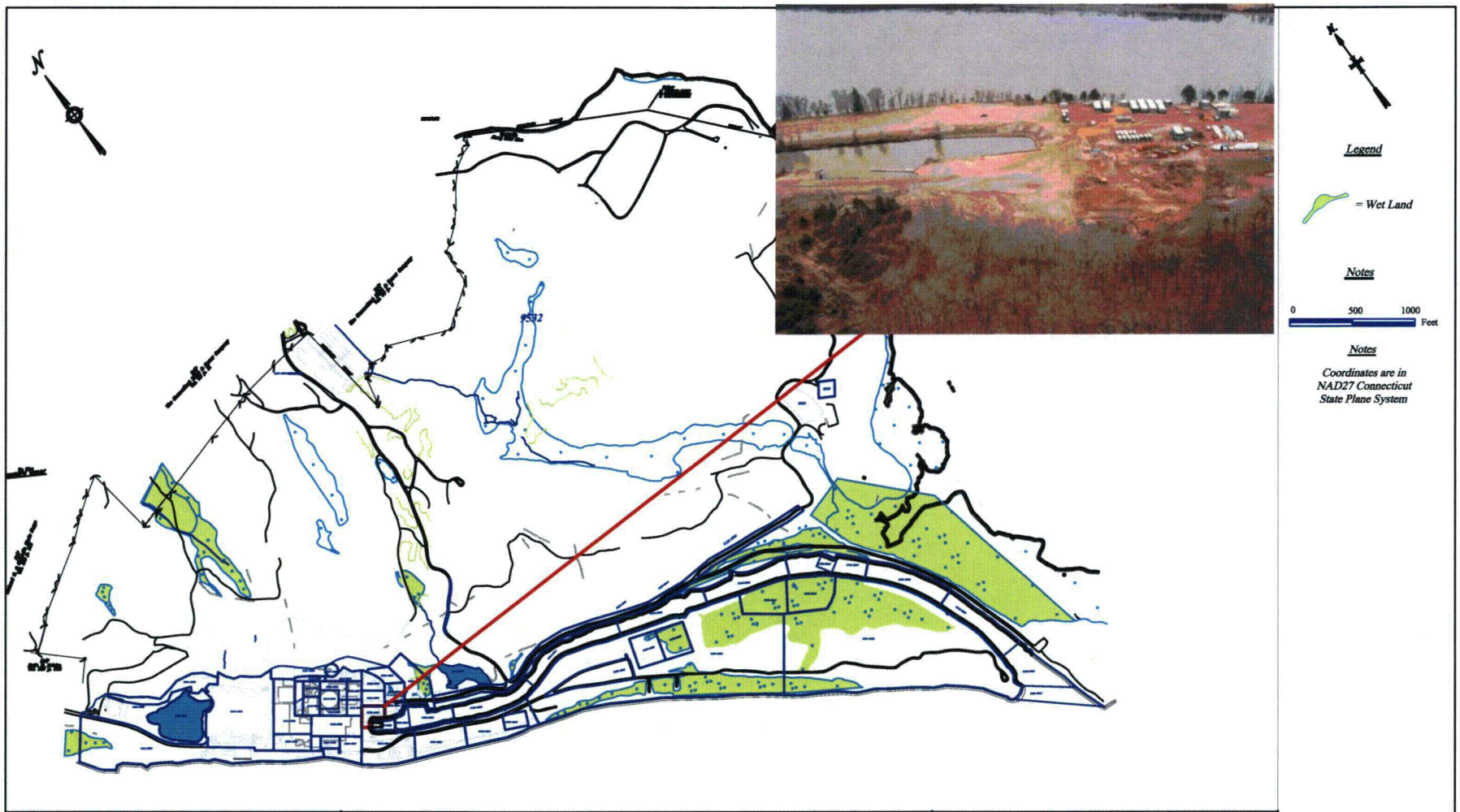

Figure 1	*Connecticut Yankee Atomic Power Company* *Survey Unit 9522-0005*	*Date: January 2007* *Revision: 0*

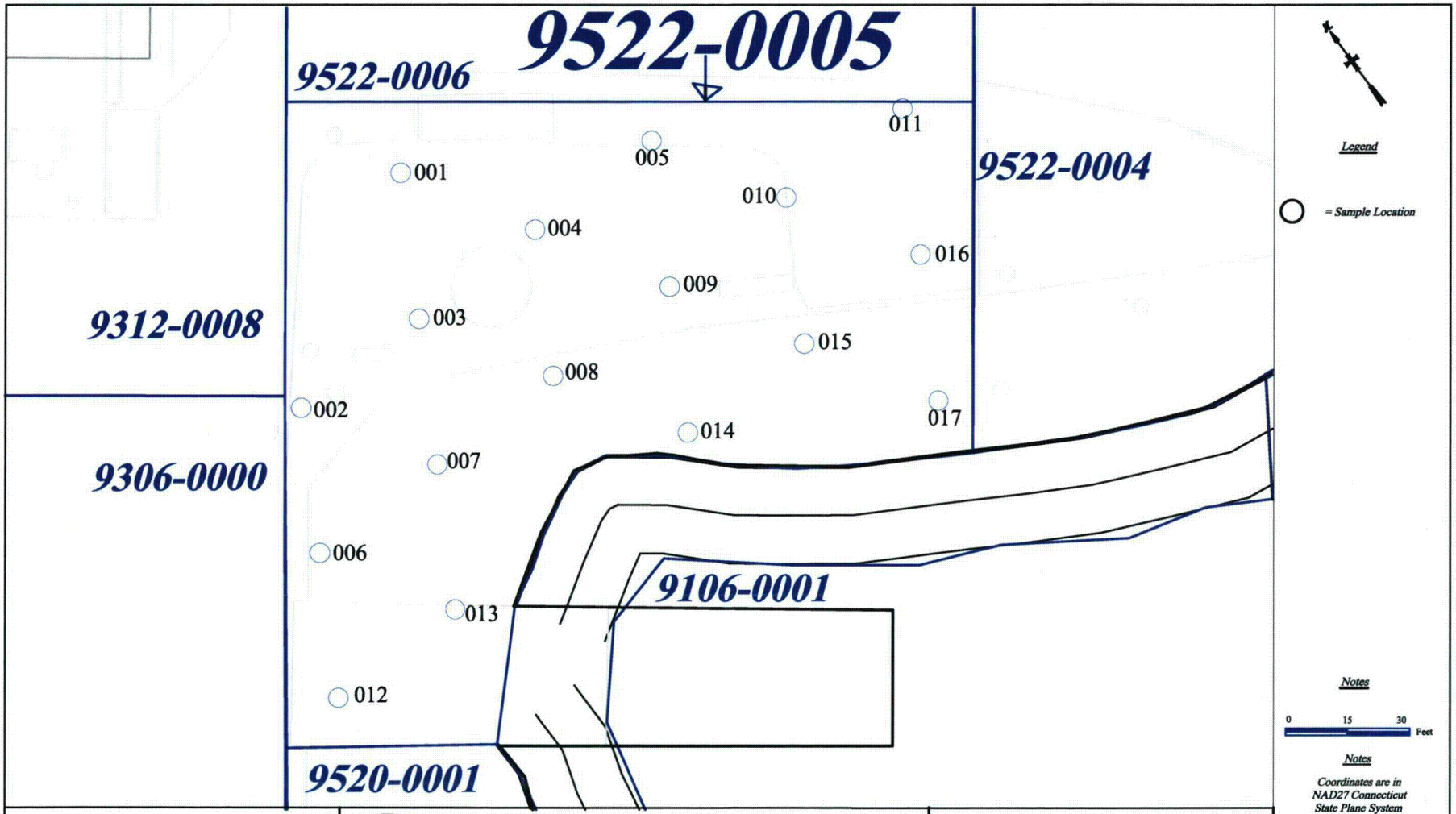

Figure 2

Connecticut Yankee Atomic Power Company

Sample Location Map for Survey Unit 9522-0005

Date: January 2007

Revision: 0

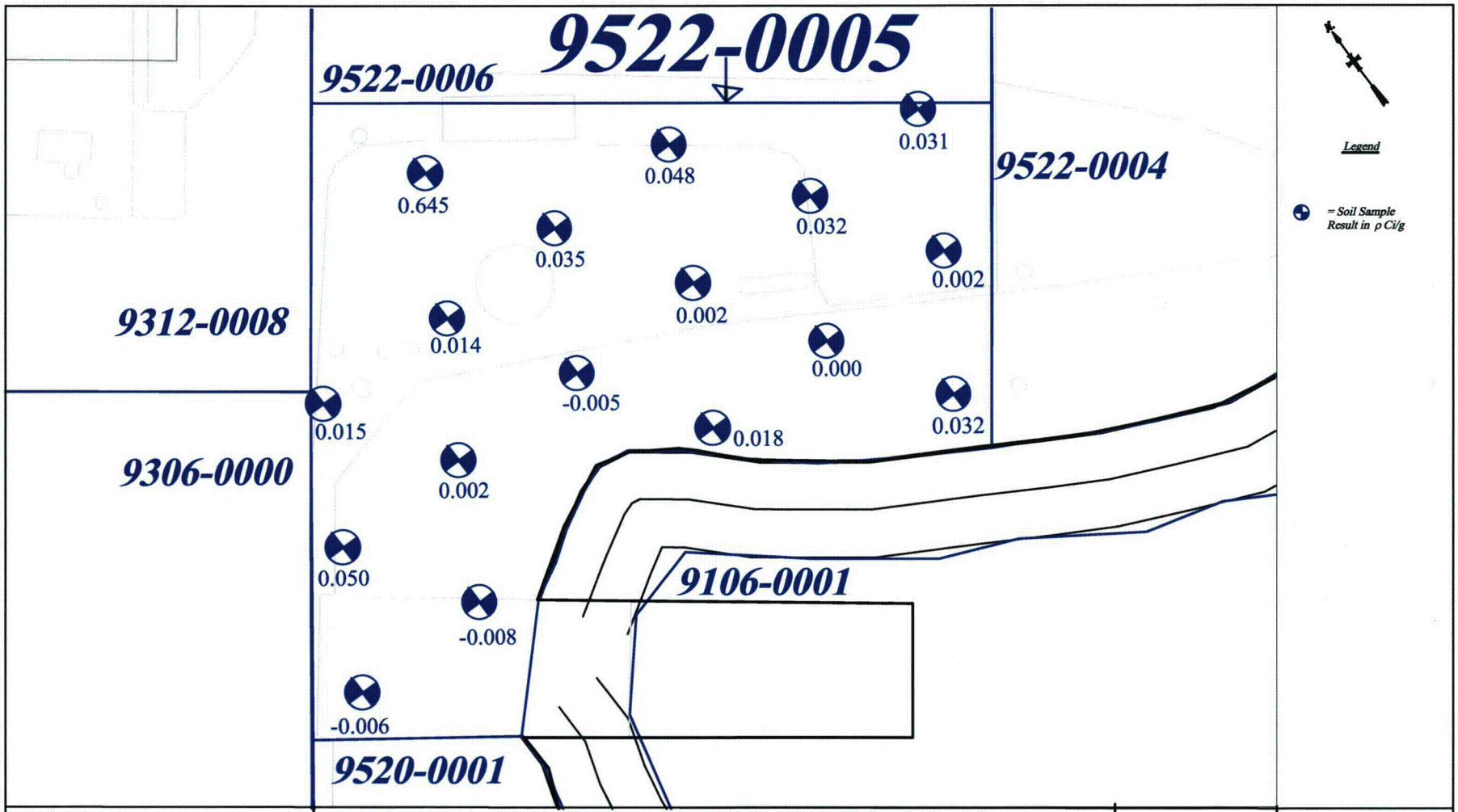

Figure 3	Connecticut Yankee Atomic Power Company 9522-0005 Final Status Survey Design Cesium-137 Posting Plot	Date January 2007	By R. Massengill

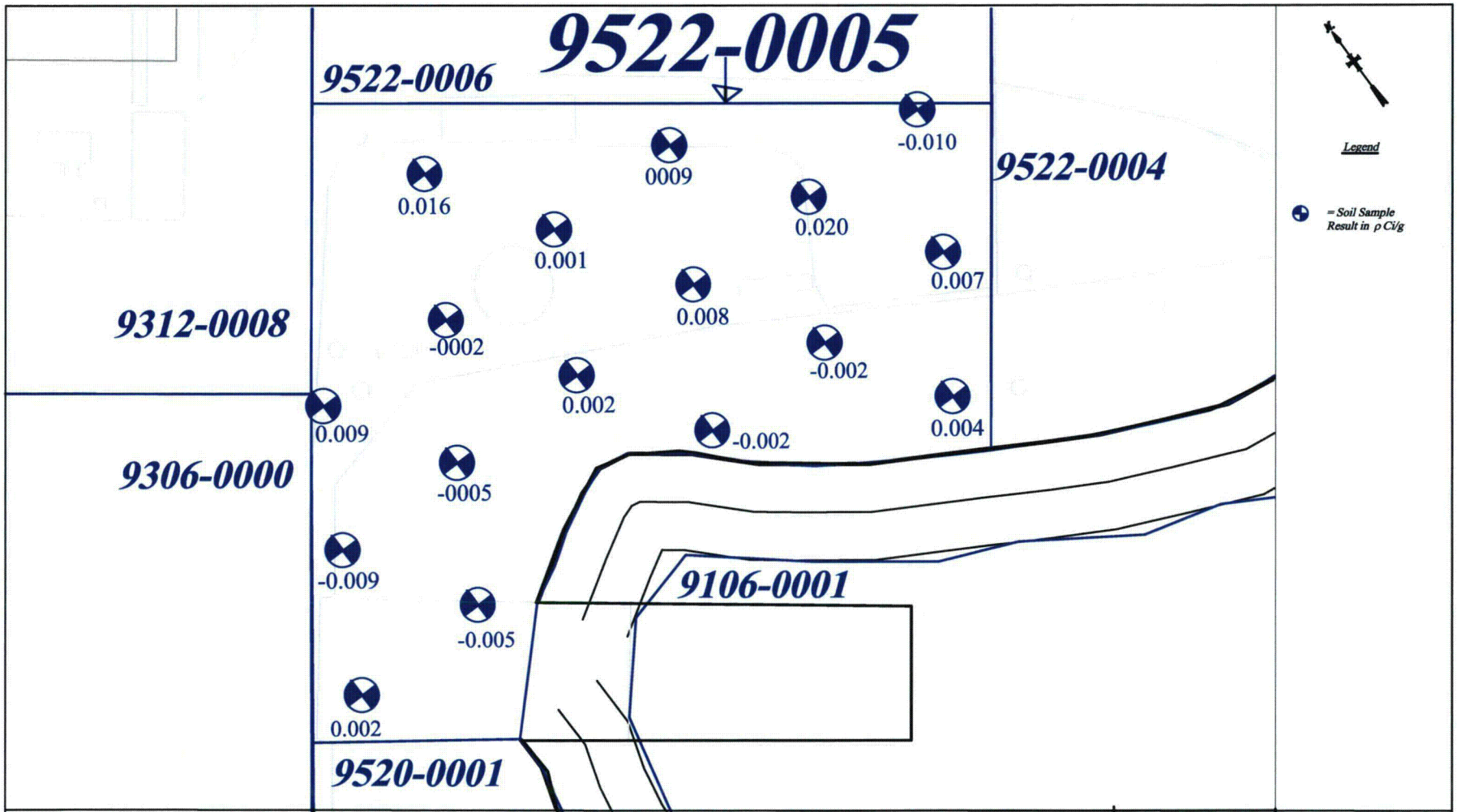

Figure 4	Connecticut Yankee Atomic Power Company 9522-0005 Final Status Survey Design Cobalt-60 Posting Plot	Date January 2007	By R. Massengill

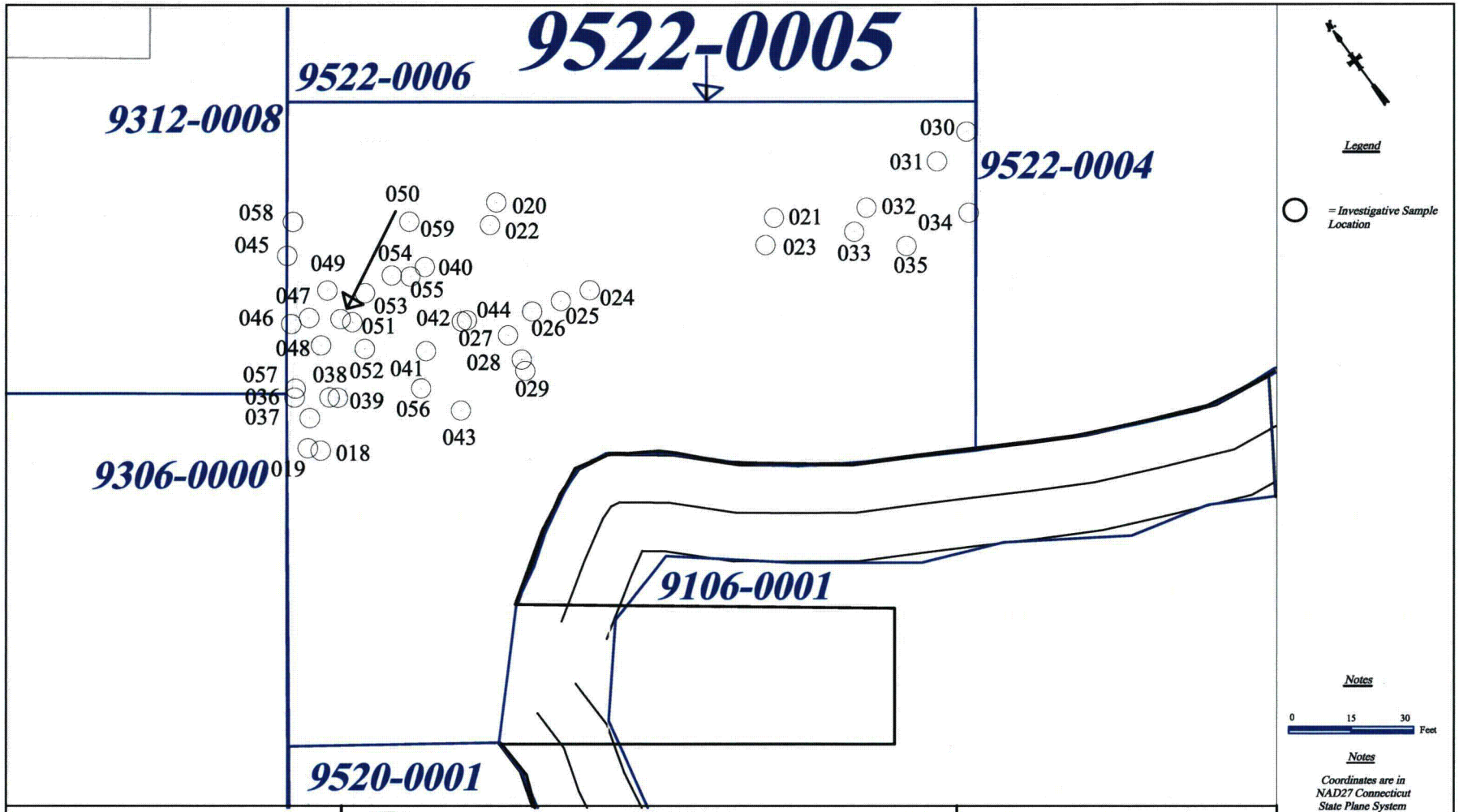

Figure 5

Connecticut Yankee Atomic Power Company

Investigative Sample Location Map for Survey Unit 9522-0005

Date: January 2007

Revision: 0

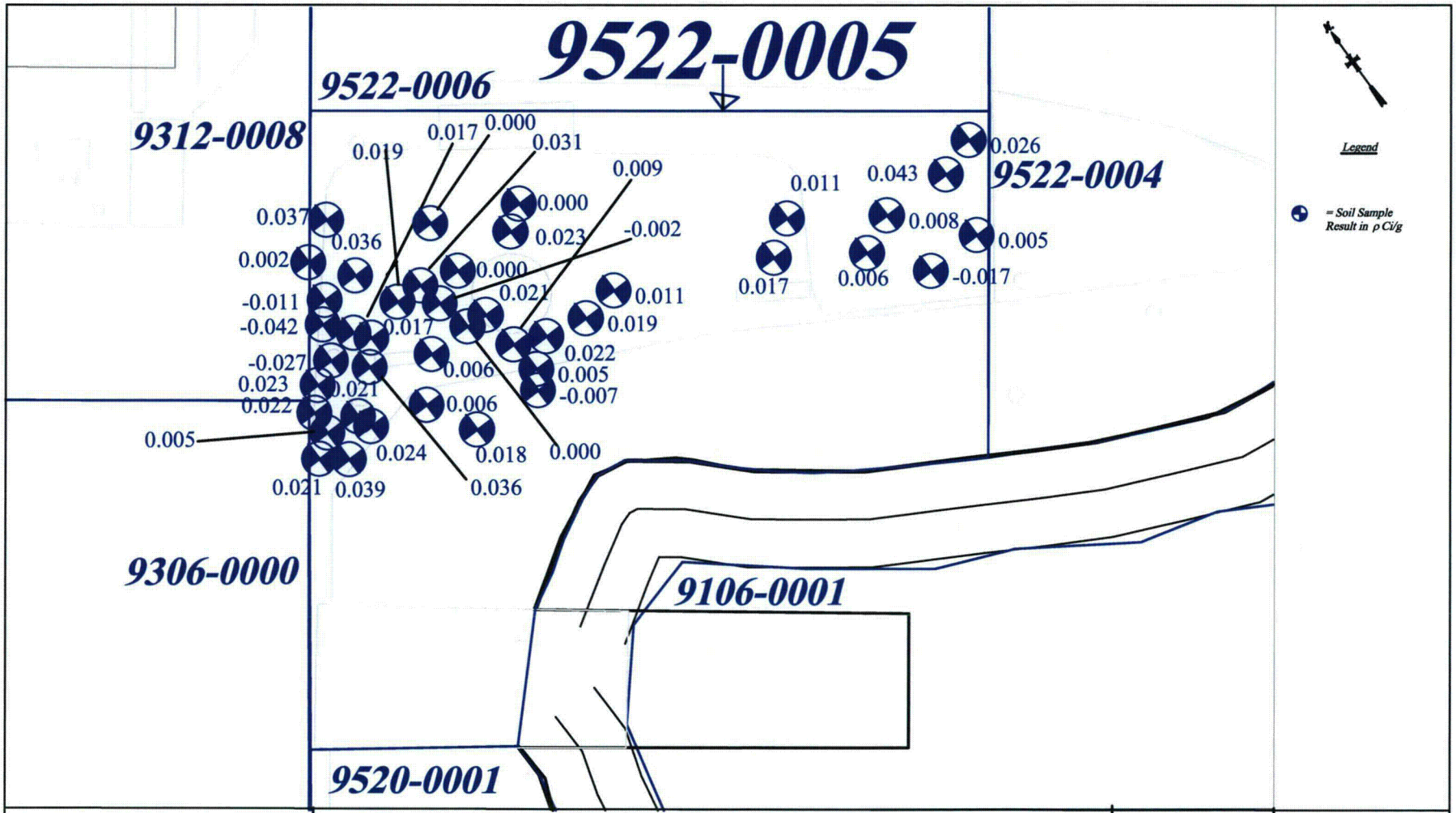

Figure 6	Connecticut Yankee Atomic Power Company 9522-0005 Final Status Survey Design Investigative Sample Cesium-137 Posting Plot	Date January 2007	By R. Massengill

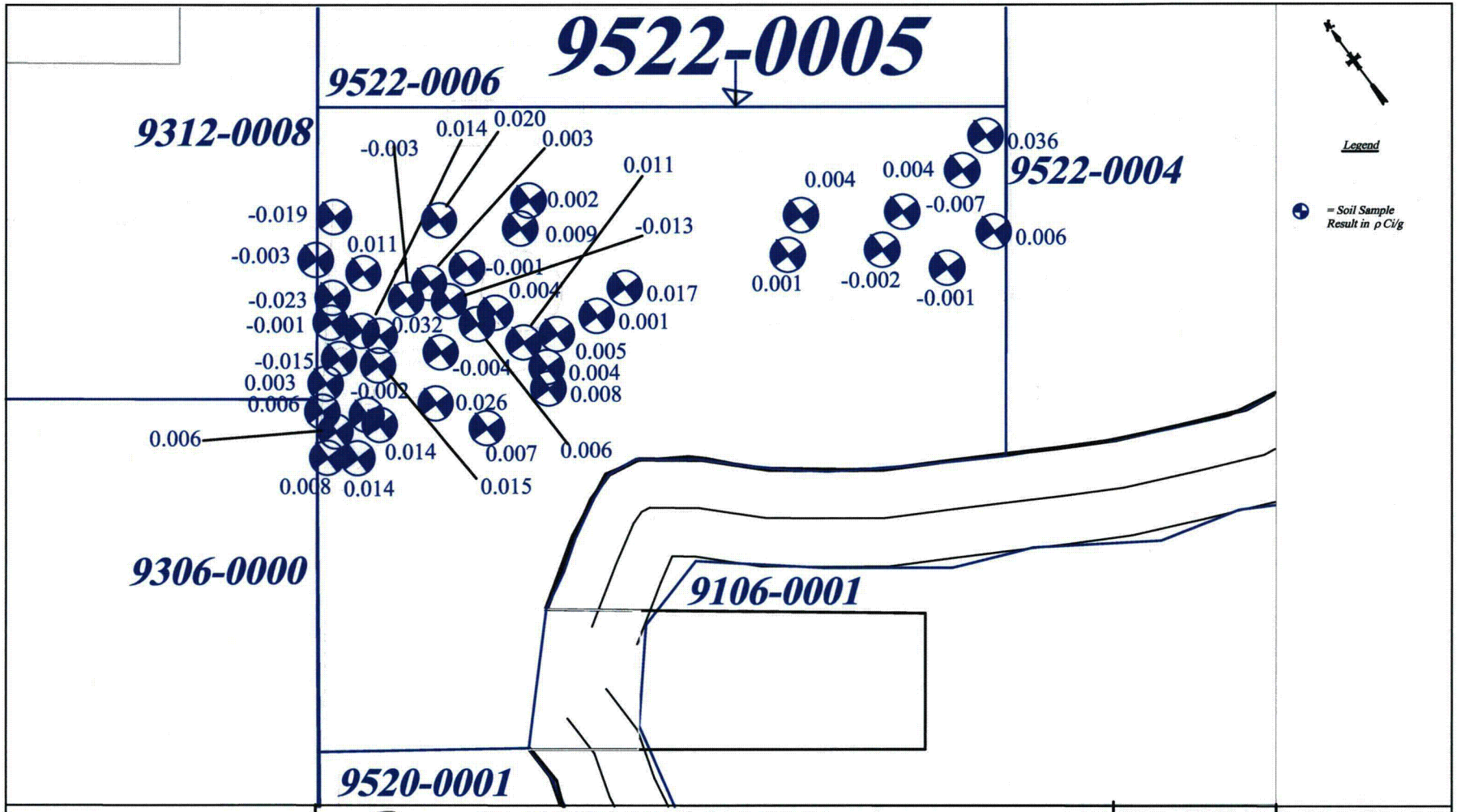

Figure 7	Connecticut Yankee Atomic Power Company 9522-0005 Final Status Survey Design Investigative Sample Cobalt-60 Posting Plot	Date January 2007	By R. Massengill

ATTACHMENT 2 (SCAN RESULTS)

SCAN RESULTS @ SAMPLE LOCATIONS

Survey Location	Log Date	Log Time	Reading	Alarm Level	>Alarm Level	E-600 S/N	Probe S/N
9522-05-BL-00-01-0	11/30/2006	7:37:00	1.04E+04			1114	1014
9522-05-SL-00-01-0	11/30/2006	7:38:00	8.49E+03	1.19E+04		1114	1014
9522-05-BL-00-02-0	11/30/2006	7:38:00	1.21E+04			1114	1014
9522-05-SL-00-02-0	11/30/2006	7:39:00	1.24E+04	1.37E+04		1114	1014
9522-05-BL-00-03-0	11/30/2006	7:57:00	1.13E+04			1114	1014
9522-05-SL-00-03-0	11/30/2006	7:58:00	1.14E+04	1.28E+04		1114	1014
9522-05-BL-00-04-0	11/30/2006	7:59:00	7.65E+03			1114	1014
9522-05-SL-00-04-0	11/30/2006	7:59:00	8.20E+03	8.90E+03		1114	1014
9522-05-BL-00-05-0	11/30/2006	8:25:00	8.05E+03			1114	1014
9522-05-SL-00-05-0	11/30/2006	8:26:00	8.10E+03	9.33E+03		1114	1014
9522-05-BL-00-06-0	11/30/2006	8:27:00	1.12E+04			1114	1014
9522-05-SL-00-06-0	11/30/2006	8:28:00	1.09E+04	1.27E+04		1114	1014
9522-05-BL-00-07-0	11/30/2006	9:36:00	7.86E+03			1114	1014
9522-05-SL-00-07-0	11/30/2006	9:37:00	7.42E+03	9.13E+03		1114	1014
9522-05-BL-00-08-0	11/30/2006	9:38:00	9.20E+03			1114	1014
9522-05-SL-00-08-0	11/30/2006	9:38:00	7.47E+03	1.06E+04		1114	1014
9522-05-BL-00-09-0	11/30/2006	9:51:00	8.24E+03			1114	1014
9522-05-SL-00-09-0	11/30/2006	9:52:00	7.36E+03	9.54E+03		1114	1014
9522-05-BL-00-10-0	11/30/2006	9:52:00	8.20E+03			1114	1014
9522-05-SL-00-10-0	11/30/2006	9:53:00	9.09E+03	9.49E+03		1114	1014
9522-05-BL-00-11-0	11/30/2006	10:04:00	8.54E+03			1114	1014
9522-05-SL-00-11-0	11/30/2006	10:05:00	8.60E+03	9.86E+03		1114	1014
9522-05-BL-00-12-0	11/30/2006	10:06:00	9.47E+03			1114	1014
9522-05-SL-00-12-0	11/30/2006	10:07:00	1.02E+04	1.09E+04		1114	1014
9522-05-BL-00-13-0	11/30/2006	10:27:00	9.94E+03			1114	1014
9522-05-SL-00-13-0	11/30/2006	10:28:00	1.06E+04	1.14E+04		1114	1014
9522-05-BL-00-14-0	11/30/2006	10:30:00	6.54E+03			1114	1014
9522-05-SL-00-14-0	11/30/2006	10:30:00	7.25E+03	7.69E+03		1114	1014
9522-05-SL-00-15-0	11/30/2006	10:49:00	7.74E+03			1114	1014
9522-05-BL-00-15-0	11/30/2006	10:50:00	6.46E+03	9.00E+03		1114	1014
9522-05-BL-00-16-0	11/30/2006	10:51:00	1.31E+04			1114	1014
9522-05-SL-00-16-0	11/30/2006	10:52:00	1.47E+04	1.47E+04		1114	1014
9522-05-BL-00-17-0	11/30/2006	11:16:00	6.28E+03			1114	1014
9522-05-SL-00-17-0	11/30/2006	11:16:00	7.92E+03	7.41E+03	+	1114	1014

SCAN RESULTS FOR SCAN STRIPS

Survey Location	Log Date	Log Time	Reading	Alarm Level	>Alarm Level	E-600 S/N	Probe S/N
9522-05-BC-00-01-0	12/6/2006	14:16:00	7.55E+03			1110	1010
9522-05-SC-00-01-0	12/6/2006	14:20:00	8.49E+03	8.79E+03		1110	1010
9522-05-BC-00-02-0	12/6/2006	14:20:00	8.70E+03			1110	1010
9522-05-SC-00-02-0	12/6/2006	14:21:00	7.76E+03	1.00E+04		1110	1010
9522-05-BC-00-03-0	12/6/2006	14:22:00	7.42E+03			1110	1010
9522-05-SC-00-03-0	12/6/2006	14:23:00	7.54E+03	8.65E+03		1110	1010
9522-05-BC-00-04-0	12/6/2006	14:24:00	8.16E+03			1110	1010
9522-05-SC-00-04-0	12/6/2006	14:25:00	6.41E+03	9.45E+03		1110	1010
9522-05-BC-00-05-0	12/6/2006	14:27:00	8.23E+03			1110	1010
9522-05-SC-00-05-0	12/6/2006	14:29:00	8.78E+03	9.53E+03		1110	1010
9522-05-ER-00-05-1	12/8/2006	7:45:00	1.06E+04	9.53E+03	+	1105	1009
9522-05-BC-00-06-0	12/6/2006	14:29:00	8.14E+03			1110	1010
9522-05-SC-00-06-0	12/6/2006	14:33:00	7.82E+03	9.43E+03		1110	1010
9522-05-ER-00-06-1	12/8/2006	7:46:00	1.13E+04	9.43E+03	+	1105	1009
9522-05-BC-00-07-0	12/6/2006	14:34:00	7.11E+03			1110	1010
9522-05-SC-00-07-0	12/6/2006	14:36:00	7.57E+03	8.31E+03		1110	1010
9522-05-BC-00-08-0	12/6/2006	14:38:00	8.03E+03			1110	1010
9522-05-SC-00-08-0	12/6/2006	14:40:00	7.51E+03	9.31E+03		1110	1010
9522-05-BC-00-09-0	12/6/2006	14:40:00	7.84E+03			1110	1010
9522-05-SC-00-09-0	12/6/2006	14:41:00	7.12E+03	9.10E+03		1110	1010
9522-05-BC-00-10-0	12/7/2006	7:43:00	8.27E+03			1117	1008
9522-05-SC-00-10-0	12/7/2006	7:46:00	9.03E+03	9.57E+03		1117	1008
9522-05-BC-00-11-0	12/7/2006	7:46:00	8.73E+03			1117	1008
9522-05-SC-00-11-0	12/7/2006	7:50:00	8.22E+03	1.01E+04		1117	1008
9522-05-BC-00-12-0	12/7/2006	7:50:00	8.47E+03			1117	1008
9522-05-SC-00-12-0	12/7/2006	7:54:00	8.44E+03	9.78E+03		1117	1008
9522-05-BC-00-13-0	12/7/2006	7:55:00	7.97E+03			1117	1008
9522-05-SC-00-13-0	12/7/2006	7:59:00	7.85E+03	9.24E+03		1117	1008
9522-05-BC-00-14-0	12/7/2006	7:59:00	9.28E+03			1117	1008
9522-05-SC-00-14-0	12/7/2006	8:03:00	9.12E+03	1.07E+04		1117	1008
9522-05-BC-00-15-0	12/7/2006	8:03:00	8.42E+03			1117	1008
9522-05-SC-00-15-0	12/7/2006	8:08:00	9.02E+03	9.73E+03		1117	1008
9522-05-BC-00-16-0	12/7/2006	8:09:00	8.03E+03			1117	1008
9522-05-SC-00-16-0	12/7/2006	8:14:00	8.13E+03	9.31E+03		1117	1008
9522-05-BC-00-17-0	12/7/2006	8:14:00	8.08E+03			1117	1008
9522-05-SC-00-17-0	12/7/2006	8:19:00	8.86E+03	9.36E+03		1117	1008
9522-05-ER-00-17-1	12/8/2006	7:47:00	8.61E+03	9.36E+03		1105	1009

SOUTHEAST SITE GROUNDS (NON-PROTECTED AREA)
SURVEY UNIT 9522-0005

RELEASE RECORD
Attachment 2

Survey Location	Log Date	Log Time	Reading	Alarm Level	>Alarm Level	E-600 S/N	Probe S/N
9522-05-BC-00-18-0	12/7/2006	8:19:00	7.97E+03			1117	1008
9522-05-SC-00-18-0	12/7/2006	8:24:00	8.35E+03	9.24E+03		1117	1008
9522-05-ER-00-18-1	12/8/2006	7:48:00	8.74E+03	9.24E+03		1105	1009
9522-05-BC-00-19-0	12/7/2006	8:25:00	8.88E+03			1117	1008
9522-05-SC-00-19-0	12/7/2006	8:29:00	9.38E+03	1.02E+04		1117	1008
9522-05-ER-00-19-1	12/8/2006	7:48:00	9.21E+03	1.02E+04		1105	1009
9522-05-BC-00-20-0	12/7/2006	8:30:00	8.61E+03			1117	1008
9522-05-SC-00-20-0	12/7/2006	8:34:00	8.61E+03	9.94E+03		1117	1008
9522-05-ER-00-20-1	12/8/2006	8:06:00	1.04E+04	9.94E+03	+	1105	1009
9522-05-BC-00-21-0	12/7/2006	8:17:00	8.12E+03			1112	1013
9522-05-SC-00-21-0	12/7/2006	8:19:00	7.06E+03	9.41E+03		1112	1013
9522-05-BC-00-22-0	12/7/2006	8:19:00	6.96E+03			1112	1013
9522-05-SC-00-22-0	12/7/2006	8:22:00	6.64E+03	8.15E+03		1112	1013
9522-05-BC-00-23-0	12/7/2006	8:23:00	8.19E+03			1112	1013
9522-05-SC-00-23-0	12/7/2006	8:25:00	7.22E+03	9.48E+03		1112	1013
9522-05-BC-00-24-0	12/7/2006	8:27:00	7.15E+03			1112	1013
9522-05-SC-00-24-0	12/7/2006	8:32:00	7.36E+03	8.36E+03		1112	1013
9522-05-ER-00-24-1	12/8/2006	8:08:00	1.07E+04	8.36E+03	+	1105	1009
9522-05-BC-00-25-0	12/7/2006	9:42:00	7.48E+03			1112	1013
9522-05-SC-00-25-0	12/7/2006	9:48:00	6.97E+03	8.72E+03		1112	1013
9522-05-ER-00-25-1	12/8/2006	8:08:00	1.06E+04	8.72E+03	+	1105	1009
9522-05-BC-00-26-0	12/7/2006	9:49:00	6.97E+03			1112	1013
9522-05-SC-00-26-0	12/7/2006	9:56:00	7.51E+03	8.16E+03		1112	1013
9522-05-ER-00-26-1	12/8/2006	8:09:00	9.88E+03	8.16E+03	+	1105	1009
9522-05-BC-00-27-0	12/7/2006	9:56:00	8.17E+03			1112	1013
9522-05-SC-00-27-0	12/7/2006	9:59:00	7.72E+03	9.46E+03		1112	1013
9522-05-BC-00-28-0	12/7/2006	10:00:00	6.37E+03			1112	1013
9522-05-SC-00-28-0	12/7/2006	10:05:00	6.89E+03	7.51E+03		1112	1013
9522-05-ER-00-28-2	12/8/2006	8:09:00	9.07E+03	7.51E+03	+	1105	1009
9522-05-BC-00-29-0	12/7/2006	9:41:00	8.17E+03			1117	1008
9522-05-SC-00-29-0	12/7/2006	9:47:00	7.52E+03	9.46E+03		1117	1008
9522-05-ER-00-29-1	12/8/2006	8:10:00	9.94E+03	9.46E+03	+	1105	1009
9522-05-BC-00-30-0	12/7/2006	9:47:00	7.51E+03			1117	1008
9522-05-SC-00-30-0	12/7/2006	9:52:00	8.67E+03	8.75E+03		1117	1008
9522-05-ER-00-30-1	12/8/2006	8:11:00	7.65E+03	8.75E+03		1105	1009
9522-05-BC-00-31-0	12/7/2006	9:53:00	8.27E+03			1117	1008
9522-05-SC-00-31-0	12/7/2006	9:57:00	7.53E+03	9.57E+03		1117	1008
9522-05-BC-00-32-0	12/7/2006	9:57:00	7.53E+03			1117	1008
9522-05-SC-00-32-0	12/7/2006	10:01:00	8.16E+03	8.77E+03		1117	1008

SOUTHEAST SITE GROUNDS (NON-PROTECTED AREA)
SURVEY UNIT 9522-0005

RELEASE RECORD
Attachment 2

Survey Location	Log Date	Log Time	Reading	Alarm Level	>Alarm Level	E-600 S/N	Probe S/N
9522-05-BC-00-33-0	12/7/2006	10:02:00	8.55E+03			1117	1008
9522-05-SC-00-33-0	12/7/2006	10:03:00	8.80E+03	9.87E+03		1117	1008
9522-05-BC-00-34-0	12/7/2006	10:04:00	8.05E+03			1117	1008
9522-05-SC-00-34-0	12/7/2006	10:06:00	8.48E+03	9.33E+03		1117	1008
9522-05-BC-00-35-0	12/7/2006	10:06:00	8.06E+03			1117	1008
9522-05-SC-00-35-0	12/7/2006	10:09:00	7.33E+03	9.34E+03		1117	1008
9522-05-BC-00-36-0	12/7/2006	10:16:00	1.06E+04			1117	1008
9522-05-SC-00-36-0	12/7/2006	10:18:00	7.99E+03	1.21E+04		1117	1008
9522-05-BC-00-37-0	12/7/2006	10:18:00	7.90E+03			1117	1008
9522-05-SC-00-37-0	12/7/2006	10:23:00	8.83E+03	9.17E+03		1117	1008
9522-05-ER-00-37-1	12/11/2006	7:30:00	1.11E+04	9.17E+03	+	1114	1014
9522-05-BC-00-38-0	12/7/2006	10:23:00	1.09E+04			1117	1008
9522-05-SC-00-38-0	12/7/2006	10:25:00	8.23E+03	1.24E+04		1117	1008
9522-05-BC-00-39-0	12/7/2006	10:26:00	8.07E+03			1117	1008
9522-05-SC-00-39-0	12/7/2006	10:30:00	8.69E+03	9.35E+03		1117	1008
9522-05-ER-00-39-1	12/11/2006	7:31:00	1.13E+04	9.35E+03	+	1114	1014
9522-05-BC-00-40-0	12/7/2006	10:30:00	1.07E+04			1117	1008
9522-05-SC-00-40-0	12/7/2006	10:32:00	8.60E+03	1.22E+04		1117	1008
9522-05-BC-00-41-0	12/7/2006	10:16:00	1.00E+04			1112	1013
9522-05-SC-00-41-0	12/7/2006	10:18:00	8.22E+03	1.14E+04		1112	1013
9522-05-BC-00-42-0	12/7/2006	10:19:00	9.56E+03			1112	1013
9522-05-SC-00-42-0	12/7/2006	10:21:00	1.02E+04	1.10E+04		1112	1013
9522-05-BC-00-43-0	12/7/2006	10:22:00	9.74E+03			1112	1013
9522-05-SC-00-43-0	12/7/2006	10:24:00	8.30E+03	1.11E+04		1112	1013
9522-05-ER-00-43-1	12/11/2006	7:32:00	1.39E+04	1.11E+04	+	1114	1014
9522-05-BC-00-44-0	12/7/2006	10:25:00	8.80E+03			1112	1013
9522-05-SC-00-44-0	12/7/2006	10:30:00	7.53E+03	1.01E+04		1112	1013
9522-05-BC-00-45-0	12/7/2006	10:34:00	8.40E+03			1112	1013
9522-05-SC-00-45-0	12/7/2006	10:37:00	9.28E+03	9.71E+03		1112	1013
9522-05-ER-00-45-1	12/11/2006	7:32:00	1.42E+04	9.71E+03	+	1114	1014
9522-05-BC-00-46-0	12/7/2006	10:38:00	9.91E+03			1112	1013
9522-05-SC-00-46-0	12/7/2006	10:41:00	1.07E+04	1.13E+04		1112	1013
9522-05-ER-00-46-1	12/11/2006	7:33:00	1.35E+04	1.13E+04	+	1114	1014
9522-05-BC-00-47-0	12/7/2006	10:42:00	1.23E+04			1112	1013
9522-05-SC-00-47-0	12/7/2006	10:43:00	1.05E+04	1.39E+04		1112	1013
9522-05-BC-00-48-0	12/7/2006	10:45:00	1.17E+04			1112	1013
9522-05-SC-00-48-0	12/7/2006	10:46:00	1.15E+04	1.32E+04		1112	1013
9522-05-BC-00-49-0	12/7/2006	10:44:00	1.22E+04			1117	1008
9522-05-SC-00-49-0	12/7/2006	10:45:00	1.19E+04	1.38E+04		1117	1008
9522-05-ER-00-49-1	12/11/2006	7:48:00	1.64E+04	1.38E+04	+	1114	1014

RELEASE RECORD
Attachment 2

Survey Location	Log Date	Log Time	Reading	Alarm Level	>Alarm Level	E-600 S/N	Probe S/N
9522-05-BC-00-50-0	12/7/2006	10:46:00	1.30E+04			1117	1008
9522-05-SC-00-50-0	12/7/2006	10:47:00	1.11E+04	1.46E+04		1117	1008
9522-05-BC-00-51-0	12/7/2006	10:48:00	1.23E+04			1117	1008
9522-05-SC-00-51-0	12/7/2006	10:49:00	1.16E+04	1.39E+04		1117	1008
9522-05-BC-00-52-0	12/7/2006	10:50:00	1.09E+04			1117	1008
9522-05-SC-00-52-0	12/7/2006	10:51:00	1.10E+04	1.24E+04		1117	1008
9522-05-BC-00-53-0	12/7/2006	10:52:00	9.27E+03			1117	1008
9522-05-SC-00-53-0	12/7/2006	10:53:00	8.88E+03	1.06E+04		1117	1008
9522-05-BC-00-54-0	12/7/2006	13:30:00	9.16E+03			1117	1008
9522-05-SC-00-54-0	12/7/2006	13:33:00	7.96E+03	1.05E+04		1117	1008
9522-05-ER-00-54-1	12/11/2006	7:49:00	1.22E+04	1.05E+04	+	1114	1014
9522-05-BC-00-55-0	12/7/2006	13:34:00	9.54E+03			1117	1008
9522-05-SC-00-55-0	12/7/2006	13:37:00	9.70E+03	1.09E+04		1117	1008
9522-05-ER-00-55-1	12/11/2006	7:50:00	1.24E+04	1.09E+04	+	1114	1014
9522-05-BC-00-56-0	12/7/2006	13:38:00	1.00E+04			1117	1008
9522-05-SC-00-56-0	12/7/2006	13:57:00	9.34E+03	1.14E+04		1117	1008
9522-05-ER-00-56-1	12/11/2006	7:51:00	1.46E+04	1.14E+04	+	1114	1014
9522-05-BC-00-57-0	12/7/2006	14:01:00	9.70E+03			1117	1008
9522-05-SC-00-57-0	12/7/2006	14:04:00	9.51E+03	1.11E+04		1117	1008
9522-05-ER-00-57-1	12/11/2006	7:51:00	1.33E+04	1.11E+04	+	1114	1014
9522-05-BC-00-58-0	12/7/2006	14:06:00	9.84E+03			1117	1008
9522-05-SC-00-58-0	12/7/2006	14:08:00	8.68E+03	1.13E+04		1117	1008
9522-05-BC-00-59-0	12/7/2006	14:12:00	9.93E+03			1117	1008
9522-05-SC-00-59-0	12/7/2006	14:14:00	8.86E+03	1.14E+04		1117	1008
9522-05-BC-00-60-0	12/7/2006	14:15:00	9.39E+03			1117	1008
9522-05-SC-00-60-0	12/7/2006	14:16:00	8.42E+03	1.08E+04		1117	1008
9522-05-BC-00-61-0	12/7/2006	13:27:00	7.36E+03			1112	1013
9522-05-SC-00-61-0	12/7/2006	13:30:00	6.86E+03	8.59E+03		1112	1013
9522-05-BC-00-62-0	12/7/2006	13:31:00	7.88E+03			1112	1013
9522-05-SC-00-62-0	12/7/2006	13:37:00	8.66E+03	9.15E+03		1112	1013
9522-05-BC-00-63-0	12/7/2006	13:37:00	8.21E+03			1112	1013
9522-05-SC-00-63-0	12/7/2006	13:40:00	7.87E+03	9.50E+03		1112	1013
9522-05-BC-00-64-0	12/7/2006	13:41:00	7.50E+03			1112	1013
9522-05-SC-00-64-0	12/7/2006	13:47:00	8.10E+03	8.74E+03		1112	1013
9522-05-ER-00-64-1	12/11/2006	8:07:00	1.37E+04	8.74E+03	+	1114	1014
9522-05-ER-00-64-2	12/11/2006	8:07:00	9.45E+03	8.74E+03	+	1114	1014
9522-05-BC-00-65-0	12/7/2006	13:49:00	8.39E+03			1112	1013
9522-05-SC-00-65-0	12/7/2006	13:53:00	7.58E+03	9.70E+03		1112	1013
9522-05-BC-00-66-0	12/7/2006	13:54:00	7.29E+03			1112	1013
9522-05-SC-00-66-0	12/7/2006	13:58:00	7.86E+03	8.51E+03		1112	1013

SOUTHEAST SITE GROUNDS (NON-PROTECTED AREA)
SURVEY UNIT 9522-0005

RELEASE RECORD
Attachment 2

Survey Location	Log Date	Log Time	Reading	Alarm Level	>Alarm Level	E-600 S/N	Probe S/N
9522-05-BC-00-67-0	12/7/2006	14:00:00	7.05E+03			1112	1013
9522-05-SC-00-67-0	12/7/2006	14:04:00	7.50E+03	8.25E+03		1112	1013
9522-05-ER-00-67-1	12/11/2006	8:08:00	1.14E+04	8.25E+03	+	1114	1014
9522-05-ER-00-67-2	12/11/2006	8:09:00	9.68E+03	8.25E+03	+	1114	1014
9522-05-BC-00-68-0	12/7/2006	14:05:00	7.09E+03			1112	1013
9522-05-SC-00-68-0	12/7/2006	14:10:00	8.04E+03	8.29E+03		1112	1013
9522-05-ER-00-68-1	12/11/2006	8:10:00	1.22E+04			1114	1014
9522-05-BC-00-69-0	12/7/2006	14:21:00	1.07E+04			1117	1008
9522-05-SC-00-69-0	12/7/2006	14:25:00	1.02E+04	1.22E+04		1117	1008
9522-05-ER-00-69-1	12/11/2006	8:11:00	1.50E+04	1.22E+04	+	1114	1014
9522-05-ER-00-69-2	12/11/2006	9:39:00	1.65E+04	1.22E+04	+	1114	1014
9522-05-BC-00-70-0	12/7/2006	14:27:00	1.02E+04			1117	1008
9522-05-SC-00-70-0	12/7/2006	14:32:00	1.04E+04	1.16E+04		1117	1008
9522-05-ER-00-70-1	12/11/2006	9:40:00	1.54E+04	1.16E+04	+	1114	1014
9522-05-BC-00-71-0	12/7/2006	14:34:00	1.27E+04			1117	1008
9522-05-SC-00-71-0	12/7/2006	14:38:00	1.21E+04	1.43E+04		1117	1008
9522-05-ER-00-71-1	12/11/2006	9:41:00	1.48E+04	1.43E+04	+	1114	1014
9522-05-BC-00-72-0	12/7/2006	14:40:00	1.18E+04			1117	1008
9522-05-SC-00-72-0	12/7/2006	14:43:00	1.25E+04	1.34E+04		1117	1008
9522-05-ER-00-72-1	12/11/2006	9:41:00	1.64E+04	1.34E+04	+	1114	1014
9522-05-BC-00-73-0	12/7/2006	14:47:00	1.33E+04			1117	1008
9522-05-SC-00-73-0	12/7/2006	14:51:00	1.13E+04	1.49E+04		1117	1008
9522-05-ER-00-73-1	12/11/2006	9:42:00	1.52E+04	1.49E+04	+	1114	1014
9522-05-ER-00-73-2	12/11/2006	9:42:00	1.55E+04	1.49E+04	+	1114	1014
9522-05-BC-00-74-0	12/7/2006	14:52:00	1.09E+04			1117	1008
9522-05-SC-00-74-0	12/7/2006	14:57:00	1.07E+04	1.24E+04		1117	1008
9522-05-ER-00-74-1	12/11/2006	9:52:00	1.48E+04	1.24E+04	+	1114	1014
9522-05-BC-00-75-0	12/7/2006	14:58:00	1.11E+04			1117	1008
9522-05-SC-00-75-0	12/7/2006	15:01:00	9.76E+03	1.26E+04		1117	1008
9522-05-ER-00-75-1	12/11/2006	9:53:00	1.52E+04	1.26E+04	+	1114	1014
9522-05-BC-00-76-0	12/7/2006	15:01:00	1.17E+04			1117	1008
9522-05-SC-00-76-0	12/7/2006	15:03:00	9.88E+03	1.32E+04		1117	1008
9522-05-BC-00-77-0	12/7/2006	14:40:00	7.91E+03			1112	1013
9522-05-SC-00-77-0	12/7/2006	14:43:00	8.61E+03	9.18E+03		1112	1013
9522-05-ER-00-77-1	12/11/2006	9:54:00	1.31E+04	9.18E+03	+	1114	1014
9522-05-BC-00-78-0	12/7/2006	14:43:00	8.91E+03			1112	1013
9522-05-SC-00-78-0	12/7/2006	14:45:00	7.41E+03	1.03E+04		1112	1013
9522-05-ER-00-78-1	12/11/2006	9:54:00	1.30E+04	1.03E+04	+	1114	1014

SCAN RESULTS @ BOUNDING SAMPLE LOCATIONS

Survey Location	Log Date	Log Time	Reading	Alarm Level	>Alarm Level	E-600 S/N	Probe S/N
9522-05-BL-00-56-0	12/11/2006	9:55:00	9.36E+03			1114	1014
9522-05-SL-00-56-0	12/11/2006	9:56:00	9.92E+03	1.07E+04		1114	1014
9522-05-BL-00-57-0	12/11/2006	9:57:00	1.08E+04			1114	1014
9522-05-SL-00-57-0	12/11/2006	9:58:00	1.64E+04	1.23E+04	+	1114	1014
9522-05-BL-00-58-0	12/11/2006	10:01:00	9.45E+03			1114	1014
9522-05-SL-00-58-0	12/11/2006	10:02:00	1.28E+04	1.08E+04	+	1114	1014
9522-05-BL-00-59-0	12/11/2006	9:59:00	1.07E+04			1114	1014
9522-05-SL-00-59-0	12/11/2006	10:00:00	1.12E+04	1.22E+04		1114	1014

ATTACHMENT 3 (LABORATORY DATA)

General Narrative

General Narrative
for
Connecticut Yankee Atomic Power Co.
Work Order: 177087
SDG: MSR#06-1519

December 08, 2006

Laboratory Identification:

General Engineering Laboratories, LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

Summary

Sample receipt

The samples arrived at General Engineering Laboratories, LLC, Charleston, South Carolina on December 05, 2006 for analysis. Shipping container temperatures were checked, documented, and within specifications. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage.

Sample Identification The laboratory received the following samples:

Laboratory Identification	Sample Description
177087001	9522-0005-001F
177087002	9522-0005-001FS
177087003	9522-0005-002F
177087004	9522-0005-003F
177087005	9522-0005-004F
177087006	9522-0005-005F
177087007	9522-0005-006F
177087008	9522-0005-007F
177087009	9522-0005-008F
177087010	9522-0005-009F
177087011	9522-0005-010F
177087012	9522-0005-011F
177087013	9522-0005-012F
177087014	9522-0005-013F
177087015	9522-0005-014F
177087016	9522-0005-015F
177087017	9522-0005-016F
177087018	9522-0005-017F

Items of Note

There are 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 contained in the analytical case narratives in the enclosed data package.

Analytical Request

Sixteen soil samples were analyzed for FSSGAM. Two soil samples were analyzed for FSSALL.

Data Package

The enclosed data package contains the following sections: General Narrative, Chain of Custody and Supporting Documentation, Data Review Qualifier Definitions, and data from the following fractions: 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

List of current GEL Certifications as of 08 December 2006

State	Certification
Alaska	UST-062
Arizona	AZ0668
Arkansas	88-0651
CLIA	42D0904046
California	01151CA
Colorado	GenEngLabs
Connecticut	PH-0169
Dept. of Navy	NFESC 413
EPA	WG-15J
Florida/NELAP	E87156
Georgia	E87156 (FL/NELAP)
Hawaii	N/A
Idaho	N/A
Illinois	200029
Indiana	C-SC-01
Kansas	E-10332
Kentucky	90129
Louisiana	03046
Maryland	270
Massachusetts	M-SC012
Michigan	9903
Nevada	SC12
New Jersey	SC002
New Mexico	FL NELAP E87156
New York	11501
North Carolina	233
North Carolina Drinking W	45709
North Dakota	R-158
Oklahoma	9904
Pennsylvania	68-00485
South Carolina	10120001/10585001/10120002
Tennessee	02934
Texas	TX213-2006A
Texas NELAP	T104704235-06-TX
U.S. Dept. of Agriculture	S-52597
US Army Corps of Engineer	N/A
Utah	8037697376 GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

Chain of Custody and Supporting Documentation

Connecticut Yankee Atomic Power Company

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

Chain of Custody Form

No. 2006-00693

Project Name: Haddam Neck Decommissioning

Contact Name & Phone:
Jack McCarthy 860-267-3924

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

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

Lab Use Only

Comments:

177087

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	FSSGAM	FSSALL					Comment, Preservation	Lab Sample ID
9522-0005-001F	11/30/06	0738	TS	G	BP	X							
9522-0005-001FS	11/30/06	0738	TS	G	BP	X							
9522-0005-002F	11/30/06	0740	TS	G	BP	X							
9522-0005-003F	11/30/06	0758	TS	G	BP	X							
9522-0005-004F	11/30/06	0800	TS	G	BP	X							
9522-0005-005F	11/30/06	0826	TS	G	BP		X						
9522-0005-006F	11/30/06	0827	TS	G	BP	X							
9522-0005-007F	11/30/06	0938	TS	G	BP	X							
9522-0005-008F	11/30/06	0939	TS	G	BP	X							
9522-0005-009F	11/30/06	0952	TS	G	BP	X							
9522-0005-010F	11/30/06	0953	TS	G	BP	X							

NOTES: PO #: 002332 MSR #: 06-1519 ☒ LTP QA ☐ Radwaste QA ☐ Non QA

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

Bill of Lading #

Internal Container Temp.: 12 Deg. C

Custody Sealed? Y N

Custody Seal Intact? Y N

1) Relinquished By: [signature] Date/Time 12/4/06 @1130	2) Received By: [signature] Date/Time 12/5/06 1015
3) Relinquished By Date/Time	4) Received By Date/Time
5) Relinquished By Date/Time	6) Received By Date/Time

Connecticut Yankee Atomic Power Company

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

Chain of Custody Form

No. 2006-00694

Project Name: Haddam Neck Decommissioning

Contact Name & Phone:
Jack McCarthy 860-267-3924

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

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

Lab Use Only

Comments:

177087 ✓

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	FSSGAM	FSSALL					Comment, Preservation	Lab Sample ID
9522-0005-011F	11/30/06	1005	TS	G	BP	X							
9522-0005-012F	11/30/06	1007	TS	G	BP	X							
9522-0005-013F	11/30/06	1027	TS	G	BP		X						
9522-0005-014F	11/30/06	1031	TS	G	BP	X							
9522-0005-015F	11/30/06	1050	TS	G	BP	X							
9522-0005-016F	11/30/06	1052	TS	G	BP	X							
9522-0005-017F	11/30/06	1115	TS	G	BP	X							

NOTES: PO #: 002332 MSR #: 06-159 ☒ LTP QA ☐ Radwaste QA ☐ Non QA

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

Bill of Lading #

Internal Container Temp.: 12 Deg. C

Custody Sealed? Y (N)

Custody Seal Intact? Y N

1) Relinquished By [signature]	Date/Time 12/4/06 @ 1130
2) Received By K. Wright	Date/Time 12/5/06 1015
3) Relinquished By	Date/Time
4) Received By	Date/Time
5) Relinquished By	Date/Time
6) Received By	Date/Time

Figure 1. Sample Check-in List

Date/Time Received: 12/5/06 1015

SDG#: MSR#06-1517, MSR#06-1519

Work Order Number: 177084, 177087

Shipping Container ID: See cont. sheet Chain of Custody # See cont. sheet

1. Custody Seals on shipping container intact? Yes [ ] No [ ] NA
2. Custody Seals dated and signed? Yes [ ] No [ ] NA
3. Chain-of-Custody record present? Yes [✓] No [ ]
4. Cooler temperature See cont sheet.
5. Vermiculite/packing materials is: Wet [ ] Dry [ ] NA
6. Number of samples in shipping container: 55 total
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: K. Knight Date: 12/5/06

Telephoned to: _____ On _____ By _____

SAMPLE RECEIPT & REVIEW FORM

GENERAL ENGINEERING LABORATORIES, LLC

PM use only

Client: Conn. Yank	**SDG/ARCOC/Work Order:** 177084, 177087
Date Received: 12/5/06	**PM(A) Review (ensure non-conforming items are resolved prior to signing):**
Received By:	

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

	Suspected Hazard Information	Non-Regulated	Regulated	High Level	RSO RAD Receipt # _____ *If > x2 area background is observed on samples identified as "non-regulated/non-radioactive", contact the Radiation Safety group for further investigation.
A	Radiological Classification?	✓			Maximum Counts Observed*: cpm 20
B	PCB Regulated?	✓			
C	Shipped as DOT Hazardous Material? If yes, contact Waste Manager or ESH Manager.	✓			Hazard Class Shipped: UN#:
D	Regulated as a Foreign Soil?	✓			

PM (or PMA) review of Hazard classification: _____ Initials CD Date: 12/6/06

SAMPLE RECEIPT & REVIEW FORM
CONTINUATION FORM

Client: **Date Received:**

Chains:

2006-001693
2006-001694
2006-001695
~~2006-001696~~

Fed ex #s Temp:

7985 5544 5873 12
7985 5544 5862
7901 2861 4738
7985 5544 5884
7901 2861 4716
7985 5544 5851

Data Review Qualifier Definitions

Data Review Qualifier Definitions

Qualifier	Explanation
*	A quality control analyte recovery is outside of specified acceptance criteria
**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
A	The TIC is a suspected aldol-condensation product
B	Target analyte was detected in the associated blank
B	Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
d	5-day BOD-The 2:1 depletion requirement was not met for this sample
E	Organics-Concentration of the target analyte exceeds the instrument calibration range
E	Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
H	Analytical holding time was exceeded
h	Preparation or preservation holding time was exceeded
J	Value is estimated
N	Metals-The Matrix spike sample recovery is not within specified control limits
N	Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
ND	Analyte concentration is not detected above the reporting limit
UI	Gamma Spectroscopy-Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

RADIOLOGICAL ANALYSIS

Radiochemistry Case Narrative
Connecticut Yankee Atomic Power Co. (YANK)
Work Order 177087

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:	593610
Prep Batch Number:	593155
Dry Soil Prep GL-RAD-A-021 Batch Number:	593153

Sample ID	Client ID
177087006	9522-0005-005F
177087014	9522-0005-013F
1201241516	Method Blank (MB)
1201241517	177084014(9804-0000-036F) Sample Duplicate (DUP)
1201241518	177084014(9804-0000-036F) Matrix Spike (MS)
1201241519	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: 177084014 (9804-0000-036F).

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. A nonconformance report (NCR) was not generated for this SDG.

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

Additional Comments
The sample and the duplicate, 1201241517 (9804-0000-036F), did not meet the relative percent difference requirement for Am-241, however they do meet the relative error ratio requirement with a value of 1.47.

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:	593611
Prep Batch Number:	593155
Dry Soil Prep GL-RAD-A-021 Batch Number:	593153

Sample ID	Client ID
177087006	9522-0005-005F
177087014	9522-0005-013F
1201241524	Method Blank (MB)
1201241525	177084014(9804-0000-036F) Sample Duplicate (DUP)
1201241526	177084014(9804-0000-036F) Matrix Spike (MS)
1201241527	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: 177084014 (9804-0000-036F).

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. A nonconformance report (NCR) was not generated for this SDG.

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

Additional Comments
The sample and the duplicate, 1201241525 (9804-0000-036F), did not meet the relative percent difference requirement for Pu-239/240, however they do meet the relative error ratio requirement with a value of 1.61.

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:	593612
Prep Batch Number:	593155
Dry Soil Prep GL-RAD-A-021 Batch Number:	593153

Sample ID	Client ID
177087006	9522-0005-005F
177087014	9522-0005-013F
1201241528	Method Blank (MB)
1201241529	177084014(9804-0000-036F) Sample Duplicate (DUP)
1201241530	177084014(9804-0000-036F) Matrix Spike (MS)
1201241531	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-035 REV# 8.

Calibration Information:

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

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

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

Quality Control (QC) Information:

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

Designated QC
The following sample was used for QC: 177084014 (9804-0000-036F).

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. A nonconformance report (NCR) was not generated for this SDG.

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

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived**
Analytical Method:	EML HASL 300, 4.5.2.3
Prep Method:	Dry Soil Prep
Analytical Batch Number:	593225
Prep Batch Number:	593153

Sample ID	Client ID
177087001	9522-0005-001F
177087002	9522-0005-001FS
177087003	9522-0005-002F
177087004	9522-0005-003F
177087005	9522-0005-004F
177087006	9522-0005-005F
177087007	9522-0005-006F
177087008	9522-0005-007F
177087009	9522-0005-008F
177087010	9522-0005-009F
177087011	9522-0005-010F
177087012	9522-0005-011F
177087013	9522-0005-012F
177087014	9522-0005-013F
177087015	9522-0005-014F
177087016	9522-0005-015F
177087017	9522-0005-016F
177087018	9522-0005-017F
1201240652	Method Blank (MB)
1201240653	177087001(9522-0005-001F) Sample Duplicate (DUP)
1201240654	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# 13.

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: 177087001 (9522-0005-001F).

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. A nonconformance report (NCR) was not generated for this SDG.

Qualifier information

Qualifier	Reason	Analyte	Sample
UI	Data rejected due to high counting uncertainty.	Cesium-137	177087016
		Radium-226	1201240652
UI	Data rejected due to interference.	Cesium-134	177087011
		Europium-155	177087008
			177087014
			177087016
			177087017
UI	Data rejected due to low abundance.	Cesium-134	177087004
			177087012
			177087013
			177087014
			177087015
			177087016
			177087017
			177087018
			1201240653
		Cobalt-60	1201240652

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:	593221
Prep Batch Number:	593155
Dry Soil Prep GL-RAD-A-021 Batch Number:	593153

Sample ID	Client ID
177087006	9522-0005-005F
177087014	9522-0005-013F
1201240642	Method Blank (MB)
1201240643	177087006(9522-0005-005F) Sample Duplicate (DUP)
1201240644	177087006(9522-0005-005F) Matrix Spike (MS)
1201240645	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# 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: 177087006 (9522-0005-005F).

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. A nonconformance report (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:	593284

Sample ID	Client ID
177087006	9522-0005-005F
177087014	9522-0005-013F
1201240789	Method Blank (MB)
1201240790	177084014(9804-0000-036F) Sample Duplicate (DUP)
1201240791	177084014(9804-0000-036F) Matrix Spike (MS)
1201240792	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# 13.

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: 177084014 (9804-0000-036F).

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. A nonconformance report (NCR) was not generated for this SDG.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Liquid Scint Fe55, Solid-HTD2,ALL2 (CT)**
Analytical Method:	DOE RESL Fe-1, Modified
Prep Method:	Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method:	Dry Soil Prep
Analytical Batch Number:	593478
Prep Batch Number:	593155
Dry Soil Prep GL-RAD-A-021 Batch Number:	593153

Sample ID	Client ID
177087006	9522-0005-005F
177087014	9522-0005-013F
1201241221	Method Blank (MB)
1201241222	177084014(9804-0000-036F) Sample Duplicate (DUP)
1201241223	177084014(9804-0000-036F) Matrix Spike (MS)
1201241224	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-040 REV# 3.

Calibration Information:

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

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

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

Quality Control (QC) Information:

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

Designated QC
The following sample was used for QC: 177084014 (9804-0000-036F).

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. A nonconformance report (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:	593479
Prep Batch Number:	593155
Dry Soil Prep GL-RAD-A-021 Batch Number:	593153

Sample ID	Client ID
177087006	9522-0005-005F
177087014	9522-0005-013F
1201241225	Method Blank (MB)
1201241226	177084014(9804-0000-036F) Sample Duplicate (DUP)

1201241227 177084014(9804-0000-036F) Matrix Spike (MS)
1201241228 Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-022 REV# 8.

Calibration Information:

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

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

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

Quality Control (QC) Information:

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

Designated QC
The following sample was used for QC: 177084014 (9804-0000-036F).

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. A nonconformance report (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: 593291

Sample ID	Client ID
177087006	9522-0005-005F
177087014	9522-0005-013F
1201240803	Method Blank (MB)
1201240804	177087014(9522-0005-013F) Sample Duplicate (DUP)
1201240805	177087014(9522-0005-013F) Matrix Spike (MS)
1201240806	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# 13.

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: 177087014(9522-0005-013F).

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. A nonconformance report (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: 593288

Sample ID	Client ID
177087006	9522-0005-005F
177087014	9522-0005-013F
1201240796	Method Blank (MB)
1201240797	177084014(9804-0000-036F) Sample Duplicate (DUP)
1201240798	177084014(9804-0000-036F) Matrix Spike (MS)
1201240799	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-003 REV# 8.

Calibration Information:

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

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

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

Quality Control (QC) Information:

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

Designated QC
The following sample was used for QC: 177084014 (9804-0000-036F).

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. A nonconformance report (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/Date: 12/12/06

SAMPLE DATA SUMMARY

GENERAL ENGINEERING LABORATORIES, LLC

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

Certificate of Analysis Report
for

YANK001 Connecticut Yankee Atomic Power Co.

Client SDG: MSR#06-1519 GEL Work Order: 177087

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

UI Gamma Spectroscopy--Uncertain identification

ND The analyte concentration is not detected above the detection limit.

The above sample is reported on a dry weight basis except where prohibited by the analytical procedure.

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.

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 : 362 Injun Hollow Rd

East Hampton, Connecticut 06424
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Report Date: December 12, 2006

Client Sample ID:	9522–0005–001F	Project:	YANK01204
Sample ID:	177087001	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	30–NOV–06		
Receive Date:	05–DEC–06		
Collector:	Client		
Moisture:	7.06%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium–228		0.848	+/–0.166	0.0482	+/–0.166	0.105	pCi/g		MJH1	12/06/06	1407	593225	
Americium–241	U	–0.0666	+/–0.0902	0.0797	+/–0.0902	0.165	pCi/g						
Bismuth–212		0.468	+/–0.218	0.106	+/–0.218	0.228	pCi/g						
Bismuth–214		0.612	+/–0.0752	0.0293	+/–0.0752	0.0623	pCi/g						
Cesium–134	U	0.0393	+/–0.0306	0.0207	+/–0.0306	0.0439	pCi/g						
Cesium–137		0.0645	+/–0.0287	0.0171	+/–0.0287	0.0364	pCi/g						
Cobalt–60	U	0.0155	+/–0.0182	0.0172	+/–0.0182	0.0378	pCi/g						
Europium–152	U	–0.0107	+/–0.0531	0.0405	+/–0.0531	0.0852	pCi/g						
Europium–154	U	–0.0244	+/–0.0607	0.0498	+/–0.0607	0.109	pCi/g						
Europium–155	U	0.00613	+/–0.0489	0.0477	+/–0.0489	0.0986	pCi/g						
Lead–212		0.763	+/–0.0549	0.0228	+/–0.0549	0.0476	pCi/g						
Lead–214		0.663	+/–0.0808	0.0319	+/–0.0808	0.0667	pCi/g						
Manganese–54		0.103	+/–0.0573	0.0135	+/–0.0573	0.0292	pCi/g						
Niobium–94	U	–0.0207	+/–0.015	0.0113	+/–0.015	0.0246	pCi/g						
Potassium–40		10.9	+/–0.804	0.147	+/–0.804	0.327	pCi/g						
Radium–226		0.612	+/–0.0752	0.0293	+/–0.0752	0.0623	pCi/g						
Silver–108m	U	–0.00641	+/–0.0149	0.0132	+/–0.0149	0.0281	pCi/g						
Thallium–208		0.252	+/–0.0382	0.0134	+/–0.0382	0.0288	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/05/06	1438	593153

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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

* A quality control analyte recovery is outside of specified acceptance criteria
< Result is less than value reported

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 : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 12, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–001F Project: YANK01204
Sample ID: 177087001 Client ID: YANK001
Vol. Recv.:

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

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was 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 : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 12, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522-0005-001FS	Project:	YANK01204
Sample ID:	177087002	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	30-NOV-06		
Receive Date:	05-DEC-06		
Collector:	Client		
Moisture:	7.28%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium-228		0.935	+/-0.146	0.0579	+/-0.146	0.125	pCi/g		MJH1	12/06/06	1408	593225	
Americium-241	U	-0.0163	+/-0.0278	0.0267	+/-0.0278	0.0548	pCi/g						
Bismuth-212		0.465	+/-0.264	0.150	+/-0.264	0.317	pCi/g						
Bismuth-214		0.658	+/-0.0785	0.0315	+/-0.0785	0.0669	pCi/g						
Cesium-134	U	0.0408	+/-0.039	0.0227	+/-0.039	0.0482	pCi/g						
Cesium-137		1.10	+/-0.0707	0.0183	+/-0.0707	0.0388	pCi/g						
Cobalt-60	U	0.0182	+/-0.0192	0.0184	+/-0.0192	0.0404	pCi/g						
Europium-152	U	-0.0332	+/-0.0514	0.046	+/-0.0514	0.0963	pCi/g						
Europium-154	U	0.0534	+/-0.0625	0.0591	+/-0.0625	0.128	pCi/g						
Europium-155	U	0.0725	+/-0.0625	0.0429	+/-0.0625	0.0885	pCi/g						
Lead-212		0.737	+/-0.0595	0.0262	+/-0.0595	0.0544	pCi/g						
Lead-214		0.672	+/-0.083	0.0336	+/-0.083	0.0702	pCi/g						
Manganese-54	U	-0.011	+/-0.0192	0.0155	+/-0.0192	0.0333	pCi/g						
Niobium-94	U	-0.00562	+/-0.0187	0.0159	+/-0.0187	0.0338	pCi/g						
Potassium-40		10.8	+/-0.848	0.174	+/-0.848	0.383	pCi/g						
Radium-226		0.658	+/-0.0785	0.0315	+/-0.0785	0.0669	pCi/g						
Silver-108m	U	-0.00527	+/-0.0196	0.0176	+/-0.0196	0.0368	pCi/g						
Thallium-208		0.245	+/-0.0468	0.0166	+/-0.0468	0.0353	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/05/06	1438	593153

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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

* A quality control analyte recovery is outside of specified acceptance criteria
< Result is less than value reported

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 : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 12, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–001FS Project: YANK01204
Sample ID: 177087002 Client ID: YANK001
Vol. Recv.:

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

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 12, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522–0005–002F	Project:	YANK01204
Sample ID:	177087003	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	30–NOV–06		
Receive Date:	05–DEC–06		
Collector:	Client		
Moisture:	8.99%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth													
Waived													
Actinium–228		1.13	+/–0.240	0.0764	+/–0.240	0.163	pCi/g		MJH1	12/06/06	1408	593225	
Americium–241	U	–0.0116	+/–0.0376	0.0339	+/–0.0376	0.0694	pCi/g						
Bismuth–212		0.910	+/–0.397	0.177	+/–0.397	0.373	pCi/g						
Bismuth–214		0.907	+/–0.120	0.0433	+/–0.120	0.0908	pCi/g						
Cesium–134	U	0.0444	+/–0.0407	0.0288	+/–0.0407	0.0605	pCi/g						
Cesium–137	U	0.0152	+/–0.0358	0.0238	+/–0.0358	0.050	pCi/g						
Cobalt–60	U	0.00869	+/–0.0288	0.025	+/–0.0288	0.0536	pCi/g						
Europium–152	U	0.0419	+/–0.0616	0.0552	+/–0.0616	0.115	pCi/g						
Europium–154	U	–0.0458	+/–0.0759	0.0604	+/–0.0759	0.131	pCi/g						
Europium–155	U	0.0365	+/–0.0708	0.0526	+/–0.0708	0.108	pCi/g						
Lead–212		1.10	+/–0.0913	0.0478	+/–0.0913	0.0976	pCi/g						
Lead–214		0.941	+/–0.107	0.0406	+/–0.107	0.0845	pCi/g						
Manganese–54	U	–0.00511	+/–0.027	0.0224	+/–0.027	0.0474	pCi/g						
Niobium–94	U	0.0127	+/–0.0262	0.0232	+/–0.0262	0.0485	pCi/g						
Potassium–40		14.3	+/–1.01	0.187	+/–1.01	0.412	pCi/g						
Radium–226		0.907	+/–0.120	0.0433	+/–0.120	0.0908	pCi/g						
Silver–108m	U	0.00118	+/–0.021	0.0191	+/–0.021	0.040	pCi/g						
Thallium–208		0.383	+/–0.0579	0.020	+/–0.0579	0.0422	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/05/06	1438	593153

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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

* A quality control analyte recovery is outside of specified acceptance criteria
< Result is less than value reported

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 : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 12, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–002F Project: YANK01204
Sample ID: 177087003 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was 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 : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 12, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522–0005–003F	Project:	YANK01204
Sample ID:	177087004	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	30–NOV–06		
Receive Date:	05–DEC–06		
Collector:	Client		
Moisture:	6.77%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth													
Waived													
Actinium–228		1.14	+/–0.144	0.0495	+/–0.144	0.104	pCi/g		MJH1	12/06/06	1409	593225	
Americium–241	U	0.0371	+/–0.0676	0.0597	+/–0.0676	0.122	pCi/g						
Bismuth–212		0.638	+/–0.212	0.114	+/–0.212	0.237	pCi/g						
Bismuth–214		0.861	+/–0.0774	0.0263	+/–0.0774	0.0548	pCi/g						
Cesium–134	UI	0.00	+/–0.0246	0.0182	+/–0.0246	0.0378	pCi/g						
Cesium–137	U	0.0142	+/–0.0151	0.0166	+/–0.0151	0.0346	pCi/g						
Cobalt–60	U	–0.00248	+/–0.0166	0.0142	+/–0.0166	0.0302	pCi/g						
Europium–152	U	0.0059	+/–0.0482	0.0374	+/–0.0482	0.0775	pCi/g						
Europium–154	U	–0.0155	+/–0.0487	0.0413	+/–0.0487	0.0877	pCi/g						
Europium–155	U	–0.0132	+/–0.0573	0.0466	+/–0.0573	0.0956	pCi/g						
Lead–212		1.13	+/–0.0559	0.0216	+/–0.0559	0.0446	pCi/g						
Lead–214		1.03	+/–0.0712	0.0259	+/–0.0712	0.0537	pCi/g						
Manganese–54	U	–0.00867	+/–0.017	0.0145	+/–0.017	0.0304	pCi/g						
Niobium–94	U	–0.00687	+/–0.0152	0.0127	+/–0.0152	0.0266	pCi/g						
Potassium–40		15.9	+/–0.734	0.107	+/–0.734	0.232	pCi/g						
Radium–226		0.861	+/–0.0774	0.0263	+/–0.0774	0.0548	pCi/g						
Silver–108m	U	–0.00959	+/–0.0142	0.0125	+/–0.0142	0.026	pCi/g						
Thallium–208		0.321	+/–0.0373	0.0134	+/–0.0373	0.0281	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/05/06	1438	593153

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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

* A quality control analyte recovery is outside of specified acceptance criteria
< Result is less than value reported

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 12, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–003F Project: YANK01204
Sample ID: 177087004 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 12, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522-0005-004F	Project:	YANK01204
Sample ID:	177087005	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	30-NOV-06		
Receive Date:	05-DEC-06		
Collector:	Client		
Moisture:	5.87%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium-228		0.559	+/-0.153	0.0546	+/-0.153	0.117	pCi/g		MJH1	12/06/06	1423	593225	
Americium-241	U	-0.0967	+/-0.0621	0.0558	+/-0.0621	0.114	pCi/g						
Bismuth-212		0.312	+/-0.184	0.113	+/-0.184	0.240	pCi/g						
Bismuth-214		0.515	+/-0.089	0.0278	+/-0.089	0.0588	pCi/g						
Cesium-134	U	0.0361	+/-0.0258	0.0181	+/-0.0258	0.0383	pCi/g						
Cesium-137		0.0354	+/-0.0312	0.0162	+/-0.0312	0.0342	pCi/g						
Cobalt-60	U	0.000489	+/-0.0167	0.0144	+/-0.0167	0.0318	pCi/g						
Europium-152	U	-0.0326	+/-0.0455	0.040	+/-0.0455	0.0836	pCi/g						
Europium-154	U	0.0022	+/-0.0513	0.0445	+/-0.0513	0.0968	pCi/g						
Europium-155	U	0.0157	+/-0.0471	0.0441	+/-0.0471	0.0907	pCi/g						
Lead-212		0.585	+/-0.0641	0.0228	+/-0.0641	0.0474	pCi/g						
Lead-214		0.524	+/-0.0755	0.0285	+/-0.0755	0.0595	pCi/g						
Manganese-54	U	0.00331	+/-0.0178	0.0155	+/-0.0178	0.0329	pCi/g						
Niobium-94	U	-0.00433	+/-0.0163	0.0139	+/-0.0163	0.0294	pCi/g						
Potassium-40		9.66	+/-0.911	0.127	+/-0.911	0.282	pCi/g						
Radium-226		0.515	+/-0.089	0.0278	+/-0.089	0.0588	pCi/g						
Silver-108m	U	-0.000555	+/-0.0139	0.0125	+/-0.0139	0.0263	pCi/g						
Thallium-208		0.205	+/-0.0381	0.0154	+/-0.0381	0.0326	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/05/06	1438	593153

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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

* A quality control analyte recovery is outside of specified acceptance criteria
< Result is less than value reported

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Company : Connecticut Yankee Atomic Power
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East Hampton, Connecticut 06424 Report Date: December 12, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–004F Project: YANK01204
Sample ID: 177087005 Client ID: YANK001
Vol. Recv.:

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

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 12, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522–0005–005F	Project:	YANK01204
Sample ID:	177087006	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	30–NOV–06		
Receive Date:	05–DEC–06		
Collector:	Client		
Moisture:	7.02%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Alpha Spec Analysis													
Alphaspec Am241, Cm, Solid ALL FSS													
Americium–241	U	0.0574	+/–0.0897	0.0281	+/–0.090	0.141	pCi/g		DXH2	12/08/06	1309	593610	
Curium–242	U	0.0325	+/–0.0637	0.00	+/–0.0639	0.0881	pCi/g						
Curium–243/244	U	0.0163	+/–0.0649	0.0398	+/–0.065	0.165	pCi/g						
Alphaspec Pu, Solid–ALL FSS													
Plutonium–238	U	0.00873	+/–0.0662	0.0485	+/–0.0662	0.181	pCi/g		DXH2	12/08/06	1309	593611	
Plutonium–239/240	U	–0.0674	+/–0.044	0.084	+/–0.0445	0.252	pCi/g						
Liquid Scint Pu241, Solid–ALL FSS													
Plutonium–241	U	–3.22	+/–7.54	6.46	+/–7.54	13.5	pCi/g		DXH2	12/12/06	1039	593612	
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium–228		0.655	+/–0.134	0.0557	+/–0.134	0.120	pCi/g		MJH1	12/06/06	1410	593225	
Americium–241	U	–0.00036	+/–0.123	0.077	+/–0.123	0.158	pCi/g						
Bismuth–212		0.344	+/–0.245	0.120	+/–0.245	0.257	pCi/g						
Bismuth–214		0.522	+/–0.0867	0.0305	+/–0.0867	0.0645	pCi/g						
Cesium–134	U	0.0367	+/–0.0233	0.0191	+/–0.0233	0.0407	pCi/g						
Cesium–137		0.0484	+/–0.0323	0.0182	+/–0.0323	0.0385	pCi/g						
Cobalt–60	U	0.0087	+/–0.0201	0.0176	+/–0.0201	0.0384	pCi/g						
Europium–152	U	0.0206	+/–0.0482	0.0435	+/–0.0482	0.0909	pCi/g						
Europium–154	U	–0.019	+/–0.0655	0.0449	+/–0.0655	0.0985	pCi/g						
Europium–155	U	0.0446	+/–0.0546	0.053	+/–0.0546	0.109	pCi/g						
Lead–212		0.645	+/–0.0536	0.0299	+/–0.0536	0.0616	pCi/g						
Lead–214		0.616	+/–0.0753	0.0295	+/–0.0753	0.0619	pCi/g						
Manganese–54	U	0.00899	+/–0.0192	0.0173	+/–0.0192	0.0367	pCi/g						
Niobium–94	U	0.0067	+/–0.0163	0.0148	+/–0.0163	0.0314	pCi/g						
Potassium–40		10.9	+/–0.761	0.117	+/–0.761	0.266	pCi/g						
Radium–226		0.522	+/–0.0867	0.0305	+/–0.0867	0.0645	pCi/g						
Silver–108m	U	–0.0125	+/–0.0163	0.0133	+/–0.0163	0.028	pCi/g						
Thallium–208		0.195	+/–0.0391	0.0165	+/–0.0391	0.0348	pCi/g						
Rad Gas Flow Proportional Counting													
GFPC, Sr90, solid–ALL FSS													
Strontium–90	U	–0.00152	+/–0.00993	0.00849	+/–0.00993	0.019	pCi/g		KSD1	12/08/06	1701	593221	
Rad Liquid Scintillation Analysis													
LSC, Tritium Dist, Solid–HTD2,ALL FSS													
Tritium	U	0.113	+/–0.882	0.737	+/–0.882	1.53	pCi/g		DFA1	12/07/06	1757	593291	

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East Hampton, Connecticut 06424 Report Date: December 12, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–005F Project: YANK01204
Sample ID: 177087006 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N
Rad Liquid Scintillation Analysis													
Liquid Scint C14, Solid All,FSS													
Carbon–14	U	0.0403	+/–0.0942	0.0783	+/–0.0942	0.160	pCi/g		AXD2	12/06/06	1906	593288	
Liquid Scint Fe55, Solid–HTD2,ALL2 (CT)													
Iron–55	U	–13.7	+/–49.3	39.3	+/–49.3	82.2	pCi/g		MXP1	12/11/06	1413	593478	
Liquid Scint Ni63, Solid–ALL FSS													
Nickel–63	U	–4.13	+/–8.61	7.41	+/–8.61	15.6	pCi/g		MXP1	12/08/06	2254	593479	
Liquid Scint Tc99, Solid–ALL FSS													
Technetium–99	U	0.0631	+/–0.173	0.144	+/–0.173	0.296	pCi/g		KXR1	12/11/06	0847	593284	

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/05/06	1438	593153

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL–300, Am–05–RC Modified
2	DOE EML HASL–300, Pu–11–RC Modified
3	DOE EML HASL–300, Pu–11–RC Modified
4	EML HASL 300, 4.5.2.3
5	EPA 905.0 Modified
6	EPA 906.0 Modified
7	EPA EERF C–01 Modified
8	DOE RESL Fe–1, Modified
9	DOE RESL Ni–1, Modified
10	DOE EML HASL–300, Tc–02–RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium–243	Alphaspec Am241, Cm, Solid ALL	85	(15%–125%)
Plutonium–242	Alphaspec Pu, Solid–ALL FSS	94	(15%–125%)
Plutonium–241	Liquid Scint Pu241, Solid–ALL FS	92	(25%–125%)
Strontium–90	GFPC, Sr90, solid–ALL FSS	101	(25%–125%)
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	101	(25%–125%)
Iron–55	Liquid Scint Fe55, Solid–HTD2,Al	72	(15%–125%)
Nickel–63	Liquid Scint Ni63, Solid–ALL FS	81	(25%–125%)

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East Hampton, Connecticut 06424 Report Date: December 12, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–005F Project: YANK01204
Sample ID: 177087006 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N
Carrier/Tracer Recovery		Liquid Scint Ni63, Solid–ALL FS			81		(25%–125%)						
Technetium–99		Liquid Scint Tc99, Solid–ALL FS			73		(15%–125%)						
Carrier/Tracer Recovery		Liquid Scint Tc99, Solid–ALL FS			73		(15%–125%)						

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

- * A quality control analyte recovery is outside of specified acceptance criteria
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol–condensation product
- B Target analyte was detected in the associated blank
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- H Analytical holding time was exceeded
- J Value is estimated
- N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- UI Gamma Spectroscopy––Uncertain identification
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y QC Samples were not spiked with this compound
- ^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
- h Preparation or preservation holding time was exceeded

The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 12, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522-0005-006F	Project:	YANK01204
Sample ID:	177087007	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	30-NOV-06		
Receive Date:	05-DEC-06		
Collector:	Client		
Moisture:	8.66%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth													
Waived													
Actinium-228		0.955	+/-0.175	0.0601	+/-0.175	0.129	pCi/g		MJH1	12/06/06	1411	593225	
Americium-241	U	-0.00399	+/-0.0255	0.0227	+/-0.0255	0.0467	pCi/g						
Bismuth-212		0.698	+/-0.286	0.135	+/-0.286	0.287	pCi/g						
Bismuth-214		0.607	+/-0.080	0.0294	+/-0.080	0.0627	pCi/g						
Cesium-134	U	0.0476	+/-0.0343	0.0227	+/-0.0343	0.0481	pCi/g						
Cesium-137	U	0.00495	+/-0.022	0.0193	+/-0.022	0.0407	pCi/g						
Cobalt-60	U	-0.00879	+/-0.0221	0.0177	+/-0.0221	0.0389	pCi/g						
Europium-152	U	-0.0403	+/-0.0479	0.0387	+/-0.0479	0.0815	pCi/g						
Europium-154	U	0.0126	+/-0.0638	0.0551	+/-0.0638	0.120	pCi/g						
Europium-155	U	0.0391	+/-0.0582	0.0367	+/-0.0582	0.0758	pCi/g						
Lead-212		0.887	+/-0.0542	0.0214	+/-0.0542	0.0446	pCi/g						
Lead-214		0.711	+/-0.0864	0.0306	+/-0.0864	0.0642	pCi/g						
Manganese-54	U	0.0201	+/-0.0228	0.0185	+/-0.0228	0.0393	pCi/g						
Niobium-94	U	0.00243	+/-0.0182	0.0157	+/-0.0182	0.0334	pCi/g						
Potassium-40		15.0	+/-0.955	0.149	+/-0.955	0.334	pCi/g						
Radium-226		0.607	+/-0.080	0.0294	+/-0.080	0.0627	pCi/g						
Silver-108m	U	0.000586	+/-0.0164	0.0148	+/-0.0164	0.0312	pCi/g						
Thallium-208		0.282	+/-0.0383	0.0162	+/-0.0383	0.0345	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/05/06	1438	593153

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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

* A quality control analyte recovery is outside of specified acceptance criteria
< Result is less than value reported

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East Hampton, Connecticut 06424 Report Date: December 12, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–006F Project: YANK01204
Sample ID: 177087007 Client ID: YANK001
Vol. Recv.:

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

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 12, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522–0005–007F	Project:	YANK01204
Sample ID:	177087008	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	30–NOV–06		
Receive Date:	05–DEC–06		
Collector:	Client		
Moisture:	8.12%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth													
Waived													
Actinium–228		0.693	+/–0.145	0.0416	+/–0.145	0.0908	pCi/g		MJH1	12/06/06	1412	593225	
Americium–241	U	–0.0345	+/–0.0473	0.0416	+/–0.0473	0.0862	pCi/g						
Bismuth–212	U	0.229	+/–0.219	0.111	+/–0.219	0.237	pCi/g						
Bismuth–214		0.485	+/–0.0836	0.0227	+/–0.0836	0.0486	pCi/g						
Cesium–134	U	0.0357	+/–0.0264	0.0171	+/–0.0264	0.0365	pCi/g						
Cesium–137	U	0.002	+/–0.0151	0.0135	+/–0.0151	0.0288	pCi/g						
Cobalt–60	U	–0.0051	+/–0.0191	0.0137	+/–0.0191	0.0303	pCi/g						
Europium–152	U	0.0159	+/–0.0399	0.036	+/–0.0399	0.0756	pCi/g						
Europium–154	U	0.000642	+/–0.0479	0.0417	+/–0.0479	0.0912	pCi/g						
Europium–155	UI	0.00	+/–0.0836	0.0365	+/–0.0836	0.0758	pCi/g						
Lead–212		0.622	+/–0.0673	0.0198	+/–0.0673	0.0412	pCi/g						
Lead–214		0.529	+/–0.0781	0.0231	+/–0.0781	0.0488	pCi/g						
Manganese–54	U	0.0143	+/–0.0193	0.013	+/–0.0193	0.028	pCi/g						
Niobium–94	U	–0.0024	+/–0.0128	0.0111	+/–0.0128	0.0238	pCi/g						
Potassium–40		10.5	+/–0.966	0.136	+/–0.966	0.300	pCi/g						
Radium–226		0.485	+/–0.0836	0.0227	+/–0.0836	0.0486	pCi/g						
Silver–108m	U	5.000E–06	+/–0.0135	0.0116	+/–0.0135	0.0246	pCi/g						
Thallium–208		0.236	+/–0.0401	0.012	+/–0.0401	0.0256	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/05/06	1438	593153

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:
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* A quality control analyte recovery is outside of specified acceptance criteria
< Result is less than value reported

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 12, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–007F Project: YANK01204
Sample ID: 177087008 Client ID: YANK001
Vol. Recv.:

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

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 12, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522–0005–008F	Project:	YANK01204
Sample ID:	177087009	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	30–NOV–06		
Receive Date:	05–DEC–06		
Collector:	Client		
Moisture:	6.22%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth													
Waived													
Actinium–228		0.626	+/–0.156	0.0563	+/–0.156	0.124	pCi/g		MJH1	12/06/06	1412	593225	
Americium–241	U	0.00956	+/–0.0258	0.0246	+/–0.0258	0.0509	pCi/g						
Bismuth–212	U	0.259	+/–0.177	0.140	+/–0.177	0.301	pCi/g						
Bismuth–214		0.495	+/–0.0816	0.0327	+/–0.0816	0.070	pCi/g						
Cesium–134	U	0.027	+/–0.0583	0.0242	+/–0.0583	0.0517	pCi/g						
Cesium–137	U	–0.00472	+/–0.019	0.0167	+/–0.019	0.0362	pCi/g						
Cobalt–60	U	0.00175	+/–0.021	0.0176	+/–0.021	0.0396	pCi/g						
Europium–152	U	–0.0141	+/–0.0459	0.0402	+/–0.0459	0.0854	pCi/g						
Europium–154	U	0.0106	+/–0.0584	0.0501	+/–0.0584	0.112	pCi/g						
Europium–155	U	0.0262	+/–0.0466	0.0383	+/–0.0466	0.0797	pCi/g						
Lead–212		0.505	+/–0.0599	0.0249	+/–0.0599	0.052	pCi/g						
Lead–214		0.482	+/–0.0791	0.0292	+/–0.0791	0.0619	pCi/g						
Manganese–54	U	0.00684	+/–0.021	0.0189	+/–0.021	0.0408	pCi/g						
Niobium–94	U	–0.00732	+/–0.0181	0.0156	+/–0.0181	0.0337	pCi/g						
Potassium–40		9.09	+/–0.837	0.125	+/–0.837	0.294	pCi/g						
Radium–226		0.495	+/–0.0816	0.0327	+/–0.0816	0.070	pCi/g						
Silver–108m	U	0.00836	+/–0.0176	0.016	+/–0.0176	0.0339	pCi/g						
Thallium–208		0.134	+/–0.048	0.0188	+/–0.048	0.040	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/05/06	1438	593153

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:
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* A quality control analyte recovery is outside of specified acceptance criteria
< Result is less than value reported

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Company : Connecticut Yankee Atomic Power
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East Hampton, Connecticut 06424 Report Date: December 12, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–008F Project: YANK01204
Sample ID: 177087009 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 12, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522-0005-009F	Project:	YANK01204
Sample ID:	177087010	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	30-NOV-06		
Receive Date:	05-DEC-06		
Collector:	Client		
Moisture:	6.45%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium-228		0.739	+/-0.140	0.0424	+/-0.140	0.0922	pCi/g		MJH1	12/06/06	1413	593225	
Americium-241	U	0.0763	+/-0.0472	0.0424	+/-0.0472	0.0874	pCi/g						
Bismuth-212		0.358	+/-0.163	0.100	+/-0.163	0.214	pCi/g						
Bismuth-214		0.566	+/-0.0898	0.0241	+/-0.0898	0.0513	pCi/g						
Cesium-134	U	0.0176	+/-0.0237	0.0182	+/-0.0237	0.0385	pCi/g						
Cesium-137	U	0.00165	+/-0.016	0.0145	+/-0.016	0.0307	pCi/g						
Cobalt-60	U	0.00764	+/-0.0182	0.0159	+/-0.0182	0.0346	pCi/g						
Europium-152	U	-0.0219	+/-0.0432	0.0373	+/-0.0432	0.0782	pCi/g						
Europium-154	U	0.0302	+/-0.0514	0.0457	+/-0.0514	0.0989	pCi/g						
Europium-155	U	0.0225	+/-0.0419	0.0417	+/-0.0419	0.086	pCi/g						
Lead-212		0.664	+/-0.0716	0.0219	+/-0.0716	0.0455	pCi/g						
Lead-214		0.631	+/-0.0897	0.0259	+/-0.0897	0.0543	pCi/g						
Manganese-54	U	0.00632	+/-0.0163	0.0147	+/-0.0163	0.0313	pCi/g						
Niobium-94	U	0.0159	+/-0.0185	0.0142	+/-0.0185	0.030	pCi/g						
Potassium-40		10.6	+/-0.959	0.104	+/-0.959	0.236	pCi/g						
Radium-226		0.566	+/-0.0898	0.0241	+/-0.0898	0.0513	pCi/g						
Silver-108m	U	0.00602	+/-0.0146	0.013	+/-0.0146	0.0274	pCi/g						
Thallium-208		0.220	+/-0.0451	0.0128	+/-0.0451	0.0273	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/05/06	1438	593153

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:
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< Result is less than value reported

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 12, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–009F Project: YANK01204
Sample ID: 177087010 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Report Date: December 12, 2006

Client Sample ID:	9522-0005-010F	Project:	YANK01204
Sample ID:	177087011	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	30-NOV-06		
Receive Date:	05-DEC-06		
Collector:	Client		
Moisture:	7.71%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth													
Waived													
Actinium-228		0.720	+/-0.174	0.0455	+/-0.174	0.0983	pCi/g		MJH1	12/06/06	1422	593225	
Americium-241	U	0.000883	+/-0.0678	0.0673	+/-0.0678	0.139	pCi/g						
Bismuth-212		0.435	+/-0.273	0.109	+/-0.273	0.233	pCi/g						
Bismuth-214		0.566	+/-0.0872	0.0268	+/-0.0872	0.0568	pCi/g						
Cesium-134	UI	0.00	+/-0.0244	0.0134	+/-0.0244	0.029	pCi/g						
Cesium-137	U	0.0324	+/-0.0218	0.0164	+/-0.0218	0.0346	pCi/g						
Cobalt-60	U	0.0199	+/-0.0156	0.0153	+/-0.0156	0.0334	pCi/g						
Europium-152	U	-0.00446	+/-0.0395	0.0365	+/-0.0395	0.0766	pCi/g						
Europium-154	U	0.0145	+/-0.0537	0.0471	+/-0.0537	0.102	pCi/g						
Europium-155	U	0.0225	+/-0.0468	0.0455	+/-0.0468	0.0938	pCi/g						
Lead-212		0.625	+/-0.068	0.0225	+/-0.068	0.0467	pCi/g						
Lead-214		0.604	+/-0.0945	0.0258	+/-0.0945	0.0543	pCi/g						
Manganese-54	U	0.00675	+/-0.016	0.0148	+/-0.016	0.0314	pCi/g						
Niobium-94	U	-0.0045	+/-0.0157	0.0132	+/-0.0157	0.0281	pCi/g						
Potassium-40		10.5	+/-1.01	0.0947	+/-1.01	0.218	pCi/g						
Radium-226		0.566	+/-0.0872	0.0268	+/-0.0872	0.0568	pCi/g						
Silver-108m	U	-0.00547	+/-0.0134	0.0118	+/-0.0134	0.025	pCi/g						
Thallium-208		0.239	+/-0.039	0.0139	+/-0.039	0.0296	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/05/06	1438	593153

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:
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< Result is less than value reported

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 12, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522-0005-010F Project: YANK01204
Sample ID: 177087011 Client ID: YANK001
Vol. Recv.:

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

> Result is greater than value reported
A The TIC is a suspected aldol-condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy--Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 12, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522–0005–011F	Project:	YANK01204
Sample ID:	177087012	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	30–NOV–06		
Receive Date:	05–DEC–06		
Collector:	Client		
Moisture:	7.46%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth													
Waived													
Actinium–228		0.724	+/–0.132	0.0339	+/–0.132	0.0711	pCi/g		MJH1	12/06/06	1625	593225	
Americium–241	U	–0.0292	+/–0.0574	0.0456	+/–0.0574	0.0931	pCi/g						
Bismuth–212		0.400	+/–0.128	0.0704	+/–0.128	0.147	pCi/g						
Bismuth–214		0.675	+/–0.0837	0.0182	+/–0.0837	0.0379	pCi/g						
Cesium–134	UI	0.00	+/–0.0228	0.0132	+/–0.0228	0.0274	pCi/g						
Cesium–137		0.0309	+/–0.0212	0.0101	+/–0.0212	0.0211	pCi/g						
Cobalt–60	U	–0.00964	+/–0.0118	0.0092	+/–0.0118	0.0197	pCi/g						
Europium–152	U	–0.00484	+/–0.0276	0.0251	+/–0.0276	0.0516	pCi/g						
Europium–154	U	–0.0276	+/–0.0363	0.0288	+/–0.0363	0.061	pCi/g						
Europium–155	U	0.0409	+/–0.0311	0.030	+/–0.0311	0.0612	pCi/g						
Lead–212		0.657	+/–0.0604	0.0141	+/–0.0604	0.0289	pCi/g						
Lead–214		0.756	+/–0.0816	0.0178	+/–0.0816	0.0367	pCi/g						
Manganese–54	U	–0.00205	+/–0.0112	0.00977	+/–0.0112	0.0204	pCi/g						
Niobium–94	U	0.00456	+/–0.0111	0.00961	+/–0.0111	0.020	pCi/g						
Potassium–40		12.2	+/–0.915	0.0776	+/–0.915	0.168	pCi/g						
Radium–226		0.675	+/–0.0837	0.0182	+/–0.0837	0.0379	pCi/g						
Silver–108m	U	–0.00115	+/–0.00925	0.00823	+/–0.00925	0.0171	pCi/g						
Thallium–208		0.239	+/–0.0334	0.00984	+/–0.0334	0.0204	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/05/06	1438	593153

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:
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< Result is less than value reported

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 12, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522-0005-011F Project: YANK01204
Sample ID: 177087012 Client ID: YANK001
Vol. Recv.:

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

> Result is greater than value reported
A The TIC is a suspected aldol-condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy--Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
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Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 12, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522-0005-012F	Project:	YANK01204
Sample ID:	177087013	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	30-NOV-06		
Receive Date:	05-DEC-06		
Collector:	Client		
Moisture:	6.56%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium-228		0.546	+/-0.0987	0.0264	+/-0.0987	0.0557	pCi/g		MJH1	12/06/06	1738	593225	
Americium-241	U	-0.0177	+/-0.0543	0.0373	+/-0.0543	0.0761	pCi/g						
Bismuth-212		0.408	+/-0.144	0.0608	+/-0.144	0.127	pCi/g						
Bismuth-214		0.452	+/-0.0562	0.0161	+/-0.0562	0.0334	pCi/g						
Cesium-134	UI	0.00	+/-0.0205	0.0108	+/-0.0205	0.0225	pCi/g						
Cesium-137	U	-0.00622	+/-0.0104	0.00865	+/-0.0104	0.018	pCi/g						
Cobalt-60	U	0.0023	+/-0.0114	0.00853	+/-0.0114	0.0181	pCi/g						
Europium-152	U	-0.0042	+/-0.0242	0.0221	+/-0.0242	0.0455	pCi/g						
Europium-154	U	-0.0207	+/-0.0317	0.0257	+/-0.0317	0.0543	pCi/g						
Europium-155	U	0.0274	+/-0.027	0.026	+/-0.027	0.053	pCi/g						
Lead-212		0.519	+/-0.0487	0.0121	+/-0.0487	0.0248	pCi/g						
Lead-214		0.416	+/-0.0558	0.0165	+/-0.0558	0.0339	pCi/g						
Manganese-54	U	0.002	+/-0.014	0.00806	+/-0.014	0.0169	pCi/g						
Niobium-94	U	0.0062	+/-0.00913	0.00809	+/-0.00913	0.0168	pCi/g						
Potassium-40		10.7	+/-0.842	0.0743	+/-0.842	0.160	pCi/g						
Radium-226		0.452	+/-0.0562	0.0161	+/-0.0562	0.0334	pCi/g						
Silver-108m	U	-0.00858	+/-0.008	0.00684	+/-0.008	0.0142	pCi/g						
Thallium-208		0.153	+/-0.0253	0.00758	+/-0.0253	0.0158	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/05/06	1438	593153

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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

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< Result is less than value reported

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 12, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–012F Project: YANK01204
Sample ID: 177087013 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 12, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522-0005-013F	Project:	YANK01204
Sample ID:	177087014	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	30-NOV-06		
Receive Date:	05-DEC-06		
Collector:	Client		
Moisture:	8.22%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N
Rad Alpha Spec Analysis													
Alphaspec Am241, Cm, Solid ALL FSS													
Americium-241	U	0.0494	+/-0.0862	0.00	+/-0.0865	0.106	pCi/g		DXH2	12/08/06	1309	593610	
Curium-242	U	-0.00974	+/-0.0191	0.0364	+/-0.0191	0.183	pCi/g						
Curium-243/244	U	0.0595	+/-0.112	0.0497	+/-0.112	0.205	pCi/g						
Alphaspec Pu, Solid-ALL FSS													
Plutonium-238	U	0.0452	+/-0.104	0.0637	+/-0.104	0.206	pCi/g		DXH2	12/08/06	1309	593611	
Plutonium-239/240	U	-0.0892	+/-0.0799	0.107	+/-0.0804	0.293	pCi/g						
Liquid Scint Pu241, Solid-ALL FSS													
Plutonium-241	U	-6.0	+/-7.37	6.44	+/-7.37	13.5	pCi/g		DXH2	12/12/06	1023	593612	
Rad Gamma Spec Analysis													
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium-228		0.958	+/-0.149	0.0347	+/-0.149	0.0723	pCi/g		MJH1	12/06/06	1739	593225	
Americium-241	U	0.0409	+/-0.045	0.0376	+/-0.045	0.0763	pCi/g						
Bismuth-212		0.640	+/-0.171	0.0786	+/-0.171	0.163	pCi/g						
Bismuth-214		0.561	+/-0.0732	0.0192	+/-0.0732	0.0397	pCi/g						
Cesium-134	UI	0.00	+/-0.0224	0.0139	+/-0.0224	0.0286	pCi/g						
Cesium-137	U	-0.00815	+/-0.0142	0.0102	+/-0.0142	0.0211	pCi/g						
Cobalt-60	U	-0.00465	+/-0.0123	0.0103	+/-0.0123	0.0217	pCi/g						
Europium-152	U	-0.0475	+/-0.0328	0.0283	+/-0.0328	0.058	pCi/g						
Europium-154	U	0.0317	+/-0.0392	0.035	+/-0.0392	0.073	pCi/g						
Europium-155	UI	0.00	+/-0.0418	0.0296	+/-0.0418	0.0602	pCi/g						
Lead-212		0.909	+/-0.0795	0.0161	+/-0.0795	0.0327	pCi/g						
Lead-214		0.652	+/-0.0743	0.020	+/-0.0743	0.0409	pCi/g						
Manganese-54	U	0.0187	+/-0.0108	0.00957	+/-0.0108	0.0199	pCi/g						
Niobium-94	U	0.00628	+/-0.0109	0.00963	+/-0.0109	0.0199	pCi/g						
Potassium-40		16.4	+/-1.10	0.0744	+/-1.10	0.160	pCi/g						
Radium-226		0.561	+/-0.0732	0.0192	+/-0.0732	0.0397	pCi/g						
Silver-108m	U	-0.00309	+/-0.0105	0.00926	+/-0.0105	0.0191	pCi/g						
Thallium-208		0.301	+/-0.0393	0.00995	+/-0.0393	0.0205	pCi/g						
Rad Gas Flow Proportional Counting													
GFPC, Sr90, solid-ALL FSS													
Strontium-90	U	-0.00319	+/-0.00949	0.00831	+/-0.00949	0.0186	pCi/g		KSD1	12/08/06	1701	593221	
Rad Liquid Scintillation Analysis													
LSC, Tritium Dist, Solid-HTD2,ALL FSS													
Tritium	U	0.506	+/-0.876	0.719	+/-0.877	1.49	pCi/g		DFA1	12/07/06	1930	593291	

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East Hampton, Connecticut 06424 Report Date: December 12, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522-0005-013F Project: YANK01204
Sample ID: 177087014 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Liquid Scintillation Analysis													
Liquid Scint C14, Solid All,FSS													
Carbon-14	U	-0.0558	+/-0.0964	0.0819	+/-0.0964	0.167	pCi/g		AXD2	12/06/06	2009	593288	
Liquid Scint Fe55, Solid-HTD2,ALL2 (CT)													
Iron-55	U	-34.8	+/-49.2	40.0	+/-49.2	83.8	pCi/g		MXP1	12/11/06	1429	593478	
Liquid Scint Ni63, Solid-ALL FSS													
Nickel-63	U	-3.06	+/-10.9	9.26	+/-10.9	19.4	pCi/g		MXP1	12/08/06	2310	593479	
Liquid Scint Tc99, Solid-ALL FSS													
Technetium-99	U	0.0792	+/-0.177	0.146	+/-0.177	0.301	pCi/g		KXR1	12/11/06	0919	593284	

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/05/06	1438	593153

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL-300, Am-05-RC Modified
2	DOE EML HASL-300, Pu-11-RC Modified
3	DOE EML HASL-300, Pu-11-RC Modified
4	EML HASL 300, 4.5.2.3
5	EPA 905.0 Modified
6	EPA 906.0 Modified
7	EPA EERF C-01 Modified
8	DOE RESL Fe-1, Modified
9	DOE RESL Ni-1, Modified
10	DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243	Alphaspec Am241, Cm, Solid ALL	71	(15%-125%)
Plutonium-242	Alphaspec Pu, Solid-ALL FSS	99	(15%-125%)
Plutonium-241	Liquid Scint Pu241, Solid-ALL FS	93	(25%-125%)
Strontium-90	GFPC, Sr90, solid-ALL FSS	103	(25%-125%)
Carrier/Tracer Recovery	GFPC, Sr90, solid-ALL FSS	103	(25%-125%)
Iron-55	Liquid Scint Fe55, Solid-HTD2,Al	71	(15%-125%)
Nickel-63	Liquid Scint Ni63, Solid-ALL FS	69	(25%-125%)

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Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–013F Project: YANK01204
Sample ID: 177087014 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N
Carrier/Tracer Recovery		Liquid Scint Ni63, Solid–ALL FS			69		(25%–125%)						
Technetium–99		Liquid Scint Tc99, Solid–ALL FS			71		(15%–125%)						
Carrier/Tracer Recovery		Liquid Scint Tc99, Solid–ALL FS			71		(15%–125%)						

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

- * A quality control analyte recovery is outside of specified acceptance criteria
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol–condensation product
- B Target analyte was detected in the associated blank
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- H Analytical holding time was exceeded
- J Value is estimated
- N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- UI Gamma Spectroscopy––Uncertain identification
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y QC Samples were not spiked with this compound
- ^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
- h Preparation or preservation holding time was exceeded

The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424 — Report Date: December 12, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522-0005-014F	Project:	YANK01204
Sample ID:	177087015	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	30-NOV-06		
Receive Date:	05-DEC-06		
Collector:	Client		
Moisture:	9.09%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium-228		0.626	+/-0.0811	0.0275	+/-0.0811	0.0578	pCi/g		MJH1	12/06/06	1740	593225	
Americium-241	U	0.0468	+/-0.0463	0.0417	+/-0.0463	0.0848	pCi/g						
Bismuth-212		0.462	+/-0.144	0.0622	+/-0.144	0.130	pCi/g						
Bismuth-214		0.489	+/-0.0491	0.0163	+/-0.0491	0.0337	pCi/g						
Cesium-134	UI	0.00	+/-0.0179	0.0113	+/-0.0179	0.0234	pCi/g						
Cesium-137	U	0.0184	+/-0.0139	0.00943	+/-0.0139	0.0195	pCi/g						
Cobalt-60	U	-0.00227	+/-0.0103	0.00852	+/-0.0103	0.0181	pCi/g						
Europium-152	U	-0.00442	+/-0.028	0.0248	+/-0.028	0.051	pCi/g						
Europium-154	U	0.0111	+/-0.0327	0.0282	+/-0.0327	0.0592	pCi/g						
Europium-155	U	0.0481	+/-0.0322	0.0293	+/-0.0322	0.0596	pCi/g						
Lead-212		0.574	+/-0.0307	0.0145	+/-0.0307	0.0296	pCi/g						
Lead-214		0.530	+/-0.0407	0.0181	+/-0.0407	0.0372	pCi/g						
Manganese-54	U	0.00836	+/-0.0108	0.00899	+/-0.0108	0.0187	pCi/g						
Niobium-94	U	-0.00496	+/-0.00907	0.00788	+/-0.00907	0.0164	pCi/g						
Potassium-40		10.1	+/-0.445	0.0659	+/-0.445	0.143	pCi/g						
Radium-226		0.489	+/-0.0491	0.0163	+/-0.0491	0.0337	pCi/g						
Silver-108m	U	0.0011	+/-0.00944	0.0083	+/-0.00944	0.0171	pCi/g						
Thallium-208		0.191	+/-0.0212	0.00842	+/-0.0212	0.0175	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/05/06	1438	593153

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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

* A quality control analyte recovery is outside of specified acceptance criteria
< Result is less than value reported

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Company : Connecticut Yankee Atomic Power
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East Hampton, Connecticut 06424 Report Date: December 12, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–014F Project: YANK01204
Sample ID: 177087015 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424 — Report Date: December 12, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522–0005–015F	Project:	YANK01204
Sample ID:	177087016	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	30–NOV–06		
Receive Date:	05–DEC–06		
Collector:	Client		
Moisture:	8.33%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth													
Waived													
Actinium–228		0.694	+/–0.110	0.0393	+/–0.110	0.0818	pCi/g		MJH1	12/06/06	1740	593225	
Americium–241	U	0.0136	+/–0.0177	0.017	+/–0.0177	0.0345	pCi/g						
Bismuth–212		0.553	+/–0.184	0.0868	+/–0.184	0.180	pCi/g						
Bismuth–214		0.500	+/–0.0592	0.0218	+/–0.0592	0.0449	pCi/g						
Cesium–134	UI	0.00	+/–0.021	0.0148	+/–0.021	0.0305	pCi/g						
Cesium–137	UI	0.00	+/–0.024	0.0115	+/–0.024	0.0238	pCi/g						
Cobalt–60	U	–0.00233	+/–0.0163	0.0118	+/–0.0163	0.0248	pCi/g						
Europium–152	U	0.0123	+/–0.0314	0.0281	+/–0.0314	0.0577	pCi/g						
Europium–154	U	–0.0255	+/–0.0427	0.0353	+/–0.0427	0.0739	pCi/g						
Europium–155	UI	0.00	+/–0.0446	0.0252	+/–0.0446	0.0514	pCi/g						
Lead–212		0.677	+/–0.0354	0.0153	+/–0.0354	0.0313	pCi/g						
Lead–214		0.610	+/–0.0614	0.0196	+/–0.0614	0.0402	pCi/g						
Manganese–54	U	0.00115	+/–0.014	0.012	+/–0.014	0.0248	pCi/g						
Niobium–94	U	0.0135	+/–0.0142	0.0112	+/–0.0142	0.023	pCi/g						
Potassium–40		11.2	+/–0.516	0.102	+/–0.516	0.216	pCi/g						
Radium–226		0.500	+/–0.0592	0.0218	+/–0.0592	0.0449	pCi/g						
Silver–108m	U	–0.00828	+/–0.0109	0.00986	+/–0.0109	0.0203	pCi/g						
Thallium–208		0.228	+/–0.0299	0.0111	+/–0.0299	0.0229	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/05/06	1438	593153

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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

* A quality control analyte recovery is outside of specified acceptance criteria
< Result is less than value reported

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East Hampton, Connecticut 06424 Report Date: December 12, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–015F Project: YANK01204
Sample ID: 177087016 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
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East Hampton, Connecticut 06424 — Report Date: December 12, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522-0005-016F	Project:	YANK01204
Sample ID:	177087017	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	30-NOV-06		
Receive Date:	05-DEC-06		
Collector:	Client		
Moisture:	6.74%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth													
Waived													
Actinium-228		2.08	+/-0.124	0.0379	+/-0.124	0.0777	pCi/g		MJH1	12/06/06	1740	593225	
Americium-241	U	-0.259	+/-0.0606	0.0488	+/-0.0606	0.0986	pCi/g						
Bismuth-212		1.24	+/-0.156	0.0812	+/-0.156	0.166	pCi/g						
Bismuth-214		2.09	+/-0.0684	0.0198	+/-0.0684	0.0404	pCi/g						
Cesium-134	UI	0.00	+/-0.0213	0.0149	+/-0.0213	0.0303	pCi/g						
Cesium-137	U	0.00238	+/-0.0143	0.0107	+/-0.0143	0.0219	pCi/g						
Cobalt-60	U	0.00722	+/-0.0232	0.0105	+/-0.0232	0.0217	pCi/g						
Europium-152	U	-0.0247	+/-0.0344	0.0298	+/-0.0344	0.0605	pCi/g						
Europium-154	U	-0.0386	+/-0.0392	0.0329	+/-0.0392	0.0677	pCi/g						
Europium-155	UI	0.00	+/-0.0501	0.0366	+/-0.0501	0.074	pCi/g						
Lead-212		1.98	+/-0.0449	0.0176	+/-0.0449	0.0357	pCi/g						
Lead-214		2.58	+/-0.0675	0.0211	+/-0.0675	0.0429	pCi/g						
Manganese-54	U	0.0161	+/-0.0149	0.0107	+/-0.0149	0.022	pCi/g						
Niobium-94	U	0.0167	+/-0.0169	0.0102	+/-0.0169	0.0207	pCi/g						
Potassium-40		21.5	+/-0.533	0.0883	+/-0.533	0.183	pCi/g						
Radium-226		2.09	+/-0.0684	0.0198	+/-0.0684	0.0404	pCi/g						
Silver-108m	U	0.00105	+/-0.0107	0.0097	+/-0.0107	0.0198	pCi/g						
Thallium-208		0.676	+/-0.0304	0.00975	+/-0.0304	0.0199	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/05/06	1438	593153

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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

* A quality control analyte recovery is outside of specified acceptance criteria
< Result is less than value reported

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Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 12, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–016F Project: YANK01204
Sample ID: 177087017 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
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UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
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The above sample is reported on a dry weight basis.

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Company : Connecticut Yankee Atomic Power
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Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522-0005-017F	Project:	YANK01204
Sample ID:	177087018	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	30-NOV-06		
Receive Date:	05-DEC-06		
Collector:	Client		
Moisture:	10.2%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N
Rad Gamma Spec Analysis													
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth													
Waived													
Actinium-228		0.703	+/-0.100	0.0307	+/-0.100	0.0642	pCi/g		MJH1	12/06/06	1741	593225	
Americium-241	U	-0.000301	+/-0.0129	0.012	+/-0.0129	0.0243	pCi/g						
Bismuth-212		0.455	+/-0.133	0.0645	+/-0.133	0.135	pCi/g						
Bismuth-214		0.524	+/-0.0458	0.016	+/-0.0458	0.0332	pCi/g						
Cesium-134	UI	0.00	+/-0.0188	0.0115	+/-0.0188	0.0238	pCi/g						
Cesium-137		0.0321	+/-0.0225	0.00917	+/-0.0225	0.019	pCi/g						
Cobalt-60	U	0.00405	+/-0.0111	0.00963	+/-0.0111	0.0204	pCi/g						
Europium-152	U	0.00438	+/-0.0245	0.0217	+/-0.0245	0.0446	pCi/g						
Europium-154	U	-0.000643	+/-0.0344	0.0293	+/-0.0344	0.0616	pCi/g						
Europium-155	U	0.0317	+/-0.0319	0.0195	+/-0.0319	0.0397	pCi/g						
Lead-212		0.693	+/-0.0282	0.0117	+/-0.0282	0.024	pCi/g						
Lead-214		0.603	+/-0.0443	0.0146	+/-0.0443	0.0302	pCi/g						
Manganese-54	U	0.00619	+/-0.0104	0.00916	+/-0.0104	0.0191	pCi/g						
Niobium-94	U	0.000485	+/-0.00943	0.00822	+/-0.00943	0.0171	pCi/g						
Potassium-40		11.4	+/-0.469	0.0729	+/-0.469	0.157	pCi/g						
Radium-226		0.524	+/-0.0458	0.016	+/-0.0458	0.0332	pCi/g						
Silver-108m	U	-0.00435	+/-0.00802	0.00721	+/-0.00802	0.0149	pCi/g						
Thallium-208		0.221	+/-0.0223	0.0085	+/-0.0223	0.0176	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/05/06	1438	593153

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

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

* A quality control analyte recovery is outside of specified acceptance criteria
< Result is less than value reported

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 : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 12, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–017F Project: YANK01204
Sample ID: 177087018 Client ID: YANK001
Vol. Recv.:

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

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was 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: December 12, 2006

Client : Connecticut Yankee Atomic Power
362 Injun Hollow Rd

East Hampton, Connecticut

Contact: Mr. Jack McCarthy

Workorder: 177087

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Alpha Spec										
Batch 593610										
QC1201241517 177084014 DUP										
Americium-241	U	0.0351		0.252	pCi/g	151		(0% - 100%)	DXH2	12/08/06 13:09
Uncert:		+/-0.202		+/-0.206						
TPU:		+/-0.202		+/-0.208						
Curium-242	U	0.00	U	0.00	pCi/g	0		(0% - 100%)		
Uncert:		+/-0.122		+/-0.0851						
TPU:		+/-0.122		+/-0.0851						
Curium-243/244	U	0.115		0.125	pCi/g	8		(0% - 100%)		
Uncert:		+/-0.309		+/-0.142						
TPU:		+/-0.310		+/-0.143						
QC1201241519 LCS										
Americium-241	13.2			12.9	pCi/g		98	(75%-125%)		
Uncert:				+/-1.28						
TPU:				+/-2.03						
Curium-242			U	0.0253	pCi/g					
Uncert:				+/-0.0671						
TPU:				+/-0.0672						
Curium-243/244	11.4			10.2	pCi/g		90	(75%-125%)		
Uncert:				+/-1.14						
TPU:				+/-1.69						
QC1201241516 MB										
Americium-241			U	0.0825	pCi/g					
Uncert:				+/-0.129						
TPU:				+/-0.129						
Curium-242			U	0.00	pCi/g					
Uncert:				+/-0.0619						
TPU:				+/-0.0619						
Curium-243/244			U	-0.0363	pCi/g					
Uncert:				+/-0.0755						
TPU:				+/-0.0756						
QC1201241518 177084014 MS										
Americium-241	13.5 U	0.0351		12.2	pCi/g		90	(75%-125%)		
Uncert:		+/-0.202		+/-1.22						
TPU:		+/-0.202		+/-1.91						
Curium-242	U	0.00	U	0.00	pCi/g					
Uncert:		+/-0.122		+/-0.0641						
TPU:		+/-0.122		+/-0.0641						
Curium-243/244	11.7 U	0.115		9.96	pCi/g		85	(75%-125%)		
Uncert:		+/-0.309		+/-1.10						
TPU:		+/-0.310		+/-1.62						
Batch 593611										
QC1201241525 177084014 DUP										
Plutonium-238	U	-0.0285	U	-0.063	pCi/g	75		(0% - 100%)	DXH2	12/08/06 13:09

QC Summary

Workorder: 177087

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Alpha Spec										
Batch 593611										
	Uncert:	+/-0.0645		+/-0.077						
	TPU:	+/-0.0645		+/-0.0773						
Plutonium-239/240	U	0.0261	U	-0.0986	pCi/g	344		(0% - 100%)		
	Uncert:	+/-0.127		+/-0.0831						
	TPU:	+/-0.127		+/-0.0837						
QC1201241527 LCS										
Plutonium-238			U	0.0649	pCi/g			(75%-125%)		12/08/06 13:09
	Uncert:			+/-0.112						
	TPU:			+/-0.112						
Plutonium-239/240	12.2			11.3	pCi/g		93	(75%-125%)		
	Uncert:			+/-1.18						
	TPU:			+/-1.65						
QC1201241524 MB										
Plutonium-238			U	0.00439	pCi/g					12/08/06 13:09
	Uncert:			+/-0.138						
	TPU:			+/-0.138						
Plutonium-239/240			U	-0.0161	pCi/g					
	Uncert:			+/-0.0831						
	TPU:			+/-0.0832						
QC1201241526 177084014 MS										
Plutonium-238	U	-0.0285	U	0.0821	pCi/g			(75%-125%)		12/08/06 13:09
	Uncert:	+/-0.0645		+/-0.109						
	TPU:	+/-0.0645		+/-0.109						
Plutonium-239/240	12.5 U	0.0261		12.7	pCi/g		102	(75%-125%)		
	Uncert:	+/-0.127		+/-1.15						
	TPU:	+/-0.127		+/-1.69						
Batch 593612										
QC1201241529 177084014 DUP										
Plutonium-241	U	-4.41	U	-5.33	pCi/g	0		(0% - 100%)	DXH2	12/12/06 09:18
	Uncert:	+/-7.46		+/-7.90						
	TPU:	+/-7.46		+/-7.90						
QC1201241531 LCS										
Plutonium-241	138			115	pCi/g		84	(75%-125%)		12/12/06 08:45
	Uncert:			+/-11.6						
	TPU:			+/-16.0						
QC1201241528 MB										
Plutonium-241			U	-5.28	pCi/g					12/12/06 09:34
	Uncert:			+/-6.97						
	TPU:			+/-6.97						
QC1201241530 177084014 MS										
Plutonium-241	141 U	-4.41		130	pCi/g		92	(75%-125%)		12/12/06 09:02
	Uncert:	+/-7.46		+/-12.3						
	TPU:	+/-7.46		+/-17.4						
Rad Gamma Spec										
Batch 593225										
QC1201240653 177087001 DUP										
Actinium-228		0.848		0.734	pCi/g	14		(0% - 100%)	MJH1	12/06/06 17:42
	Uncert:	+/-0.166		+/-0.118						
				+/-0.118						

QC Summary

Workorder: 177087

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch 593225											
	TPU:	+/-0.166									
Americium-241	U	-0.0666	U	0.0327	pCi/g	587		(0% - 100%)			
	Uncert:	+/-0.0902		+/-0.0367							
	TPU:	+/-0.0902		+/-0.0367							
Bismuth-212		0.468		0.411	pCi/g	13		(0% - 100%)			
	Uncert:	+/-0.218		+/-0.161							
	TPU:	+/-0.218		+/-0.161							
Bismuth-214		0.612		0.653	pCi/g	6		(0% - 100%)			
	Uncert:	+/-0.0752		+/-0.0785							
	TPU:	+/-0.0752		+/-0.0785							
Cesium-134	U	0.0393	UI	0.00	pCi/g	31		(0% - 100%)			
	Uncert:	+/-0.0306		+/-0.0191							
	TPU:	+/-0.0306		+/-0.0191							
Cesium-137		0.0645		0.0733	pCi/g	13		(0% - 100%)			
	Uncert:	+/-0.0287		+/-0.017							
	TPU:	+/-0.0287		+/-0.017							
Cobalt-60	U	0.0155	U	0.0207	pCi/g	28		(0% - 100%)			
	Uncert:	+/-0.0182		+/-0.0114							
	TPU:	+/-0.0182		+/-0.0114							
Europium-152	U	-0.0107	U	-0.0216	pCi/g	67		(0% - 100%)			
	Uncert:	+/-0.0531		+/-0.0274							
	TPU:	+/-0.0531		+/-0.0274							
Europium-154	U	-0.0244	U	0.0189	pCi/g	1580		(0% - 100%)			
	Uncert:	+/-0.0607		+/-0.0322							
	TPU:	+/-0.0607		+/-0.0322							
Europium-155	U	0.00613	U	0.0262	pCi/g	124		(0% - 100%)			
	Uncert:	+/-0.0489		+/-0.034							
	TPU:	+/-0.0489		+/-0.034							
Lead-212		0.763		0.763	pCi/g	0		(0% - 20%)			
	Uncert:	+/-0.0549		+/-0.0669							
	TPU:	+/-0.0549		+/-0.0669							
Lead-214		0.663		0.718	pCi/g	8		(0% - 20%)			
	Uncert:	+/-0.0808		+/-0.076							
	TPU:	+/-0.0808		+/-0.076							
Manganese-54		0.103	U	0.00995	pCi/g	165		(0% - 100%)			
	Uncert:	+/-0.0573		+/-0.0118							
	TPU:	+/-0.0573		+/-0.0118							
Niobium-94	U	-0.0207	U	0.00534	pCi/g	339		(0% - 100%)			
	Uncert:	+/-0.015		+/-0.00937							
	TPU:	+/-0.015		+/-0.00937							
Potassium-40		10.9		11.5	pCi/g	5		(0% - 20%)			
	Uncert:	+/-0.804		+/-0.848							
	TPU:	+/-0.804		+/-0.848							
Radium-226		0.612		0.653	pCi/g	6		(0% - 100%)			
	Uncert:	+/-0.0752		+/-0.0785							
	TPU:	+/-0.0752		+/-0.0785							
Silver-108m	U	-0.00641	U	0.000565	pCi/g	239		(0% - 100%)			
	Uncert:	+/-0.0149		+/-0.0133							

QC Summary

Workorder: 177087

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch 593225											
	TPU:	+/-0.0149		+/-0.0133							
Thallium-208		0.252		0.239	pCi/g	6		(0% - 100%)			
	Uncert:	+/-0.0382		+/-0.0299							
	TPU:	+/-0.0382		+/-0.0299							
QC1201240654 LCS											
Actinium-228			U	0.513	pCi/g					12/06/06	15:21
	Uncert:			+/-0.546							
	TPU:			+/-0.546							
Americium-241	23.4			24.3	pCi/g		104	(75%-125%)			
	Uncert:			+/-2.24							
	TPU:			+/-2.24							
Bismuth-212			U	-0.115	pCi/g						
	Uncert:			+/-0.964							
	TPU:			+/-0.964							
Bismuth-214			U	0.0399	pCi/g						
	Uncert:			+/-0.215							
	TPU:			+/-0.215							
Cesium-134			U	0.0306	pCi/g						
	Uncert:			+/-0.134							
	TPU:			+/-0.134							
Cesium-137	9.52			10.0	pCi/g		105	(75%-125%)			
	Uncert:			+/-1.02							
	TPU:			+/-1.02							
Cobalt-60	14.0			14.0	pCi/g		100	(75%-125%)			
	Uncert:			+/-1.05							
	TPU:			+/-1.05							
Europium-152			U	-0.223	pCi/g						
	Uncert:			+/-0.257							
	TPU:			+/-0.257							
Europium-154			U	0.167	pCi/g						
	Uncert:			+/-0.261							
	TPU:			+/-0.261							
Europium-155			U	0.193	pCi/g						
	Uncert:			+/-0.273							
	TPU:			+/-0.273							
Lead-212			U	0.111	pCi/g						
	Uncert:			+/-0.137							
	TPU:			+/-0.137							
Lead-214			U	0.126	pCi/g						
	Uncert:			+/-0.189							
	TPU:			+/-0.189							
Manganese-54			U	0.128	pCi/g						
	Uncert:			+/-0.134							
	TPU:			+/-0.134							
Niobium-94			U	0.0295	pCi/g						
	Uncert:			+/-0.113							
	TPU:			+/-0.113							
Potassium-40			U	0.623	pCi/g						

QC Summary

Workorder: 177087

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch 593225											
	Uncert:			+/-0.911							
	TPU:			+/-0.911							
Radium-226			U	0.0399	pCi/g			(75%-125%)			
	Uncert:			+/-0.215							
	TPU:			+/-0.215							
Silver-108m			U	-0.0283	pCi/g						
	Uncert:			+/-0.103							
	TPU:			+/-0.103							
Thallium-208			U	0.00513	pCi/g						
	Uncert:			+/-0.103							
	TPU:			+/-0.103							
QC1201240652 MB											
Actinium-228			U	0.00829	pCi/g					12/06/06	17:41
	Uncert:			+/-0.0377							
	TPU:			+/-0.0377							
Americium-241			U	0.00446	pCi/g						
	Uncert:			+/-0.0129							
	TPU:			+/-0.0129							
Bismuth-212			U	0.0225	pCi/g						
	Uncert:			+/-0.056							
	TPU:			+/-0.056							
Bismuth-214			U	0.0217	pCi/g						
	Uncert:			+/-0.0223							
	TPU:			+/-0.0223							
Cesium-134			U	0.00072	pCi/g						
	Uncert:			+/-0.00528							
	TPU:			+/-0.00528							
Cesium-137			U	0.00301	pCi/g						
	Uncert:			+/-0.00536							
	TPU:			+/-0.00536							
Cobalt-60			UI	0.00	pCi/g						
	Uncert:			+/-0.00757							
	TPU:			+/-0.00757							
Europium-152			U	-0.00467	pCi/g						
	Uncert:			+/-0.0133							
	TPU:			+/-0.0133							
Europium-154			U	-0.00916	pCi/g						
	Uncert:			+/-0.0163							
	TPU:			+/-0.0163							
Europium-155			U	-0.000129	pCi/g						
	Uncert:			+/-0.0121							
	TPU:			+/-0.0121							
Lead-212			U	0.00416	pCi/g						
	Uncert:			+/-0.0136							
	TPU:			+/-0.0136							
Lead-214			U	0.0135	pCi/g						
	Uncert:			+/-0.020							
	TPU:			+/-0.020							

QC Summary

Workorder: 177087

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 593225										
Manganese-54			U	0.000453	pCi/g					
Uncert:				+/-0.00504						
TPU:				+/-0.00504						
Niobium-94			U	-1.120E-05	pCi/g					
Uncert:				+/-0.00494						
TPU:				+/-0.00494						
Potassium-40			U	0.0119	pCi/g					
Uncert:				+/-0.115						
TPU:				+/-0.115						
Radium-226			UI	0.00	pCi/g					
Uncert:				+/-0.0223						
TPU:				+/-0.0223						
Silver-108m			U	0.00588	pCi/g					
Uncert:				+/-0.00458						
TPU:				+/-0.00458						
Thallium-208			U	0.0025	pCi/g					
Uncert:				+/-0.0131						
TPU:				+/-0.0131						
Rad Gas Flow										
Batch 593221										
QC1201240643 177087006 DUP										
Strontium-90	U	-0.00152	U	0.00411	pCi/g	0		(0% - 100%)	KSD1	12/08/06 17:02
Uncert:		+/-0.00993		+/-0.0104						
TPU:		+/-0.00993		+/-0.0104						
QC1201240645 LCS										
Strontium-90	1.13			1.13	pCi/g		100	(75%-125%)		12/08/06 17:02
Uncert:				+/-0.105						
TPU:				+/-0.111						
QC1201240642 MB										
Strontium-90			U	-8.670E-05	pCi/g					12/08/06 17:01
Uncert:				+/-0.00912						
TPU:				+/-0.00912						
QC1201240644 177087006 MS										
Strontium-90	5.07 U	-0.00152		5.23	pCi/g		103	(75%-125%)		12/08/06 17:02
Uncert:		+/-0.00993		+/-0.499						
TPU:		+/-0.00993		+/-0.513						
Rad Liquid Scintillation										
Batch 593284										
QC1201240790 177084014 DUP										
Technetium-99	U	0.132	U	-0.111	pCi/g	0		(0% - 100%)	KXR1	12/11/06 10:22
Uncert:		+/-0.182		+/-0.156						
TPU:		+/-0.182		+/-0.156						
QC1201240792 LCS										
Technetium-99	13.0			12.1	pCi/g		93	(75%-125%)		12/11/06 11:25
Uncert:				+/-0.349						
TPU:				+/-0.460						
QC1201240789 MB										
Technetium-99			U	0.0296	pCi/g					12/11/06 09:50

QC Summary

Workorder: 177087

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Liquid Scintillation										
Batch 593284										
	Uncert:			+/-0.148						
	TPU:			+/-0.148						
QC1201240791 177084014 MS										
Technetium-99	13.0 U	0.132		12.1	pCi/g		93	(75%-125%)		12/11/06 10:53
	Uncert:	+/-0.182		+/-0.397						
	TPU:	+/-0.182		+/-0.498						
Batch 593288										
QC1201240797 177084014 DUP										
Carbon-14	U	-0.0214	U	0.0237	pCi/g	0		(0% - 100%)	AXD2	12/06/06 22:14
	Uncert:	+/-0.0914		+/-0.102						
	TPU:	+/-0.0914		+/-0.102						
QC1201240799 LCS										
Carbon-14	6.60			6.53	pCi/g		99	(75%-125%)		12/07/06 00:19
	Uncert:			+/-0.185						
	TPU:			+/-0.211						
QC1201240796 MB										
Carbon-14			U	-0.00806	pCi/g					12/06/06 21:11
	Uncert:			+/-0.0931						
	TPU:			+/-0.0931						
QC1201240798 177084014 MS										
Carbon-14	7.01 U	-0.0214		7.02	pCi/g		100	(75%-125%)		12/06/06 23:16
	Uncert:	+/-0.0914		+/-0.198						
	TPU:	+/-0.0914		+/-0.226						
Batch 593291										
QC1201240804 177087014 DUP										
Tritium	U	0.506	U	0.635	pCi/g	0		(0% - 100%)	DFA1	12/07/06 22:36
	Uncert:	+/-0.876		+/-0.885						
	TPU:	+/-0.877		+/-0.885						
QC1201240806 LCS										
Tritium	10.7			10.1	pCi/g		95	(75%-125%)		12/08/06 01:42
	Uncert:			+/-0.698						
	TPU:			+/-0.719						
QC1201240803 MB										
Tritium			U	0.321	pCi/g					12/07/06 21:03
	Uncert:			+/-0.426						
	TPU:			+/-0.426						
QC1201240805 177087014 MS										
Tritium	11.1 U	0.506		10.1	pCi/g		91	(75%-125%)		12/08/06 00:09
	Uncert:	+/-0.876		+/-1.18						
	TPU:	+/-0.877		+/-1.19						
Batch 593478										
QC1201241222 177084014 DUP										
Iron-55	U	-17	U	-1.18	pCi/g	0		(0% - 100%)	MXP1	12/11/06 15:02
	Uncert:	+/-39.0		+/-52.7						
	TPU:	+/-39.0		+/-52.7						
QC1201241224 LCS										
Iron-55	608			635	pCi/g		104	(75%-125%)		12/11/06 15:34
	Uncert:			+/-49.4						
	TPU:			+/-94.0						

QC Summary

Workorder: 177087

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Liquid Scintillation										
Batch 593478										
QC1201241221 MB										
Iron-55			U	-23.2	pCi/g					12/11/06 14:46
	Uncert:			+/-43.3						
	TPU:			+/-43.3						
QC1201241223 177084014 MS										
Iron-55	642 U	-17		650	pCi/g		101	(75%-125%)		12/11/06 15:18
	Uncert:	+/-39.0		+/-78.7						
	TPU:	+/-39.0		+/-130						
Batch 593479										
QC1201241226 177084014 DUP										
Nickel-63	U	-4.09	U	1.32	pCi/g	0		(0% - 100%)	MXP1	12/08/06 23:43
	Uncert:	+/-11.1		+/-9.72						
	TPU:	+/-11.1		+/-9.72						
QC1201241228 LCS										
Nickel-63	506			514	pCi/g		102	(75%-125%)		12/09/06 00:15
	Uncert:			+/-23.3						
	TPU:			+/-29.2						
QC1201241225 MB										
Nickel-63			U	-2.75	pCi/g					12/08/06 23:27
	Uncert:			+/-8.97						
	TPU:			+/-8.97						
QC1201241227 177084014 MS										
Nickel-63	545 U	-4.09		515	pCi/g		95	(75%-125%)		12/08/06 23:59
	Uncert:	+/-11.1		+/-24.1						
	TPU:	+/-11.1		+/-30.2						

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

- * A quality control analyte recovery is outside of specified acceptance criteria
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B Target analyte was detected in the associated blank
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- H Analytical holding time was exceeded
- J Value is estimated
- N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- UI Gamma Spectroscopy--Uncertain identification
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y QC Samples were not spiked with this compound
- RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL

QC Summary

Workorder: **177087**

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

^

h Preparation or preservation holding time was exceeded

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

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

General Narrative

General Narrative
for
Connecticut Yankee Atomic Power Co.
Work Order: 177713
SDG: MSR#06-1557

December 18, 2006

Laboratory Identification:

General Engineering Laboratories, LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

Summary

Sample receipt

The samples arrived at General Engineering Laboratories, LLC, Charleston, South Carolina on December 14, 2006 for analysis. Shipping container temperatures were checked, documented, and within specifications. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage.

Sample Identification The laboratory received the following samples:

Laboratory Identification	Sample Description
177713001	9522-0006-001F
177713002	9522-0006-002F
177713003	9522-0006-003F
177713004	9522-0006-004F
177713005	9522-0006-005F
177713006	9522-0006-006F
177713007	9522-0006-007F
177713008	9522-0006-008F
177713009	9522-0006-008FS
177713010	9522-0006-009F
177713011	9522-0006-010F
177713012	9522-0006-011F
177713013	9522-0006-012F
177713014	9522-0006-013F
177713015	9522-0006-014F
177713016	9522-0006-015F
177713017	9522-0006-016F
177713018	9522-0006-017F
177713019	9522-0005-018-I
177713020	9522-0005-019-I
177713021	9522-0005-020-I
177713022	9522-0005-021-I
177713023	9522-0005-022-I
177713024	9522-0005-023-I
177713025	9522-0005-024-I

177713026	9522-0005-025-I
177713027	9522-0005-026-I
177713028	9522-0005-027-I
177713029	9522-0005-028-I
177713030	9522-0005-029-I
177713031	9522-0005-030-I
177713032	9522-0005-031-I
177713033	9522-0005-032-I
177713034	9522-0005-033-I
177713035	9522-0005-034-I
177713036	9522-0005-035-I
177713037	9522-0005-036-I
177713038	9522-0005-037-I
177713039	9522-0005-038-I
177713040	9522-0005-039-I
177713041	9522-0005-040-I
177713042	9522-0005-041-I
177713043	9522-0005-042-I
177713044	9522-0005-043-I
177713045	9522-0005-044-I
177713046	9522-0005-045-I
177713047	9522-0005-046-I
177713048	9522-0005-047-I
177713049	9522-0005-048-I
177713050	9522-0005-049-I
177713051	9522-0005-050-I
177713052	9522-0005-051-I
177713053	9522-0005-052-I
177713054	9522-0005-053-I
177713055	9522-0005-054-I
177713056	9522-0005-055-I
177713057	9522-0005-056-I
177713058	9522-0005-057-I
177713059	9522-0005-058-I
177713060	9522-0005-059-I

Items of Note

There are 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 contained in the analytical case narratives in the enclosed data package.

Analytical Request

Forty-two soil samples were analyzed for FSSGAM. Sixteen soil samples were analyzed for FSSGAM and Strontium-90. Two soil samples were analyzed for FSSALL.

Data Package

The enclosed data package contains the following sections: General Narrative, Chain of Custody and Supporting Documentation, Data Review Qualifier Definitions, and data from the following fractions: Radiochemistry.

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

Cheryl Jones
Project Manager

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

List of current GEL Certifications as of 18 December 2006

State	Certification
Alaska	UST-062
Arizona	AZ0668
Arkansas	88-0651
CLIA	42D0904046
California	01151CA
Colorado	GenEngLabs
Connecticut	PH-0169
Dept. of Navy	NFESC 413
EPA	WG-15J
Florida/NELAP	E87156
Georgia	E87156 (FL/NELAP)
Hawaii	N/A
Idaho	N/A
Illinois	200029
Indiana	C-SC-01
Kansas	E-10332
Kentucky	90129
Louisiana	03046
Maryland	270
Massachusetts	M-SC012
Michigan	9903
Nevada	SC12
New Jersey	SC002
New Mexico	FL NELAP E87156
New York	11501
North Carolina	233
North Carolina Drinking W	45709
North Dakota	R-158
Oklahoma	9904
Pennsylvania	68-00485
South Carolina	10120001/10585001/10120002
Tennessee	02934
Texas	TX213-2006A
Texas NELAP	T104704235-06-TX
U.S. Dept. of Agriculture	S-52597
US Army Corps of Engineer	N/A
Utah	8037697376 GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

Chain of Custody and Supporting Documentation

Chain of Custody Form

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

No. 2006-00678

Project Name: Haddam Neck Decommissioning

Contact Name & Phone:
Jack McCarthy 860-267-3924

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

Priority: ☐ 30 D. ☒ 14 D. ☐ 7 D. ☐ 3 D.

Lab Use Only
Comments:
177713%

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	FSSGAM	FSSALL	Sr-90				Comment, Preservation	Lab Sample ID
9522-0006-001F	11/17/06	0942	TS	G	BP	X		X					
9522-0006-002F	11/17/06	0945	TS	G	BP	X		X					
9522-0006-003F	11/17/06	0947	TS	G	BP	X		X					
9522-0006-004F	11/17/06	0958	TS	G	BP	X		X					
9522-0006-005F	11/17/06	1000	TS	G	BP	X		X					
9522-0006-006F	11/17/06	1002	TS	G	BP	X		X					
9522-0006-007F	11/17/06	1014	TS	G	BP	X		X					
9522-0006-008F	11/17/06	1032	TS	G	BP	X		X					
9522-0006-008FS	11/17/06	1032	TS	G	BP	X		X					
9522-0006-009F	11/17/06	1034	TS	G	BP	X		X					
9522-0006-010F	11/17/06	1036	TS	G	BP	X		X					

NOTES: PO #: 002332 MSR #: 06-1557 SSWP# NA ☒ LTP QA ☐ Radwaste QA ☐ Non QA

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

Bill of Lading #

Internal Container Temp.: 10 Deg. C

Custody Sealed? Y ☐ N ☑

Custody Seal Intact? Y ☐ N ☐

1) Relinquished By	Date/Time	2) Received By	Date/Time
[signature]	12/13/06 0945	[signature]	12/14/06 0930 ~~0948~~
3) Relinquished By	Date/Time	4) 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. 2006-00679

Project Name: Haddam Neck Decommissioning

Contact Name & Phone:
Jack McCarthy 860-267-3924

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

Priority: ☐ 30 D. ☒ 14 D. ☐ 7 D. ☐ 3 D.

Lab Use Only
Comments:
177713%

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	FSSGAM	FSSALL	Sr-90				Comment, Preservation	Lab Sample ID
9522-0006-011F	11/17/06	1055	TS	G	BP	X		X					
9522-0006-012F	11/17/06	1057	TS	G	BP	X		X					
9522-0006-013F	11/17/06	1058	TS	G	BP		X						
9522-0006-014F	11/17/06	1255	TS	G	BP	X		X					
9522-0006-015F	11/17/06	1257	TS	G	BP		X						
9522-0006-016F	11/17/06	1259	TS	G	BP	X		X					
9522-0006-017F	11/17/06	1303	TS	G	BP	X		X					

NOTES: PO #: 002332 MSR #: 06-1557 SSWP# NA ☒ LTP QA ☐ Radwaste QA ☐ Non QA

Samples Shipped Via:
☒ Fed Ex
☐ UPS
☐ Hand
☐ Other
7901-3611-5164
Bill of Lading #

Internal Container Temp.: 16 Deg. C
Custody Sealed? Y ☐ N ☒
Custody Seal Intact? Y ☐ N ☐

1) Relinquished By	Date/Time	2) Received By	Date/Time
[redacted]	12/13/06 0910	K. [illegible]	12/14/06 0930
3) Relinquished By	Date/Time	4) Received By	Date/Time

Chain of Custody Form

No. 2006-00701

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

Project Name: Haddam Neck Decommissioning

Contact Name & Phone:
Jack McCarthy 860-267-3924

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

Priority: ☐ 30 D. ☒ 14 D. ☐ 7 D. ☐ 3 D.

Lab Use Only
Comments:
177713

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	FSSGAM	FSSALL					Comment, Preservation	Lab Sample ID
9522-0005-018-I	12/08/06	0947	TS	G	BP	X							
9522-0005-019-I	12/08/06	0948	TS	G	BP	X							
9522-0005-020-I	12/08/06	0949	TS	G	BP	X							
9522-0005-021-I	12/08/06	0950	TS	G	BP	X							
9522-0005-022-I	12/08/06	0951	TS	G	BP	X							
9522-0005-023-I	12/08/06	0953	TS	G	BP	X							
9522-0005-024-I	12/08/06	0954	TS	G	BP	X							
9522-0005-025-I	12/08/06	0955	TS	G	BP	X							
9522-0005-026-I	12/08/06	0956	TS	G	BP	X							
9522-0005-027-I	12/08/06	0957	TS	G	BP	X							
9522-0005-028-I	12/08/06	1012	TS	G	BP	X							

NOTES: PO #: 002332 MSR #: 06-1557 SSWP# NA ☒ LTP QA ☐ Radwaste QA ☐ Non QA

Samples Shipped Via:
☒ Fed Ex
☐ UPS
☐ Hand
☐ Other 3611-8197
7901-00701
Bill of Lading #

Internal Container Temp.: 14 Deg. C

Custody Sealed? Y ☐ N ☑

Custody Seal Intact? Y ☐ N ☐

1) Relinquished By	Date/Time	2) Received By	Date/Time
		K. Cleveland	12/14/06 0930
3) Relinquished By	Date/Time	4) 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. 2006-00702

Project Name: Haddam Neck Decommissioning

Contact Name & Phone:
Jack McCarthy 860-267-3924

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

Priority: ☐ 30 D. ☒ 14 D. ☐ 7 D. ☐ 3 D.

Lab Use Only
Comments: 177713'1.

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	FSSGAM	FSSALL					Comment, Preservation	Lab Sample ID
9522-0005-029-I	12/08/06	1009	TS	G	BP	X							

NOTES: PO #: 002332 MSR #: 06-1557 SSWP# NA ☒ LTP QA ☐ Radwaste QA ☐ Non QA

Samples Shipped Via:
☒ Fed Ex
☐ UPS
☐ Hand
☐ Other
7901-3611-8297
Bill of Lading #

Internal Container Temp.: 16 Deg. C
Custody Sealed? Y ☐ N ☒
Custody Seal Intact? Y ☐ N ☐

1) Relinquished By	Date/Time	2) Received By	Date/Time
		K. Wilson	12/14/06 0930
3) Relinquished By	Date/Time	4) 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. 2006-00731

Project Name: Haddam Neck Decommissioning

Contact Name & Phone:
Jack McCarthy 860-267-3924

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

Priority: ☐ 30 D. ☒ 14 D. ☐ 7 D. ☐ 3 D.

Lab Use Only
Comments: 1777131

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	FSSGAM	FSSALL					Comment, Preservation	Lab Sample ID
9522-0005-030-I	12/11/06	0730	TS	G	BP	X							
9522-0005-031-I	12/11/06	0731	TS	G	BP	X							
9522-0005-032-I	12/11/06	0732	TS	G	BP	X							
9522-0005-033-I	12/11/06	0733	TS	G	BP	X							
9522-0005-034-I	12/11/06	0734	TS	G	BP	X							
9522-0005-035-I	12/11/06	0747	TS	G	BP	X							
9522-0005-036-I	12/11/06	0750	TS	G	BP	X							
9522-0005-037-I	12/11/06	0751	TS	G	BP	X							
9522-0005-038-I	12/11/06	0752	TS	G	BP	X							
9522-0005-039-I	12/11/06	0752	TS	G	BP	X							
9522-0005-040-I	12/11/06	0806	TS	G	BP	X							

NOTES: PO #: 002332 MSR #: 06-1557 SSWP# NA ☒ LTP QA ☐ Radwaste QA ☐ Non QA

Samples Shipped Via:
☒ Fed Ex
☐ UPS
☐ Hand
☐ Other
7901-3611-8142
Bill of Lading #

Internal Container Temp.: 16 Deg. C

Custody Sealed? Y ☐ N ☒

Custody Seal Intact? Y ☐ N ☐

1) Relinquished By	Date/Time	2) Received By	Date/Time
[signature]	12/13/06 0830	K. [signature]	12/14/06 0930
3) Relinquished By	Date/Time	4) 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. 2006-00732

Project Name: Haddam Neck Decommissioning

Contact Name & Phone:
Jack McCarthy 860-267-3924

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

Priority: ☐ 30 D. ☒ 14 D. ☐ 7 D. ☐ 3 D.

Lab Use Only
Comments: 177713'1

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	FSSGAM	FSSALL					Comment, Preservation	Lab Sample ID
9522-0005-041-I	12/11/06	0807	TS	G	BP	X							
9522-0005-042-I	12/11/06	0808	TS	G	BP	X							
9522-0005-043-I	12/11/06	0809	TS	G	BP	X							
9522-0005-044-I	12/11/06	0810	TS	G	BP	X							
9522-0005-045-I	12/11/06	0811	TS	G	BP	X							
9522-0005-046-I	12/11/06	0939	TS	G	BP	X							
9522-0005-047-I	12/11/06	0940	TS	G	BP	X							
9522-0005-048-I	12/11/06	0941	TS	G	BP	X							
9522-0005-049-I	12/11/06	0942	TS	G	BP	X							
9522-0005-050-I	12/11/06	0943	TS	G	BP	X							
9522-0005-051-I	12/11/06	0944	TS	G	BP	X							

NOTES: PO #: 002332 MSR #: 06-1557 SSWP# NA ☒ LTP QA ☐ Radwaste QA ☐ Non QA

Samples Shipped Via:
☒ Fed Ex
☐ UPS
☐ Hand
☐ Other
7901-[illegible]
Bill of Lading #

Internal Container Temp.: 14 Deg. C
Custody Sealed? Y ☐ N ☑
Custody Seal Intact? Y ☐ N ☐

1) Relinquished By	Date/Time	2) Received By	Date/Time
[signature]	12/13/06 0825	[signature]	12/14/06 0930
3) Relinquished By	Date/Time	4) Received By	Date/Time

Chain of Custody Form

No. 2006-00733

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

Project Name: Haddam Neck Decommissioning

Contact Name & Phone:
Jack McCarthy 860-267-3924

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

Priority: ☐ 30 D. ☒ 14 D. ☐ 7 D. ☐ 3 D.

Lab Use Only
Comments:
177713%

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size-&Type Code	FSSGAM	FSSALL					Comment, Preservation	Lab Sample ID
9522-0005-052-I	12/11/06	0952	TS	G	BP	X							
9522-0005-053-I	12/11/06	0953	TS	G	BP	X							
9522-0005-054-I	12/11/06	0954	TS	G	BP	X							
9522-0005-055-I	12/11/06	0955	TS	G	BP	X							
9522-0005-056-I	12/11/06	0956	TS	G	BP	X							
9522-0005-057-I	12/11/06	0958	TS	G	BP	X							
9522-0005-058-I	12/11/06	1002	TS	G	BP	X							
9522-0005-059-I	12/11/06	1000	TS	G	BP	X							

NOTES: PO #: 002332 MSR #: 06-1557 SSWP# NA ☒ LTP QA ☐ Radwaste QA ☐ Non QA

Samples Shipped Via:
☒ Fed Ex
☐ UPS
☐ Hand
☐ Other
7901-3141-8153
Bill of Lading #

Internal Container Temp.: 4 °C Deg.
Custody Sealed? Y ☐ N ☒
Custody Seal Intact? Y ☐ N ☐

1) Relinquished By	Date/Time	2) Received By	Date/Time
		K. Wood	12/14/06
3) Relinquished By	Date/Time	4) Received By	Date/Time

Figure 1. Sample Check-in List

Date/Time Received: 12/14/06 0930

SDG#: MSR#06-1557

Work Order Number: 177713.

Shipping Container ID: See Cont. Sheet Chain of Custody # See Cont. Sheet

1. Custody Seals on shipping container intact? Yes [ ] No [ ] NA
2. Custody Seals dated and signed? Yes [ ] No [ ] NA
3. Chain-of-Custody record present? Yes [✓] No [ ]
4. Cooler temperature See Cont. Sheet
5. Vermiculite/packing materials is: Wet [ ] Dry [ ] 12/14/06
6. Number of samples in shipping container: ~~54 total soils~~ 60 total soils
7. Sample holding times exceeded? Yes [ ] No [✓]

8. Samples have: 60 cpm-background

✓ 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): See Cont. Sheet

Sample Custodian/Laboratory: K. Lefengol Date: 12/14/06

Telephoned to: ____ On ____ By ____

1590

SAMPLE RECEIPT & REVIEW FORM
CONTINUATION FORM

GENERAL ENGINEERING LABORATORIES, LLC

Client: YANK **Date Received:** 12/14/06

Chain #
2006-00733
2006-00679
2006-00701
2006-00731
2006-00678
2006-00732
2006-00702

fedex @ temp

7901 3611 8153 @ 16
7901 3611 8164 @ 16
7901 3611 8197 @ 16
7901 3611 8142 @ 16
7901 3611 8131 @ 16
7901 3611 8175 @ 16

COCs Not signed as relinquished: 2006-00701, 2006-00702, ~~2006-00703~~ 2006-00733.
12/14/06

SAMPLE RECEIPT & REVIEW FORM

PM use only

Client: Conn. Yank	**SDG/ARCOC/Work Order:** 177713.
Date Received: 12/14/06	**PM(A) Review (ensure non-conforming items are resolved prior to signing):**
Received By:	

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

	Suspected Hazard Information	Non-Regulated	Regulated	High Level	RSO RAD Receipt # _____ *If > x2 area background is observed on samples identified as "non-regulated/non-radioactive", contact the Radiation Safety group for further investigation.
A	Radiological Classification?	✓			Maximum Counts Observed*: cpm60
B	PCB Regulated?	✓			
C	Shipped as DOT Hazardous Material? If yes, contact Waste Manager or ESH Manager.	✓			Hazard Class Shipped: UN#:
D	Regulated as a Foreign Soil?	✓			

PM (or PMA) review of Hazard classification: ✓ Initials [illegible] Date: 12/14/06

Data Review Qualifier Definitions

Data Review Qualifier Definitions

Qualifier	Explanation
*	A quality control analyte recovery is outside of specified acceptance criteria
**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
A	The TIC is a suspected aldol-condensation product
B	Target analyte was detected in the associated blank
B	Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
d	5-day BOD-The 2:1 depletion requirement was not met for this sample
E	Organics-Concentration of the target analyte exceeds the instrument calibration range
E	Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
H	Analytical holding time was exceeded
h	Preparation or preservation holding time was exceeded
J	Value is estimated
N	Metals-The Matrix spike sample recovery is not within specified control limits
N	Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
ND	Analyte concentration is not detected above the reporting limit
UI	Gamma Spectroscopy-Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

RADIOLOGICAL ANALYSIS

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:	596347
Prep Batch Number:	595903
Dry Soil Prep GL-RAD-A-021 Batch Number:	595900

Sample ID	Client ID
177713014	9522-0006-013F
177713016	9522-0006-015F
1201247790	Method Blank (MB)
1201247791	177713014(9522-0006-013F) Sample Duplicate (DUP)
1201247792	177713014(9522-0006-013F) Matrix Spike (MS)
1201247793	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL 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: 177713014 (9522-0006-013F).

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. A nonconformance report (NCR) was not generated for this SDG.

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

Additional Comments
Additional comments were not required for this sample set.

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:	596348
Prep Batch Number:	595903
Dry Soil Prep GL-RAD-A-021 Batch Number:	595900

Sample ID	Client ID
177713014	9522-0006-013F
177713016	9522-0006-015F
1201247794	Method Blank (MB)
1201247795	177713014(9522-0006-013F) Sample Duplicate (DUP)
1201247796	177713014(9522-0006-013F) Matrix Spike (MS)
1201247797	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL 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: 177713014 (9522-0006-013F).

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. A nonconformance report (NCR) was not generated for this SDG.

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

Additional Comments
Additional comments were not required for this sample set.

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:	596349
Prep Batch Number:	595903
Dry Soil Prep GL-RAD-A-021 Batch Number:	595900

Sample ID	Client ID
177713014	9522-0006-013F
177713016	9522-0006-015F
1201247798	Method Blank (MB)
1201247799	177713014(9522-0006-013F) Sample Duplicate (DUP)
1201247800	177713014(9522-0006-013F) Matrix Spike (MS)
1201247801	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-035 REV# 8.

Calibration Information:

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

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

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

Quality Control (QC) Information:

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

Designated QC
The following sample was used for QC: 177713014 (9522-0006-013F).

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. A nonconformance report (NCR) was not generated for this SDG.

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

Additional Comments
Additional comments were not required for this sample set.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

Product:	**Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived**
Analytical Method:	EML HASL 300, 4.5.2.3
Prep Method:	Dry Soil Prep
Analytical Batch Number:	595950
Prep Batch Number:	595900

Sample ID	Client ID
177713001	9522-0006-001F
177713002	9522-0006-002F
177713003	9522-0006-003F
177713004	9522-0006-004F
177713005	9522-0006-005F
177713006	9522-0006-006F
177713007	9522-0006-007F
177713008	9522-0006-008F
177713009	9522-0006-008FS
177713010	9522-0006-009F
177713011	9522-0006-010F
177713012	9522-0006-011F
177713013	9522-0006-012F
177713014	9522-0006-013F
177713015	9522-0006-014F
177713016	9522-0006-015F
177713017	9522-0006-016F
177713018	9522-0006-017F
177713019	9522-0005-018-I
177713020	9522-0005-019-I
1201246864	Method Blank (MB)
1201246865	177713010(9522-0006-009F) Sample Duplicate (DUP)
1201246866	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-013 REV# 13.

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: 177713010 (9522-0006-009F).

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. A nonconformance report (NCR) was not generated for this SDG.

Additional Comments
The sample and the duplicate,1201246865 (9522-0006-009F) and 177713010 (9522-0006-009F), for Bi-214 and Ra-226 did not meet the relative percent difference requirement, however they do meet the relative error ratio requirement with value of 1.58421.

Qualifier information

Qualifier	Reason	Analyte	Sample
UI	Data rejected due to high counting uncertainty.	Bismuth-212	177713016
		Cesium-137	177713007
UI	Data rejected due to interference.	Europium-155	177713003
			177713007
			1201246865
		Manganese-54	177713003
			177713015
			177713020
UI	Data rejected due to low abundance.	Cesium-134	177713001
			177713002
			177713003
			177713004
			177713005
			177713006
			177713007
			177713012
			177713014
			177713015
			177713017
			177713018
			177713019
			177713020
			1201246865
		Lead-212	1201246864
UI	Data rejected due to no valid peak.	Bismuth-212	1201246864
		Cesium-134	177713013

Method/Analysis Information

Product:	**Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived**
Analytical Method:	EML HASL 300, 4.5.2.3
Prep Method:	Dry Soil Prep
Analytical Batch Number:	595951
Prep Batch Number:	595901

Sample ID	Client ID
177713021	9522-0005-020-I
177713022	9522-0005-021-I
177713023	9522-0005-022-I
177713024	9522-0005-023-I
177713025	9522-0005-024-I
177713026	9522-0005-025-I
177713027	9522-0005-026-I
177713028	9522-0005-027-I
177713029	9522-0005-028-I
177713030	9522-0005-029-I
177713031	9522-0005-030-I
177713032	9522-0005-031-I
177713033	9522-0005-032-I
177713034	9522-0005-033-I
177713035	9522-0005-034-I
177713036	9522-0005-035-I
177713037	9522-0005-036-I
177713038	9522-0005-037-I
177713039	9522-0005-038-I
177713040	9522-0005-039-I
1201246867	Method Blank (MB)
1201246868	177713021(9522-0005-020-I) Sample Duplicate (DUP)
1201246869	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-013 REV# 13.

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: 177713021 (9522-0005-020-I).

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. A nonconformance report (NCR) was not generated for this SDG.

Additional Comments
Additional comments were not required for this sample set.

Qualifier information

Qualifier	Reason	Analyte	Sample
UI	Data rejected due to high peak-width.	Cesium-137	177713021
UI	Data rejected due to interference.	Cesium-134	1201246868
		Europium-155	177713024
			177713025
			177713036
		Manganese-54	177713026
			177713030
			177713037
UI	Data rejected due to low abundance.	Bismuth-214	1201246867
		Cesium-134	177713022
			177713023
			177713024
			177713025
			177713026
			177713027
			177713028
			177713029
			177713030
			177713032
			177713033
			177713034
			177713036
			177713037
			177713038
			177713039
			177713040
		Lead-212	1201246867
		Radium-226	1201246867

Method/Analysis Information

Product:	**Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived**
Analytical Method:	EML HASL 300, 4.5.2.3
Prep Method:	Dry Soil Prep
Analytical Batch Number:	595952
Prep Batch Number:	595902

Sample ID	Client ID
177713041	9522-0005-040-I
177713042	9522-0005-041-I
177713043	9522-0005-042-I
177713044	9522-0005-043-I
177713045	9522-0005-044-I
177713046	9522-0005-045-I
177713047	9522-0005-046-I
177713048	9522-0005-047-I
177713049	9522-0005-048-I
177713050	9522-0005-049-I
177713051	9522-0005-050-I
177713052	9522-0005-051-I
177713053	9522-0005-052-I
177713054	9522-0005-053-I
177713055	9522-0005-054-I
177713056	9522-0005-055-I
177713057	9522-0005-056-I
177713058	9522-0005-057-I
177713059	9522-0005-058-I
177713060	9522-0005-059-I
1201246870	Method Blank (MB)
1201246871	177713041(9522-0005-040-I) Sample Duplicate (DUP)
1201246872	Laboratory Control Sample (LCS)

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-013 REV# 13.

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: 177713041 (9522-0005-040-I).

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. A nonconformance report (NCR) was not generated for this SDG.

Additional Comments
The sample and the duplicate, 1201246871 (9522-0005-040-I) and 177713041 (9522-0005-040-I) , did not meet the relative percent difference requirement for Bi-212, however they do meet the relative error ratio requirement with value of 1.1786.

Qualifier information

Qualifier	Reason	Analyte	Sample
UI	Data rejected due to high peak-width.	Cesium-137	177713043
UI	Data rejected due to interference.	Europium-155	177713043
			177713047
			177713051
			177713052
			177713054
			177713055
		Manganese-54	177713050
UI	Data rejected due to low abundance.	Cesium-134	177713041
			177713042
			177713043
			177713044
			177713045
			177713046
			177713047
			177713048
			177713049
			177713050
			177713051
			177713052
			177713053
			177713054
			177713056
			177713058
			177713059
			1201246871
UI	Data rejected due to no valid peak.	Cesium-137	177713041
			177713060

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:	595975
Prep Batch Number:	595903
Dry Soil Prep GL-RAD-A-021 Batch Number:	595900

Sample ID	Client ID
177713001	9522-0006-001F
177713002	9522-0006-002F
177713003	9522-0006-003F
177713004	9522-0006-004F
177713005	9522-0006-005F
177713006	9522-0006-006F
177713007	9522-0006-007F
177713008	9522-0006-008F
177713009	9522-0006-008FS
177713010	9522-0006-009F
177713011	9522-0006-010F
177713012	9522-0006-011F
177713013	9522-0006-012F
177713014	9522-0006-013F
177713015	9522-0006-014F
177713016	9522-0006-015F
177713017	9522-0006-016F
177713018	9522-0006-017F
1201246937	Method Blank (MB)
1201246938	177713001(9522-0006-001F) Sample Duplicate (DUP)
1201246939	177713001(9522-0006-001F) Matrix Spike (MS)
1201246940	Laboratory Control Sample (LCS)

SOP Reference

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

Designated QC
The following sample was used for QC: 177713001 (9522-0006-001F).

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

Technical Information:

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

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

Sample Re-prep/Re-analysis
Samples were recounted due to a suspected blank false positive. Samples 177713005 (9522-0006-005F) and 177713008 (9522-0006-008F) were recounted to verify sample results. Second counts being reported.

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

Miscellaneous Information:

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

Additional Comments
The MDA for sample 177713001 (9522-0006-001F) was used to calculate the relative percent difference.

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:	595937

Sample ID	Client ID
177713014	9522-0006-013F
177713016	9522-0006-015F
1201246830	Method Blank (MB)
1201246831	177713014(9522-0006-013F) Sample Duplicate (DUP)
1201246832	177713014(9522-0006-013F) Matrix Spike (MS)
1201246833	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-005 REV# 13.

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: 177713014 (9522-0006-013F).

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. A nonconformance report (NCR) was not generated for this SDG.

Additional Comments
Additional comments were not required for this sample set.

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:	595939
Prep Batch Number:	595903
Dry Soil Prep GL-RAD-A-021 Batch Number:	595900

Sample ID	**Client ID**
177713014	9522-0006-013F
177713016	9522-0006-015F
1201246838	Method Blank (MB)
1201246839	177713014(9522-0006-013F) Sample Duplicate (DUP)
1201246840	177713014(9522-0006-013F) Matrix Spike (MS)
1201246841	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-040 REV# 3.

Calibration Information:

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

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

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

Quality Control (QC) Information:

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

Designated QC
The following sample was used for QC: 177713014 (9522-0006-013F).

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. A nonconformance report (NCR) was not generated for this SDG.

Additional Comments
Additional comments were not required for this sample set.

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:	595938
Prep Batch Number:	595903
Dry Soil Prep GL-RAD-A-021 Batch Number:	595900

Sample ID	Client ID
177713014	9522-0006-013F
177713016	9522-0006-015F
1201246834	Method Blank (MB)
1201246835	177713014(9522-0006-013F) Sample Duplicate (DUP)
1201246836	177713014(9522-0006-013F) Matrix Spike (MS)
1201246837	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-022 REV# 8.

Calibration Information:

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

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

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

Quality Control (QC) Information:

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

Designated QC
The following sample was used for QC: 177713014 (9522-0006-013F).

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. A nonconformance report (NCR) was not generated for this SDG.

Additional Comments
Additional comments were not required for this sample set.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

Product:	**LSC, Tritium Dist, Solid - 3 pCi/g**
Analytical Method:	EPA 906.0 Modified
Analytical Batch Number:	595904

Sample ID	Client ID
177713014	9522-0006-013F
177713016	9522-0006-015F
1201246732	Method Blank (MB)
1201246733	177713014(9522-0006-013F) Sample Duplicate (DUP)
1201246734	177713014(9522-0006-013F) Matrix Spike (MS)
1201246735	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-002 REV# 13.

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 volumes in this batch.

Designated QC
The following sample was used for QC: 177713014 (9522-0006-013F).

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

Technical Information:

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

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

Sample Re-prep/Re-analysis
Samples were recounted due to low/high recovery.

Miscellaneous Information:

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

Additional Comments
Additional comments were not required for this sample set.

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:	595936

Sample ID	Client ID
177713014	9522-0006-013F
177713016	9522-0006-015F
1201246826	Method Blank (MB)
1201246827	177713014(9522-0006-013F) Sample Duplicate (DUP)
1201246828	177713014(9522-0006-013F) Matrix Spike (MS)
1201246829	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-003 REV# 8.

Calibration Information:

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

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

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

Quality Control (QC) Information:

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

Designated QC
The following sample was used for QC: 177713014 (9522-0006-013F).

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. A nonconformance report (NCR) was not generated for this SDG.

Additional Comments
Additional comments were not required for this sample set.

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/Date: 12/23/06

SAMPLE DATA SUMMARY

GEL 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#06-1557 GEL Work Order: 177713

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

UI Gamma Spectroscopy--Uncertain identification

ND The analyte concentration is not detected above the detection limit.

The above sample is reported on a dry weight basis except where prohibited by the analytical procedure.

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.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Cheryl Jones.

12/28/06

Reviewed by

GEL LABORATORIES LLC

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

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Report Date: December 28, 2006

Client Sample ID:	9522-0006-001F	Project:	YANK01204
Sample ID:	177713001	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	17-NOV-06		
Receive Date:	14-DEC-06		
Collector:	Client		
Moisture:	10.1%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N
Rad Gamma Spec Analysis													
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium-228		1.13	+/-0.127	0.0451	+/-0.127	0.0941	pCi/g		MJH1	12/15/06	1727	595950	
Americium-241	U	-0.0706	+/-0.0796	0.0619	+/-0.0796	0.126	pCi/g						
Bismuth-212		0.818	+/-0.223	0.0954	+/-0.223	0.198	pCi/g						
Bismuth-214		1.09	+/-0.0722	0.0221	+/-0.0722	0.0458	pCi/g						
Cesium-134	UI	0.00	+/-0.0256	0.0164	+/-0.0256	0.0339	pCi/g						
Cesium-137		0.162	+/-0.0238	0.0118	+/-0.0238	0.0246	pCi/g						
Cobalt-60		0.0765	+/-0.0292	0.0117	+/-0.0292	0.025	pCi/g						
Europium-152	U	-0.00134	+/-0.0367	0.031	+/-0.0367	0.0638	pCi/g						
Europium-154	U	-0.0342	+/-0.0499	0.0405	+/-0.0499	0.0851	pCi/g						
Europium-155	U	0.0649	+/-0.0615	0.0363	+/-0.0615	0.074	pCi/g						
Lead-212		1.15	+/-0.0466	0.0189	+/-0.0466	0.0387	pCi/g						
Lead-214		1.20	+/-0.0684	0.0233	+/-0.0684	0.0479	pCi/g						
Manganese-54	U	0.00683	+/-0.0182	0.0137	+/-0.0182	0.0285	pCi/g						
Niobium-94	U	-0.00166	+/-0.0131	0.0111	+/-0.0131	0.023	pCi/g						
Potassium-40		18.6	+/-0.721	0.113	+/-0.721	0.242	pCi/g						
Radium-226		1.09	+/-0.0722	0.0221	+/-0.0722	0.0458	pCi/g						
Silver-108m	U	-0.0054	+/-0.0121	0.0106	+/-0.0121	0.022	pCi/g						
Thallium-208		0.396	+/-0.0316	0.0113	+/-0.0316	0.0235	pCi/g						
Rad Gas Flow Proportional Counting													
GFPC, Sr90, solid-ALL FSS													
Strontium-90	U	0.00864	+/-0.0232	0.0186	+/-0.0232	0.0415	pCi/g		KSD1	12/22/06	1141	595975	

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1140	595900

The following Analytical Methods were performed

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

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 – (843) 556–8171 – www.gel.com

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0006–001F Project: YANK01204
Sample ID: 177713001 Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Strontium–90	GFPC, Sr90, solid–ALL FSS	73	(25%–125%)
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	73	(25%–125%)

Notes:

The Qualifiers in this report are defined as follows :

- * A quality control analyte recovery is outside of specified acceptance criteria
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol–condensation product
- B Target analyte was detected in the associated blank
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- H Analytical holding time was exceeded
- J Value is estimated
- N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- UI Gamma Spectroscopy––Uncertain identification
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y QC Samples were not spiked with this compound
- ^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
- h Preparation or preservation holding time was exceeded

The above sample is reported on a dry weight basis.

GEL LABORATORIES LLC

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

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522–0006–002F	Project:	YANK01204
Sample ID:	177713002	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	17–NOV–06		
Receive Date:	14–DEC–06		
Collector:	Client		
Moisture:	7.54%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth													
Waived													
Actinium–228		0.608	+/–0.133	0.0486	+/–0.133	0.101	pCi/g		MJH1	12/15/06	1728	595950	
Americium–241	U	0.00817	+/–0.0199	0.0181	+/–0.0199	0.0368	pCi/g						
Bismuth–212		0.466	+/–0.216	0.103	+/–0.216	0.214	pCi/g						
Bismuth–214		0.542	+/–0.073	0.024	+/–0.073	0.0496	pCi/g						
Cesium–134	UI	0.00	+/–0.0299	0.0173	+/–0.0299	0.0356	pCi/g						
Cesium–137		0.0482	+/–0.0204	0.0134	+/–0.0204	0.0277	pCi/g						
Cobalt–60	U	–0.00214	+/–0.0162	0.0134	+/–0.0162	0.0283	pCi/g						
Europium–152	U	–0.00726	+/–0.0366	0.0311	+/–0.0366	0.0639	pCi/g						
Europium–154	U	–0.00554	+/–0.0492	0.0412	+/–0.0492	0.0864	pCi/g						
Europium–155	U	0.0172	+/–0.0479	0.0284	+/–0.0479	0.058	pCi/g						
Lead–212		0.662	+/–0.0391	0.017	+/–0.0391	0.0347	pCi/g						
Lead–214		0.604	+/–0.067	0.0219	+/–0.067	0.0451	pCi/g						
Manganese–54	U	0.00957	+/–0.0158	0.0137	+/–0.0158	0.0284	pCi/g						
Niobium–94	U	–0.00106	+/–0.0142	0.0121	+/–0.0142	0.025	pCi/g						
Potassium–40		9.73	+/–0.559	0.119	+/–0.559	0.253	pCi/g						
Radium–226		0.542	+/–0.073	0.024	+/–0.073	0.0496	pCi/g						
Silver–108m	U	–0.00379	+/–0.0125	0.0112	+/–0.0125	0.023	pCi/g						
Thallium–208		0.199	+/–0.0336	0.0117	+/–0.0336	0.0242	pCi/g						
Rad Gas Flow Proportional Counting													
GFPC, Sr90, solid–ALL FSS													
Strontium–90	U	0.0351	+/–0.0239	0.0169	+/–0.0239	0.0375	pCi/g		KSD1	12/22/06	1141	595975	

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/14/06	1140	595900

The following Analytical Methods were performed

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

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 – (843) 556–8171 – www.gel.com

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0006–002F Project: YANK01204
Sample ID: 177713002 Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Strontium–90	GFPC, Sr90, solid–ALL FSS	84	(25%–125%)
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	84	(25%–125%)

Notes:

The Qualifiers in this report are defined as follows :

- * A quality control analyte recovery is outside of specified acceptance criteria
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol–condensation product
- B Target analyte was detected in the associated blank
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- H Analytical holding time was exceeded
- J Value is estimated
- N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- UI Gamma Spectroscopy––Uncertain identification
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y QC Samples were not spiked with this compound
- ^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
- h Preparation or preservation holding time was exceeded

The above sample is reported on a dry weight basis.

GEL LABORATORIES LLC

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

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522-0006-003F	Project:	YANK01204
Sample ID:	177713003	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	17-NOV-06		
Receive Date:	14-DEC-06		
Collector:	Client		
Moisture:	8.82%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N
Rad Gamma Spec Analysis													
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium-228		0.949	+/-0.161	0.0473	+/-0.161	0.0996	pCi/g		MJH1	12/15/06	1728	595950	
Americium-241	U	0.00662	+/-0.0219	0.0182	+/-0.0219	0.0371	pCi/g						
Bismuth-212		0.721	+/-0.260	0.104	+/-0.260	0.218	pCi/g						
Bismuth-214		0.644	+/-0.075	0.0239	+/-0.075	0.0498	pCi/g						
Cesium-134	UI	0.00	+/-0.0203	0.018	+/-0.0203	0.0374	pCi/g						
Cesium-137		0.0824	+/-0.0266	0.0137	+/-0.0266	0.0286	pCi/g						
Cobalt-60	U	0.0223	+/-0.0251	0.0167	+/-0.0251	0.0354	pCi/g						
Europium-152	U	-0.00288	+/-0.0366	0.0316	+/-0.0366	0.0654	pCi/g						
Europium-154	U	-0.0115	+/-0.0619	0.0435	+/-0.0619	0.0923	pCi/g						
Europium-155	UI	0.00	+/-0.0469	0.0299	+/-0.0469	0.061	pCi/g						
Lead-212		0.872	+/-0.0438	0.0175	+/-0.0438	0.036	pCi/g						
Lead-214		0.748	+/-0.0666	0.0215	+/-0.0666	0.0446	pCi/g						
Manganese-54	UI	0.00	+/-0.0298	0.0142	+/-0.0298	0.0297	pCi/g						
Niobium-94	U	0.00274	+/-0.0139	0.0123	+/-0.0139	0.0256	pCi/g						
Potassium-40		14.8	+/-0.725	0.121	+/-0.725	0.261	pCi/g						
Radium-226		0.644	+/-0.075	0.0239	+/-0.075	0.0498	pCi/g						
Silver-108m	U	0.00575	+/-0.0125	0.0109	+/-0.0125	0.0226	pCi/g						
Thallium-208		0.306	+/-0.0414	0.0128	+/-0.0414	0.0267	pCi/g						
Rad Gas Flow Proportional Counting													
GFPC, Sr90, solid-ALL FSS													
Strontium-90	U	0.0169	+/-0.0183	0.0136	+/-0.0183	0.0305	pCi/g		KSD1	12/22/06	1141	595975	

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1140	595900

The following Analytical Methods were performed

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

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 – (843) 556–8171 – www.gel.com

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0006–003F Project: YANK01204
Sample ID: 177713003 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Strontium–90	GFPC, Sr90, solid–ALL FSS	89	(25%–125%)
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	89	(25%–125%)

Notes:

The Qualifiers in this report are defined as follows :

- * A quality control analyte recovery is outside of specified acceptance criteria
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol–condensation product
- B Target analyte was detected in the associated blank
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- H Analytical holding time was exceeded
- J Value is estimated
- N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- UI Gamma Spectroscopy––Uncertain identification
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y QC Samples were not spiked with this compound
- ^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
- h Preparation or preservation holding time was exceeded

The above sample is reported on a dry weight basis.

GEL LABORATORIES LLC

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

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522-0006-004F	Project:	YANK01204
Sample ID:	177713004	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	17-NOV-06		
Receive Date:	14-DEC-06		
Collector:	Client		
Moisture:	8.02%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium-228		0.560	+/-0.113	0.0279	+/-0.113	0.0586	pCi/g		MJH1	12/15/06	1728	595950	
Americium-241	U	0.0181	+/-0.0302	0.0252	+/-0.0302	0.0515	pCi/g						
Bismuth-212		0.465	+/-0.151	0.0672	+/-0.151	0.140	pCi/g						
Bismuth-214		0.487	+/-0.0601	0.0167	+/-0.0601	0.0347	pCi/g						
Cesium-134	UI	0.00	+/-0.0202	0.0115	+/-0.0202	0.0238	pCi/g						
Cesium-137		0.042	+/-0.0173	0.00897	+/-0.0173	0.0187	pCi/g						
Cobalt-60	U	0.00486	+/-0.00946	0.00818	+/-0.00946	0.0175	pCi/g						
Europium-152	U	-0.0133	+/-0.0291	0.0221	+/-0.0291	0.0457	pCi/g						
Europium-154	U	-0.000916	+/-0.0307	0.0254	+/-0.0307	0.0538	pCi/g						
Europium-155	U	0.0254	+/-0.0257	0.025	+/-0.0257	0.051	pCi/g						
Lead-212		0.701	+/-0.0631	0.013	+/-0.0631	0.0266	pCi/g						
Lead-214		0.499	+/-0.0611	0.0169	+/-0.0611	0.0349	pCi/g						
Manganese-54	U	-0.00148	+/-0.0118	0.0102	+/-0.0118	0.0212	pCi/g						
Niobium-94	U	0.00229	+/-0.00892	0.00796	+/-0.00892	0.0166	pCi/g						
Potassium-40		9.11	+/-0.707	0.0693	+/-0.707	0.150	pCi/g						
Radium-226		0.487	+/-0.0601	0.0167	+/-0.0601	0.0347	pCi/g						
Silver-108m	U	0.00559	+/-0.00973	0.00853	+/-0.00973	0.0176	pCi/g						
Thallium-208		0.189	+/-0.0321	0.00838	+/-0.0321	0.0174	pCi/g						
Rad Gas Flow Proportional Counting													
GFPC, Sr90, solid-ALL FSS													
Strontium-90		0.0454	+/-0.0233	0.0156	+/-0.0234	0.0346	pCi/g		KSD1	12/22/06	1141	595975	

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1140	595900

The following Analytical Methods were performed

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

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

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0006–004F Project: YANK01204
Sample ID: 177713004 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Strontium–90	GFPC, Sr90, solid–ALL FSS	96	(25%–125%)
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	96	(25%–125%)

Notes:

The Qualifiers in this report are defined as follows :

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- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol–condensation product
- B Target analyte was detected in the associated blank
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- H Analytical holding time was exceeded
- J Value is estimated
- N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- UI Gamma Spectroscopy––Uncertain identification
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y QC Samples were not spiked with this compound
- ^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
- h Preparation or preservation holding time was exceeded

The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522–0006–005F	Project:	YANK01204
Sample ID:	177713005	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	17–NOV–06		
Receive Date:	14–DEC–06		
Collector:	Client		
Moisture:	7.4%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium–228		0.639	+/–0.119	0.035	+/–0.119	0.070	pCi/g		MJH1	12/15/06	1733	595950	
Americium–241	U	0.0318	+/–0.0579	0.0482	+/–0.0579	0.0964	pCi/g						
Bismuth–212		0.468	+/–0.174	0.0805	+/–0.174	0.161	pCi/g						
Bismuth–214		0.497	+/–0.0666	0.0186	+/–0.0666	0.0371	pCi/g						
Cesium–134	UI	0.00	+/–0.0252	0.014	+/–0.0252	0.028	pCi/g						
Cesium–137	U	0.0213	+/–0.0216	0.0115	+/–0.0216	0.0231	pCi/g						
Cobalt–60	U	0.00422	+/–0.0123	0.0105	+/–0.0123	0.0211	pCi/g						
Europium–152	U	–0.0156	+/–0.0442	0.0285	+/–0.0442	0.057	pCi/g						
Europium–154	U	–0.0135	+/–0.0422	0.0347	+/–0.0422	0.0694	pCi/g						
Europium–155	U	0.0303	+/–0.0498	0.0316	+/–0.0498	0.0631	pCi/g						
Lead–212		0.642	+/–0.0617	0.0162	+/–0.0617	0.0323	pCi/g						
Lead–214		0.562	+/–0.0682	0.0195	+/–0.0682	0.0391	pCi/g						
Manganese–54	U	0.0121	+/–0.0152	0.012	+/–0.0152	0.0241	pCi/g						
Niobium–94	U	0.00935	+/–0.0122	0.00936	+/–0.0122	0.0187	pCi/g						
Potassium–40		9.79	+/–0.756	0.0906	+/–0.756	0.181	pCi/g						
Radium–226		0.497	+/–0.0666	0.0186	+/–0.0666	0.0371	pCi/g						
Silver–108m	U	–0.01	+/–0.0122	0.00882	+/–0.0122	0.0176	pCi/g						
Thallium–208		0.179	+/–0.0322	0.0105	+/–0.0322	0.0209	pCi/g						
Rad Gas Flow Proportional Counting													
GFPC, Sr90, solid–ALL FSS													
Strontium–90	U	0.00208	+/–0.0195	0.0162	+/–0.0195	0.0363	pCi/g		KSD1	12/23/06	1125	595975	

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/14/06	1140	595900

The following Analytical Methods were performed

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

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0006–005F Project: YANK01204
Sample ID: 177713005 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Strontium–90	GFPC, Sr90, solid–ALL FSS	75	(25%–125%)
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	75	(25%–125%)

Notes:

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- A The TIC is a suspected aldol–condensation product
- B Target analyte was detected in the associated blank
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- H Analytical holding time was exceeded
- J Value is estimated
- N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- UI Gamma Spectroscopy––Uncertain identification
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y QC Samples were not spiked with this compound
- ^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
- h Preparation or preservation holding time was exceeded

The above sample is reported on a dry weight basis.

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Certificate of Analysis

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Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522-0006-006F	Project:	YANK01204
Sample ID:	177713006	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	17-NOV-06		
Receive Date:	14-DEC-06		
Collector:	Client		
Moisture:	8.74%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium-228		0.800	+/-0.123	0.0284	+/-0.123	0.0568	pCi/g		MJH1	12/15/06	1733	595950	
Americium-241	U	0.0902	+/-0.0718	0.0601	+/-0.0718	0.120	pCi/g						
Bismuth-212		0.427	+/-0.154	0.0654	+/-0.154	0.131	pCi/g						
Bismuth-214		0.413	+/-0.0603	0.0161	+/-0.0603	0.0321	pCi/g						
Cesium-134	UI	0.00	+/-0.0186	0.0111	+/-0.0186	0.0222	pCi/g						
Cesium-137		0.0219	+/-0.0155	0.0087	+/-0.0155	0.0174	pCi/g						
Cobalt-60	U	0.00183	+/-0.0103	0.00873	+/-0.0103	0.0175	pCi/g						
Europium-152	U	-0.0155	+/-0.0308	0.0244	+/-0.0308	0.0487	pCi/g						
Europium-154	U	-0.0249	+/-0.0318	0.0254	+/-0.0318	0.0509	pCi/g						
Europium-155	U	0.00761	+/-0.0424	0.0337	+/-0.0424	0.0673	pCi/g						
Lead-212		0.701	+/-0.0636	0.0149	+/-0.0636	0.0298	pCi/g						
Lead-214		0.506	+/-0.0601	0.0171	+/-0.0601	0.0342	pCi/g						
Manganese-54	U	-9.660E-05	+/-0.0107	0.0093	+/-0.0107	0.0186	pCi/g						
Niobium-94	U	0.00897	+/-0.0101	0.00856	+/-0.0101	0.0171	pCi/g						
Potassium-40		11.9	+/-0.805	0.0695	+/-0.805	0.139	pCi/g						
Radium-226		0.413	+/-0.0603	0.0161	+/-0.0603	0.0321	pCi/g						
Silver-108m	U	0.00271	+/-0.00998	0.00802	+/-0.00998	0.016	pCi/g						
Thallium-208		0.234	+/-0.0305	0.00899	+/-0.0305	0.018	pCi/g						
Rad Gas Flow Proportional Counting													
GFPC, Sr90, solid-ALL FSS													
Strontium-90		0.0386	+/-0.0238	0.0165	+/-0.0238	0.0366	pCi/g		KSD1	12/22/06	1141	595975	

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1140	595900

The following Analytical Methods were performed

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

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East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0006–006F Project: YANK01204
Sample ID: 177713006 Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Strontium–90	GFPC, Sr90, solid–ALL FSS	79	(25%–125%)
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	79	(25%–125%)

Notes:

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- > Result is greater than value reported
- A The TIC is a suspected aldol–condensation product
- B Target analyte was detected in the associated blank
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- H Analytical holding time was exceeded
- J Value is estimated
- N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- UI Gamma Spectroscopy––Uncertain identification
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y QC Samples were not spiked with this compound
- ^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
- h Preparation or preservation holding time was exceeded

The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522–0006–007F	Project:	YANK01204
Sample ID:	177713007	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	17–NOV–06		
Receive Date:	14–DEC–06		
Collector:	Client		
Moisture:	9.59%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth													
Waived													
Actinium–228		0.569	+/–0.148	0.0488	+/–0.148	0.0974	pCi/g		MJH1	12/15/06	1733	595950	
Americium–241	U	0.0192	+/–0.0228	0.0186	+/–0.0228	0.0371	pCi/g						
Bismuth–212		0.287	+/–0.235	0.112	+/–0.235	0.224	pCi/g						
Bismuth–214		0.525	+/–0.0886	0.0228	+/–0.0886	0.0455	pCi/g						
Cesium–134	UI	0.00	+/–0.0322	0.019	+/–0.0322	0.0379	pCi/g						
Cesium–137	UI	0.00	+/–0.0299	0.014	+/–0.0299	0.0281	pCi/g						
Cobalt–60	U	–0.00173	+/–0.0176	0.0146	+/–0.0176	0.0291	pCi/g						
Europium–152	U	–0.0415	+/–0.0681	0.0325	+/–0.0681	0.065	pCi/g						
Europium–154	U	–0.0195	+/–0.0569	0.0465	+/–0.0569	0.093	pCi/g						
Europium–155	UI	0.00	+/–0.0418	0.029	+/–0.0418	0.058	pCi/g						
Lead–212		0.724	+/–0.0747	0.0175	+/–0.0747	0.0351	pCi/g						
Lead–214		0.576	+/–0.0824	0.0218	+/–0.0824	0.0435	pCi/g						
Manganese–54	U	0.00748	+/–0.0182	0.0143	+/–0.0182	0.0285	pCi/g						
Niobium–94	U	0.00278	+/–0.0148	0.0131	+/–0.0148	0.0261	pCi/g						
Potassium–40		10.1	+/–0.668	0.136	+/–0.668	0.271	pCi/g						
Radium–226		0.525	+/–0.0886	0.0228	+/–0.0886	0.0455	pCi/g						
Silver–108m	U	–0.00991	+/–0.0135	0.0114	+/–0.0135	0.0227	pCi/g						
Thallium–208		0.235	+/–0.0443	0.0138	+/–0.0443	0.0277	pCi/g						
Rad Gas Flow Proportional Counting													
GFPC, Sr90, solid–ALL FSS													
Strontium–90	U	0.0307	+/–0.0212	0.0148	+/–0.0212	0.0331	pCi/g		KSD1	12/22/06	1141	595975	

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/14/06	1140	595900

The following Analytical Methods were performed

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

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
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East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0006–007F Project: YANK01204
Sample ID: 177713007 Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Strontium–90	GFPC, Sr90, solid–ALL FSS	82	(25%–125%)
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	82	(25%–125%)

Notes:

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- > Result is greater than value reported
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- B Target analyte was detected in the associated blank
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- H Analytical holding time was exceeded
- J Value is estimated
- N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- UI Gamma Spectroscopy––Uncertain identification
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y QC Samples were not spiked with this compound
- ^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
- h Preparation or preservation holding time was exceeded

The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522–0006–008F	Project:	YANK01204
Sample ID:	177713008	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	17–NOV–06		
Receive Date:	14–DEC–06		
Collector:	Client		
Moisture:	10%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium–228		0.897	+/–0.169	0.056	+/–0.169	0.121	pCi/g		MJH1	12/16/06	0926	595950	
Americium–241	U	0.087	+/–0.110	0.0663	+/–0.110	0.136	pCi/g						
Bismuth–212		0.393	+/–0.323	0.138	+/–0.323	0.294	pCi/g						
Bismuth–214		0.567	+/–0.109	0.0345	+/–0.109	0.0729	pCi/g						
Cesium–134	U	0.0337	+/–0.0323	0.0257	+/–0.0323	0.0542	pCi/g						
Cesium–137		0.0553	+/–0.0241	0.0188	+/–0.0241	0.0399	pCi/g						
Cobalt–60		0.0491	+/–0.0304	0.0204	+/–0.0304	0.0443	pCi/g						
Europium–152	U	0.00883	+/–0.0585	0.0455	+/–0.0585	0.0954	pCi/g						
Europium–154	U	–0.0235	+/–0.0658	0.054	+/–0.0658	0.118	pCi/g						
Europium–155	U	0.0343	+/–0.060	0.054	+/–0.060	0.111	pCi/g						
Lead–212		0.898	+/–0.0944	0.0292	+/–0.0944	0.0605	pCi/g						
Lead–214		0.666	+/–0.103	0.0331	+/–0.103	0.0694	pCi/g						
Manganese–54	U	0.00281	+/–0.0228	0.0193	+/–0.0228	0.0411	pCi/g						
Niobium–94	U	0.00299	+/–0.0201	0.0172	+/–0.0201	0.0364	pCi/g						
Potassium–40		14.6	+/–1.26	0.168	+/–1.26	0.371	pCi/g						
Radium–226		0.567	+/–0.109	0.0345	+/–0.109	0.0729	pCi/g						
Silver–108m	U	0.0177	+/–0.0189	0.0173	+/–0.0189	0.0364	pCi/g						
Thallium–208		0.256	+/–0.0486	0.0192	+/–0.0486	0.0405	pCi/g						
Rad Gas Flow Proportional Counting													
GFPC, Sr90, solid–ALL FSS													
Strontium–90		0.0506	+/–0.0247	0.0158	+/–0.0249	0.0356	pCi/g		KSD1	12/23/06	1125	595975	

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/14/06	1140	595900

The following Analytical Methods were performed

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

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0006–008F Project: YANK01204
Sample ID: 177713008 Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Strontium–90	GFPC, Sr90, solid–ALL FSS	76	(25%–125%)
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	76	(25%–125%)

Notes:

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- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol–condensation product
- B Target analyte was detected in the associated blank
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- H Analytical holding time was exceeded
- J Value is estimated
- N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- UI Gamma Spectroscopy––Uncertain identification
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y QC Samples were not spiked with this compound
- ^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
- h Preparation or preservation holding time was exceeded

The above sample is reported on a dry weight basis.

GEL LABORATORIES LLC

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522–0006–008FS	Project:	YANK01204
Sample ID:	177713009	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	17–NOV–06		
Receive Date:	14–DEC–06		
Collector:	Client		
Moisture:	10.1%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium–228		0.991	+/–0.194	0.0607	+/–0.194	0.131	pCi/g		MJH1	12/16/06	0927	595950	
Americium–241	U	0.0107	+/–0.136	0.083	+/–0.136	0.171	pCi/g						
Bismuth–212	U	0.244	+/–0.403	0.145	+/–0.403	0.308	pCi/g						
Bismuth–214		0.497	+/–0.101	0.0318	+/–0.101	0.0676	pCi/g						
Cesium–134	U	0.0166	+/–0.0242	0.022	+/–0.0242	0.0467	pCi/g						
Cesium–137		0.0712	+/–0.0335	0.0208	+/–0.0335	0.0439	pCi/g						
Cobalt–60	U	0.0461	+/–0.0476	0.0239	+/–0.0476	0.0514	pCi/g						
Europium–152	U	–0.0467	+/–0.0587	0.0484	+/–0.0587	0.101	pCi/g						
Europium–154	U	0.0374	+/–0.0672	0.0593	+/–0.0672	0.128	pCi/g						
Europium–155	U	0.0278	+/–0.0623	0.0582	+/–0.0623	0.120	pCi/g						
Lead–212		0.881	+/–0.0621	0.0292	+/–0.0621	0.0605	pCi/g						
Lead–214		0.623	+/–0.0905	0.0371	+/–0.0905	0.0774	pCi/g						
Manganese–54	U	0.008	+/–0.022	0.0195	+/–0.022	0.0415	pCi/g						
Niobium–94	U	0.0209	+/–0.0187	0.0175	+/–0.0187	0.0371	pCi/g						
Potassium–40		14.5	+/–0.919	0.130	+/–0.919	0.296	pCi/g						
Radium–226		0.497	+/–0.101	0.0318	+/–0.101	0.0676	pCi/g						
Silver–108m	U	–0.0132	+/–0.0201	0.0164	+/–0.0201	0.0345	pCi/g						
Thallium–208		0.256	+/–0.0477	0.0179	+/–0.0477	0.0379	pCi/g						
Rad Gas Flow Proportional Counting													
GFPC, Sr90, solid–ALL FSS													
Strontium–90		0.0414	+/–0.0193	0.0118	+/–0.0194	0.0268	pCi/g		KSD1	12/22/06	1140	595975	

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/14/06	1140	595900

The following Analytical Methods were performed

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

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0006–008FS Project: YANK01204
Sample ID: 177713009 Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Strontium–90	GFPC, Sr90, solid–ALL FSS	125	(25%–125%)
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	125	(25%–125%)

Notes:

The Qualifiers in this report are defined as follows :

- * A quality control analyte recovery is outside of specified acceptance criteria
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol–condensation product
- B Target analyte was detected in the associated blank
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- H Analytical holding time was exceeded
- J Value is estimated
- N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- UI Gamma Spectroscopy––Uncertain identification
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y QC Samples were not spiked with this compound
- ^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
- h Preparation or preservation holding time was exceeded

The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522–0006–009F	Project:	YANK01204
Sample ID:	177713010	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	17–NOV–06		
Receive Date:	14–DEC–06		
Collector:	Client		
Moisture:	9.03%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth													
Waived													
Actinium–228		0.565	+/–0.204	0.0823	+/–0.204	0.175	pCi/g		MJH1	12/16/06	0927	595950	
Americium–241	U	0.0074	+/–0.0316	0.0287	+/–0.0316	0.0592	pCi/g						
Bismuth–212	U	0.309	+/–0.412	0.178	+/–0.412	0.377	pCi/g						
Bismuth–214		0.522	+/–0.117	0.0398	+/–0.117	0.0839	pCi/g						
Cesium–134	U	0.00353	+/–0.0304	0.0259	+/–0.0304	0.0549	pCi/g						
Cesium–137		0.048	+/–0.0323	0.0214	+/–0.0323	0.0453	pCi/g						
Cobalt–60	U	–0.00288	+/–0.028	0.0232	+/–0.028	0.0504	pCi/g						
Europium–152	U	–0.0218	+/–0.0579	0.0485	+/–0.0579	0.102	pCi/g						
Europium–154	U	0.0269	+/–0.0774	0.0676	+/–0.0774	0.146	pCi/g						
Europium–155	U	0.0239	+/–0.0549	0.0482	+/–0.0549	0.0996	pCi/g						
Lead–212		0.525	+/–0.0749	0.0392	+/–0.0749	0.0807	pCi/g						
Lead–214		0.596	+/–0.0908	0.0356	+/–0.0908	0.0747	pCi/g						
Manganese–54	U	0.00912	+/–0.0303	0.0229	+/–0.0303	0.0487	pCi/g						
Niobium–94	U	0.00956	+/–0.0234	0.0206	+/–0.0234	0.0435	pCi/g						
Potassium–40		9.69	+/–0.960	0.188	+/–0.960	0.416	pCi/g						
Radium–226		0.522	+/–0.117	0.0398	+/–0.117	0.0839	pCi/g						
Silver–108m	U	0.0109	+/–0.0217	0.018	+/–0.0217	0.0379	pCi/g						
Thallium–208		0.187	+/–0.0514	0.0212	+/–0.0514	0.0448	pCi/g						
Rad Gas Flow Proportional Counting													
GFPC, Sr90, solid–ALL FSS													
Strontium–90	U	0.0279	+/–0.0235	0.0164	+/–0.0235	0.0375	pCi/g		KSD1	12/22/06	1140	595975	

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/14/06	1140	595900

The following Analytical Methods were performed

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

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0006–009F Project: YANK01204
Sample ID: 177713010 Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Strontium–90	GFPC, Sr90, solid–ALL FSS	87	(25%–125%)
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	87	(25%–125%)

Notes:

The Qualifiers in this report are defined as follows :

- * A quality control analyte recovery is outside of specified acceptance criteria
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol–condensation product
- B Target analyte was detected in the associated blank
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- H Analytical holding time was exceeded
- J Value is estimated
- N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- UI Gamma Spectroscopy––Uncertain identification
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y QC Samples were not spiked with this compound
- ^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
- h Preparation or preservation holding time was exceeded

The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Report Date: December 28, 2006

Client Sample ID:	9522-0006-010F	Project:	YANK01204
Sample ID:	177713011	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	17-NOV-06		
Receive Date:	14-DEC-06		
Collector:	Client		
Moisture:	7.06%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N
Rad Gamma Spec Analysis													
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium-228		0.518	+/-0.135	0.0494	+/-0.135	0.0987	pCi/g		MJH1	12/16/06	0934	595950	
Americium-241	U	-0.0574	+/-0.0503	0.0441	+/-0.0503	0.0882	pCi/g						
Bismuth-212		0.386	+/-0.173	0.0974	+/-0.173	0.195	pCi/g						
Bismuth-214		0.292	+/-0.071	0.026	+/-0.071	0.052	pCi/g						
Cesium-134	U	0.0344	+/-0.0197	0.0194	+/-0.0197	0.0387	pCi/g						
Cesium-137		0.104	+/-0.0259	0.0108	+/-0.0259	0.0217	pCi/g						
Cobalt-60	U	0.0185	+/-0.0195	0.0182	+/-0.0195	0.0364	pCi/g						
Europium-152	U	-0.00049	+/-0.056	0.0407	+/-0.056	0.0814	pCi/g						
Europium-154	U	-0.0599	+/-0.0711	0.0439	+/-0.0711	0.0877	pCi/g						
Europium-155	U	0.0353	+/-0.0508	0.0398	+/-0.0508	0.0796	pCi/g						
Lead-212		0.393	+/-0.0536	0.0215	+/-0.0536	0.043	pCi/g						
Lead-214		0.340	+/-0.0715	0.0277	+/-0.0715	0.0554	pCi/g						
Manganese-54	U	0.0047	+/-0.0205	0.0153	+/-0.0205	0.0306	pCi/g						
Niobium-94	U	0.000952	+/-0.0142	0.0127	+/-0.0142	0.0253	pCi/g						
Potassium-40		7.26	+/-0.810	0.142	+/-0.810	0.285	pCi/g						
Radium-226		0.292	+/-0.071	0.026	+/-0.071	0.052	pCi/g						
Silver-108m	U	0.0106	+/-0.0149	0.0137	+/-0.0149	0.0273	pCi/g						
Thallium-208		0.167	+/-0.0347	0.0128	+/-0.0347	0.0255	pCi/g						
Rad Gas Flow Proportional Counting													
GFPC, Sr90, solid-ALL FSS													
Strontium-90	U	0.029	+/-0.0249	0.0175	+/-0.025	0.040	pCi/g		KSD1	12/22/06	1140	595975	

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1140	595900

The following Analytical Methods were performed

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

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0006–010F Project: YANK01204
Sample ID: 177713011 Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Strontium–90	GFPC, Sr90, solid–ALL FSS	83	(25%–125%)
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	83	(25%–125%)

Notes:

The Qualifiers in this report are defined as follows :

- * A quality control analyte recovery is outside of specified acceptance criteria
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol–condensation product
- B Target analyte was detected in the associated blank
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- H Analytical holding time was exceeded
- J Value is estimated
- N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- UI Gamma Spectroscopy––Uncertain identification
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y QC Samples were not spiked with this compound
- ^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
- h Preparation or preservation holding time was exceeded

The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522–0006–011F	Project:	YANK01204
Sample ID:	177713012	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	17–NOV–06		
Receive Date:	14–DEC–06		
Collector:	Client		
Moisture:	9.23%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium–228		1.12	+/–0.179	0.0588	+/–0.179	0.127	pCi/g		MJH1	12/16/06	0928	595950	
Americium–241	U	0.0037	+/–0.0277	0.0227	+/–0.0277	0.0468	pCi/g						
Bismuth–212		0.555	+/–0.251	0.135	+/–0.251	0.288	pCi/g						
Bismuth–214		0.651	+/–0.0815	0.0303	+/–0.0815	0.0645	pCi/g						
Cesium–134	UI	0.00	+/–0.0417	0.0259	+/–0.0417	0.0547	pCi/g						
Cesium–137	U	–0.0137	+/–0.0221	0.018	+/–0.0221	0.0384	pCi/g						
Cobalt–60	U	0.00778	+/–0.024	0.0209	+/–0.024	0.0455	pCi/g						
Europium–152	U	–0.0027	+/–0.0505	0.0428	+/–0.0505	0.0899	pCi/g						
Europium–154	U	0.0065	+/–0.0683	0.0582	+/–0.0683	0.126	pCi/g						
Europium–155	U	0.0656	+/–0.0629	0.0381	+/–0.0629	0.0788	pCi/g						
Lead–212		1.02	+/–0.061	0.0244	+/–0.061	0.0507	pCi/g						
Lead–214		0.694	+/–0.0824	0.0298	+/–0.0824	0.0627	pCi/g						
Manganese–54	U	0.0195	+/–0.029	0.0174	+/–0.029	0.0375	pCi/g						
Niobium–94	U	0.0178	+/–0.0195	0.0178	+/–0.0195	0.0376	pCi/g						
Potassium–40		16.1	+/–0.974	0.0862	+/–0.974	0.210	pCi/g						
Radium–226		0.651	+/–0.0815	0.0303	+/–0.0815	0.0645	pCi/g						
Silver–108m	U	–0.0141	+/–0.0157	0.0132	+/–0.0157	0.028	pCi/g						
Thallium–208		0.300	+/–0.0489	0.0176	+/–0.0489	0.0373	pCi/g						
Rad Gas Flow Proportional Counting													
GFPC, Sr90, solid–ALL FSS													
Strontium–90		0.0965	+/–0.0242	0.0128	+/–0.0249	0.0285	pCi/g		KSD1	12/22/06	1236	595975	

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/14/06	1140	595900

The following Analytical Methods were performed

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

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0006–011F Project: YANK01204
Sample ID: 177713012 Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Strontium–90	GFPC, Sr90, solid–ALL FSS	92	(25%–125%)
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	92	(25%–125%)

Notes:

The Qualifiers in this report are defined as follows :

- * A quality control analyte recovery is outside of specified acceptance criteria
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol–condensation product
- B Target analyte was detected in the associated blank
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- H Analytical holding time was exceeded
- J Value is estimated
- N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- UI Gamma Spectroscopy––Uncertain identification
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y QC Samples were not spiked with this compound
- ^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
- h Preparation or preservation holding time was exceeded

The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522–0006–012F	Project:	YANK01204
Sample ID:	177713013	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	17–NOV–06		
Receive Date:	14–DEC–06		
Collector:	Client		
Moisture:	6.28%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium–228		0.959	+/–0.176	0.0571	+/–0.176	0.122	pCi/g		MJH1	12/16/06	0928	595950	
Americium–241	U	–0.0115	+/–0.0555	0.0496	+/–0.0555	0.102	pCi/g						
Bismuth–212		0.558	+/–0.277	0.107	+/–0.277	0.230	pCi/g						
Bismuth–214		0.611	+/–0.095	0.0271	+/–0.095	0.0576	pCi/g						
Cesium–134	UI	0.00	+/–0.0253	0.0135	+/–0.0253	0.0294	pCi/g						
Cesium–137	U	–0.00113	+/–0.0171	0.0149	+/–0.0171	0.0318	pCi/g						
Cobalt–60	U	–0.000469	+/–0.0182	0.0156	+/–0.0182	0.0343	pCi/g						
Europium–152	U	0.00851	+/–0.0437	0.0386	+/–0.0437	0.0809	pCi/g						
Europium–154	U	–0.0139	+/–0.058	0.0491	+/–0.058	0.106	pCi/g						
Europium–155	U	0.082	+/–0.0674	0.0412	+/–0.0674	0.0852	pCi/g						
Lead–212		0.946	+/–0.091	0.0218	+/–0.091	0.0453	pCi/g						
Lead–214		0.684	+/–0.0969	0.0279	+/–0.0969	0.0585	pCi/g						
Manganese–54	U	0.021	+/–0.0195	0.0181	+/–0.0195	0.0383	pCi/g						
Niobium–94	U	–0.00207	+/–0.0159	0.0138	+/–0.0159	0.0294	pCi/g						
Potassium–40		16.2	+/–1.35	0.121	+/–1.35	0.273	pCi/g						
Radium–226		0.611	+/–0.095	0.0271	+/–0.095	0.0576	pCi/g						
Silver–108m	U	0.0052	+/–0.0155	0.0136	+/–0.0155	0.0286	pCi/g						
Thallium–208		0.314	+/–0.0518	0.0156	+/–0.0518	0.033	pCi/g						
Rad Gas Flow Proportional Counting													
GFPC, Sr90, solid–ALL FSS													
Strontium–90		0.0627	+/–0.0237	0.0148	+/–0.0239	0.0328	pCi/g		KSD1	12/22/06	1236	595975	

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/14/06	1140	595900

The following Analytical Methods were performed

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

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

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0006–012F Project: YANK01204
Sample ID: 177713013 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Strontium–90	GFPC, Sr90, solid–ALL FSS	79	(25%–125%)
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	79	(25%–125%)

Notes:

The Qualifiers in this report are defined as follows :

- * A quality control analyte recovery is outside of specified acceptance criteria
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol–condensation product
- B Target analyte was detected in the associated blank
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- H Analytical holding time was exceeded
- J Value is estimated
- N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- UI Gamma Spectroscopy––Uncertain identification
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y QC Samples were not spiked with this compound
- ^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
- h Preparation or preservation holding time was exceeded

The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522–0006–013F	Project:	YANK01204
Sample ID:	177713014	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	17–NOV–06		
Receive Date:	14–DEC–06		
Collector:	Client		
Moisture:	10.6%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Alpha Spec Analysis													
Alphaspec Am241, Cm, Solid ALL FSS													
Americium–241	U	0.040	+/–0.102	0.0605	+/–0.102	0.213	pCi/g		PXH2	12/18/06	0912	596347	
Curium–242	U	0.0293	+/–0.0777	0.0346	+/–0.0778	0.174	pCi/g						
Curium–243/244	U	–0.0771	+/–0.137	0.142	+/–0.137	0.376	pCi/g						
Alphaspec Pu, Solid–ALL FSS													
Plutonium–238	U	–0.00725	+/–0.0609	0.0271	+/–0.0609	0.136	pCi/g		PXH2	12/18/06	0912	596348	
Plutonium–239/240	U	0.00966	+/–0.0917	0.0717	+/–0.0917	0.225	pCi/g						
Liquid Scint Pu241, Solid–ALL FSS													
Plutonium–241	U	3.34	+/–7.15	5.85	+/–7.16	12.3	pCi/g		PXH2	12/20/06	0819	596349	
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium–228		0.877	+/–0.185	0.066	+/–0.185	0.145	pCi/g		MJH1	12/16/06	0929	595950	
Americium–241	U	–0.0061	+/–0.0304	0.0275	+/–0.0304	0.0569	pCi/g						
Bismuth–212	U	0.273	+/–0.219	0.210	+/–0.219	0.444	pCi/g						
Bismuth–214		0.674	+/–0.111	0.0319	+/–0.111	0.0691	pCi/g						
Cesium–134	UI	0.00	+/–0.0536	0.0301	+/–0.0536	0.0639	pCi/g						
Cesium–137		0.102	+/–0.0476	0.0213	+/–0.0476	0.0456	pCi/g						
Cobalt–60	U	0.00212	+/–0.0254	0.0212	+/–0.0254	0.0473	pCi/g						
Europium–152	U	–0.000133	+/–0.051	0.045	+/–0.051	0.0955	pCi/g						
Europium–154	U	–0.0337	+/–0.077	0.0601	+/–0.077	0.133	pCi/g						
Europium–155	U	0.0817	+/–0.0498	0.0472	+/–0.0498	0.0978	pCi/g						
Lead–212		0.765	+/–0.0614	0.0251	+/–0.0614	0.0526	pCi/g						
Lead–214		0.702	+/–0.0895	0.0323	+/–0.0895	0.0685	pCi/g						
Manganese–54	U	–0.00213	+/–0.0242	0.0208	+/–0.0242	0.045	pCi/g						
Niobium–94	U	0.00441	+/–0.0211	0.019	+/–0.0211	0.0407	pCi/g						
Potassium–40		11.1	+/–0.915	0.150	+/–0.915	0.349	pCi/g						
Radium–226		0.674	+/–0.111	0.0319	+/–0.111	0.0691	pCi/g						
Silver–108m	U	–0.00583	+/–0.0185	0.0155	+/–0.0185	0.0333	pCi/g						
Thallium–208		0.231	+/–0.0574	0.0204	+/–0.0574	0.0436	pCi/g						
Rad Gas Flow Proportional Counting													
GFPC, Sr90, solid–ALL FSS													
Strontium–90		0.0528	+/–0.0206	0.0129	+/–0.0207	0.0286	pCi/g		KSD1	12/22/06	1236	595975	
Rad Liquid Scintillation Analysis													
LSC, Tritium Dist, Solid – 3 pCi/g													
Tritium	U	–0.253	+/–1.34	1.14	+/–1.34	2.37	pCi/g		DFA1	12/19/06	2036	595904	

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East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0006–013F — Project: YANK01204
Sample ID: 177713014 — Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Liquid Scintillation Analysis													
Liquid Scint C14, Solid All,FSS													
Carbon–14	U	–0.0292	+/–0.0719	0.0617	+/–0.0719	0.129	pCi/g		AXD2	12/15/06	1550	595936	
Liquid Scint Fe55, Solid–ALL FSS													
Iron–55	U	0.502	+/–21.5	16.3	+/–21.5	34.7	pCi/g		MXP1	12/19/06	1228	595939	
Liquid Scint Ni63, Solid–ALL FSS													
Nickel–63	U	–1.04	+/–11.9	9.97	+/–11.9	20.4	pCi/g		MXP1	12/18/06	2008	595938	
Liquid Scint Tc99, Solid–ALL FSS													
Technetium–99	U	0.204	+/–0.236	0.192	+/–0.236	0.396	pCi/g		KXR1	12/19/06	0913	595937	

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/14/06	1140	595900

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 906.0 Modified
9	EPA EERF C–01 Modified
10	DOE RESL Fe–1, Modified
11	DOE RESL Ni–1, Modified
12	DOE EML HASL–300, Tc–02–RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium–243	Alphaspec Am241, Cm, Solid ALL	87	(15%–125%)
Plutonium–242	Alphaspec Pu, Solid–ALL FSS	89	(15%–125%)
Strontium–90	GFPC, Sr90, solid–ALL FSS	89	(25%–125%)
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	89	(25%–125%)
Nickel–63	Liquid Scint Ni63, Solid–ALL FS	45	(25%–125%)

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East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0006–013F Project: YANK01204
Sample ID: 177713014 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N
Carrier/Tracer Recovery		Liquid Scint Ni63, Solid–ALL FS			45		(25%–125%)						
Technetium–99		Liquid Scint Tc99, Solid–ALL FS			87		(15%–125%)						
Carrier/Tracer Recovery		Liquid Scint Tc99, Solid–ALL FS			87		(15%–125%)						

Notes:

The Qualifiers in this report are defined as follows :

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- > Result is greater than value reported
- A The TIC is a suspected aldol–condensation product
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- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- H Analytical holding time was exceeded
- J Value is estimated
- N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- UI Gamma Spectroscopy––Uncertain identification
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y QC Samples were not spiked with this compound
- ^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
- h Preparation or preservation holding time was exceeded

The above sample is reported on a dry weight basis.

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East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522–0006–014F	Project:	YANK01204
Sample ID:	177713015	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	17–NOV–06		
Receive Date:	14–DEC–06		
Collector:	Client		
Moisture:	9.34%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium–228		0.648	+/–0.133	0.0437	+/–0.133	0.0873	pCi/g		MJH1	12/16/06	0934	595950	
Americium–241	U	0.0078	+/–0.103	0.088	+/–0.103	0.176	pCi/g						
Bismuth–212		0.354	+/–0.171	0.107	+/–0.171	0.213	pCi/g						
Bismuth–214		0.475	+/–0.0769	0.0245	+/–0.0769	0.0489	pCi/g						
Cesium–134	UI	0.00	+/–0.0248	0.016	+/–0.0248	0.032	pCi/g						
Cesium–137	U	0.00316	+/–0.0158	0.0138	+/–0.0158	0.0276	pCi/g						
Cobalt–60	U	0.000303	+/–0.0161	0.0136	+/–0.0161	0.0272	pCi/g						
Europium–152	U	–0.0282	+/–0.0523	0.0345	+/–0.0523	0.0689	pCi/g						
Europium–154	U	0.00532	+/–0.0462	0.0396	+/–0.0462	0.0791	pCi/g						
Europium–155	U	0.0149	+/–0.0529	0.0498	+/–0.0529	0.0995	pCi/g						
Lead–212		0.636	+/–0.0673	0.0228	+/–0.0673	0.0456	pCi/g						
Lead–214		0.515	+/–0.0717	0.0255	+/–0.0717	0.051	pCi/g						
Manganese–54	UI	0.00	+/–0.022	0.0114	+/–0.022	0.0228	pCi/g						
Niobium–94	U	–0.00173	+/–0.0145	0.0123	+/–0.0145	0.0246	pCi/g						
Potassium–40		10.6	+/–0.852	0.123	+/–0.852	0.245	pCi/g						
Radium–226		0.475	+/–0.0769	0.0245	+/–0.0769	0.0489	pCi/g						
Silver–108m	U	–0.00216	+/–0.0136	0.012	+/–0.0136	0.0241	pCi/g						
Thallium–208		0.218	+/–0.0385	0.0124	+/–0.0385	0.0248	pCi/g						
Rad Gas Flow Proportional Counting													
GFPC, Sr90, solid–ALL FSS													
Strontium–90	U	0.014	+/–0.0168	0.0128	+/–0.0168	0.0284	pCi/g		KSD1	12/22/06	1236	595975	

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/14/06	1140	595900

The following Analytical Methods were performed

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

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
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East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0006–014F Project: YANK01204
Sample ID: 177713015 Client ID: YANK001
Vol. Recv.:

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Strontium–90	GFPC, Sr90, solid–ALL FSS	89	(25%–125%)
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	89	(25%–125%)

Notes:

The Qualifiers in this report are defined as follows :

- * A quality control analyte recovery is outside of specified acceptance criteria
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol–condensation product
- B Target analyte was detected in the associated blank
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- H Analytical holding time was exceeded
- J Value is estimated
- N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- UI Gamma Spectroscopy––Uncertain identification
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y QC Samples were not spiked with this compound
- ^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
- h Preparation or preservation holding time was exceeded

The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522–0006–015F	Project:	YANK01204
Sample ID:	177713016	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	17–NOV–06		
Receive Date:	14–DEC–06		
Collector:	Client		
Moisture:	8.04%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N
Rad Alpha Spec Analysis													
Alphaspec Am241, Cm, Solid ALL FSS													
Americium–241	U	0.0663	+/–0.129	0.0653	+/–0.130	0.244	pCi/g		PXH2	12/18/06	0912	596347	
Curium–242	U	0.0729	+/–0.137	0.0609	+/–0.137	0.252	pCi/g						
Curium–243/244	U	–0.16	+/–0.121	0.169	+/–0.123	0.452	pCi/g						
Alphaspec Pu, Solid–ALL FSS													
Plutonium–238	U	–0.00772	+/–0.0648	0.0289	+/–0.0649	0.145	pCi/g		PXH2	12/18/06	0912	596348	
Plutonium–239/240	U	0.0424	+/–0.116	0.0763	+/–0.116	0.240	pCi/g						
Liquid Scint Pu241, Solid–ALL FSS													
Plutonium–241	U	7.30	+/–7.20	5.72	+/–7.23	12.0	pCi/g		PXH2	12/20/06	0835	596349	
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium–228		0.659	+/–0.211	0.0793	+/–0.211	0.158	pCi/g		MJH1	12/16/06	0935	595950	
Americium–241	U	0.0375	+/–0.0349	0.0291	+/–0.0349	0.0581	pCi/g						
Bismuth–212	UI	0.00	+/–0.352	0.158	+/–0.352	0.315	pCi/g						
Bismuth–214		0.348	+/–0.0995	0.0419	+/–0.0995	0.0838	pCi/g						
Cesium–134	U	0.0485	+/–0.0331	0.0319	+/–0.0331	0.0637	pCi/g						
Cesium–137		0.062	+/–0.0334	0.0217	+/–0.0334	0.0434	pCi/g						
Cobalt–60	U	0.0219	+/–0.0294	0.024	+/–0.0294	0.0479	pCi/g						
Europium–152	U	–0.0831	+/–0.0791	0.0457	+/–0.0791	0.0913	pCi/g						
Europium–154	U	–0.0927	+/–0.0895	0.0641	+/–0.0895	0.128	pCi/g						
Europium–155	U	–0.00247	+/–0.0555	0.049	+/–0.0555	0.0979	pCi/g						
Lead–212		0.618	+/–0.0832	0.0299	+/–0.0832	0.0597	pCi/g						
Lead–214		0.539	+/–0.105	0.0377	+/–0.105	0.0754	pCi/g						
Manganese–54	U	–0.0208	+/–0.0317	0.0213	+/–0.0317	0.0426	pCi/g						
Niobium–94	U	–0.00754	+/–0.0237	0.0202	+/–0.0237	0.0403	pCi/g						
Potassium–40		9.21	+/–1.02	0.191	+/–1.02	0.381	pCi/g						
Radium–226		0.348	+/–0.0995	0.0419	+/–0.0995	0.0838	pCi/g						
Silver–108m	U	–0.00586	+/–0.0223	0.0189	+/–0.0223	0.0379	pCi/g						
Thallium–208		0.222	+/–0.0518	0.024	+/–0.0518	0.048	pCi/g						
Rad Gas Flow Proportional Counting													
GFPC, Sr90, solid–ALL FSS													
Strontium–90		0.0718	+/–0.0232	0.0131	+/–0.0233	0.0293	pCi/g		KSD1	12/22/06	1623	595975	
Rad Liquid Scintillation Analysis													
LSC, Tritium Dist, Solid – 3 pCi/g													
Tritium	U	0.877	+/–1.41	1.15	+/–1.41	2.41	pCi/g		DFA1	12/19/06	2124	595904	

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Certificate of Analysis

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East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522-0006-015F — Project: YANK01204
Sample ID: 177713016 — Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst Date	Time	Batch	M
Rad Liquid Scintillation Analysis												
Liquid Scint C14, Solid All,FSS												
Carbon-14	U	0.00	+/-0.0777	0.0652	+/-0.0777	0.137	pCi/g		AXD2 12/15/06	1653	595936	
Liquid Scint Fe55, Solid-ALL FSS												
Iron-55	U	3.18	+/-26.3	19.8	+/-26.3	42.1	pCi/g		MXP1 12/19/06	1244	595939	
Liquid Scint Ni63, Solid-ALL FSS												
Nickel-63	U	4.59	+/-9.85	8.18	+/-9.85	16.7	pCi/g		MXP1 12/18/06	2055	595938	
Liquid Scint Tc99, Solid-ALL FSS												
Technetium-99	U	0.227	+/-0.234	0.190	+/-0.234	0.391	pCi/g		KXR1 12/19/06	0930	595937	

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1140	595900

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 906.0 Modified
9	EPA EERF C-01 Modified
10	DOE RESL Fe-1, Modified
11	DOE RESL Ni-1, Modified
12	DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243	Alphaspec Am241, Cm, Solid ALL	69	(15%-125%)
Plutonium-242	Alphaspec Pu, Solid-ALL FSS	87	(15%-125%)
Strontium-90	GFPC, Sr90, solid-ALL FSS	90	(25%-125%)
Carrier/Tracer Recovery	GFPC, Sr90, solid-ALL FSS	90	(25%-125%)
Nickel-63	Liquid Scint Ni63, Solid-ALL FS	56	(25%-125%)

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Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0006–015F Project: YANK01204
Sample ID: 177713016 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N
Carrier/Tracer Recovery		Liquid Scint Ni63, Solid–ALL FS			56		(25%–125%)						
Technetium–99		Liquid Scint Tc99, Solid–ALL FS			88		(15%–125%)						
Carrier/Tracer Recovery		Liquid Scint Tc99, Solid–ALL FS			88		(15%–125%)						

Notes:

The Qualifiers in this report are defined as follows :

- * A quality control analyte recovery is outside of specified acceptance criteria
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol–condensation product
- B Target analyte was detected in the associated blank
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- H Analytical holding time was exceeded
- J Value is estimated
- N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- UI Gamma Spectroscopy––Uncertain identification
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y QC Samples were not spiked with this compound
- ^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
- h Preparation or preservation holding time was exceeded

The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522–0006–016F	Project:	YANK01204
Sample ID:	177713017	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	17–NOV–06		
Receive Date:	14–DEC–06		
Collector:	Client		
Moisture:	12.2%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium–228		0.240	+/–0.186	0.0793	+/–0.186	0.169	pCi/g		MJH1	12/16/06	1027	595950	
Americium–241	U	0.0064	+/–0.0291	0.025	+/–0.0291	0.0515	pCi/g						
Bismuth–212		0.533	+/–0.270	0.132	+/–0.270	0.285	pCi/g						
Bismuth–214		0.533	+/–0.0907	0.0284	+/–0.0907	0.0612	pCi/g						
Cesium–134	UI	0.00	+/–0.0326	0.024	+/–0.0326	0.0511	pCi/g						
Cesium–137	U	0.021	+/–0.0286	0.0162	+/–0.0286	0.035	pCi/g						
Cobalt–60	U	–0.00635	+/–0.0227	0.0187	+/–0.0227	0.0414	pCi/g						
Europium–152	U	–0.0227	+/–0.0539	0.0417	+/–0.0539	0.0881	pCi/g						
Europium–154	U	0.0268	+/–0.0669	0.0598	+/–0.0669	0.131	pCi/g						
Europium–155	U	0.0722	+/–0.0583	0.0415	+/–0.0583	0.0859	pCi/g						
Lead–212		0.670	+/–0.0597	0.0249	+/–0.0597	0.0519	pCi/g						
Lead–214		0.690	+/–0.0855	0.0309	+/–0.0855	0.0652	pCi/g						
Manganese–54	U	–0.00363	+/–0.0269	0.0194	+/–0.0269	0.0418	pCi/g						
Niobium–94	U	–0.00744	+/–0.0189	0.0156	+/–0.0189	0.0336	pCi/g						
Potassium–40		10.6	+/–0.862	0.162	+/–0.862	0.364	pCi/g						
Radium–226		0.533	+/–0.0907	0.0284	+/–0.0907	0.0612	pCi/g						
Silver–108m	U	–0.0031	+/–0.0169	0.0149	+/–0.0169	0.0316	pCi/g						
Thallium–208		0.238	+/–0.0435	0.0174	+/–0.0435	0.0372	pCi/g						
Rad Gas Flow Proportional Counting													
GFPC, Sr90, solid–ALL FSS													
Strontium–90	U	0.00901	+/–0.0179	0.0142	+/–0.0179	0.0315	pCi/g		KSD1	12/22/06	1623	595975	

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/14/06	1140	595900

The following Analytical Methods were performed

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

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
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East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0006–016F Project: YANK01204
Sample ID: 177713017 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Strontium–90	GFPC, Sr90, solid–ALL FSS	84	(25%–125%)
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	84	(25%–125%)

Notes:

The Qualifiers in this report are defined as follows :

- * A quality control analyte recovery is outside of specified acceptance criteria
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol–condensation product
- B Target analyte was detected in the associated blank
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- H Analytical holding time was exceeded
- J Value is estimated
- N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- UI Gamma Spectroscopy––Uncertain identification
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y QC Samples were not spiked with this compound
- ^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
- h Preparation or preservation holding time was exceeded

The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522-0006-017F	Project:	YANK01204
Sample ID:	177713018	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	17-NOV-06		
Receive Date:	14-DEC-06		
Collector:	Client		
Moisture:	7.01%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N
Rad Gamma Spec Analysis													
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium-228		0.494	+/-0.115	0.0359	+/-0.115	0.0718	pCi/g		MJH1	12/16/06	1317	595950	
Americium-241	U	0.0337	+/-0.0575	0.0473	+/-0.0575	0.0946	pCi/g						
Bismuth-212		0.403	+/-0.166	0.0794	+/-0.166	0.159	pCi/g						
Bismuth-214		0.359	+/-0.0626	0.019	+/-0.0626	0.038	pCi/g						
Cesium-134	UI	0.00	+/-0.0281	0.0133	+/-0.0281	0.0266	pCi/g						
Cesium-137		0.0529	+/-0.0243	0.0123	+/-0.0243	0.0246	pCi/g						
Cobalt-60	U	0.0169	+/-0.0205	0.012	+/-0.0205	0.024	pCi/g						
Europium-152	U	-0.0572	+/-0.0447	0.0261	+/-0.0447	0.0522	pCi/g						
Europium-154	U	-0.0532	+/-0.0434	0.033	+/-0.0434	0.066	pCi/g						
Europium-155	U	0.0157	+/-0.0376	0.034	+/-0.0376	0.0679	pCi/g						
Lead-212		0.507	+/-0.0537	0.0165	+/-0.0537	0.033	pCi/g						
Lead-214		0.416	+/-0.0611	0.0211	+/-0.0611	0.0422	pCi/g						
Manganese-54	U	0.00961	+/-0.0128	0.0115	+/-0.0128	0.023	pCi/g						
Niobium-94	U	0.00854	+/-0.0116	0.0101	+/-0.0116	0.0201	pCi/g						
Potassium-40		9.09	+/-0.755	0.0952	+/-0.755	0.190	pCi/g						
Radium-226		0.359	+/-0.0626	0.019	+/-0.0626	0.038	pCi/g						
Silver-108m	U	-0.00155	+/-0.0113	0.00974	+/-0.0113	0.0195	pCi/g						
Thallium-208		0.143	+/-0.0276	0.010	+/-0.0276	0.020	pCi/g						
Rad Gas Flow Proportional Counting													
GFPC, Sr90, solid-ALL FSS													
Strontium-90	U	0.0303	+/-0.0197	0.0137	+/-0.0197	0.0305	pCi/g		KSD1	12/22/06	1623	595975	

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1140	595900

The following Analytical Methods were performed

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

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0006–017F Project: YANK01204
Sample ID: 177713018 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst Date	Time	Batch	N

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Strontium–90	GFPC, Sr90, solid–ALL FSS	87	(25%–125%)
Carrier/Tracer Recovery	GFPC, Sr90, solid–ALL FSS	87	(25%–125%)

Notes:

The Qualifiers in this report are defined as follows :

- * A quality control analyte recovery is outside of specified acceptance criteria
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol–condensation product
- B Target analyte was detected in the associated blank
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- H Analytical holding time was exceeded
- J Value is estimated
- N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- UI Gamma Spectroscopy––Uncertain identification
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y QC Samples were not spiked with this compound
- ^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
- h Preparation or preservation holding time was exceeded

The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522–0005–018–I	Project:	YANK01204
Sample ID:	177713019	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	08–DEC–06		
Receive Date:	14–DEC–06		
Collector:	Client		
Moisture:	7.26%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth													
Waived													
Actinium–228		1.10	+/–0.125	0.0431	+/–0.125	0.090	pCi/g		MJH1	12/16/06	1314	595950	
Americium–241	U	–0.0336	+/–0.0902	0.0697	+/–0.0902	0.142	pCi/g						
Bismuth–212		0.835	+/–0.203	0.0889	+/–0.203	0.185	pCi/g						
Bismuth–214		0.844	+/–0.072	0.021	+/–0.072	0.0435	pCi/g						
Cesium–134	UI	0.00	+/–0.0291	0.0155	+/–0.0291	0.0321	pCi/g						
Cesium–137		0.0394	+/–0.0256	0.0126	+/–0.0256	0.0262	pCi/g						
Cobalt–60	U	0.0144	+/–0.0152	0.0136	+/–0.0152	0.0287	pCi/g						
Europium–152	U	0.018	+/–0.0365	0.0312	+/–0.0365	0.0641	pCi/g						
Europium–154	U	–0.0305	+/–0.0411	0.0327	+/–0.0411	0.0696	pCi/g						
Europium–155	U	0.0459	+/–0.0405	0.0359	+/–0.0405	0.0733	pCi/g						
Lead–212		1.16	+/–0.0478	0.0208	+/–0.0478	0.0425	pCi/g						
Lead–214		1.02	+/–0.0662	0.0205	+/–0.0662	0.0423	pCi/g						
Manganese–54	U	0.0103	+/–0.0177	0.0113	+/–0.0177	0.0235	pCi/g						
Niobium–94	U	–0.00246	+/–0.0123	0.0103	+/–0.0123	0.0215	pCi/g						
Potassium–40		16.2	+/–0.681	0.111	+/–0.681	0.237	pCi/g						
Radium–226		0.844	+/–0.072	0.021	+/–0.072	0.0435	pCi/g						
Silver–108m	U	–0.00106	+/–0.012	0.0105	+/–0.012	0.0217	pCi/g						
Thallium–208		0.340	+/–0.0381	0.0111	+/–0.0381	0.023	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/14/06	1140	595900

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

* A quality control analyte recovery is outside of specified acceptance criteria
< Result is less than value reported

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–018–I Project: YANK01204
Sample ID: 177713019 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522-0005-019-I	Project:	YANK01204
Sample ID:	177713020	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	08-DEC-06		
Receive Date:	14-DEC-06		
Collector:	Client		
Moisture:	8.22%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium-228		1.31	+/-0.195	0.0418	+/-0.195	0.0871	pCi/g		MJH1	12/16/06	1315	595950	
Americium-241	U	0.00487	+/-0.0665	0.0552	+/-0.0665	0.112	pCi/g						
Bismuth-212		0.740	+/-0.244	0.0895	+/-0.244	0.186	pCi/g						
Bismuth-214		0.978	+/-0.110	0.0217	+/-0.110	0.0449	pCi/g						
Cesium-134	UI	0.00	+/-0.0303	0.0161	+/-0.0303	0.0333	pCi/g						
Cesium-137	U	0.0212	+/-0.0208	0.0137	+/-0.0208	0.0282	pCi/g						
Cobalt-60	U	0.0076	+/-0.0141	0.0122	+/-0.0141	0.0258	pCi/g						
Europium-152	U	-0.00828	+/-0.0388	0.0301	+/-0.0388	0.0618	pCi/g						
Europium-154	U	-0.00634	+/-0.0456	0.038	+/-0.0456	0.0796	pCi/g						
Europium-155	U	0.0574	+/-0.0563	0.0348	+/-0.0563	0.0708	pCi/g						
Lead-212		1.28	+/-0.105	0.0185	+/-0.105	0.0377	pCi/g						
Lead-214		1.16	+/-0.118	0.0221	+/-0.118	0.0454	pCi/g						
Manganese-54	UI	0.00	+/-0.0168	0.0117	+/-0.0168	0.0244	pCi/g						
Niobium-94	U	0.00116	+/-0.0135	0.0114	+/-0.0135	0.0235	pCi/g						
Potassium-40		18.5	+/-1.40	0.116	+/-1.40	0.246	pCi/g						
Radium-226		0.978	+/-0.110	0.0217	+/-0.110	0.0449	pCi/g						
Silver-108m	U	-0.0105	+/-0.0119	0.010	+/-0.0119	0.0207	pCi/g						
Thallium-208		0.433	+/-0.0462	0.0116	+/-0.0462	0.024	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1140	595900

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

* A quality control analyte recovery is outside of specified acceptance criteria
< Result is less than value reported

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–019–I Project: YANK01204
Sample ID: 177713020 Client ID: YANK001
Vol. Recv.:

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

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Report Date: December 28, 2006

Client Sample ID:	9522–0005–020–I	Project:	YANK01204
Sample ID:	177713021	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	08–DEC–06		
Receive Date:	14–DEC–06		
Collector:	Client		
Moisture:	9.8%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium–228		0.663	+/–0.138	0.0482	+/–0.138	0.100	pCi/g		MJH1	12/16/06	1241	595951	
Americium–241	U	0.00957	+/–0.0259	0.0183	+/–0.0259	0.0373	pCi/g						
Bismuth–212		0.336	+/–0.205	0.112	+/–0.205	0.231	pCi/g						
Bismuth–214		0.678	+/–0.0799	0.0241	+/–0.0799	0.0498	pCi/g						
Cesium–134	U	0.0222	+/–0.0213	0.0167	+/–0.0213	0.0344	pCi/g						
Cesium–137	UI	0.00	+/–0.0372	0.0131	+/–0.0372	0.0271	pCi/g						
Cobalt–60	U	0.00162	+/–0.0172	0.0145	+/–0.0172	0.0304	pCi/g						
Europium–152	U	–0.00529	+/–0.037	0.0315	+/–0.037	0.0647	pCi/g						
Europium–154	U	–0.0139	+/–0.0491	0.0407	+/–0.0491	0.0854	pCi/g						
Europium–155	U	0.0242	+/–0.0573	0.028	+/–0.0573	0.0571	pCi/g						
Lead–212		0.652	+/–0.0437	0.025	+/–0.0437	0.0507	pCi/g						
Lead–214		0.627	+/–0.0599	0.0237	+/–0.0599	0.0487	pCi/g						
Manganese–54	U	0.0188	+/–0.0188	0.0135	+/–0.0188	0.028	pCi/g						
Niobium–94	U	0.00839	+/–0.0142	0.0124	+/–0.0142	0.0257	pCi/g						
Potassium–40		11.1	+/–0.581	0.130	+/–0.581	0.273	pCi/g						
Radium–226		0.678	+/–0.0799	0.0241	+/–0.0799	0.0498	pCi/g						
Silver–108m	U	0.00341	+/–0.0128	0.0116	+/–0.0128	0.024	pCi/g						
Thallium–208		0.245	+/–0.0382	0.0119	+/–0.0382	0.0247	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/14/06	1129	595901

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

* A quality control analyte recovery is outside of specified acceptance criteria

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–020–I Project: YANK01204
Sample ID: 177713021 Client ID: YANK001
Vol. Recv.:

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

< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522–0005–021–I	Project:	YANK01204
Sample ID:	177713022	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	08–DEC–06		
Receive Date:	14–DEC–06		
Collector:	Client		
Moisture:	6.23%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium–228		0.719	+/–0.124	0.0358	+/–0.124	0.0716	pCi/g		MJH1	12/16/06	1245	595951	
Americium–241	U	0.0395	+/–0.0452	0.0371	+/–0.0452	0.0742	pCi/g						
Bismuth–212		0.503	+/–0.139	0.0851	+/–0.139	0.170	pCi/g						
Bismuth–214		0.609	+/–0.0739	0.0201	+/–0.0739	0.0402	pCi/g						
Cesium–134	UI	0.00	+/–0.0242	0.0131	+/–0.0242	0.0263	pCi/g						
Cesium–137	U	0.0111	+/–0.0167	0.0112	+/–0.0167	0.0223	pCi/g						
Cobalt–60	U	0.00369	+/–0.0134	0.0114	+/–0.0134	0.0228	pCi/g						
Europium–152	U	–0.0145	+/–0.0399	0.0281	+/–0.0399	0.0561	pCi/g						
Europium–154	U	–0.0317	+/–0.0414	0.0329	+/–0.0414	0.0657	pCi/g						
Europium–155	U	0.0301	+/–0.0433	0.0277	+/–0.0433	0.0553	pCi/g						
Lead–212		0.680	+/–0.0639	0.0162	+/–0.0639	0.0323	pCi/g						
Lead–214		0.680	+/–0.0784	0.0201	+/–0.0784	0.0402	pCi/g						
Manganese–54	U	–0.00435	+/–0.0145	0.0111	+/–0.0145	0.0221	pCi/g						
Niobium–94	U	–0.0103	+/–0.0111	0.00927	+/–0.0111	0.0185	pCi/g						
Potassium–40		11.7	+/–0.880	0.0882	+/–0.880	0.176	pCi/g						
Radium–226		0.609	+/–0.0739	0.0201	+/–0.0739	0.0402	pCi/g						
Silver–108m	U	–0.0151	+/–0.013	0.00905	+/–0.013	0.0181	pCi/g						
Thallium–208		0.228	+/–0.0327	0.00997	+/–0.0327	0.0199	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/14/06	1129	595901

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

* A quality control analyte recovery is outside of specified acceptance criteria
< Result is less than value reported

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East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–021–I Project: YANK01204
Sample ID: 177713022 Client ID: YANK001
Vol. Recv.:

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

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522-0005-022-I	Project:	YANK01204
Sample ID:	177713023	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	08-DEC-06		
Receive Date:	14-DEC-06		
Collector:	Client		
Moisture:	5.82%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium-228		0.801	+/-0.104	0.0325	+/-0.104	0.0682	pCi/g		MJH1	12/16/06	1242	595951	
Americium-241	U	-0.00379	+/-0.0138	0.0123	+/-0.0138	0.0252	pCi/g						
Bismuth-212		0.378	+/-0.163	0.0713	+/-0.163	0.149	pCi/g						
Bismuth-214		0.554	+/-0.0595	0.0158	+/-0.0595	0.0328	pCi/g						
Cesium-134	UI	0.00	+/-0.0241	0.0122	+/-0.0241	0.0254	pCi/g						
Cesium-137		0.0231	+/-0.013	0.00941	+/-0.013	0.0196	pCi/g						
Cobalt-60	U	0.00897	+/-0.0113	0.0104	+/-0.0113	0.022	pCi/g						
Europium-152	U	-0.0121	+/-0.027	0.0227	+/-0.027	0.0469	pCi/g						
Europium-154	U	0.0203	+/-0.0243	0.0301	+/-0.0243	0.0636	pCi/g						
Europium-155	U	0.030	+/-0.0295	0.020	+/-0.0295	0.0408	pCi/g						
Lead-212		0.690	+/-0.0308	0.0123	+/-0.0308	0.0252	pCi/g						
Lead-214		0.617	+/-0.0475	0.0164	+/-0.0475	0.0339	pCi/g						
Manganese-54	U	0.0171	+/-0.0177	0.00945	+/-0.0177	0.0197	pCi/g						
Niobium-94	U	0.00417	+/-0.0105	0.00914	+/-0.0105	0.019	pCi/g						
Potassium-40		11.1	+/-0.490	0.0698	+/-0.490	0.152	pCi/g						
Radium-226		0.554	+/-0.0595	0.0158	+/-0.0595	0.0328	pCi/g						
Silver-108m	U	-0.00523	+/-0.00987	0.00762	+/-0.00987	0.0158	pCi/g						
Thallium-208		0.212	+/-0.0241	0.00867	+/-0.0241	0.0181	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1129	595901

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

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< Result is less than value reported

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East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–022–I Project: YANK01204
Sample ID: 177713023 Client ID: YANK001
Vol. Recv.:

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

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
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Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522–0005–023–I	Project:	YANK01204
Sample ID:	177713024	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	08–DEC–06		
Receive Date:	14–DEC–06		
Collector:	Client		
Moisture:	7.55%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth													
Waived													
Actinium–228		1.12	+/–0.161	0.0347	+/–0.161	0.0727	pCi/g		MJH1	12/16/06	1242	595951	
Americium–241	U	–0.0293	+/–0.0392	0.0334	+/–0.0392	0.068	pCi/g						
Bismuth–212		0.540	+/–0.184	0.0752	+/–0.184	0.157	pCi/g						
Bismuth–214		0.916	+/–0.106	0.0181	+/–0.106	0.0375	pCi/g						
Cesium–134	UI	0.00	+/–0.0246	0.0142	+/–0.0246	0.0294	pCi/g						
Cesium–137	U	0.0167	+/–0.0158	0.0116	+/–0.0158	0.024	pCi/g						
Cobalt–60	U	0.0013	+/–0.0126	0.0108	+/–0.0126	0.0229	pCi/g						
Europium–152	U	0.0123	+/–0.0296	0.0257	+/–0.0296	0.0529	pCi/g						
Europium–154	U	–0.00393	+/–0.042	0.0311	+/–0.042	0.0656	pCi/g						
Europium–155	UI	0.00	+/–0.0469	0.0274	+/–0.0469	0.0559	pCi/g						
Lead–212		1.05	+/–0.0873	0.0148	+/–0.0873	0.0303	pCi/g						
Lead–214		0.988	+/–0.0962	0.0188	+/–0.0962	0.0387	pCi/g						
Manganese–54	U	0.0144	+/–0.0156	0.00975	+/–0.0156	0.0204	pCi/g						
Niobium–94	U	0.0113	+/–0.011	0.00986	+/–0.011	0.0205	pCi/g						
Potassium–40		13.6	+/–1.00	0.0916	+/–1.00	0.196	pCi/g						
Radium–226		0.916	+/–0.106	0.0181	+/–0.106	0.0375	pCi/g						
Silver–108m	U	0.0044	+/–0.0106	0.00899	+/–0.0106	0.0186	pCi/g						
Thallium–208		0.342	+/–0.0431	0.00937	+/–0.0431	0.0195	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/14/06	1129	595901

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

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< Result is less than value reported

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Certificate of Analysis

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East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–023–I Project: YANK01204
Sample ID: 177713024 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522-0005-024-I	Project:	YANK01204
Sample ID:	177713025	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	08-DEC-06		
Receive Date:	14-DEC-06		
Collector:	Client		
Moisture:	8.14%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N
Rad Gamma Spec Analysis													
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth													
Waived													
Actinium-228		1.25	+/-0.162	0.0499	+/-0.162	0.105	pCi/g		MJH1	12/16/06	1243	595951	
Americium-241	U	0.0223	+/-0.0351	0.0223	+/-0.0351	0.0454	pCi/g						
Bismuth-212		0.938	+/-0.211	0.113	+/-0.211	0.235	pCi/g						
Bismuth-214		1.33	+/-0.0877	0.026	+/-0.0877	0.0539	pCi/g						
Cesium-134	UI	0.00	+/-0.0267	0.0193	+/-0.0267	0.0399	pCi/g						
Cesium-137	U	0.0107	+/-0.0197	0.0174	+/-0.0197	0.036	pCi/g						
Cobalt-60	U	0.0171	+/-0.0182	0.016	+/-0.0182	0.0339	pCi/g						
Europium-152	U	-0.0224	+/-0.0393	0.0336	+/-0.0393	0.0692	pCi/g						
Europium-154	U	0.0225	+/-0.0588	0.0497	+/-0.0588	0.104	pCi/g						
Europium-155	UI	0.00	+/-0.0613	0.0322	+/-0.0613	0.0656	pCi/g						
Lead-212		1.26	+/-0.0488	0.0203	+/-0.0488	0.0415	pCi/g						
Lead-214		1.45	+/-0.076	0.0255	+/-0.076	0.0525	pCi/g						
Manganese-54	U	0.0131	+/-0.0198	0.0157	+/-0.0198	0.0326	pCi/g						
Niobium-94	U	0.0169	+/-0.0155	0.0142	+/-0.0155	0.0295	pCi/g						
Potassium-40		21.2	+/-0.825	0.130	+/-0.825	0.278	pCi/g						
Radium-226		1.33	+/-0.0877	0.026	+/-0.0877	0.0539	pCi/g						
Silver-108m	U	0.00349	+/-0.0138	0.0119	+/-0.0138	0.0246	pCi/g						
Thallium-208		0.423	+/-0.0404	0.016	+/-0.0404	0.033	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1129	595901

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

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< Result is less than value reported

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East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–024–I Project: YANK01204
Sample ID: 177713025 Client ID: YANK001
Vol. Recv.:

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

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
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East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522-0005-025-I	Project:	YANK01204
Sample ID:	177713026	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	08-DEC-06		
Receive Date:	14-DEC-06		
Collector:	Client		
Moisture:	8.18%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium-228		1.43	+/-0.198	0.038	+/-0.198	0.0759	pCi/g		MJH1	12/16/06	1247	595951	
Americium-241	U	-0.0214	+/-0.0962	0.0768	+/-0.0962	0.154	pCi/g						
Bismuth-212		0.915	+/-0.229	0.0808	+/-0.229	0.162	pCi/g						
Bismuth-214		1.12	+/-0.124	0.0215	+/-0.124	0.043	pCi/g						
Cesium-134	UI	0.00	+/-0.0229	0.0153	+/-0.0229	0.0306	pCi/g						
Cesium-137	U	0.0186	+/-0.0185	0.0107	+/-0.0185	0.0214	pCi/g						
Cobalt-60	U	0.000811	+/-0.0159	0.0114	+/-0.0159	0.0227	pCi/g						
Europium-152	U	-0.0263	+/-0.0416	0.0311	+/-0.0416	0.0622	pCi/g						
Europium-154	U	-0.0224	+/-0.0417	0.034	+/-0.0417	0.068	pCi/g						
Europium-155	U	0.0687	+/-0.0533	0.0418	+/-0.0533	0.0836	pCi/g						
Lead-212		1.33	+/-0.112	0.0186	+/-0.112	0.0372	pCi/g						
Lead-214		1.32	+/-0.126	0.0211	+/-0.126	0.0422	pCi/g						
Manganese-54	UI	0.00	+/-0.0181	0.00994	+/-0.0181	0.0199	pCi/g						
Niobium-94	U	0.00857	+/-0.0123	0.0105	+/-0.0123	0.021	pCi/g						
Potassium-40		20.1	+/-1.31	0.0948	+/-1.31	0.190	pCi/g						
Radium-226		1.12	+/-0.124	0.0215	+/-0.124	0.043	pCi/g						
Silver-108m	U	-0.0018	+/-0.0119	0.0103	+/-0.0119	0.0205	pCi/g						
Thallium-208		0.395	+/-0.0446	0.011	+/-0.0446	0.0221	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1129	595901

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

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< Result is less than value reported

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–025–I Project: YANK01204
Sample ID: 177713026 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522–0005–026–I	Project:	YANK01204
Sample ID:	177713027	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	08–DEC–06		
Receive Date:	14–DEC–06		
Collector:	Client		
Moisture:	6.64%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium–228		1.01	+/–0.157	0.045	+/–0.157	0.090	pCi/g		MJH1	12/16/06	1248	595951	
Americium–241	U	0.0471	+/–0.0636	0.0518	+/–0.0636	0.104	pCi/g						
Bismuth–212		0.438	+/–0.209	0.0957	+/–0.209	0.191	pCi/g						
Bismuth–214		1.03	+/–0.109	0.0237	+/–0.109	0.0473	pCi/g						
Cesium–134	UI	0.00	+/–0.022	0.0153	+/–0.022	0.0306	pCi/g						
Cesium–137	U	0.0216	+/–0.0144	0.0123	+/–0.0144	0.0246	pCi/g						
Cobalt–60	U	0.00493	+/–0.0177	0.0131	+/–0.0177	0.0262	pCi/g						
Europium–152	U	–0.0563	+/–0.0482	0.033	+/–0.0482	0.0659	pCi/g						
Europium–154	U	–0.0174	+/–0.0494	0.041	+/–0.0494	0.0819	pCi/g						
Europium–155	U	0.0274	+/–0.051	0.0382	+/–0.051	0.0764	pCi/g						
Lead–212		1.05	+/–0.0971	0.0193	+/–0.0971	0.0385	pCi/g						
Lead–214		1.11	+/–0.115	0.0238	+/–0.115	0.0477	pCi/g						
Manganese–54	U	0.00609	+/–0.0238	0.0128	+/–0.0238	0.0256	pCi/g						
Niobium–94	U	0.00151	+/–0.0139	0.0118	+/–0.0139	0.0236	pCi/g						
Potassium–40		17.2	+/–1.21	0.103	+/–1.21	0.206	pCi/g						
Radium–226		1.03	+/–0.109	0.0237	+/–0.109	0.0473	pCi/g						
Silver–108m	U	0.00156	+/–0.0147	0.0116	+/–0.0147	0.0232	pCi/g						
Thallium–208		0.346	+/–0.0412	0.0114	+/–0.0412	0.0228	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/14/06	1129	595901

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

* A quality control analyte recovery is outside of specified acceptance criteria
< Result is less than value reported

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522-0005-026-I Project: YANK01204
Sample ID: 177713027 Client ID: YANK001
Vol. Recv.:

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

> Result is greater than value reported
A The TIC is a suspected aldol-condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy--Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522-0005-027-I	Project:	YANK01204
Sample ID:	177713028	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	08-DEC-06		
Receive Date:	14-DEC-06		
Collector:	Client		
Moisture:	5.18%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium-228		0.600	+/-0.120	0.0306	+/-0.120	0.0643	pCi/g		MJH1	12/16/06	1249	595951	
Americium-241	U	-0.0118	+/-0.0333	0.0266	+/-0.0333	0.0543	pCi/g						
Bismuth-212		0.397	+/-0.157	0.0751	+/-0.157	0.156	pCi/g						
Bismuth-214		0.682	+/-0.0826	0.0177	+/-0.0826	0.0367	pCi/g						
Cesium-134	UI	0.00	+/-0.0212	0.0128	+/-0.0212	0.0265	pCi/g						
Cesium-137	U	0.0087	+/-0.0118	0.00961	+/-0.0118	0.020	pCi/g						
Cobalt-60	U	0.0105	+/-0.00989	0.00892	+/-0.00989	0.019	pCi/g						
Europium-152	U	-0.0216	+/-0.0285	0.024	+/-0.0285	0.0495	pCi/g						
Europium-154	U	-0.00561	+/-0.0333	0.0272	+/-0.0333	0.0577	pCi/g						
Europium-155	U	0.0497	+/-0.0412	0.0251	+/-0.0412	0.0512	pCi/g						
Lead-212		0.618	+/-0.0584	0.0142	+/-0.0584	0.0292	pCi/g						
Lead-214		0.614	+/-0.0723	0.018	+/-0.0723	0.0372	pCi/g						
Manganese-54	U	0.0161	+/-0.00867	0.00768	+/-0.00867	0.0162	pCi/g						
Niobium-94	U	0.00375	+/-0.00958	0.00855	+/-0.00958	0.0178	pCi/g						
Potassium-40		12.8	+/-0.936	0.0795	+/-0.936	0.171	pCi/g						
Radium-226		0.682	+/-0.0826	0.0177	+/-0.0826	0.0367	pCi/g						
Silver-108m	U	-0.00391	+/-0.00987	0.00825	+/-0.00987	0.0171	pCi/g						
Thallium-208		0.195	+/-0.0325	0.00816	+/-0.0325	0.017	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1129	595901

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

* A quality control analyte recovery is outside of specified acceptance criteria
< Result is less than value reported

GEL LABORATORIES LLC

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

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–027–I Project: YANK01204
Sample ID: 177713028 Client ID: YANK001
Vol. Recv.:

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

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522-0005-028-I	Project:	YANK01204
Sample ID:	177713029	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	08-DEC-06		
Receive Date:	14-DEC-06		
Collector:	Client		
Moisture:	7.68%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N
Rad Gamma Spec Analysis													
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium-228		0.816	+/-0.163	0.0576	+/-0.163	0.115	pCi/g		MJH1	12/16/06	1249	595951	
Americium-241	U	0.0372	+/-0.031	0.0237	+/-0.031	0.0474	pCi/g						
Bismuth-212		0.515	+/-0.290	0.123	+/-0.290	0.246	pCi/g						
Bismuth-214		1.33	+/-0.160	0.0278	+/-0.160	0.0556	pCi/g						
Cesium-134	Ul	0.00	+/-0.0284	0.0195	+/-0.0284	0.039	pCi/g						
Cesium-137	U	0.00532	+/-0.0213	0.0165	+/-0.0213	0.033	pCi/g						
Cobalt-60	U	0.00445	+/-0.0215	0.0183	+/-0.0215	0.0365	pCi/g						
Europium-152	U	-0.00646	+/-0.0508	0.0364	+/-0.0508	0.0728	pCi/g						
Europium-154	U	0.0093	+/-0.0674	0.0571	+/-0.0674	0.114	pCi/g						
Europium-155	U	0.00987	+/-0.0415	0.035	+/-0.0415	0.070	pCi/g						
Lead-212		0.859	+/-0.0867	0.0206	+/-0.0867	0.0412	pCi/g						
Lead-214		1.47	+/-0.149	0.0262	+/-0.149	0.0523	pCi/g						
Manganese-54	U	-0.00159	+/-0.0194	0.0168	+/-0.0194	0.0336	pCi/g						
Niobium-94	U	0.0275	+/-0.0173	0.016	+/-0.0173	0.032	pCi/g						
Potassium-40		15.3	+/-0.871	0.143	+/-0.871	0.286	pCi/g						
Radium-226		1.33	+/-0.160	0.0278	+/-0.160	0.0556	pCi/g						
Silver-108m	U	-0.00763	+/-0.0181	0.0133	+/-0.0181	0.0266	pCi/g						
Thallium-208		0.296	+/-0.0482	0.015	+/-0.0482	0.0299	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1129	595901

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

* A quality control analyte recovery is outside of specified acceptance criteria
< Result is less than value reported

GEL LABORATORIES LLC

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–028–I Project: YANK01204
Sample ID: 177713029 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522–0005–029–I	Project:	YANK01204
Sample ID:	177713030	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	08–DEC–06		
Receive Date:	14–DEC–06		
Collector:	Client		
Moisture:	6.48%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium–228		0.704	+/–0.140	0.0401	+/–0.140	0.0802	pCi/g		MJH1	12/18/06	1538	595951	
Americium–241	U	0.0855	+/–0.102	0.0858	+/–0.102	0.171	pCi/g						
Bismuth–212		0.480	+/–0.215	0.0931	+/–0.215	0.186	pCi/g						
Bismuth–214		0.647	+/–0.0951	0.024	+/–0.0951	0.0479	pCi/g						
Cesium–134	UI	0.00	+/–0.0219	0.0153	+/–0.0219	0.0305	pCi/g						
Cesium–137	U	–0.00718	+/–0.0151	0.0124	+/–0.0151	0.0248	pCi/g						
Cobalt–60	U	0.00757	+/–0.0156	0.0136	+/–0.0156	0.0272	pCi/g						
Europium–152	U	–0.00526	+/–0.0537	0.0361	+/–0.0537	0.0722	pCi/g						
Europium–154	U	–0.0406	+/–0.0499	0.0393	+/–0.0499	0.0786	pCi/g						
Europium–155	U	0.0215	+/–0.0538	0.0491	+/–0.0538	0.0982	pCi/g						
Lead–212		0.596	+/–0.0629	0.0213	+/–0.0629	0.0426	pCi/g						
Lead–214		0.745	+/–0.0934	0.0251	+/–0.0934	0.0503	pCi/g						
Manganese–54	UI	0.00	+/–0.0207	0.0108	+/–0.0207	0.0215	pCi/g						
Niobium–94	U	0.00699	+/–0.0138	0.012	+/–0.0138	0.0239	pCi/g						
Potassium–40		12.7	+/–1.00	0.126	+/–1.00	0.252	pCi/g						
Radium–226		0.647	+/–0.0951	0.024	+/–0.0951	0.0479	pCi/g						
Silver–108m	U	–0.00358	+/–0.0129	0.0112	+/–0.0129	0.0223	pCi/g						
Thallium–208		0.175	+/–0.0281	0.0113	+/–0.0281	0.0226	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/14/06	1129	595901

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

* A quality control analyte recovery is outside of specified acceptance criteria
< Result is less than value reported

GEL LABORATORIES LLC

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

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–029–I Project: YANK01204
Sample ID: 177713030 Client ID: YANK001
Vol. Recv.:

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

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Report Date: December 28, 2006

Client Sample ID:	9522–0005–030–I	Project:	YANK01204
Sample ID:	177713031	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	11–DEC–06		
Receive Date:	14–DEC–06		
Collector:	Client		
Moisture:	7.66%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium–228		1.42	+/–0.258	0.0838	+/–0.258	0.167	pCi/g		MJH1	12/18/06	1539	595951	
Americium–241	U	0.0411	+/–0.0488	0.0397	+/–0.0488	0.0793	pCi/g						
Bismuth–212		0.793	+/–0.397	0.197	+/–0.397	0.393	pCi/g						
Bismuth–214		1.10	+/–0.172	0.0511	+/–0.172	0.102	pCi/g						
Cesium–134	U	0.0501	+/–0.0394	0.0369	+/–0.0394	0.0737	pCi/g						
Cesium–137	U	0.0259	+/–0.039	0.0302	+/–0.039	0.0604	pCi/g						
Cobalt–60	U	0.0355	+/–0.0385	0.0353	+/–0.0385	0.0705	pCi/g						
Europium–152	U	–0.0118	+/–0.108	0.0633	+/–0.108	0.127	pCi/g						
Europium–154	U	–0.0944	+/–0.115	0.0872	+/–0.115	0.174	pCi/g						
Europium–155	U	0.0944	+/–0.0687	0.0604	+/–0.0687	0.121	pCi/g						
Lead–212		1.14	+/–0.126	0.0367	+/–0.126	0.0733	pCi/g						
Lead–214		1.24	+/–0.169	0.0461	+/–0.169	0.0921	pCi/g						
Manganese–54	U	0.0195	+/–0.0374	0.0294	+/–0.0374	0.0588	pCi/g						
Niobium–94	U	0.0202	+/–0.0287	0.0262	+/–0.0287	0.0524	pCi/g						
Potassium–40		16.0	+/–1.36	0.225	+/–1.36	0.450	pCi/g						
Radium–226		1.10	+/–0.172	0.0511	+/–0.172	0.102	pCi/g						
Silver–108m	U	–0.0195	+/–0.027	0.0223	+/–0.027	0.0445	pCi/g						
Thallium–208		0.386	+/–0.0756	0.0274	+/–0.0756	0.0548	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/14/06	1129	595901

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

* A quality control analyte recovery is outside of specified acceptance criteria

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

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–030–I Project: YANK01204
Sample ID: 177713031 Client ID: YANK001
Vol. Recv.:

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

< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522–0005–031–I	Project:	YANK01204
Sample ID:	177713032	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	11–DEC–06		
Receive Date:	14–DEC–06		
Collector:	Client		
Moisture:	7.57%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth													
Waived													
Actinium–228		1.07	+/–0.221	0.0672	+/–0.221	0.144	pCi/g		MJH1	12/18/06	1646	595951	
Americium–241	U	0.0139	+/–0.103	0.0864	+/–0.103	0.178	pCi/g						
Bismuth–212		0.734	+/–0.287	0.133	+/–0.287	0.285	pCi/g						
Bismuth–214		0.968	+/–0.129	0.0357	+/–0.129	0.0754	pCi/g						
Cesium–134	UI	0.00	+/–0.0728	0.0248	+/–0.0728	0.0523	pCi/g						
Cesium–137	U	0.0434	+/–0.0253	0.0218	+/–0.0253	0.0459	pCi/g						
Cobalt–60	U	0.00406	+/–0.0222	0.019	+/–0.0222	0.0416	pCi/g						
Europium–152	U	0.00475	+/–0.052	0.0467	+/–0.052	0.0979	pCi/g						
Europium–154	U	0.00825	+/–0.0714	0.0607	+/–0.0714	0.131	pCi/g						
Europium–155	U	0.00841	+/–0.0612	0.0554	+/–0.0612	0.114	pCi/g						
Lead–212		0.989	+/–0.102	0.0275	+/–0.102	0.057	pCi/g						
Lead–214		1.08	+/–0.134	0.0324	+/–0.134	0.068	pCi/g						
Manganese–54	U	0.00931	+/–0.021	0.019	+/–0.021	0.0404	pCi/g						
Niobium–94	U	–0.00031	+/–0.0193	0.0162	+/–0.0193	0.0345	pCi/g						
Potassium–40		16.5	+/–1.47	0.146	+/–1.47	0.329	pCi/g						
Radium–226		0.968	+/–0.129	0.0357	+/–0.129	0.0754	pCi/g						
Silver–108m	U	–0.0102	+/–0.0182	0.0154	+/–0.0182	0.0325	pCi/g						
Thallium–208		0.330	+/–0.0597	0.0168	+/–0.0597	0.0357	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/14/06	1129	595901

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

* A quality control analyte recovery is outside of specified acceptance criteria
< Result is less than value reported

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

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–031–I Project: YANK01204
Sample ID: 177713032 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522-0005-032-I	Project:	YANK01204
Sample ID:	177713033	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	11-DEC-06		
Receive Date:	14-DEC-06		
Collector:	Client		
Moisture:	8.27%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium-228		1.38	+/-0.261	0.073	+/-0.261	0.156	pCi/g		MJH1	12/18/06	1646	595951	
Americium-241	U	-0.0312	+/-0.0992	0.0866	+/-0.0992	0.177	pCi/g						
Bismuth-212		0.829	+/-0.313	0.172	+/-0.313	0.363	pCi/g						
Bismuth-214		1.46	+/-0.172	0.0404	+/-0.172	0.085	pCi/g						
Cesium-134	UI	0.00	+/-0.0356	0.0305	+/-0.0356	0.064	pCi/g						
Cesium-137	U	0.00842	+/-0.0344	0.0256	+/-0.0344	0.0536	pCi/g						
Cobalt-60	U	-0.00745	+/-0.0286	0.0235	+/-0.0286	0.051	pCi/g						
Europium-152	U	-0.0152	+/-0.0829	0.062	+/-0.0829	0.129	pCi/g						
Europium-154	U	0.0377	+/-0.106	0.0806	+/-0.106	0.172	pCi/g						
Europium-155	U	0.0658	+/-0.0696	0.0667	+/-0.0696	0.137	pCi/g						
Lead-212		1.30	+/-0.128	0.0358	+/-0.128	0.0739	pCi/g						
Lead-214		1.58	+/-0.183	0.0444	+/-0.183	0.0922	pCi/g						
Manganese-54	U	0.00297	+/-0.0336	0.0243	+/-0.0336	0.0512	pCi/g						
Niobium-94	U	0.0198	+/-0.0258	0.0226	+/-0.0258	0.0475	pCi/g						
Potassium-40		23.4	+/-1.82	0.171	+/-1.82	0.381	pCi/g						
Radium-226		1.46	+/-0.172	0.0404	+/-0.172	0.085	pCi/g						
Silver-108m	U	-0.00683	+/-0.0241	0.0205	+/-0.0241	0.0428	pCi/g						
Thallium-208		0.412	+/-0.0688	0.0213	+/-0.0688	0.0448	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1129	595901

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

* A quality control analyte recovery is outside of specified acceptance criteria
< Result is less than value reported

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–032–I Project: YANK01204
Sample ID: 177713033 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522-0005-033-I	Project:	YANK01204
Sample ID:	177713034	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	11-DEC-06		
Receive Date:	14-DEC-06		
Collector:	Client		
Moisture:	7.91%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst Date	Time	Batch	M
Rad Gamma Spec Analysis												
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived												
Actinium-228		1.38	+/-0.199	0.0662	+/-0.199	0.140	pCi/g		MJH1 12/18/06	1647	595951	
Americium-241	U	0.0309	+/-0.164	0.0978	+/-0.164	0.199	pCi/g					
Bismuth-212		0.940	+/-0.289	0.139	+/-0.289	0.293	pCi/g					
Bismuth-214		1.58	+/-0.120	0.0357	+/-0.120	0.0747	pCi/g					
Cesium-134	UI	0.00	+/-0.0495	0.0281	+/-0.0495	0.0584	pCi/g					
Cesium-137		0.0639	+/-0.0333	0.0186	+/-0.0333	0.0391	pCi/g					
Cobalt-60	U	-0.00225	+/-0.0257	0.021	+/-0.0257	0.0449	pCi/g					
Europium-152	U	-0.0416	+/-0.0653	0.054	+/-0.0653	0.112	pCi/g					
Europium-154	U	-0.0329	+/-0.069	0.0545	+/-0.069	0.117	pCi/g					
Europium-155	U	0.102	+/-0.0865	0.0634	+/-0.0865	0.130	pCi/g					
Lead-212		1.49	+/-0.073	0.0305	+/-0.073	0.0626	pCi/g					
Lead-214		1.66	+/-0.116	0.0396	+/-0.116	0.0819	pCi/g					
Manganese-54	U	-0.0113	+/-0.0254	0.0211	+/-0.0254	0.0443	pCi/g					
Niobium-94	U	0.0161	+/-0.0212	0.019	+/-0.0212	0.0397	pCi/g					
Potassium-40		21.8	+/-0.998	0.158	+/-0.998	0.346	pCi/g					
Radium-226		1.58	+/-0.120	0.0357	+/-0.120	0.0747	pCi/g					
Silver-108m	U	0.004	+/-0.0218	0.0185	+/-0.0218	0.0384	pCi/g					
Thallium-208		0.443	+/-0.0492	0.0212	+/-0.0492	0.0441	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1129	595901

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

* A quality control analyte recovery is outside of specified acceptance criteria
< Result is less than value reported

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–033–I Project: YANK01204
Sample ID: 177713034 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522-0005-034-I	Project:	YANK01204
Sample ID:	177713035	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	11-DEC-06		
Receive Date:	14-DEC-06		
Collector:	Client		
Moisture:	8.72%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium-228		1.25	+/-0.339	0.153	+/-0.339	0.325	pCi/g		MJH1	12/18/06	1647	595951	
Americium-241	U	0.012	+/-0.0658	0.0522	+/-0.0658	0.108	pCi/g						
Bismuth-212		1.16	+/-0.453	0.269	+/-0.453	0.577	pCi/g						
Bismuth-214		1.49	+/-0.195	0.0675	+/-0.195	0.143	pCi/g						
Cesium-134	U	0.0539	+/-0.0657	0.0483	+/-0.0657	0.102	pCi/g						
Cesium-137	U	0.00583	+/-0.0476	0.0404	+/-0.0476	0.0857	pCi/g						
Cobalt-60	U	0.0253	+/-0.0463	0.0409	+/-0.0463	0.0892	pCi/g						
Europium-152	U	-0.00505	+/-0.101	0.0836	+/-0.101	0.176	pCi/g						
Europium-154	U	-0.0599	+/-0.150	0.120	+/-0.150	0.261	pCi/g						
Europium-155	U	0.124	+/-0.112	0.0845	+/-0.112	0.175	pCi/g						
Lead-212		1.39	+/-0.116	0.0481	+/-0.116	0.100	pCi/g						
Lead-214		1.65	+/-0.192	0.0609	+/-0.192	0.128	pCi/g						
Manganese-54	U	-0.00443	+/-0.0473	0.0386	+/-0.0473	0.0823	pCi/g						
Niobium-94	U	-0.00728	+/-0.0416	0.0344	+/-0.0416	0.0731	pCi/g						
Potassium-40		24.9	+/-1.83	0.354	+/-1.83	0.783	pCi/g						
Radium-226		1.49	+/-0.195	0.0675	+/-0.195	0.143	pCi/g						
Silver-108m	U	-0.0277	+/-0.0382	0.0274	+/-0.0382	0.0584	pCi/g						
Thallium-208		0.480	+/-0.0881	0.0343	+/-0.0881	0.073	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1129	595901

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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< Result is less than value reported

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–034–I Project: YANK01204
Sample ID: 177713035 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst Date	Time	Batch	N

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522–0005–035–I	Project:	YANK01204
Sample ID:	177713036	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	11–DEC–06		
Receive Date:	14–DEC–06		
Collector:	Client		
Moisture:	7.76%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium–228		1.98	+/–0.311	0.107	+/–0.311	0.230	pCi/g		MJH1	12/18/06	1647	595951	
Americium–241	U	0.0557	+/–0.0622	0.0406	+/–0.0622	0.0834	pCi/g						
Bismuth–212		1.16	+/–0.385	0.234	+/–0.385	0.498	pCi/g						
Bismuth–214		1.94	+/–0.180	0.0519	+/–0.180	0.110	pCi/g						
Cesium–134	UI	0.00	+/–0.0488	0.0376	+/–0.0488	0.0796	pCi/g						
Cesium–137	U	–0.0167	+/–0.0396	0.0281	+/–0.0396	0.0599	pCi/g						
Cobalt–60	U	–0.00137	+/–0.0369	0.0307	+/–0.0369	0.0674	pCi/g						
Europium–152	U	0.0122	+/–0.0857	0.0727	+/–0.0857	0.152	pCi/g						
Europium–154	U	–0.0366	+/–0.110	0.0892	+/–0.110	0.195	pCi/g						
Europium–155	UI	0.00	+/–0.102	0.0621	+/–0.102	0.128	pCi/g						
Lead–212		1.83	+/–0.103	0.039	+/–0.103	0.0811	pCi/g						
Lead–214		2.23	+/–0.160	0.0476	+/–0.160	0.100	pCi/g						
Manganese–54	U	0.0304	+/–0.0396	0.0313	+/–0.0396	0.0666	pCi/g						
Niobium–94	U	0.011	+/–0.0312	0.0271	+/–0.0312	0.0576	pCi/g						
Potassium–40		23.5	+/–1.58	0.283	+/–1.58	0.627	pCi/g						
Radium–226		1.94	+/–0.180	0.0519	+/–0.180	0.110	pCi/g						
Silver–108m	U	0.00785	+/–0.026	0.0235	+/–0.026	0.0496	pCi/g						
Thallium–208		0.517	+/–0.0791	0.0257	+/–0.0791	0.0547	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/14/06	1129	595901

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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< Result is less than value reported

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–035–I Project: YANK01204
Sample ID: 177713036 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522-0005-036-I	Project:	YANK01204
Sample ID:	177713037	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	11-DEC-06		
Receive Date:	14-DEC-06		
Collector:	Client		
Moisture:	9.91%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium-228		1.07	+/-0.242	0.0562	+/-0.242	0.122	pCi/g		MJH1	12/18/06	1648	595951	
Americium-241	U	0.0149	+/-0.0698	0.0566	+/-0.0698	0.117	pCi/g						
Bismuth-212		0.775	+/-0.248	0.102	+/-0.248	0.222	pCi/g						
Bismuth-214		0.825	+/-0.120	0.0311	+/-0.120	0.066	pCi/g						
Cesium-134	UI	0.00	+/-0.0276	0.0227	+/-0.0276	0.048	pCi/g						
Cesium-137	U	0.0216	+/-0.0261	0.0193	+/-0.0261	0.0409	pCi/g						
Cobalt-60	U	0.00594	+/-0.0202	0.0179	+/-0.0202	0.0392	pCi/g						
Europium-152	U	0.0201	+/-0.050	0.0438	+/-0.050	0.0919	pCi/g						
Europium-154	U	-0.0805	+/-0.0678	0.051	+/-0.0678	0.112	pCi/g						
Europium-155	U	-0.00374	+/-0.0553	0.0463	+/-0.0553	0.0957	pCi/g						
Lead-212		1.06	+/-0.102	0.025	+/-0.102	0.052	pCi/g						
Lead-214		0.948	+/-0.121	0.0318	+/-0.121	0.0667	pCi/g						
Manganese-54	UI	0.00	+/-0.0338	0.017	+/-0.0338	0.0363	pCi/g						
Niobium-94	U	0.00364	+/-0.0186	0.0163	+/-0.0186	0.0346	pCi/g						
Potassium-40		16.6	+/-1.42	0.137	+/-1.42	0.310	pCi/g						
Radium-226		0.825	+/-0.120	0.0311	+/-0.120	0.066	pCi/g						
Silver-108m	U	0.00524	+/-0.0171	0.0146	+/-0.0171	0.0309	pCi/g						
Thallium-208		0.335	+/-0.0582	0.0166	+/-0.0582	0.0352	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1129	595901

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

* A quality control analyte recovery is outside of specified acceptance criteria
< Result is less than value reported

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–036–I Project: YANK01204
Sample ID: 177713037 Client ID: YANK001
Vol. Recv.:

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

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522–0005–037–I	Project:	YANK01204
Sample ID:	177713038	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	11–DEC–06		
Receive Date:	14–DEC–06		
Collector:	Client		
Moisture:	8.95%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst Date	Time	Batch	M
Rad Gamma Spec Analysis												
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth												
Waived												
Actinium–228		0.855	+/–0.205	0.0661	+/–0.205	0.132	pCi/g		MJH1 12/18/06	1652	595951	
Americium–241	U	–0.00831	+/–0.0938	0.0754	+/–0.0938	0.151	pCi/g					
Bismuth–212		0.584	+/–0.294	0.157	+/–0.294	0.314	pCi/g					
Bismuth–214		0.788	+/–0.123	0.0364	+/–0.123	0.0728	pCi/g					
Cesium–134	UI	0.00	+/–0.0368	0.0242	+/–0.0368	0.0484	pCi/g					
Cesium–137		0.0534	+/–0.0402	0.0203	+/–0.0402	0.0405	pCi/g					
Cobalt–60	U	0.00558	+/–0.0233	0.0202	+/–0.0233	0.0403	pCi/g					
Europium–152	U	–0.014	+/–0.0744	0.0535	+/–0.0744	0.107	pCi/g					
Europium–154	U	–0.0137	+/–0.0808	0.0653	+/–0.0808	0.131	pCi/g					
Europium–155	U	0.014	+/–0.0702	0.0612	+/–0.0702	0.122	pCi/g					
Lead–212		0.969	+/–0.104	0.0299	+/–0.104	0.0598	pCi/g					
Lead–214		0.889	+/–0.120	0.0403	+/–0.120	0.0806	pCi/g					
Manganese–54	U	0.0114	+/–0.0233	0.0211	+/–0.0233	0.0421	pCi/g					
Niobium–94	U	0.0137	+/–0.0259	0.0199	+/–0.0259	0.0397	pCi/g					
Potassium–40		14.7	+/–1.26	0.159	+/–1.26	0.318	pCi/g					
Radium–226		0.788	+/–0.123	0.0364	+/–0.123	0.0728	pCi/g					
Silver–108m	U	–0.00664	+/–0.0202	0.0174	+/–0.0202	0.0347	pCi/g					
Thallium–208		0.349	+/–0.0572	0.0188	+/–0.0572	0.0375	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/14/06	1129	595901

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

* A quality control analyte recovery is outside of specified acceptance criteria
< Result is less than value reported

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Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–037–I Project: YANK01204
Sample ID: 177713038 Client ID: YANK001
Vol. Recv.:

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

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Company : Connecticut Yankee Atomic Power
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East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522–0005–038–I	Project:	YANK01204
Sample ID:	177713039	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	11–DEC–06		
Receive Date:	14–DEC–06		
Collector:	Client		
Moisture:	8.27%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth													
Waived													
Actinium–228		1.04	+/–0.216	0.0841	+/–0.216	0.185	pCi/g		MJH1	12/18/06	1705	595951	
Americium–241	U	0.0025	+/–0.0391	0.0368	+/–0.0391	0.076	pCi/g						
Bismuth–212		0.784	+/–0.356	0.194	+/–0.356	0.419	pCi/g						
Bismuth–214		0.833	+/–0.150	0.047	+/–0.150	0.101	pCi/g						
Cesium–134	UI	0.00	+/–0.0607	0.035	+/–0.0607	0.0747	pCi/g						
Cesium–137	U	0.0208	+/–0.0372	0.029	+/–0.0372	0.0621	pCi/g						
Cobalt–60	U	–0.0015	+/–0.030	0.0253	+/–0.030	0.0568	pCi/g						
Europium–152	U	0.0227	+/–0.070	0.0646	+/–0.070	0.136	pCi/g						
Europium–154	U	0.0298	+/–0.0818	0.0734	+/–0.0818	0.164	pCi/g						
Europium–155	U	0.0784	+/–0.0885	0.0589	+/–0.0885	0.122	pCi/g						
Lead–212		0.852	+/–0.0938	0.0482	+/–0.0938	0.0997	pCi/g						
Lead–214		0.931	+/–0.140	0.0437	+/–0.140	0.0926	pCi/g						
Manganese–54	U	0.0181	+/–0.0285	0.0257	+/–0.0285	0.0556	pCi/g						
Niobium–94	U	0.00678	+/–0.0276	0.0241	+/–0.0276	0.0518	pCi/g						
Potassium–40		15.3	+/–1.25	0.238	+/–1.25	0.539	pCi/g						
Radium–226		0.833	+/–0.150	0.047	+/–0.150	0.101	pCi/g						
Silver–108m	U	–0.0208	+/–0.0238	0.0197	+/–0.0238	0.0422	pCi/g						
Thallium–208		0.364	+/–0.0759	0.0241	+/–0.0759	0.0518	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/14/06	1129	595901

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

* A quality control analyte recovery is outside of specified acceptance criteria
< Result is less than value reported

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Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–038–I Project: YANK01204
Sample ID: 177713039 Client ID: YANK001
Vol. Recv.:

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

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522–0005–039–I	Project:	YANK01204
Sample ID:	177713040	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	11–DEC–06		
Receive Date:	14–DEC–06		
Collector:	Client		
Moisture:	7.87%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst Date	Time	Batch	M
Rad Gamma Spec Analysis												
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth Waived												
Actinium–228		1.75	+/–0.284	0.101	+/–0.284	0.222	pCi/g		MJH1 12/18/06	1754	595951	
Americium–241	U	0.0203	+/–0.0502	0.0424	+/–0.0502	0.0878	pCi/g					
Bismuth–212		0.725	+/–0.528	0.204	+/–0.528	0.447	pCi/g					
Bismuth–214		0.935	+/–0.162	0.0569	+/–0.162	0.122	pCi/g					
Cesium–134	UI	0.00	+/–0.0516	0.0379	+/–0.0516	0.0816	pCi/g					
Cesium–137	U	0.0237	+/–0.0448	0.0321	+/–0.0448	0.0692	pCi/g					
Cobalt–60	U	0.0136	+/–0.0359	0.0313	+/–0.0359	0.0705	pCi/g					
Europium–152	U	–0.00628	+/–0.0761	0.066	+/–0.0761	0.141	pCi/g					
Europium–154	U	0.0252	+/–0.128	0.109	+/–0.128	0.238	pCi/g					
Europium–155	U	0.0611	+/–0.0773	0.0694	+/–0.0773	0.144	pCi/g					
Lead–212		1.36	+/–0.0997	0.0357	+/–0.0997	0.0752	pCi/g					
Lead–214		1.16	+/–0.143	0.0492	+/–0.143	0.105	pCi/g					
Manganese–54	U	0.0206	+/–0.032	0.0295	+/–0.032	0.0644	pCi/g					
Niobium–94	U	–0.0145	+/–0.0333	0.0281	+/–0.0333	0.0607	pCi/g					
Potassium–40		19.2	+/–1.53	0.254	+/–1.53	0.586	pCi/g					
Radium–226		0.935	+/–0.162	0.0569	+/–0.162	0.122	pCi/g					
Silver–108m	U	0.0165	+/–0.0297	0.0266	+/–0.0297	0.0566	pCi/g					
Thallium–208		0.456	+/–0.0853	0.0243	+/–0.0853	0.0532	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/14/06	1129	595901

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

* A quality control analyte recovery is outside of specified acceptance criteria
< Result is less than value reported

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–039–I Project: YANK01204
Sample ID: 177713040 Client ID: YANK001
Vol. Recv.:

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

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Report Date: December 28, 2006

Client Sample ID:	9522-0005-040-I	Project:	YANK01204
Sample ID:	177713041	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	11-DEC-06		
Receive Date:	14-DEC-06		
Collector:	Client		
Moisture:	8.79%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium-228		1.34	+/-0.183	0.0347	+/-0.183	0.0693	pCi/g		MJH1	12/18/06	2001	595952	
Americium-241	U	0.0119	+/-0.0834	0.069	+/-0.0834	0.138	pCi/g						
Bismuth-212		0.782	+/-0.184	0.074	+/-0.184	0.148	pCi/g						
Bismuth-214		1.08	+/-0.117	0.0184	+/-0.117	0.0368	pCi/g						
Cesium-134	UI	0.00	+/-0.0211	0.0137	+/-0.0211	0.0274	pCi/g						
Cesium-137	UI	0.00	+/-0.0126	0.0101	+/-0.0126	0.0202	pCi/g						
Cobalt-60	U	-0.000914	+/-0.0114	0.00955	+/-0.0114	0.0191	pCi/g						
Europium-152	U	-0.0529	+/-0.0401	0.0279	+/-0.0401	0.0558	pCi/g						
Europium-154	U	-0.000264	+/-0.0453	0.0292	+/-0.0453	0.0583	pCi/g						
Europium-155	U	0.0587	+/-0.0479	0.040	+/-0.0479	0.0799	pCi/g						
Lead-212		1.27	+/-0.107	0.0172	+/-0.107	0.0344	pCi/g						
Lead-214		1.34	+/-0.125	0.0195	+/-0.125	0.0389	pCi/g						
Manganese-54	U	0.0151	+/-0.0136	0.0107	+/-0.0136	0.0214	pCi/g						
Niobium-94	U	0.00036	+/-0.0108	0.00919	+/-0.0108	0.0184	pCi/g						
Potassium-40		19.3	+/-1.22	0.0851	+/-1.22	0.170	pCi/g						
Radium-226		1.08	+/-0.117	0.0184	+/-0.117	0.0368	pCi/g						
Silver-108m	U	-0.00337	+/-0.0106	0.00923	+/-0.0106	0.0184	pCi/g						
Thallium-208		0.383	+/-0.0421	0.00933	+/-0.0421	0.0187	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1214	595902

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

* A quality control analyte recovery is outside of specified acceptance criteria

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–040–I Project: YANK01204
Sample ID: 177713041 Client ID: YANK001
Vol. Recv.:

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

< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522-0005-041-I	Project:	YANK01204
Sample ID:	177713042	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	11-DEC-06		
Receive Date:	14-DEC-06		
Collector:	Client		
Moisture:	5.79%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N
Rad Gamma Spec Analysis													
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium-228		0.597	+/-0.110	0.0301	+/-0.110	0.0602	pCi/g		MJH1	12/19/06	1925	595952	
Americium-241	U	0.0461	+/-0.0542	0.0468	+/-0.0542	0.0935	pCi/g						
Bismuth-212		0.399	+/-0.138	0.0703	+/-0.138	0.141	pCi/g						
Bismuth-214		0.524	+/-0.068	0.0185	+/-0.068	0.0369	pCi/g						
Cesium-134	UI	0.00	+/-0.0177	0.0114	+/-0.0177	0.0227	pCi/g						
Cesium-137	U	0.00641	+/-0.0115	0.0102	+/-0.0115	0.0204	pCi/g						
Cobalt-60	U	-0.00387	+/-0.0121	0.00998	+/-0.0121	0.0199	pCi/g						
Europium-152	U	-0.0317	+/-0.0372	0.0265	+/-0.0372	0.0531	pCi/g						
Europium-154	U	-0.0108	+/-0.0369	0.0307	+/-0.0369	0.0614	pCi/g						
Europium-155	U	0.0306	+/-0.0407	0.0306	+/-0.0407	0.0611	pCi/g						
Lead-212		0.626	+/-0.0588	0.0151	+/-0.0588	0.0301	pCi/g						
Lead-214		0.557	+/-0.0649	0.0187	+/-0.0649	0.0374	pCi/g						
Manganese-54	U	0.0119	+/-0.0121	0.00943	+/-0.0121	0.0188	pCi/g						
Niobium-94	U	0.00363	+/-0.0104	0.00902	+/-0.0104	0.018	pCi/g						
Potassium-40		9.60	+/-0.738	0.0841	+/-0.738	0.168	pCi/g						
Radium-226		0.524	+/-0.068	0.0185	+/-0.068	0.0369	pCi/g						
Silver-108m	U	0.00786	+/-0.00993	0.00911	+/-0.00993	0.0182	pCi/g						
Thallium-208		0.210	+/-0.0293	0.00933	+/-0.0293	0.0186	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1214	595902

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

* A quality control analyte recovery is outside of specified acceptance criteria
< Result is less than value reported

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–041–I Project: YANK01204
Sample ID: 177713042 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522–0005–042–I	Project:	YANK01204
Sample ID:	177713043	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	11–DEC–06		
Receive Date:	14–DEC–06		
Collector:	Client		
Moisture:	7.24%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium–228		1.23	+/–0.153	0.0536	+/–0.153	0.111	pCi/g		MJH1	12/19/06	1922	595952	
Americium–241	U	–0.01	+/–0.0296	0.0213	+/–0.0296	0.0433	pCi/g						
Bismuth–212		0.837	+/–0.203	0.111	+/–0.203	0.230	pCi/g						
Bismuth–214		1.20	+/–0.0842	0.0277	+/–0.0842	0.0569	pCi/g						
Cesium–134	UI	0.00	+/–0.0304	0.0204	+/–0.0304	0.042	pCi/g						
Cesium–137	UI	0.00	+/–0.0393	0.0143	+/–0.0393	0.0295	pCi/g						
Cobalt–60	U	0.00596	+/–0.0185	0.0158	+/–0.0185	0.0331	pCi/g						
Europium–152	U	–0.0109	+/–0.0426	0.0362	+/–0.0426	0.0741	pCi/g						
Europium–154	U	–0.0629	+/–0.0539	0.0427	+/–0.0539	0.0892	pCi/g						
Europium–155	UI	0.00	+/–0.0547	0.0334	+/–0.0547	0.0679	pCi/g						
Lead–212		1.24	+/–0.0488	0.0199	+/–0.0488	0.0406	pCi/g						
Lead–214		1.25	+/–0.0755	0.0257	+/–0.0755	0.0527	pCi/g						
Manganese–54	U	0.00809	+/–0.0202	0.0151	+/–0.0202	0.0313	pCi/g						
Niobium–94	U	0.0111	+/–0.0159	0.014	+/–0.0159	0.0288	pCi/g						
Potassium–40		17.7	+/–0.696	0.136	+/–0.696	0.286	pCi/g						
Radium–226		1.20	+/–0.0842	0.0277	+/–0.0842	0.0569	pCi/g						
Silver–108m	U	–0.000646	+/–0.0138	0.0124	+/–0.0138	0.0254	pCi/g						
Thallium–208		0.392	+/–0.0375	0.0148	+/–0.0375	0.0304	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/14/06	1214	595902

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

* A quality control analyte recovery is outside of specified acceptance criteria
< Result is less than value reported

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–042–I Project: YANK01204
Sample ID: 177713043 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst Date	Time	Batch	N

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522–0005–043–I	Project:	YANK01204
Sample ID:	177713044	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	11–DEC–06		
Receive Date:	14–DEC–06		
Collector:	Client		
Moisture:	5.16%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium–228		0.660	+/–0.173	0.0649	+/–0.173	0.142	pCi/g		MJH1	12/20/06	0627	595952	
Americium–241	U	0.0171	+/–0.0267	0.0255	+/–0.0267	0.0527	pCi/g						
Bismuth–212		0.475	+/–0.351	0.154	+/–0.351	0.330	pCi/g						
Bismuth–214		0.445	+/–0.103	0.0349	+/–0.103	0.0747	pCi/g						
Cesium–134	UI	0.00	+/–0.0439	0.0256	+/–0.0439	0.0547	pCi/g						
Cesium–137	U	0.0177	+/–0.0223	0.0212	+/–0.0223	0.0453	pCi/g						
Cobalt–60	U	0.00665	+/–0.0226	0.0196	+/–0.0226	0.0436	pCi/g						
Europium–152	U	–0.0195	+/–0.0466	0.0402	+/–0.0466	0.0856	pCi/g						
Europium–154	U	–0.0591	+/–0.0744	0.0554	+/–0.0744	0.123	pCi/g						
Europium–155	U	0.0324	+/–0.0678	0.0386	+/–0.0678	0.0803	pCi/g						
Lead–212		0.605	+/–0.0554	0.0231	+/–0.0554	0.0485	pCi/g						
Lead–214		0.603	+/–0.0798	0.030	+/–0.0798	0.0636	pCi/g						
Manganese–54	U	0.0212	+/–0.0209	0.020	+/–0.0209	0.0431	pCi/g						
Niobium–94	U	–0.00323	+/–0.0212	0.0186	+/–0.0212	0.0399	pCi/g						
Potassium–40		9.63	+/–0.924	0.151	+/–0.924	0.347	pCi/g						
Radium–226		0.445	+/–0.103	0.0349	+/–0.103	0.0747	pCi/g						
Silver–108m	U	–0.00465	+/–0.0173	0.0148	+/–0.0173	0.0316	pCi/g						
Thallium–208		0.254	+/–0.0493	0.0154	+/–0.0493	0.0333	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/14/06	1214	595902

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

* A quality control analyte recovery is outside of specified acceptance criteria
< Result is less than value reported

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–043–I Project: YANK01204
Sample ID: 177713044 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst Date	Time	Batch	N

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI *Gamma Spectroscopy––Uncertain identification*
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522-0005-044-I	Project:	YANK01204
Sample ID:	177713045	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	11-DEC-06		
Receive Date:	14-DEC-06		
Collector:	Client		
Moisture:	7.1%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium-228		1.26	+/-0.245	0.0628	+/-0.245	0.134	pCi/g		MJH1	12/20/06	0628	595952	
Americium-241	U	-0.0388	+/-0.0636	0.0545	+/-0.0636	0.112	pCi/g						
Bismuth-212		0.752	+/-0.321	0.151	+/-0.321	0.318	pCi/g						
Bismuth-214		1.05	+/-0.135	0.0309	+/-0.135	0.0654	pCi/g						
Cesium-134	UI	0.00	+/-0.0427	0.026	+/-0.0427	0.0545	pCi/g						
Cesium-137	U	0.0206	+/-0.0261	0.0188	+/-0.0261	0.0397	pCi/g						
Cobalt-60	U	0.00442	+/-0.0218	0.0184	+/-0.0218	0.040	pCi/g						
Europium-152	U	-0.0119	+/-0.0567	0.0486	+/-0.0567	0.101	pCi/g						
Europium-154	U	0.00191	+/-0.0683	0.0566	+/-0.0683	0.122	pCi/g						
Europium-155	U	0.0484	+/-0.0549	0.0529	+/-0.0549	0.109	pCi/g						
Lead-212		1.23	+/-0.117	0.0277	+/-0.117	0.0573	pCi/g						
Lead-214		1.11	+/-0.138	0.0353	+/-0.138	0.0735	pCi/g						
Manganese-54	U	0.0134	+/-0.0203	0.0184	+/-0.0203	0.039	pCi/g						
Niobium-94	U	-0.00171	+/-0.0192	0.0167	+/-0.0192	0.0354	pCi/g						
Potassium-40		17.5	+/-1.47	0.159	+/-1.47	0.352	pCi/g						
Radium-226		1.05	+/-0.135	0.0309	+/-0.135	0.0654	pCi/g						
Silver-108m	U	0.0118	+/-0.0191	0.0168	+/-0.0191	0.0353	pCi/g						
Thallium-208		0.383	+/-0.0551	0.0196	+/-0.0551	0.0411	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1214	595902

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

* A quality control analyte recovery is outside of specified acceptance criteria
< Result is less than value reported

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–044–I Project: YANK01204
Sample ID: 177713045 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522-0005-045-I	Project:	YANK01204
Sample ID:	177713046	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	11-DEC-06		
Receive Date:	14-DEC-06		
Collector:	Client		
Moisture:	9.1%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N
Rad Gamma Spec Analysis													
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium-228		1.46	+/-0.259	0.0733	+/-0.259	0.147	pCi/g		MJH1	12/20/06	0815	595952	
Americium-241	U	-0.0558	+/-0.121	0.097	+/-0.121	0.194	pCi/g						
Bismuth-212		1.10	+/-0.328	0.155	+/-0.328	0.309	pCi/g						
Bismuth-214		1.54	+/-0.175	0.0372	+/-0.175	0.0743	pCi/g						
Cesium-134	UI	0.00	+/-0.0467	0.0255	+/-0.0467	0.051	pCi/g						
Cesium-137	U	0.00207	+/-0.026	0.0221	+/-0.026	0.0442	pCi/g						
Cobalt-60	U	-0.00299	+/-0.0283	0.0229	+/-0.0283	0.0459	pCi/g						
Europium-152	U	0.0962	+/-0.0875	0.0579	+/-0.0875	0.116	pCi/g						
Europium-154	U	0.0103	+/-0.0856	0.0724	+/-0.0856	0.145	pCi/g						
Europium-155	U	0.0426	+/-0.100	0.0663	+/-0.100	0.133	pCi/g						
Lead-212		1.63	+/-0.147	0.0328	+/-0.147	0.0655	pCi/g						
Lead-214		1.85	+/-0.194	0.0385	+/-0.194	0.0769	pCi/g						
Manganese-54	U	0.00133	+/-0.0254	0.0222	+/-0.0254	0.0443	pCi/g						
Niobium-94	U	-0.0188	+/-0.0234	0.0188	+/-0.0234	0.0376	pCi/g						
Potassium-40		25.6	+/-1.86	0.167	+/-1.86	0.334	pCi/g						
Radium-226		1.54	+/-0.175	0.0372	+/-0.175	0.0743	pCi/g						
Silver-108m	U	-0.0127	+/-0.0217	0.0184	+/-0.0217	0.0368	pCi/g						
Thallium-208		0.487	+/-0.0641	0.0222	+/-0.0641	0.0443	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1214	595902

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

* A quality control analyte recovery is outside of specified acceptance criteria
< Result is less than value reported

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–045–I Project: YANK01204
Sample ID: 177713046 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522-0005-046-I	Project:	YANK01204
Sample ID:	177713047	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	11-DEC-06		
Receive Date:	14-DEC-06		
Collector:	Client		
Moisture:	7.06%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium-228		2.52	+/-0.372	0.0924	+/-0.372	0.185	pCi/g		MJH1	12/20/06	0816	595952	
Americium-241	U	0.110	+/-0.120	0.095	+/-0.120	0.190	pCi/g						
Bismuth-212		1.58	+/-0.481	0.201	+/-0.481	0.402	pCi/g						
Bismuth-214		1.95	+/-0.225	0.045	+/-0.225	0.0898	pCi/g						
Cesium-134	UI	0.00	+/-0.0635	0.036	+/-0.0635	0.072	pCi/g						
Cesium-137	U	-0.0416	+/-0.0397	0.0259	+/-0.0397	0.0518	pCi/g						
Cobalt-60	U	-0.00126	+/-0.0342	0.0283	+/-0.0342	0.0566	pCi/g						
Europium-152	U	-0.116	+/-0.105	0.069	+/-0.105	0.138	pCi/g						
Europium-154	U	-0.0534	+/-0.0993	0.079	+/-0.0993	0.158	pCi/g						
Europium-155	UI	0.00	+/-0.147	0.0782	+/-0.147	0.156	pCi/g						
Lead-212		2.39	+/-0.213	0.0419	+/-0.213	0.0837	pCi/g						
Lead-214		1.93	+/-0.207	0.0511	+/-0.207	0.102	pCi/g						
Manganese-54	U	0.000521	+/-0.0333	0.0285	+/-0.0333	0.057	pCi/g						
Niobium-94	U	-0.000226	+/-0.028	0.0243	+/-0.028	0.0487	pCi/g						
Potassium-40		28.2	+/-2.11	0.216	+/-2.11	0.432	pCi/g						
Radium-226		1.95	+/-0.225	0.045	+/-0.225	0.0898	pCi/g						
Silver-108m	U	0.00672	+/-0.0268	0.0232	+/-0.0268	0.0463	pCi/g						
Thallium-208		0.742	+/-0.0886	0.0239	+/-0.0886	0.0477	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1214	595902

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

* A quality control analyte recovery is outside of specified acceptance criteria
< Result is less than value reported

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–046–I Project: YANK01204
Sample ID: 177713047 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522-0005-047-I	Project:	YANK01204
Sample ID:	177713048	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	11-DEC-06		
Receive Date:	14-DEC-06		
Collector:	Client		
Moisture:	14.9%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium-228		1.45	+/-0.245	0.0757	+/-0.245	0.151	pCi/g		MJH1	12/20/06	0816	595952	
Americium-241	U	0.152	+/-0.109	0.0917	+/-0.109	0.183	pCi/g						
Bismuth-212		0.799	+/-0.348	0.158	+/-0.348	0.316	pCi/g						
Bismuth-214		1.27	+/-0.145	0.0383	+/-0.145	0.0766	pCi/g						
Cesium-134	UI	0.00	+/-0.0564	0.029	+/-0.0564	0.058	pCi/g						
Cesium-137	U	-0.0113	+/-0.0279	0.0231	+/-0.0279	0.0461	pCi/g						
Cobalt-60	U	-0.0233	+/-0.0328	0.0213	+/-0.0328	0.0426	pCi/g						
Europium-152	U	-0.0354	+/-0.0923	0.0602	+/-0.0923	0.120	pCi/g						
Europium-154	U	-0.0712	+/-0.0916	0.0705	+/-0.0916	0.141	pCi/g						
Europium-155	U	0.0315	+/-0.0906	0.0679	+/-0.0906	0.136	pCi/g						
Lead-212		1.40	+/-0.139	0.0347	+/-0.139	0.0694	pCi/g						
Lead-214		1.40	+/-0.165	0.0425	+/-0.165	0.0849	pCi/g						
Manganese-54	U	0.017	+/-0.028	0.0223	+/-0.028	0.0446	pCi/g						
Niobium-94	U	0.0278	+/-0.0235	0.0213	+/-0.0235	0.0426	pCi/g						
Potassium-40		20.6	+/-1.66	0.159	+/-1.66	0.318	pCi/g						
Radium-226		1.27	+/-0.145	0.0383	+/-0.145	0.0766	pCi/g						
Silver-108m	U	-0.0189	+/-0.0234	0.0195	+/-0.0234	0.039	pCi/g						
Thallium-208		0.439	+/-0.0638	0.0213	+/-0.0638	0.0426	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1214	595902

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

* A quality control analyte recovery is outside of specified acceptance criteria
< Result is less than value reported

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

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–047–I Project: YANK01204
Sample ID: 177713048 Client ID: YANK001
Vol. Recv.:

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

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522–0005–048–I	Project:	YANK01204
Sample ID:	177713049	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	11–DEC–06		
Receive Date:	14–DEC–06		
Collector:	Client		
Moisture:	9.15%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth													
Waived													
Actinium–228		1.70	+/–0.332	0.102	+/–0.332	0.217	pCi/g		MJH1	12/20/06	0815	595952	
Americium–241	U	0.0288	+/–0.052	0.0424	+/–0.052	0.0867	pCi/g						
Bismuth–212		1.88	+/–0.476	0.238	+/–0.476	0.499	pCi/g						
Bismuth–214		1.73	+/–0.155	0.0542	+/–0.155	0.114	pCi/g						
Cesium–134	UI	0.00	+/–0.0513	0.0438	+/–0.0513	0.0912	pCi/g						
Cesium–137	U	–0.0265	+/–0.0374	0.0303	+/–0.0374	0.0637	pCi/g						
Cobalt–60	U	–0.0154	+/–0.0394	0.0317	+/–0.0394	0.068	pCi/g						
Europium–152	U	0.136	+/–0.090	0.0698	+/–0.090	0.145	pCi/g						
Europium–154	U	–0.0597	+/–0.115	0.0924	+/–0.115	0.197	pCi/g						
Europium–155	U	0.0902	+/–0.119	0.0716	+/–0.119	0.147	pCi/g						
Lead–212		1.69	+/–0.100	0.0399	+/–0.100	0.0822	pCi/g						
Lead–214		1.87	+/–0.158	0.0547	+/–0.158	0.113	pCi/g						
Manganese–54	U	0.00968	+/–0.0373	0.0314	+/–0.0373	0.0661	pCi/g						
Niobium–94	U	–0.00355	+/–0.0338	0.0283	+/–0.0338	0.0592	pCi/g						
Potassium–40		24.6	+/–1.48	0.279	+/–1.48	0.604	pCi/g						
Radium–226		1.73	+/–0.155	0.0542	+/–0.155	0.114	pCi/g						
Silver–108m	U	–0.00548	+/–0.0275	0.024	+/–0.0275	0.0502	pCi/g						
Thallium–208		0.595	+/–0.0699	0.0264	+/–0.0699	0.0556	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/14/06	1214	595902

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

* A quality control analyte recovery is outside of specified acceptance criteria
< Result is less than value reported

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Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–048–I Project: YANK01204
Sample ID: 177713049 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Company : Connecticut Yankee Atomic Power
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East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522–0005–049–I	Project:	YANK01204
Sample ID:	177713050	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	11–DEC–06		
Receive Date:	14–DEC–06		
Collector:	Client		
Moisture:	7.27%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst Date	Time	Batch	M
Rad Gamma Spec Analysis												
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth Waived												
Actinium–228		2.51	+/–0.389	0.0669	+/–0.389	0.142	pCi/g		MJH1	12/20/06 0928	595952	
Americium–241	U	–0.0244	+/–0.102	0.0946	+/–0.102	0.193	pCi/g					
Bismuth–212		1.57	+/–0.366	0.159	+/–0.366	0.335	pCi/g					
Bismuth–214		1.71	+/–0.186	0.0401	+/–0.186	0.0837	pCi/g					
Cesium–134	UI	0.00	+/–0.051	0.0325	+/–0.051	0.0673	pCi/g					
Cesium–137	U	0.0364	+/–0.0284	0.0216	+/–0.0284	0.0451	pCi/g					
Cobalt–60	U	0.0108	+/–0.0262	0.0232	+/–0.0262	0.0496	pCi/g					
Europium–152	U	0.00641	+/–0.064	0.054	+/–0.064	0.112	pCi/g					
Europium–154	U	0.0124	+/–0.0753	0.0656	+/–0.0753	0.140	pCi/g					
Europium–155	U	0.113	+/–0.101	0.0629	+/–0.101	0.129	pCi/g					
Lead–212		2.57	+/–0.227	0.0324	+/–0.227	0.0666	pCi/g					
Lead–214		1.88	+/–0.194	0.0407	+/–0.194	0.0842	pCi/g					
Manganese–54	UI	0.00	+/–0.0333	0.0203	+/–0.0333	0.0427	pCi/g					
Niobium–94	U	0.00905	+/–0.0227	0.0199	+/–0.0227	0.0415	pCi/g					
Potassium–40		23.3	+/–1.93	0.177	+/–1.93	0.387	pCi/g					
Radium–226		1.71	+/–0.186	0.0401	+/–0.186	0.0837	pCi/g					
Silver–108m	U	–0.0105	+/–0.0205	0.0178	+/–0.0205	0.037	pCi/g					
Thallium–208		0.762	+/–0.085	0.023	+/–0.085	0.0478	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/14/06	1214	595902

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

* A quality control analyte recovery is outside of specified acceptance criteria
< Result is less than value reported

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–049–I Project: YANK01204
Sample ID: 177713050 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Report Date: December 28, 2006

Client Sample ID:	9522–0005–050–I	Project:	YANK01204
Sample ID:	177713051	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	11–DEC–06		
Receive Date:	14–DEC–06		
Collector:	Client		
Moisture:	10%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium–228		1.58	+/–0.216	0.0979	+/–0.216	0.208	pCi/g		MJH1	12/20/06	0929	595952	
Americium–241	U	0.0175	+/–0.0407	0.0378	+/–0.0407	0.0774	pCi/g						
Bismuth–212		1.04	+/–0.428	0.207	+/–0.428	0.437	pCi/g						
Bismuth–214		1.74	+/–0.150	0.0481	+/–0.150	0.101	pCi/g						
Cesium–134	UI	0.00	+/–0.0588	0.0347	+/–0.0588	0.0727	pCi/g						
Cesium–137	U	0.0173	+/–0.0348	0.0271	+/–0.0348	0.0571	pCi/g						
Cobalt–60	U	0.0135	+/–0.0324	0.0285	+/–0.0324	0.0615	pCi/g						
Europium–152	U	–0.0638	+/–0.070	0.0598	+/–0.070	0.125	pCi/g						
Europium–154	U	–0.0198	+/–0.0997	0.0833	+/–0.0997	0.179	pCi/g						
Europium–155	UI	0.00	+/–0.126	0.0597	+/–0.126	0.123	pCi/g						
Lead–212		1.78	+/–0.0934	0.0363	+/–0.0934	0.0749	pCi/g						
Lead–214		2.02	+/–0.145	0.0434	+/–0.145	0.0906	pCi/g						
Manganese–54	U	0.0243	+/–0.035	0.0243	+/–0.035	0.0517	pCi/g						
Niobium–94	U	0.00913	+/–0.029	0.025	+/–0.029	0.0526	pCi/g						
Potassium–40		24.9	+/–1.39	0.178	+/–1.39	0.403	pCi/g						
Radium–226		1.74	+/–0.150	0.0481	+/–0.150	0.101	pCi/g						
Silver–108m	U	–0.00431	+/–0.0242	0.0211	+/–0.0242	0.0442	pCi/g						
Thallium–208		0.578	+/–0.0641	0.0244	+/–0.0641	0.0514	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/14/06	1214	595902

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

* A quality control analyte recovery is outside of specified acceptance criteria

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–050–I Project: YANK01204
Sample ID: 177713051 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N

< Result is less than value reported
> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522–0005–051–I	Project:	YANK01204
Sample ID:	177713052	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	11–DEC–06		
Receive Date:	14–DEC–06		
Collector:	Client		
Moisture:	9.01%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth													
Waived													
Actinium–228		1.83	+/–0.281	0.0661	+/–0.281	0.139	pCi/g		MJH1	12/20/06	0930	595952	
Americium–241	U	–0.0849	+/–0.114	0.0887	+/–0.114	0.181	pCi/g						
Bismuth–212		1.16	+/–0.359	0.155	+/–0.359	0.322	pCi/g						
Bismuth–214		1.72	+/–0.187	0.0383	+/–0.187	0.0795	pCi/g						
Cesium–134	UI	0.00	+/–0.0521	0.0266	+/–0.0521	0.0551	pCi/g						
Cesium–137	U	0.0171	+/–0.0245	0.0222	+/–0.0245	0.0461	pCi/g						
Cobalt–60	U	0.0322	+/–0.0242	0.0221	+/–0.0242	0.0468	pCi/g						
Europium–152	U	0.0267	+/–0.0578	0.049	+/–0.0578	0.101	pCi/g						
Europium–154	U	–0.0147	+/–0.0753	0.0618	+/–0.0753	0.131	pCi/g						
Europium–155	UI	0.00	+/–0.0955	0.0547	+/–0.0955	0.112	pCi/g						
Lead–212		1.83	+/–0.156	0.0292	+/–0.156	0.0599	pCi/g						
Lead–214		1.94	+/–0.186	0.0362	+/–0.186	0.0748	pCi/g						
Manganese–54	U	0.0155	+/–0.0246	0.0218	+/–0.0246	0.0454	pCi/g						
Niobium–94	U	0.0172	+/–0.0223	0.0191	+/–0.0223	0.0397	pCi/g						
Potassium–40		25.7	+/–2.05	0.158	+/–2.05	0.342	pCi/g						
Radium–226		1.72	+/–0.187	0.0383	+/–0.187	0.0795	pCi/g						
Silver–108m	U	0.00893	+/–0.0206	0.018	+/–0.0206	0.0372	pCi/g						
Thallium–208		0.573	+/–0.066	0.0197	+/–0.066	0.0409	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/14/06	1214	595902

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

* A quality control analyte recovery is outside of specified acceptance criteria
< Result is less than value reported

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–051–I Project: YANK01204
Sample ID: 177713052 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522–0005–052–I	Project:	YANK01204
Sample ID:	177713053	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	11–DEC–06		
Receive Date:	14–DEC–06		
Collector:	Client		
Moisture:	8.64%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst Date	Time	Batch	M
Rad Gamma Spec Analysis												
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth Waived												
Actinium–228		1.73	+/–0.262	0.0586	+/–0.262	0.127	pCi/g		MJH1	12/20/06 0930	595952	
Americium–241	U	–0.0479	+/–0.0857	0.066	+/–0.0857	0.136	pCi/g					
Bismuth–212		1.20	+/–0.374	0.144	+/–0.374	0.306	pCi/g					
Bismuth–214		1.38	+/–0.182	0.0359	+/–0.182	0.076	pCi/g					
Cesium–134	UI	0.00	+/–0.046	0.0272	+/–0.046	0.0572	pCi/g					
Cesium–137	U	0.0357	+/–0.0338	0.0192	+/–0.0338	0.0407	pCi/g					
Cobalt–60	U	0.0151	+/–0.0247	0.0223	+/–0.0247	0.0483	pCi/g					
Europium–152	U	0.015	+/–0.0586	0.0504	+/–0.0586	0.105	pCi/g					
Europium–154	U	–0.0378	+/–0.0695	0.0562	+/–0.0695	0.123	pCi/g					
Europium–155	U	0.077	+/–0.0842	0.0536	+/–0.0842	0.111	pCi/g					
Lead–212		1.56	+/–0.141	0.0321	+/–0.141	0.0664	pCi/g					
Lead–214		1.45	+/–0.154	0.0361	+/–0.154	0.0755	pCi/g					
Manganese–54	U	–0.00549	+/–0.0245	0.0203	+/–0.0245	0.0432	pCi/g					
Niobium–94	U	–0.00478	+/–0.0194	0.0163	+/–0.0194	0.0347	pCi/g					
Potassium–40		21.1	+/–1.76	0.160	+/–1.76	0.357	pCi/g					
Radium–226		1.38	+/–0.182	0.0359	+/–0.182	0.076	pCi/g					
Silver–108m	U	–0.0118	+/–0.020	0.0159	+/–0.020	0.0336	pCi/g					
Thallium–208		0.530	+/–0.0729	0.0193	+/–0.0729	0.0408	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/14/06	1214	595902

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

* A quality control analyte recovery is outside of specified acceptance criteria
< Result is less than value reported

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

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–052–I Project: YANK01204
Sample ID: 177713053 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522–0005–053–I	Project:	YANK01204
Sample ID:	177713054	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	11–DEC–06		
Receive Date:	14–DEC–06		
Collector:	Client		
Moisture:	8.38%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium–228		2.00	+/–0.360	0.141	+/–0.360	0.301	pCi/g		MJH1	12/28/06	1401	595952	
Americium–241	U	–0.0282	+/–0.054	0.0485	+/–0.054	0.0996	pCi/g						
Bismuth–212		1.12	+/–0.571	0.266	+/–0.571	0.568	pCi/g						
Bismuth–214		1.90	+/–0.187	0.0555	+/–0.187	0.119	pCi/g						
Cesium–134	UI	0.00	+/–0.0654	0.0485	+/–0.0654	0.102	pCi/g						
Cesium–137	U	0.0193	+/–0.0452	0.0352	+/–0.0452	0.0749	pCi/g						
Cobalt–60	U	–0.00334	+/–0.0414	0.0346	+/–0.0414	0.0764	pCi/g						
Europium–152	U	0.0519	+/–0.0926	0.0848	+/–0.0926	0.178	pCi/g						
Europium–154	U	0.00511	+/–0.121	0.103	+/–0.121	0.225	pCi/g						
Europium–155	UI	0.00	+/–0.136	0.0777	+/–0.136	0.160	pCi/g						
Lead–212		2.23	+/–0.126	0.0451	+/–0.126	0.0939	pCi/g						
Lead–214		1.91	+/–0.175	0.0566	+/–0.175	0.119	pCi/g						
Manganese–54	U	–0.0166	+/–0.0423	0.0339	+/–0.0423	0.0728	pCi/g						
Niobium–94	U	0.00824	+/–0.0378	0.0324	+/–0.0378	0.0689	pCi/g						
Potassium–40		25.8	+/–1.79	0.283	+/–1.79	0.636	pCi/g						
Radium–226		1.90	+/–0.187	0.0555	+/–0.187	0.119	pCi/g						
Silver–108m	U	0.000386	+/–0.0319	0.0279	+/–0.0319	0.059	pCi/g						
Thallium–208		0.700	+/–0.0875	0.0314	+/–0.0875	0.0668	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/14/06	1214	595902

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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< Result is less than value reported

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–053–I Project: YANK01204
Sample ID: 177713054 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522–0005–054–I	Project:	YANK01204
Sample ID:	177713055	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	11–DEC–06		
Receive Date:	14–DEC–06		
Collector:	Client		
Moisture:	8.83%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth													
Waived													
Actinium–228		1.61	+/–0.203	0.0634	+/–0.203	0.134	pCi/g		MJH1	12/20/06	0945	595952	
Americium–241	U	–0.0188	+/–0.0294	0.0263	+/–0.0294	0.0536	pCi/g						
Bismuth–212		0.727	+/–0.322	0.142	+/–0.322	0.298	pCi/g						
Bismuth–214		1.31	+/–0.110	0.0339	+/–0.110	0.071	pCi/g						
Cesium–134	U	0.0471	+/–0.0397	0.0271	+/–0.0397	0.0564	pCi/g						
Cesium–137	U	0.0305	+/–0.0337	0.0189	+/–0.0337	0.0397	pCi/g						
Cobalt–60	U	0.00324	+/–0.0234	0.0195	+/–0.0234	0.0419	pCi/g						
Europium–152	U	–0.00973	+/–0.0506	0.0394	+/–0.0506	0.082	pCi/g						
Europium–154	U	0.0343	+/–0.0703	0.0607	+/–0.0703	0.129	pCi/g						
Europium–155	UI	0.00	+/–0.0643	0.0397	+/–0.0643	0.0814	pCi/g						
Lead–212		1.34	+/–0.0611	0.025	+/–0.0611	0.0514	pCi/g						
Lead–214		1.40	+/–0.0899	0.0325	+/–0.0899	0.0673	pCi/g						
Manganese–54	U	0.034	+/–0.0228	0.0179	+/–0.0228	0.0377	pCi/g						
Niobium–94	U	0.0238	+/–0.0201	0.0188	+/–0.0201	0.0392	pCi/g						
Potassium–40		19.3	+/–0.964	0.152	+/–0.964	0.334	pCi/g						
Radium–226		1.31	+/–0.110	0.0339	+/–0.110	0.071	pCi/g						
Silver–108m	U	–0.00558	+/–0.0182	0.0154	+/–0.0182	0.0321	pCi/g						
Thallium–208		0.477	+/–0.055	0.0173	+/–0.055	0.0364	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/14/06	1214	595902

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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< Result is less than value reported

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–054–I Project: YANK01204
Sample ID: 177713055 Client ID: YANK001
Vol. Recv.:

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

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522-0005-055-I	Project:	YANK01204
Sample ID:	177713056	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	11-DEC-06		
Receive Date:	14-DEC-06		
Collector:	Client		
Moisture:	8.87%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth													
Waived													
Actinium-228		1.24	+/-0.211	0.0626	+/-0.211	0.134	pCi/g		MJH1	12/20/06	0946	595952	
Americium-241	U	0.0717	+/-0.0372	0.0517	+/-0.0372	0.107	pCi/g						
Bismuth-212	U	0.304	+/-0.380	0.159	+/-0.380	0.335	pCi/g						
Bismuth-214		0.978	+/-0.141	0.0375	+/-0.141	0.0789	pCi/g						
Cesium-134	UI	0.00	+/-0.0362	0.0261	+/-0.0362	0.0548	pCi/g						
Cesium-137	U	-0.00168	+/-0.0221	0.0193	+/-0.0221	0.0407	pCi/g						
Cobalt-60	U	-0.0128	+/-0.0208	0.0156	+/-0.0208	0.0347	pCi/g						
Europium-152	U	-0.0096	+/-0.0567	0.0484	+/-0.0567	0.101	pCi/g						
Europium-154	U	0.0321	+/-0.069	0.0596	+/-0.069	0.129	pCi/g						
Europium-155	U	0.0551	+/-0.0567	0.0542	+/-0.0567	0.112	pCi/g						
Lead-212		1.30	+/-0.123	0.028	+/-0.123	0.058	pCi/g						
Lead-214		1.22	+/-0.146	0.032	+/-0.146	0.0671	pCi/g						
Manganese-54	U	0.0161	+/-0.0221	0.0199	+/-0.0221	0.0422	pCi/g						
Niobium-94	U	-0.00115	+/-0.0192	0.0167	+/-0.0192	0.0354	pCi/g						
Potassium-40		18.6	+/-1.55	0.145	+/-1.55	0.324	pCi/g						
Radium-226		0.978	+/-0.141	0.0375	+/-0.141	0.0789	pCi/g						
Silver-108m	U	0.0213	+/-0.0202	0.0181	+/-0.0202	0.0379	pCi/g						
Thallium-208		0.407	+/-0.0627	0.0184	+/-0.0627	0.0389	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1214	595902

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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< Result is less than value reported

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–055–I Project: YANK01204
Sample ID: 177713056 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522-0005-056-I	Project:	YANK01204
Sample ID:	177713057	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	11-DEC-06		
Receive Date:	14-DEC-06		
Collector:	Client		
Moisture:	5.48%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N
Rad Gamma Spec Analysis													
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium-228		0.440	+/-0.155	0.0689	+/-0.155	0.148	pCi/g		MJH1	12/20/06	1116	595952	
Americium-241	U	-0.00322	+/-0.0303	0.0277	+/-0.0303	0.0571	pCi/g						
Bismuth-212		0.371	+/-0.216	0.163	+/-0.216	0.345	pCi/g						
Bismuth-214		0.589	+/-0.105	0.0379	+/-0.105	0.0798	pCi/g						
Cesium-134	U	0.0405	+/-0.0396	0.026	+/-0.0396	0.0548	pCi/g						
Cesium-137	U	0.00564	+/-0.0254	0.0224	+/-0.0254	0.0472	pCi/g						
Cobalt-60	U	0.0261	+/-0.0234	0.0221	+/-0.0234	0.0477	pCi/g						
Europium-152	U	-0.0382	+/-0.0532	0.0441	+/-0.0532	0.0927	pCi/g						
Europium-154	U	-0.0243	+/-0.0749	0.0616	+/-0.0749	0.133	pCi/g						
Europium-155	U	0.0318	+/-0.0518	0.0467	+/-0.0518	0.0962	pCi/g						
Lead-212		0.520	+/-0.0621	0.0376	+/-0.0621	0.0773	pCi/g						
Lead-214		0.538	+/-0.0953	0.0343	+/-0.0953	0.0718	pCi/g						
Manganese-54	U	0.00407	+/-0.0253	0.019	+/-0.0253	0.0405	pCi/g						
Niobium-94	U	0.00369	+/-0.0223	0.0195	+/-0.0223	0.0411	pCi/g						
Potassium-40		9.06	+/-0.864	0.208	+/-0.864	0.451	pCi/g						
Radium-226		0.589	+/-0.105	0.0379	+/-0.105	0.0798	pCi/g						
Silver-108m	U	0.0188	+/-0.0178	0.0172	+/-0.0178	0.0362	pCi/g						
Thallium-208		0.208	+/-0.0555	0.0196	+/-0.0555	0.0413	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1214	595902

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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< Result is less than value reported

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–056–I Project: YANK01204
Sample ID: 177713057 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst Date	Time	Batch	N

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522–0005–057–I	Project:	YANK01204
Sample ID:	177713058	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	11–DEC–06		
Receive Date:	14–DEC–06		
Collector:	Client		
Moisture:	6.73%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium–228		0.903	+/–0.209	0.061	+/–0.209	0.122	pCi/g		MJH1	12/20/06	1117	595952	
Americium–241	U	0.0325	+/–0.115	0.0955	+/–0.115	0.191	pCi/g						
Bismuth–212		0.631	+/–0.250	0.150	+/–0.250	0.300	pCi/g						
Bismuth–214		0.851	+/–0.149	0.0373	+/–0.149	0.0746	pCi/g						
Cesium–134	UI	0.00	+/–0.0412	0.0257	+/–0.0412	0.0514	pCi/g						
Cesium–137	U	0.0231	+/–0.0255	0.0206	+/–0.0255	0.0412	pCi/g						
Cobalt–60	U	0.00332	+/–0.0223	0.019	+/–0.0223	0.038	pCi/g						
Europium–152	U	–0.0498	+/–0.0809	0.0519	+/–0.0809	0.104	pCi/g						
Europium–154	U	–0.0431	+/–0.0946	0.064	+/–0.0946	0.128	pCi/g						
Europium–155	U	0.0527	+/–0.0814	0.0666	+/–0.0814	0.133	pCi/g						
Lead–212		1.06	+/–0.107	0.0326	+/–0.107	0.0651	pCi/g						
Lead–214		1.04	+/–0.145	0.038	+/–0.145	0.076	pCi/g						
Manganese–54	U	0.0194	+/–0.0243	0.0222	+/–0.0243	0.0445	pCi/g						
Niobium–94	U	–0.00211	+/–0.0228	0.0192	+/–0.0228	0.0383	pCi/g						
Potassium–40		15.1	+/–1.33	0.192	+/–1.33	0.384	pCi/g						
Radium–226		0.851	+/–0.149	0.0373	+/–0.149	0.0746	pCi/g						
Silver–108m	U	0.0118	+/–0.0204	0.0185	+/–0.0204	0.0369	pCi/g						
Thallium–208		0.351	+/–0.058	0.0196	+/–0.058	0.0393	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/14/06	1214	595902

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

* A quality control analyte recovery is outside of specified acceptance criteria
< Result is less than value reported

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–057–I Project: YANK01204
Sample ID: 177713058 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst Date	Time	Batch	N

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 — Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522-0005-058-I	Project:	YANK01204
Sample ID:	177713059	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	11-DEC-06		
Receive Date:	14-DEC-06		
Collector:	Client		
Moisture:	6.47%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid-FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium-228		0.843	+/-0.191	0.0587	+/-0.191	0.117	pCi/g		MJH1	12/20/06	1118	595952	
Americium-241	U	0.0824	+/-0.0748	0.0628	+/-0.0748	0.125	pCi/g						
Bismuth-212		0.376	+/-0.282	0.133	+/-0.282	0.265	pCi/g						
Bismuth-214		0.733	+/-0.108	0.0338	+/-0.108	0.0675	pCi/g						
Cesium-134	UI	0.00	+/-0.0282	0.0231	+/-0.0282	0.0461	pCi/g						
Cesium-137	U	0.0374	+/-0.0293	0.0197	+/-0.0293	0.0394	pCi/g						
Cobalt-60	U	-0.0185	+/-0.0247	0.0191	+/-0.0247	0.0381	pCi/g						
Europium-152	U	-0.017	+/-0.0626	0.0471	+/-0.0626	0.0941	pCi/g						
Europium-154	U	-0.0114	+/-0.0679	0.0561	+/-0.0679	0.112	pCi/g						
Europium-155	U	0.0549	+/-0.0711	0.0498	+/-0.0711	0.0996	pCi/g						
Lead-212		0.835	+/-0.0876	0.0277	+/-0.0876	0.0553	pCi/g						
Lead-214		0.834	+/-0.104	0.0349	+/-0.104	0.0698	pCi/g						
Manganese-54	U	0.000747	+/-0.024	0.0181	+/-0.024	0.0361	pCi/g						
Niobium-94	U	0.00653	+/-0.0205	0.0161	+/-0.0205	0.0322	pCi/g						
Potassium-40		12.3	+/-1.13	0.147	+/-1.13	0.293	pCi/g						
Radium-226		0.733	+/-0.108	0.0338	+/-0.108	0.0675	pCi/g						
Silver-108m	U	0.00197	+/-0.0182	0.0159	+/-0.0182	0.0319	pCi/g						
Thallium-208		0.248	+/-0.048	0.0166	+/-0.048	0.0332	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1214	595902

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

* A quality control analyte recovery is outside of specified acceptance criteria
< Result is less than value reported

GEL LABORATORIES LLC

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

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–058–I Project: YANK01204
Sample ID: 177713059 Client ID: YANK001
Vol. Recv.:

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

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Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID:	9522–0005–059–I	Project:	YANK01204
Sample ID:	177713060	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	11–DEC–06		
Receive Date:	14–DEC–06		
Collector:	Client		
Moisture:	10.5%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Gamma Spec Analysis													
Gamma,Solid–FSS GAM & ALL FSS 226 Ingrowth Waived													
Actinium–228		0.781	+/–0.159	0.0593	+/–0.159	0.118	pCi/g		MJH1	12/20/06	1118	595952	
Americium–241	U	0.0217	+/–0.0912	0.076	+/–0.0912	0.152	pCi/g						
Bismuth–212		0.547	+/–0.207	0.132	+/–0.207	0.265	pCi/g						
Bismuth–214		0.775	+/–0.110	0.0336	+/–0.110	0.0671	pCi/g						
Cesium–134	U	0.030	+/–0.0258	0.0212	+/–0.0258	0.0423	pCi/g						
Cesium–137	UI	0.00	+/–0.0303	0.0171	+/–0.0303	0.0342	pCi/g						
Cobalt–60	U	0.0196	+/–0.0202	0.019	+/–0.0202	0.0379	pCi/g						
Europium–152	U	–0.0349	+/–0.0641	0.0482	+/–0.0641	0.0963	pCi/g						
Europium–154	U	–0.0738	+/–0.0705	0.0517	+/–0.0705	0.103	pCi/g						
Europium–155	U	0.0652	+/–0.0708	0.0567	+/–0.0708	0.113	pCi/g						
Lead–212		0.920	+/–0.0986	0.0279	+/–0.0986	0.0558	pCi/g						
Lead–214		0.887	+/–0.117	0.0337	+/–0.117	0.0673	pCi/g						
Manganese–54	U	0.0186	+/–0.022	0.0204	+/–0.022	0.0407	pCi/g						
Niobium–94	U	0.013	+/–0.020	0.0178	+/–0.020	0.0356	pCi/g						
Potassium–40		13.3	+/–1.16	0.151	+/–1.16	0.302	pCi/g						
Radium–226		0.775	+/–0.110	0.0336	+/–0.110	0.0671	pCi/g						
Silver–108m	U	–0.00136	+/–0.0194	0.0171	+/–0.0194	0.0342	pCi/g						
Thallium–208		0.281	+/–0.044	0.0166	+/–0.044	0.0331	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	JMB1	12/14/06	1214	595902

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

* A quality control analyte recovery is outside of specified acceptance criteria
< Result is less than value reported

GEL LABORATORIES LLC

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

Certificate of Analysis

Company : Connecticut Yankee Atomic Power
Address : 362 Injun Hollow Rd

East Hampton, Connecticut 06424 Report Date: December 28, 2006
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Client Sample ID: 9522–0005–059–I Project: YANK01204
Sample ID: 177713060 Client ID: YANK001
Vol. Recv.:

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

> Result is greater than value reported
A The TIC is a suspected aldol–condensation product
B Target analyte was detected in the associated blank
BD Results are either below the MDC or tracer recovery is low
C Analyte has been confirmed by GC/MS analysis
D Results are reported from a diluted aliquot of the sample
H Analytical holding time was exceeded
J Value is estimated
N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
R Sample results are rejected
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UI Gamma Spectroscopy––Uncertain identification
X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y QC Samples were not spiked with this compound
^ RPD of sample and duplicate evaluated using +/–RL. Concentrations are <5X the RL
h Preparation or preservation holding time was exceeded
The above sample is reported on a dry weight basis.

QUALITY CONTROL DATA

GEL LABORATORIES LLC

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

QC Summary

Report Date: December 28, 2006
Page 1 of 16

Client : Connecticut Yankee Atomic Power
362 Injun Hollow Rd

East Hampton, Connecticut

Contact: Mr. Jack McCarthy

Workorder: 177713

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Alpha Spec										
Batch 596347										
QC1201247791 177713014 DUP										
Americium-241	U	0.040	U	-0.0279	pCi/g	1120		(0% - 100%)	PXH2	12/18/06 09:12
	Uncert:	+/-0.102		+/-0.0502						
	TPU:	+/-0.102		+/-0.0503						
Curium-242	U	0.0293	U	0.0867	pCi/g	99		(0% - 100%)		
	Uncert:	+/-0.0777		+/-0.120						
	TPU:	+/-0.0778		+/-0.121						
Curium-243/244	U	-0.0771	U	0.0898	pCi/g	2630		(0% - 100%)		
	Uncert:	+/-0.137		+/-0.177						
	TPU:	+/-0.137		+/-0.177						
QC1201247793 LCS										
Americium-241	13.2			11.6	pCi/g		88	(75%-125%)		
	Uncert:			+/-1.42						
	TPU:			+/-2.11						
Curium-242			U	-0.022	pCi/g					
	Uncert:			+/-0.0306						
	TPU:			+/-0.0307						
Curium-243/244	11.4			11.5	pCi/g		101	(75%-125%)		
	Uncert:			+/-1.43						
	TPU:			+/-2.10						
QC1201247790 MB										
Americium-241			U	-0.0743	pCi/g					
	Uncert:			+/-0.121						
	TPU:			+/-0.121						
Curium-242			U	-0.0168	pCi/g					
	Uncert:			+/-0.0232						
	TPU:			+/-0.0233						
Curium-243/244			U	-0.138	pCi/g					
	Uncert:			+/-0.125						
	TPU:			+/-0.126						
QC1201247792 177713014 MS										
Americium-241	13.7 U	0.040		16.3	pCi/g		119	(75%-125%)		
	Uncert:	+/-0.102		+/-1.59						
	TPU:	+/-0.102		+/-2.62						
Curium-242	U	0.0293	U	-0.02	pCi/g					
	Uncert:	+/-0.0777		+/-0.103						
	TPU:	+/-0.0778		+/-0.103						
Curium-243/244	11.8 U	-0.0771		11.9	pCi/g		101	(75%-125%)		
	Uncert:	+/-0.137		+/-1.37						
	TPU:	+/-0.137		+/-2.04						
Batch 596348										
QC1201247795 177713014 DUP										
Plutonium-238	U	-0.00725	U	0.0328	pCi/g	314		(0% - 100%)	PXH2	12/18/06 09:12

QC Summary

Workorder: 177713

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Alpha Spec										
Batch 596348										
	Uncert:	+/-0.0609		+/-0.0644						
	TPU:	+/-0.0609		+/-0.0644						
Plutonium-239/240	U	0.00966	U	0.0499	pCi/g	135		(0% - 100%)		
	Uncert:	+/-0.0917		+/-0.0935						
	TPU:	+/-0.0917		+/-0.0937						
QC1201247797 LCS										
Plutonium-238			U	0.0227	pCi/g			(75%-125%)		
	Uncert:			+/-0.0601						
	TPU:			+/-0.0602						
Plutonium-239/240	12.2			12.1	pCi/g		99	(75%-125%)		
	Uncert:			+/-1.18						
	TPU:			+/-1.70						
QC1201247794 MB										
Plutonium-238			U	-0.0271	pCi/g					
	Uncert:			+/-0.0614						
	TPU:			+/-0.0614						
Plutonium-239/240			U	-0.00565	pCi/g					
	Uncert:			+/-0.0629						
	TPU:			+/-0.0629						
QC1201247796 177713014 MS										
Plutonium-238	U	-0.00725	U	0.0289	pCi/g			(75%-125%)		
	Uncert:	+/-0.0609		+/-0.0567						
	TPU:	+/-0.0609		+/-0.0568						
Plutonium-239/240	12.6 U	0.00966		12.4	pCi/g		98	(75%-125%)		
	Uncert:	+/-0.0917		+/-1.18						
	TPU:	+/-0.0917		+/-1.70						
Batch 596349										
QC1201247799 177713014 DUP										
Plutonium-241	U	3.34	U	4.31	pCi/g	0		(0% - 100%)	PXH2	12/20/06 09:08
	Uncert:	+/-7.15		+/-8.30						
	TPU:	+/-7.16		+/-8.31						
QC1201247801 LCS										
Plutonium-241	136			120	pCi/g		88	(75%-125%)		12/20/06 09:40
	Uncert:			+/-11.8						
	TPU:			+/-16.8						
QC1201247798 MB										
Plutonium-241			U	7.60	pCi/g					12/20/06 08:52
	Uncert:			+/-7.14						
	TPU:			+/-7.18						
QC1201247800 177713014 MS										
Plutonium-241	142 U	3.34		147	pCi/g		103	(75%-125%)		12/20/06 09:24
	Uncert:	+/-7.15		+/-14.2						
	TPU:	+/-7.16		+/-20.7						
Rad Gamma Spec										
Batch 595950										
QC1201246865 177713010 DUP										
Actinium-228		0.565		0.615	pCi/g	8		(0% - 100%)	MJH1	12/16/06 12:54
	Uncert:	+/-0.204		+/-0.0901						
				+/-0.0901						

QC Summary

Workorder: 177713

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch 595950											
	TPU:	+/-0.204									
Americium-241	U	0.0074	U	-0.127	pCi/g	225		(0% - 100%)			
	Uncert:	+/-0.0316		+/-0.0602							
	TPU:	+/-0.0316		+/-0.0602							
Bismuth-212	U	0.309		0.376	pCi/g	20		(0% - 100%)			
	Uncert:	+/-0.412		+/-0.149							
	TPU:	+/-0.412		+/-0.149							
Bismuth-214		0.522		0.419	pCi/g	22		(0% - 100%)			
	Uncert:	+/-0.117		+/-0.0507							
	TPU:	+/-0.117		+/-0.0507							
Cesium-134	U	0.00353	UI	0.00	pCi/g	170		(0% - 100%)			
	Uncert:	+/-0.0304		+/-0.0201							
	TPU:	+/-0.0304		+/-0.0201							
Cesium-137		0.048	U	0.020	pCi/g	82		(0% - 100%)			
	Uncert:	+/-0.0323		+/-0.0218							
	TPU:	+/-0.0323		+/-0.0218							
Cobalt-60	U	-0.00288	U	0.0152	pCi/g	293		(0% - 100%)			
	Uncert:	+/-0.028		+/-0.0156							
	TPU:	+/-0.028		+/-0.0156							
Europium-152	U	-0.0218	U	0.00312	pCi/g	267		(0% - 100%)			
	Uncert:	+/-0.0579		+/-0.033							
	TPU:	+/-0.0579		+/-0.033							
Europium-154	U	0.0269	U	0.0303	pCi/g	12		(0% - 100%)			
	Uncert:	+/-0.0774		+/-0.0384							
	TPU:	+/-0.0774		+/-0.0384							
Europium-155	U	0.0239	UI	0.00	pCi/g	100		(0% - 100%)			
	Uncert:	+/-0.0549		+/-0.0515							
	TPU:	+/-0.0549		+/-0.0515							
Lead-212		0.525		0.588	pCi/g	11		(0% - 20%)			
	Uncert:	+/-0.0749		+/-0.0352							
	TPU:	+/-0.0749		+/-0.0352							
Lead-214		0.596		0.518	pCi/g	14		(0% - 20%)			
	Uncert:	+/-0.0908		+/-0.0563							
	TPU:	+/-0.0908		+/-0.0563							
Manganese-54	U	0.00912	U	-0.0048	pCi/g	644		(0% - 100%)			
	Uncert:	+/-0.0303		+/-0.0128							
	TPU:	+/-0.0303		+/-0.0128							
Niobium-94	U	0.00956	U	-0.000632	pCi/g	228		(0% - 100%)			
	Uncert:	+/-0.0234		+/-0.0107							
	TPU:	+/-0.0234		+/-0.0107							
Potassium-40		9.69		10.3	pCi/g	6		(0% - 20%)			
	Uncert:	+/-0.960		+/-0.505							
	TPU:	+/-0.960		+/-0.505							
Radium-226		0.522		0.419	pCi/g	22		(0% - 100%)			
	Uncert:	+/-0.117		+/-0.0507							
	TPU:	+/-0.117		+/-0.0507							
Silver-108m	U	0.0109	U	-0.0117	pCi/g	5440		(0% - 100%)			
	Uncert:	+/-0.0217		+/-0.0112							

QC Summary

Workorder: 177713

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch 595950											
	TPU:	+/-0.0217		+/-0.0112							
Thallium-208		0.187		0.176	pCi/g	6		(0% - 100%)			
	Uncert:	+/-0.0514		+/-0.0228							
	TPU:	+/-0.0514		+/-0.0228							
QC1201246866 LCS											
Actinium-228			U	0.203	pCi/g					12/16/06	11:08
	Uncert:			+/-0.541							
	TPU:			+/-0.541							
Americium-241	23.4			25.8	pCi/g		110	(75%-125%)			
	Uncert:			+/-2.85							
	TPU:			+/-2.85							
Bismuth-212			U	-0.684	pCi/g						
	Uncert:			+/-0.906							
	TPU:			+/-0.906							
Bismuth-214			U	0.265	pCi/g						
	Uncert:			+/-0.214							
	TPU:			+/-0.214							
Cesium-134			U	0.0265	pCi/g						
	Uncert:			+/-0.169							
	TPU:			+/-0.169							
Cesium-137	9.51			10.2	pCi/g		107	(75%-125%)			
	Uncert:			+/-0.891							
	TPU:			+/-0.891							
Cobalt-60	13.9			14.6	pCi/g		105	(75%-125%)			
	Uncert:			+/-1.09							
	TPU:			+/-1.09							
Europium-152			U	-0.335	pCi/g						
	Uncert:			+/-0.297							
	TPU:			+/-0.297							
Europium-154			U	0.0602	pCi/g						
	Uncert:			+/-0.248							
	TPU:			+/-0.248							
Europium-155			U	0.322	pCi/g						
	Uncert:			+/-0.303							
	TPU:			+/-0.303							
Lead-212			U	-0.00758	pCi/g						
	Uncert:			+/-0.146							
	TPU:			+/-0.146							
Lead-214			U	-0.0446	pCi/g						
	Uncert:			+/-0.214							
	TPU:			+/-0.214							
Manganese-54			U	-0.0203	pCi/g						
	Uncert:			+/-0.124							
	TPU:			+/-0.124							
Niobium-94			U	0.0714	pCi/g						
	Uncert:			+/-0.0989							
	TPU:			+/-0.0989							
Potassium-40			U	0.257	pCi/g						

QC Summary

Workorder: 177713

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch 595950											
	Uncert:			+/-0.937							
	TPU:			+/-0.937							
Radium-226			U	0.265	pCi/g			(75%-125%)			
	Uncert:			+/-0.214							
	TPU:			+/-0.214							
Silver-108m			U	0.0715	pCi/g						
	Uncert:			+/-0.115							
	TPU:			+/-0.115							
Thallium-208			U	0.114	pCi/g						
	Uncert:			+/-0.111							
	TPU:			+/-0.111							
QC1201246864 MB											
Actinium-228			U	0.0285	pCi/g					12/16/06	12:53
	Uncert:			+/-0.0258							
	TPU:			+/-0.0258							
Americium-241			U	0.0299	pCi/g						
	Uncert:			+/-0.0262							
	TPU:			+/-0.0262							
Bismuth-212			UI	0.00	pCi/g						
	Uncert:			+/-0.0759							
	TPU:			+/-0.0759							
Bismuth-214			U	0.0205	pCi/g						
	Uncert:			+/-0.014							
	TPU:			+/-0.014							
Cesium-134			U	0.00626	pCi/g						
	Uncert:			+/-0.00695							
	TPU:			+/-0.00695							
Cesium-137			U	0.000568	pCi/g						
	Uncert:			+/-0.00658							
	TPU:			+/-0.00658							
Cobalt-60			U	0.00625	pCi/g						
	Uncert:			+/-0.0076							
	TPU:			+/-0.0076							
Europium-152			U	-0.0124	pCi/g						
	Uncert:			+/-0.0179							
	TPU:			+/-0.0179							
Europium-154			U	-0.00107	pCi/g						
	Uncert:			+/-0.0224							
	TPU:			+/-0.0224							
Europium-155			U	0.000693	pCi/g						
	Uncert:			+/-0.0186							
	TPU:			+/-0.0186							
Lead-212			UI	0.00	pCi/g						
	Uncert:			+/-0.0117							
	TPU:			+/-0.0117							
Lead-214			U	0.0123	pCi/g						
	Uncert:			+/-0.0209							
	TPU:			+/-0.0209							

QC Summary

Workorder: 177713

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 595950										
Manganese-54			U	-0.000414	pCi/g					
	Uncert:			+/-0.00651						
	TPU:			+/-0.00651						
Niobium-94			U	0.000173	pCi/g					
	Uncert:			+/-0.00659						
	TPU:			+/-0.00659						
Potassium-40			U	0.0121	pCi/g					
	Uncert:			+/-0.117						
	TPU:			+/-0.117						
Radium-226			U	0.0205	pCi/g					
	Uncert:			+/-0.014						
	TPU:			+/-0.014						
Silver-108m			U	-0.00185	pCi/g					
	Uncert:			+/-0.00619						
	TPU:			+/-0.00619						
Thallium-208			U	0.000709	pCi/g					
	Uncert:			+/-0.0104						
	TPU:			+/-0.0104						
Batch 595951										
QC1201246868 177713021 DUP										
Actinium-228		0.663		0.761	pCi/g	14		(0% - 100%)	MJH1	12/18/06 19:08
	Uncert:	+/-0.138		+/-0.125						
	TPU:	+/-0.138		+/-0.125						
Americium-241	U	0.00957	U	-0.00522	pCi/g	681		(0% - 100%)		
	Uncert:	+/-0.0259		+/-0.0199						
	TPU:	+/-0.0259		+/-0.0199						
Bismuth-212		0.336		0.577	pCi/g	53		(0% - 100%)		
	Uncert:	+/-0.205		+/-0.236						
	TPU:	+/-0.205		+/-0.236						
Bismuth-214		0.678		0.601	pCi/g	12		(0% - 100%)		
	Uncert:	+/-0.0799		+/-0.0684						
	TPU:	+/-0.0799		+/-0.0684						
Cesium-134	U	0.0222	UI	0.00	pCi/g	64		(0% - 100%)		
	Uncert:	+/-0.0213		+/-0.0298						
	TPU:	+/-0.0213		+/-0.0298						
Cesium-137	UI	0.00		0.0406	pCi/g	39		(0% - 100%)		
	Uncert:	+/-0.0372		+/-0.0249						
	TPU:	+/-0.0372		+/-0.0249						
Cobalt-60	U	0.00162	U	0.0068	pCi/g	123		(0% - 100%)		
	Uncert:	+/-0.0172		+/-0.0164						
	TPU:	+/-0.0172		+/-0.0164						
Europium-152	U	-0.00529	U	-0.0197	pCi/g	115		(0% - 100%)		
	Uncert:	+/-0.037		+/-0.0372						
	TPU:	+/-0.037		+/-0.0372						
Europium-154	U	-0.0139	U	0.00989	pCi/g	1190		(0% - 100%)		
	Uncert:	+/-0.0491		+/-0.0485						
	TPU:	+/-0.0491		+/-0.0485						
Europium-155	U	0.0242	U	0.0382	pCi/g	45		(0% - 100%)		

QC Summary

Workorder: 177713

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 595951										
	Uncert:	+/-0.0573		+/-0.0415						
	TPU:	+/-0.0573		+/-0.0415						
Lead-212		0.652		0.621	pCi/g	5		(0% - 20%)		
	Uncert:	+/-0.0437		+/-0.0467						
	TPU:	+/-0.0437		+/-0.0467						
Lead-214		0.627		0.660	pCi/g	5		(0% - 20%)		
	Uncert:	+/-0.0599		+/-0.0522						
	TPU:	+/-0.0599		+/-0.0522						
Manganese-54	U	0.0188	U	-0.0164	pCi/g	2930		(0% - 100%)		
	Uncert:	+/-0.0188		+/-0.0162						
	TPU:	+/-0.0188		+/-0.0162						
Niobium-94	U	0.00839	U	0.0103	pCi/g	21		(0% - 100%)		
	Uncert:	+/-0.0142		+/-0.0172						
	TPU:	+/-0.0142		+/-0.0172						
Potassium-40		11.1		10.8	pCi/g	3		(0% - 20%)		
	Uncert:	+/-0.581		+/-0.553						
	TPU:	+/-0.581		+/-0.553						
Radium-226		0.678		0.601	pCi/g	12		(0% - 100%)		
	Uncert:	+/-0.0799		+/-0.0684						
	TPU:	+/-0.0799		+/-0.0684						
Silver-108m	U	0.00341	U	-0.00247	pCi/g	1240		(0% - 100%)		
	Uncert:	+/-0.0128		+/-0.0121						
	TPU:	+/-0.0128		+/-0.0121						
Thallium-208		0.245		0.250	pCi/g	2		(0% - 100%)		
	Uncert:	+/-0.0382		+/-0.0343						
	TPU:	+/-0.0382		+/-0.0343						
QC1201246869 LCS										
Actinium-228			U	0.135	pCi/g					12/18/06 08:02
	Uncert:			+/-0.382						
	TPU:			+/-0.382						
Americium-241	23.4			24.4	pCi/g		104	(75%-125%)		
	Uncert:			+/-0.847						
	TPU:			+/-0.847						
Bismuth-212			U	-0.537	pCi/g					
	Uncert:			+/-0.682						
	TPU:			+/-0.682						
Bismuth-214			U	0.0565	pCi/g					
	Uncert:			+/-0.161						
	TPU:			+/-0.161						
Cesium-134			U	0.0153	pCi/g					
	Uncert:			+/-0.0983						
	TPU:			+/-0.0983						
Cesium-137	9.51			10.3	pCi/g		108	(75%-125%)		
	Uncert:			+/-0.364						
	TPU:			+/-0.364						
Cobalt-60	14.0			14.9	pCi/g		107	(75%-125%)		
	Uncert:			+/-0.490						
	TPU:			+/-0.490						

QC Summary

Workorder: 177713

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 595951										
Europium-152			U	-0.0468	pCi/g					
	Uncert:			+/-0.219						
	TPU:			+/-0.219						
Europium-154			U	0.0344	pCi/g					
	Uncert:			+/-0.200						
	TPU:			+/-0.200						
Europium-155			U	0.0525	pCi/g					
	Uncert:			+/-0.232						
	TPU:			+/-0.232						
Lead-212			U	0.040	pCi/g					
	Uncert:			+/-0.154						
	TPU:			+/-0.154						
Lead-214			U	-0.0528	pCi/g					
	Uncert:			+/-0.154						
	TPU:			+/-0.154						
Manganese-54			U	0.0141	pCi/g					
	Uncert:			+/-0.0899						
	TPU:			+/-0.0899						
Niobium-94			U	-0.0248	pCi/g					
	Uncert:			+/-0.0753						
	TPU:			+/-0.0753						
Potassium-40			U	-0.0614	pCi/g					
	Uncert:			+/-0.697						
	TPU:			+/-0.697						
Radium-226			U	0.0565	pCi/g			(75%-125%)		
	Uncert:			+/-0.161						
	TPU:			+/-0.161						
Silver-108m			U	-0.0219	pCi/g					
	Uncert:			+/-0.0795						
	TPU:			+/-0.0795						
Thallium-208			U	0.00579	pCi/g					
	Uncert:			+/-0.0832						
	TPU:			+/-0.0832						
QC1201246867 MB										
Actinium-228			U	0.00223	pCi/g					12/18/06 19:08
	Uncert:			+/-0.0255						
	TPU:			+/-0.0255						
Americium-241			U	0.00281	pCi/g					
	Uncert:			+/-0.0357						
	TPU:			+/-0.0357						
Bismuth-212			U	-0.00926	pCi/g					
	Uncert:			+/-0.055						
	TPU:			+/-0.055						
Bismuth-214			UI	0.00	pCi/g					
	Uncert:			+/-0.0247						
	TPU:			+/-0.0247						
Cesium-134			U	-0.00101	pCi/g					
	Uncert:			+/-0.00748						

QC Summary

Workorder: 177713

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch 595951											
	TPU:			+/-0.00748							
Cesium-137			U	-0.00013	pCi/g						
	Uncert:			+/-0.00721							
	TPU:			+/-0.00721							
Cobalt-60			U	0.00333	pCi/g						
	Uncert:			+/-0.0115							
	TPU:			+/-0.0115							
Europium-152			U	0.00655	pCi/g						
	Uncert:			+/-0.0192							
	TPU:			+/-0.0192							
Europium-154			U	0.00574	pCi/g						
	Uncert:			+/-0.0199							
	TPU:			+/-0.0199							
Europium-155			U	0.00323	pCi/g						
	Uncert:			+/-0.0182							
	TPU:			+/-0.0182							
Lead-212			UI	0.00	pCi/g						
	Uncert:			+/-0.0121							
	TPU:			+/-0.0121							
Lead-214			U	0.015	pCi/g						
	Uncert:			+/-0.015							
	TPU:			+/-0.015							
Manganese-54			U	0.000728	pCi/g						
	Uncert:			+/-0.00707							
	TPU:			+/-0.00707							
Niobium-94			U	0.00116	pCi/g						
	Uncert:			+/-0.00687							
	TPU:			+/-0.00687							
Potassium-40			U	0.183	pCi/g						
	Uncert:			+/-0.0961							
	TPU:			+/-0.0961							
Radium-226			UI	0.00	pCi/g						
	Uncert:			+/-0.0247							
	TPU:			+/-0.0247							
Silver-108m			U	-0.00308	pCi/g						
	Uncert:			+/-0.00596							
	TPU:			+/-0.00596							
Thallium-208			U	0.0042	pCi/g						
	Uncert:			+/-0.00784							
	TPU:			+/-0.00784							
Batch 595952											
QC1201246871 177713041 DUP											
Actinium-228		1.34		1.40	pCi/g	4		(0% - 100%)	MJH1	12/20/06	12:27
	Uncert:	+/-0.183		+/-0.191							
	TPU:	+/-0.183		+/-0.191							
Americium-241	U	0.0119	U	0.00394	pCi/g	101		(0% - 100%)			
	Uncert:	+/-0.0834		+/-0.0305							
	TPU:	+/-0.0834		+/-0.0305							

QC Summary

Workorder: 177713

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch 595952											
Bismuth-212		0.782		1.00	pCi/g	25		(0% - 100%)			
	Uncert:	+/-0.184		+/-0.315							
	TPU:	+/-0.184		+/-0.315							
Bismuth-214		1.08		1.16	pCi/g	7		(0% - 20%)			
	Uncert:	+/-0.117		+/-0.107							
	TPU:	+/-0.117		+/-0.107							
Cesium-134	UI	0.00	UI	0.00	pCi/g	26		(0% - 100%)			
	Uncert:	+/-0.0211		+/-0.0443							
	TPU:	+/-0.0211		+/-0.0443							
Cesium-137	UI	0.00	U	0.0313	pCi/g	28		(0% - 100%)			
	Uncert:	+/-0.0126		+/-0.0336							
	TPU:	+/-0.0126		+/-0.0336							
Cobalt-60	U	-0.000914	U	0.0215	pCi/g	218		(0% - 100%)			
	Uncert:	+/-0.0114		+/-0.0241							
	TPU:	+/-0.0114		+/-0.0241							
Europium-152	U	-0.0529	U	-0.00406	pCi/g	172		(0% - 100%)			
	Uncert:	+/-0.0401		+/-0.0592							
	TPU:	+/-0.0401		+/-0.0592							
Europium-154	U	-0.000264	U	0.0108	pCi/g	210		(0% - 100%)			
	Uncert:	+/-0.0453		+/-0.0804							
	TPU:	+/-0.0453		+/-0.0804							
Europium-155	U	0.0587	U	0.0667	pCi/g	13		(0% - 100%)			
	Uncert:	+/-0.0479		+/-0.0556							
	TPU:	+/-0.0479		+/-0.0556							
Lead-212		1.27		1.27	pCi/g	0		(0% - 20%)			
	Uncert:	+/-0.107		+/-0.0646							
	TPU:	+/-0.107		+/-0.0646							
Lead-214		1.34		1.23	pCi/g	9		(0% - 20%)			
	Uncert:	+/-0.125		+/-0.101							
	TPU:	+/-0.125		+/-0.101							
Manganese-54	U	0.0151	U	0.0216	pCi/g	35		(0% - 100%)			
	Uncert:	+/-0.0136		+/-0.0268							
	TPU:	+/-0.0136		+/-0.0268							
Niobium-94	U	0.00036	U	0.0176	pCi/g	192		(0% - 100%)			
	Uncert:	+/-0.0108		+/-0.022							
	TPU:	+/-0.0108		+/-0.022							
Potassium-40		19.3		17.2	pCi/g	12		(0% - 20%)			
	Uncert:	+/-1.22		+/-1.05							
	TPU:	+/-1.22		+/-1.05							
Radium-226		1.08		1.16	pCi/g	7		(0% - 100%)			
	Uncert:	+/-0.117		+/-0.107							
	TPU:	+/-0.117		+/-0.107							
Silver-108m	U	-0.00337	U	0.00806	pCi/g	487		(0% - 100%)			
	Uncert:	+/-0.0106		+/-0.0191							
	TPU:	+/-0.0106		+/-0.0191							
Thallium-208		0.383		0.404	pCi/g	5		(0%-20%)			
	Uncert:	+/-0.0421		+/-0.0491							
	TPU:	+/-0.0421		+/-0.0491							

QC Summary

Workorder: 177713

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 595952										
QC1201246872 LCS										
Actinium-228			U	-0.526	pCi/g					12/20/06 12:39
	Uncert:			+/-0.429						
	TPU:			+/-0.429						
Americium-241	23.4			25.6	pCi/g		109	(75%-125%)		
	Uncert:			+/-2.90						
	TPU:			+/-2.90						
Bismuth-212			U	-0.346	pCi/g					
	Uncert:			+/-0.741						
	TPU:			+/-0.741						
Bismuth-214			U	0.107	pCi/g					
	Uncert:			+/-0.188						
	TPU:			+/-0.188						
Cesium-134			U	-0.00467	pCi/g					
	Uncert:			+/-0.103						
	TPU:			+/-0.103						
Cesium-137	9.51			10.3	pCi/g		109	(75%-125%)		
	Uncert:			+/-0.965						
	TPU:			+/-0.965						
Cobalt-60	13.9			14.8	pCi/g		106	(75%-125%)		
	Uncert:			+/-0.936						
	TPU:			+/-0.936						
Europium-152			U	-0.066	pCi/g					
	Uncert:			+/-0.231						
	TPU:			+/-0.231						
Europium-154			U	0.190	pCi/g					
	Uncert:			+/-0.199						
	TPU:			+/-0.199						
Europium-155			U	0.00208	pCi/g					
	Uncert:			+/-0.293						
	TPU:			+/-0.293						
Lead-212			U	0.149	pCi/g					
	Uncert:			+/-0.187						
	TPU:			+/-0.187						
Lead-214			U	0.0691	pCi/g					
	Uncert:			+/-0.211						
	TPU:			+/-0.211						
Manganese-54			U	-0.0358	pCi/g					
	Uncert:			+/-0.101						
	TPU:			+/-0.101						
Niobium-94			U	-0.00176	pCi/g					
	Uncert:			+/-0.0865						
	TPU:			+/-0.0865						
Potassium-40			U	-0.0278	pCi/g					
	Uncert:			+/-0.715						
	TPU:			+/-0.715						
Radium-226			U	0.107	pCi/g			(75%-125%)		
	Uncert:			+/-0.188						
	TPU:			+/-0.188						

QC Summary

Workorder: 177713

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 595952										
Silver-108m			U	-0.0281	pCi/g					
	Uncert:			+/-0.0881						
	TPU:			+/-0.0881						
Thallium-208			U	-0.0357	pCi/g					
	Uncert:			+/-0.0876						
	TPU:			+/-0.0876						
QC1201246870 MB										
Actinium-228			U	0.0318	pCi/g					12/20/06 12:26
	Uncert:			+/-0.0445						
	TPU:			+/-0.0445						
Americium-241			U	-0.00955	pCi/g					
	Uncert:			+/-0.0642						
	TPU:			+/-0.0642						
Bismuth-212			U	-0.0171	pCi/g					
	Uncert:			+/-0.0886						
	TPU:			+/-0.0886						
Bismuth-214			U	0.0221	pCi/g					
	Uncert:			+/-0.0277						
	TPU:			+/-0.0277						
Cesium-134			U	0.00544	pCi/g					
	Uncert:			+/-0.0113						
	TPU:			+/-0.0113						
Cesium-137			U	0.00152	pCi/g					
	Uncert:			+/-0.0108						
	TPU:			+/-0.0108						
Cobalt-60			U	0.00666	pCi/g					
	Uncert:			+/-0.00974						
	TPU:			+/-0.00974						
Europium-152			U	-0.0115	pCi/g					
	Uncert:			+/-0.0337						
	TPU:			+/-0.0337						
Europium-154			U	-0.0134	pCi/g					
	Uncert:			+/-0.0342						
	TPU:			+/-0.0342						
Europium-155			U	0.0115	pCi/g					
	Uncert:			+/-0.0273						
	TPU:			+/-0.0273						
Lead-212			U	0.011	pCi/g					
	Uncert:			+/-0.0276						
	TPU:			+/-0.0276						
Lead-214			U	0.0273	pCi/g					
	Uncert:			+/-0.0225						
	TPU:			+/-0.0225						
Manganese-54			U	-0.00718	pCi/g					
	Uncert:			+/-0.0104						
	TPU:			+/-0.0104						
Niobium-94			U	-0.00772	pCi/g					
	Uncert:			+/-0.0109						

QC Summary

Workorder: 177713

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 595952										
	TPU:			+/-0.0109						
Potassium-40			U	0.0729	pCi/g					
	Uncert:			+/-0.114						
	TPU:			+/-0.114						
Radium-226			U	0.0221	pCi/g					
	Uncert:			+/-0.0277						
	TPU:			+/-0.0277						
Silver-108m			U	-0.0039	pCi/g					
	Uncert:			+/-0.0102						
	TPU:			+/-0.0102						
Thallium-208			U	0.00516	pCi/g					
	Uncert:			+/-0.0189						
	TPU:			+/-0.0189						
Rad Gas Flow										
Batch 595975										
QC1201246938 177713001 DUP										
Strontium-90	U	0.00864		0.0299	pCi/g	33		(0% - 100%)	KSD1	12/22/06 16:33
	Uncert:	+/-0.0232		+/-0.0184						
	TPU:	+/-0.0232		+/-0.0185						
QC1201246940 LCS										
Strontium-90	1.46			1.38	pCi/g		94	(75%-125%)		12/22/06 14:28
	Uncert:			+/-0.0771						
	TPU:			+/-0.228						
QC1201246937 MB										
Strontium-90			U	-0.014	pCi/g					12/22/06 16:33
	Uncert:			+/-0.0135						
	TPU:			+/-0.0136						
QC1201246939 177713001 MS										
Strontium-90	5.16 U	0.00864		4.08	pCi/g		79	(75%-125%)		
	Uncert:	+/-0.0232		+/-0.199						
	TPU:	+/-0.0232		+/-0.844						
Rad Liquid Scintillation										
Batch 595904										
QC1201246733 177713014 DUP										
Tritium	U	-0.253	U	0.310	pCi/g	0		(0% - 100%)	DFA1	12/19/06 22:12
	Uncert:	+/-1.34		+/-1.42						
	TPU:	+/-1.34		+/-1.42						
QC1201246735 LCS										
Tritium	10.4			9.08	pCi/g		88	(75%-125%)		12/19/06 23:33
	Uncert:			+/-1.63						
	TPU:			+/-1.64						
QC1201246732 MB										
Tritium			U	-0.0787	pCi/g					12/19/06 22:59
	Uncert:			+/-0.912						
	TPU:			+/-0.912						
QC1201246734 177713014 MS										
Tritium	10.7 U	-0.253		10.6	pCi/g		99	(75%-125%)		12/19/06 23:16
	Uncert:	+/-1.34		+/-2.81						
				+/-2.81						

QC Summary

Workorder: 177713

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Liquid Scintillation										
Batch 595904										
	TPU:	+/-1.34								
Batch 595936										
QC1201246827 177713014 DUP										
Carbon-14	U	-0.0292	U	-0.0149	pCi/g	0		(0% - 100%)	AXD2	12/15/06 18:58
	Uncert:	+/-0.0719		+/-0.0743						
	TPU:	+/-0.0719		+/-0.0743						
QC1201246829 LCS										
Carbon-14	7.14			7.00	pCi/g		98	(75%-125%)		12/15/06 20:18
	Uncert:			+/-0.475						
	TPU:			+/-0.488						
QC1201246826 MB										
Carbon-14			U	-0.0393	pCi/g					12/15/06 17:55
	Uncert:			+/-0.0745						
	TPU:			+/-0.0745						
QC1201246828 177713014 MS										
Carbon-14	7.24 U	-0.0292		7.13	pCi/g		99	(75%-125%)		12/15/06 20:00
	Uncert:	+/-0.0719		+/-0.488						
	TPU:	+/-0.0719		+/-0.500						
Batch 595937										
QC1201246831 177713014 DUP										
Technetium-99	U	0.204	U	0.303	pCi/g	0		(0% - 100%)	KXR1	12/19/06 10:03
	Uncert:	+/-0.236		+/-0.238						
	TPU:	+/-0.236		+/-0.238						
QC1201246833 LCS										
Technetium-99	13.0			13.2	pCi/g		101	(75%-125%)		12/19/06 10:37
	Uncert:			+/-0.487						
	TPU:			+/-0.588						
QC1201246830 MB										
Technetium-99			U	0.107	pCi/g					12/19/06 09:47
	Uncert:			+/-0.206						
	TPU:			+/-0.206						
QC1201246832 177713014 MS										
Technetium-99	13.0 U	0.204		12.1	pCi/g		93	(75%-125%)		12/19/06 10:20
	Uncert:	+/-0.236		+/-0.496						
	TPU:	+/-0.236		+/-0.581						
Batch 595938										
QC1201246835 177713014 DUP										
Nickel-63	U	-1.04	U	2.96	pCi/g	0		(0% - 100%)	MXP1	12/18/06 22:29
	Uncert:	+/-11.9		+/-8.26						
	TPU:	+/-11.9		+/-8.26						
QC1201246837 LCS										
Nickel-63	576			558	pCi/g		97	(75%-125%)		12/19/06 00:03
	Uncert:			+/-13.8						
	TPU:			+/-24.5						
QC1201246834 MB										
Nickel-63			U	7.58	pCi/g					12/18/06 21:42
	Uncert:			+/-9.00						
	TPU:			+/-9.00						
QC1201246836 177713014 MS										

QC Summary

Workorder: 177713

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Liquid Scintillation										
Batch 595938										
Nickel-63	577 U	-1.04		588	pCi/g		102	(75%-125%)		
	Uncert:	+/-11.9		+/-15.0						
	TPU:	+/-11.9		+/-26.1						
Batch 595939										
QC1201246839 177713014 DUP										
Iron-55	U	0.502	U	13.4	pCi/g	0		(0% - 100%)	MXP1	12/19/06 13:17
	Uncert:	+/-21.5		+/-30.8						
	TPU:	+/-21.5		+/-30.9						
QC1201246841 LCS										
Iron-55	640			521	pCi/g		81	(75%-125%)		12/19/06 13:49
	Uncert:			+/-45.5						
	TPU:			+/-83.5						
QC1201246838 MB										
Iron-55			U	4.79	pCi/g					12/19/06 13:01
	Uncert:			+/-23.7						
	TPU:			+/-23.7						
QC1201246840 177713014 MS										
Iron-55	681 U	0.502		589	pCi/g		87	(75%-125%)		12/19/06 13:33
	Uncert:	+/-21.5		+/-52.4						
	TPU:	+/-21.5		+/-100						

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

- * A quality control analyte recovery is outside of specified acceptance criteria
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B Target analyte was detected in the associated blank
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- H Analytical holding time was exceeded
- J Value is estimated
- N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- UI Gamma Spectroscopy--Uncertain identification
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y QC Samples were not spiked with this compound
- ^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
- h Preparation or preservation holding time was exceeded

QC Summary

Workorder: 177713

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

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

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

ATTACHMENT 4 (DQA RESULTS)

ATTACHMENT 4A
(PRELIMINARY DATA REVIEW)

RELEASE RECORD
Attachment 4

Survey Unit:	9522-0005
Area Description	Southeast Grounds (non-protected)
Classification	1
Survey Media	Surface Soils
Type of Survey	Final Status Survey
Number of Measurements	17 Static, 42 Investigative

STATISTICS on TOTAL POPULATION

	Cs-137	Co-60
$DCGL_{op}$ (pCi/g):	4.75E+00	2.29E+00
Minimum Value:	-4.16E-02	-2.33E-02
Maximum Value:	1.10E+00	3.55E-02
Mean:	4.37E-02	4.31E-03
Median:	1.72E-02	4.06E-03
Standard Deviation:	1.62E-01	1.08E-02

STATISTICS on NON-PARAMETRIC POPULATION

	Cs-137	Co-60
$DCGL_{op}$ (pCi/g):	4.75E+00	2.29E+00
Minimum Value:	-8.15E-03	-9.64E-03
Maximum Value:	6.45E-01	1.99E-02
Mean:	5.08E-02	2.41E-03
Median:	1.42E-02	1.75E-03
Standard Deviation:	1.54E-01	8.13E-03

Sample ID	GPS Coordinates		Cs-137				Co-60				Fraction of DCGL
	North	East	Result (pCi/g)	2σ	MDA (pCi/g)	Identified	Result (pCi/g)	2σ	MDA (pCi/g)	Identified	
9522-0005-001F	236362.19	668928.16	6.45E-01	0.029	3.64E-02	+	1.55E-02	0.018	3.78E-02		0.14
9522-0005-002F	236329.51	668871.56	1.52E-02	0.036	5.00E-02		8.69E-03	0.029	5.36E-02		0.01
9522-0005-003F	236329.51	668909.29	1.42E-02	0.015	3.46E-02		-2.48E-03	0.017	3.02E-02		0.00
9522-0005-004F	236329.51	668947.03	3.54E-02	0.031	3.42E-02	+	4.89E-04	0.017	3.18E-02		0.01
9522-0005-005F	236329.51	668984.76	4.84E-02	0.032	3.85E-02	+	8.70E-03	0.020	3.84E-02		0.01

RELEASE RECORD
Attachment 4

Sample ID	GPS Coordinates		Cs-137				Co-60				Fraction of DCGL
	North	East	Result (pCi/g)	2σ	MDA (pCi/g)	Identified	Result (pCi/g)	2σ	MDA (pCi/g)	Identified	
9522-0005-006F	236296.83	668852.69	4.95E-03	0.022	4.07E-02		-8.79E-03	0.022	3.89E-02		0.00
9522-0005-007F	236296.83	668890.43	2.00E-03	0.015	2.88E-02		-5.10E-03	0.019	3.03E-02		0.00
9522-0005-008F	236296.83	668928.16	-4.72E-03	0.019	3.62E-02		1.75E-03	0.021	3.96E-02		0.00
9522-0005-009F	236296.83	668965.90	1.65E-03	0.016	3.07E-02		7.64E-03	0.018	3.46E-02		0.00
9522-0005-0010F	236296.83	669003.63	3.24E-02	0.022	3.46E-02	+	1.99E-02	0.016	3.34E-02	+	0.02
9522-0005-0011F	236296.83	669041.36	3.09E-02	0.021	2.11E-02	+	-9.64E-03	0.012	1.97E-02		0.00
9522-0005-0012F	236264.16	668833.82	-6.22E-03	0.010	1.80E-02		2.30E-03	0.011	1.81E-02		0.00
9522-0005-0013F	236264.16	668871.56	-8.15E-03	0.014	2.11E-02		-4.65E-03	0.012	2.17E-02		0.00
9522-0005-0014F	236264.16	668947.03	1.84E-02	0.014	1.95E-02	+	-2.27E-03	0.010	1.81E-02		0.00
9522-0005-0015F	236264.16	668984.76	0.00E+00	0.024	2.38E-02		-2.33E-03	0.016	2.48E-02		0.00
9522-0005-0016F	236264.16	669022.50	2.38E-03	0.014	2.19E-02		7.22E-03	0.023	2.17E-02		0.00
9522-0005-0017F	236231.48	669003.63	3.21E-02	0.023	1.90E-02	+	4.05E-03	0.011	2.04E-02		0.01
9522-0005-001FS	236362.19	668928.16	1.10E+00	0.071	3.88E-02	+	1.82E-02	0.019	4.04E-02		0.24
9522-0005-0018I	236317.56	668868.09	3.94E-02	0.026	2.62E-02	+	1.44E-02	0.015	2.87E-02		0.01
9522-0005-0019I	236320.03	668865.87	2.12E-02	0.021	2.82E-02	+	7.60E-03	0.014	2.58E-02		0.01
9522-0005-0020I	236341.16	668942.95	0.00E+00	0.037	2.71E-02		1.62E-03	0.017	3.04E-02		0.00
9522-0005-0021I	236294.68	668997.48	1.11E-02	0.017	2.23E-02		3.69E-03	0.013	2.28E-02		0.00
9522-0005-0022I	236337.50	668938.15	2.31E-02	0.013	1.96E-02	+	8.97E-03	0.011	2.20E-02		0.01
9522-0005-0023I	236290.43	668991.47	1.67E-02	0.016	2.40E-02	+	1.30E-03	0.013	2.29E-02		0.00
9522-0005-0024I	236308.45	668948.56	1.07E-02	0.020	3.60E-02		1.71E-02	0.018	3.39E-02		0.01

RELEASE RECORD
Attachment 4

Sample ID	GPS Coordinates		Cs-137				Co-60				Fraction of DCGL
	North	East	Result (pCi/g)	2σ	MDA (pCi/g)	Identified	Result (pCi/g)	2σ	MDA (pCi/g)	Identified	
9522-0005-0025I	236310.79	668940.90	1.86E-02	0.019	2.14E-02	+	8.11E-04	0.016	2.27E-02		0.00
9522-0005-0026I	236313.15	668933.34	2.16E-02	0.014	2.46E-02	+	4.93E-03	0.018	2.62E-02		0.01
9522-0005-0027I	236312.03	668924.64	8.70E-03	0.012	2.00E-02		1.05E-02	0.010	1.90E-02	+	0.01
9522-0005-0028I	236304.90	668923.67	5.32E-03	0.021	3.30E-02		4.45E-03	0.022	3.65E-02		0.00
9522-0005-0029I	236302.03	668922.63	-7.18E-03	0.015	2.48E-02		7.57E-03	0.016	2.72E-02		0.00
9522-0005-0030I	236282.22	669050.47	2.59E-02	0.039	6.04E-02		3.55E-02	0.039	7.05E-02		0.02
9522-0005-0031I	236280.69	669039.85	4.34E-02	0.025	4.59E-02	+	4.06E-03	0.022	4.16E-02		0.01
9522-0005-0032I	236282.23	669018.14	8.42E-03	0.034	5.36E-02		-7.45E-03	0.029	5.10E-02		0.00
9522-0005-0033I	236279.20	669011.88	6.39E-02	0.033	3.91E-02	+	-2.25E-03	0.026	4.49E-02		0.01
9522-0005-0034I	236265.24	669038.26	5.39E-02	0.066	1.02E-01		5.83E-03	0.048	8.57E-02		0.01
9522-0005-0035I	236268.06	669020.46	-1.67E-02	0.040	5.99E-02		-1.37E-03	0.037	6.74E-02		0.00
9522-0005-0036I	236332.50	668871.12	2.16E-02	0.026	4.09E-02		5.94E-03	0.020	3.92E-02		0.01
9522-0005-0037I	236325.94	668870.98	5.34E-02	0.040	4.05E-02	+	5.58E-03	0.023	4.03E-02		0.01
9522-0005-0038I	236327.14	668878.22	2.08E-02	0.037	6.21E-02		-1.50E-03	0.030	5.68E-02		0.00
9522-0005-0039I	236325.81	668879.84	2.37E-02	0.045	6.92E-02		1.36E-02	0.036	7.05E-02		0.01
9522-0005-0040I	236339.12	668918.15	0.00E+00	0.013	2.02E-02		-9.14E-04	0.011	1.91E-02		0.00
9522-0005-0041I	236321.64	668905.26	6.41E-03	0.012	2.04E-02		-3.87E-03	0.012	1.99E-02		0.00
9522-0005-0042I	236322.09	668917.26	0.00E+00	0.039	2.95E-02		5.96E-03	0.019	3.31E-02		0.00
9522-0005-0043I	236303.94	668903.17	1.77E-02	0.022	4.53E-02		6.65E-03	0.023	4.36E-02		0.01
9522-0005-0044I	236321.55	668918.53	2.06E-02	0.026	3.97E-02		4.42E-03	0.022	4.00E-02		0.01

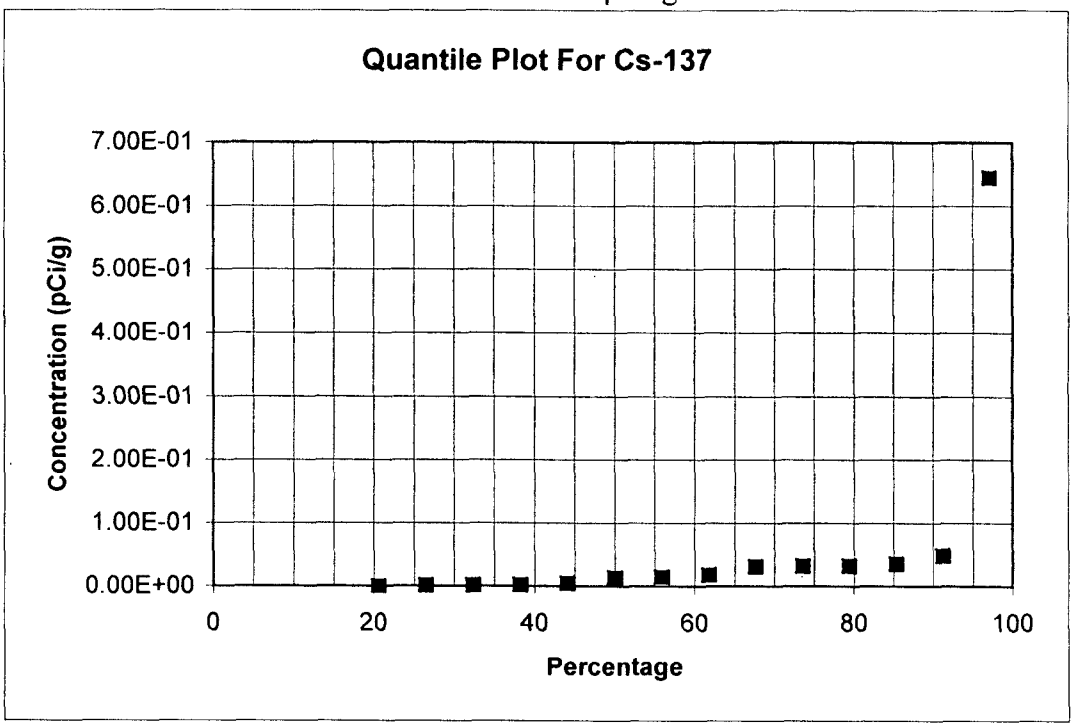
RELEASE RECORD
Attachment 4

Sample ID	GPS Coordinates		Cs-137				Co-60				Fraction of DCGL
	North	East	Result (pCi/g)	2σ	MDA (pCi/g)	Identified	Result (pCi/g)	2σ	MDA (pCi/g)	Identified	
9522-0005-0045I	236362.77	668891.76	2.07E-03	0.026	4.42E-02		-2.99E-03	0.028	4.59E-02		0.00
9522-0005-0046I	236348.13	668881.94	-4.16E-02	0.040	5.18E-02		-1.26E-03	0.034	5.66E-02		0.00
9522-0005-0047I	236346.63	668886.51	-1.13E-02	0.028	4.61E-02		-2.33E-02	0.033	4.26E-02		0.00
9522-0005-0048I	236339.17	668884.62	-2.65E-02	0.037	6.37E-02		-1.54E-02	0.039	6.80E-02		0.00
9522-0005-0049I	236349.47	668894.50	3.64E-02	0.028	4.51E-02	+	1.08E-02	0.026	4.96E-02		0.01
9522-0005-0050I	236341.57	668892.71	1.73E-02	0.035	5.71E-02		1.35E-02	0.032	6.15E-02		0.01
9522-0005-0051I	236339.10	668894.62	1.71E-02	0.025	4.61E-02		3.22E-02	0.024	4.68E-02	+	0.02
9522-0005-0052I	236331.67	668893.00	3.57E-02	0.034	4.07E-02	+	1.51E-02	0.025	4.83E-02		0.01
9522-0005-0053I	236343.13	668901.75	1.93E-02	0.045	7.49E-02		-3.34E-03	0.041	7.64E-02		0.00
9522-0005-0054I	236342.59	668909.99	3.05E-02	0.034	3.97E-02		3.24E-03	0.023	4.19E-02		0.01
9522-0005-0055I	236339.44	668913.67	-1.68E-03	0.022	4.07E-02		-1.28E-02	0.021	3.47E-02		0.00
9522-0005-0056I	236314.73	668898.41	5.64E-03	0.025	4.72E-02		2.61E-02	0.023	4.77E-02	+	0.01
9522-0005-0057I	236334.18	668872.69	2.31E-02	0.026	4.12E-02		3.32E-03	0.022	3.80E-02		0.01
9522-0005-0058I	236368.85	668898.21	3.74E-02	0.029	3.94E-02	+	-1.85E-02	0.025	3.81E-02		0.00
9522-0005-0059I	236350.85	668921.99	0.00E+00	0.030	3.42E-02		1.96E-02	0.020	3.79E-02		0.01

ATTACHMENT 4B
(GRAPHICAL REPRESENTATION OF DATA)

QUANTILE PLOT FOR CESIUM-137

Survey Unit: 9522-0005
Survey Unit Name: Southeast Site Grounds (non-protected area)
Mean: 5.08E-02 pCi/g



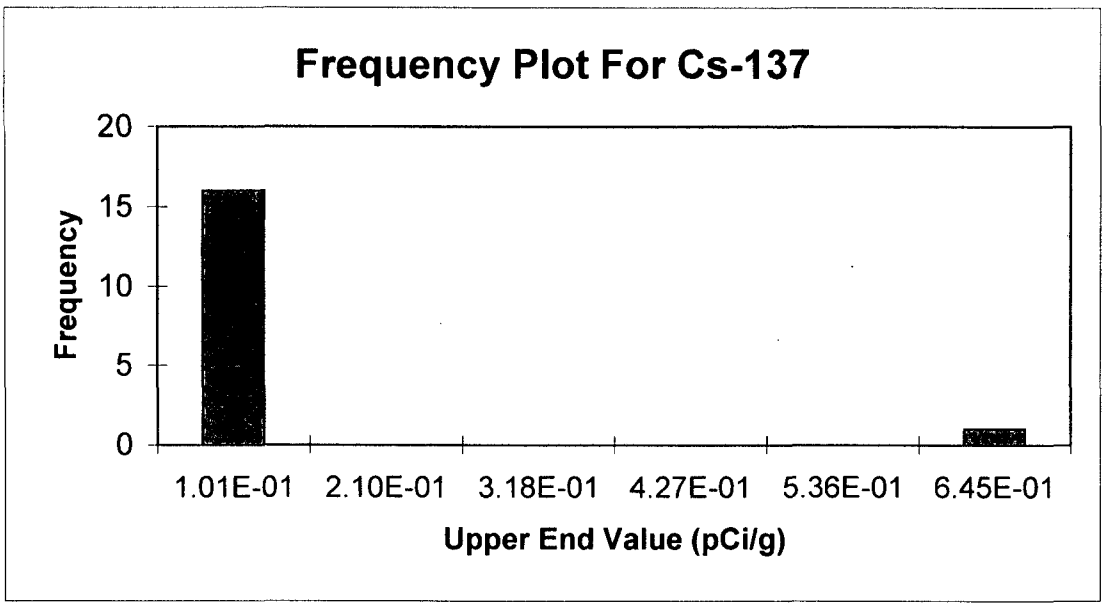
Cs-137	Rank	Percentage
-8.15E-03	1	2.9%
-6.22E-03	2	8.8%
-4.72E-03	3	14.7%
0.00E+00	4	20.6%
1.65E-03	5	26.5%
2.00E-03	6	32.4%
2.38E-03	7	38.2%
4.95E-03	8	44.1%
1.42E-02	9	50.0%
1.52E-02	10	55.9%
1.84E-02	11	61.8%
3.09E-02	12	67.6%
3.21E-02	13	73.5%
3.24E-02	14	79.4%
3.54E-02	15	85.3%
4.84E-02	16	91.2%
6.45E-01	17	97.1%

D. WATKOWIAK 1/3/07
Submitted by/Date

R. Massengill 1/4/07
Reviewed by/Date

FREQUENCY PLOT FOR CESIUM-137

Survey Unit: 9522-0005
Survey Unit Name: Southeast Site Grounds (non-protected area)
Mean: 5.08E-02 pCi/g



Upper End Value	Observation Frequency	Observation Frequency
1.01E-01	16	94%
2.10E-01	0	0%
3.18E-01	0	0%
4.27E-01	0	0%
5.36E-01	0	0%
6.45E-01	1	6%
Total:	17	100%

D. WOJTKOWIAK 1/3/07
Submitted by/Date

R. Massengill 1/4/07
Reviewed by/Date

ATTACHMENT 4C (SIGN TEST)

Sign Test Calculation Sheet for Multiple Radionuclides

Survey Area Number:	9522		Survey Unit Number:	0005	WPIR #:	2006-0047
Survey Area Name:	Southeast Site Grounds (non-protected area)		Classification:	1	TYPE I (α error): 0.05	N: 17
Radionuclides:	1st Radionuclide Cs-137	2nd Radionuclide Co-60	3rd Radionuclide	4th Radionuclide		
DCGL:	4.75E+00	2.29E+00				

Results 1st Radionuclide (pCi/g)	Results 2nd Radionuclide (pCi/g)	Results 3rd Radionuclide (pCi/g)	Results 4th Radionuclide (pCi/g)	Weighted Sum (W_s)	$1-W_s$	Sign
6.45E-01	1.55E-02			0.14	0.86	+1
1.52E-02	8.69E-03			0.01	0.99	+1
1.42E-02	-2.48E-03			0.00	1.00	+1
3.54E-02	4.89E-04			0.01	0.99	+1
4.84E-02	8.70E-03			0.01	0.99	+1
4.95E-03	-8.79E-03			0.00	1.00	+1
2.00E-03	-5.10E-03			0.00	1.00	+1
-4.72E-03	1.75E-03			0.00	1.00	+1
1.65E-03	7.64E-03			0.00	1.00	+1
3.24E-02	1.99E-02			0.02	0.98	+1
3.09E-02	-9.64E-03			0.00	1.00	+1
-6.22E-03	2.30E-03			0.00	1.00	+1
-8.15E-03	-4.65E-03			0.00	1.00	+1
1.84E-02	-2.27E-03			0.00	1.00	+1
0.00E+00	-2.33E-03			0.00	1.00	+1
2.38E-03	7.22E-03			0.00	1.00	+1
3.21E-02	4.05E-03			0.01	0.99	+1
					Number of positive differences (S+)	17

Critical Value 12 Survey Unit Meets the Acceptance Criteria

Performed by: David Wojtkowiak Date: 1/3/2007

Independent Review by: R. Massengill Date: 1/4/07

ATTACHMENT 4D (QC SPLIT RESULTS)

Split Sample Assessment Form

Survey Area #: 9522	Survey Unit # 0005	Survey Unit Name:	Southeast Site Grounds (non-protected area)
Sample Plan or WPIR#: 2006-0047		SML#:	9522-0005-001

Sample Description: Comparison of split samples collected from sample measurement location #1 and analyzed using gamma spectroscopy by off-site Vendor Laboratory. The standard sample was 9522-0005-001F, the comparison sample was 9522-0005-001FS.

STANDARD					COMPARISON			
Radionuclide	Activity Value	Standard Error	Resolution	Agreement Range	Activity Value	Standard Error	Comparison Ratio	Acceptable (Y/N)
Cs-137	6.45E-01	0.014	45	0.75 - 1.33	1.10E+00	0.035	1.71	N
K-40	1.09E+01	0.402	27	0.75 - 1.33	1.08E+01	0.424	0.99	Y

Comments/Corrective Actions: In consideration of the Cs-137 results, Cs-137 has a likelihood to be tightly bound to organic mater in the sample matrix, one would not necessarily expect it to be homogeneously mixed as processing of the sample-split aliquot is not very effective in dispersing the organic material uniformly through the sample aliquot due to the physical form of the organic material itself. Since K-40 was found to be present at an acceptable level of agreement, no further action is warranted.

Table is provided to show acceptance criteria used to assess split samples.

Resolution	Agreement Range
4 - 7	0.5 - 2.0
8 - 15	0.6 - 1.66
16 - 50	0.75 - 1.33
51 - 200	0.80 - 1.25
>200	0.85 - 1.18

Performed by: D. Wojtkowiak	Date: 1/3/2007	Reveiwed by: R. Massengill	Date: 1/4/07

ATTACHMENT 4E
(COMPASS DQA WITH POWER CURVE)

DQA Surface Soil Report

Assessment Summary

Site:	Southeast Grounds (non-protected area)		
Planner(s):	Wojo		
Survey Unit Name:	9522-0005		
Report Number:	1		
Survey Unit Samples:	17		
Reference Area Samples:	0		
Test Performed:	Sign	Test Result:	Not Performed
Judgmental Samples:	0	EMC Result:	Not Performed
Assessment Conclusion:	***Reject Null Hypothesis (Survey Unit PASSES)***		

Retrospective Power Curve