



Final Status Survey Final Report Phase IV

**Appendix A5
Survey Unit Release Record
9106-0005, Discharge Canal**

November 2006



CYAPCO
FINAL STATUS SURVEY RELEASE RECORD
DISCHARGE CANAL
SURVEY UNIT 9106-0005

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1. SURVEY UNIT DESCRIPTION

Survey Unit 9106-0005 (Discharge Canal) is designated as Final Status Survey (FSS) Class 2 and consists of approximately 9,632 m² (2.38 acres) of water covered sediment in an area located approximately 0.55 miles from the reference coordinate system benchmark used at the Haddam Neck Plant (HNP) (see Attachment 1, Figure 1). The Discharge Canal is a man-made mile long waterway that runs parallel to, and ultimately communicates with the Connecticut River. The Discharge Canal is subdivided into fifteen (15) survey units including two (2) permanent wetland areas for FSS purposes. The survey unit is bounded as follows: Discharge Canal Survey Unit 9106-0004 is to the north (called north as orientated with the north to south flow of the Connecticut River), Survey Area 9528 is to the east, Discharge Canal Survey Unit 9106-0006 is to the south and Survey Area 9530 is to the west. The survey unit comprises the canal sediments to the depth of three (3) feet from the top of the sediment layer or the original construction depth and it extends up the canal banks to the mean high water level.

This survey unit is bounded by reference coordinates E017 through E023 and by S100 through S115 (refer to License Termination Plan 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 historical information, scoping analyses and characterization results provided sufficient data to designate Survey Unit 9106-0005 as Class 2 in May 2006.

The "*Classification Basis Summary*" conducted for this survey unit 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 (HSA) Supplement*,"
- c) Historic and current survey records review,
- d) Visual inspections and a "walkdown."
- e) Formal or informal interviews with cognizant personnel.

A review of the 10CFR50.75(g)(1) database report identified a number of events that may have impacted this survey unit. Several events indicated the potential for plant related contamination in the survey unit. These included a number of primary side system to secondary side system leakage events,

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contamination found to be present in secondary side systems and components, and unmonitored spills that drained to the discharge canal. In 1986, samples were taken from the legacy dredge spoils removed in 1979 dredged spoils area and from recently dredged canal sediment. The sample analyses indicated that the concentrations of Cs-137, Co-60 and other radionuclides were a small fraction of the DCGLs for those nuclides that could be identified by gamma spectroscopy. (refer to NE-86-RA-1142 dated 11-13-86). None the available historical information reviewed would support a conclusion that any residual activity in this survey unit is likely to be present at concentrations greater than the respective DCGLs.

Additional information was provided by several historical documents, including the "*Results of Scoping Survey*", (completed 9/1/98), the "*Historical Site Assessment*", and the HSA Supplement (dated 6-30-00). These documents presented the results of several sediment samples taken in 1997. These sample results indicated concentrations of 0.5 pCi/g for Co-60, 0.024 pCi/g for Cs-134 and 0.722 pCi/g for Cs-137.

An initial characterization survey of the Discharge Canal was performed during April and May of 2004. However, none of these samples were taken from within the footprint of survey Unit 9106-0005.

A final characterization was performed by Site Closure personnel in April of 2006 to obtain the necessary data of sufficient data quality for Final Status Survey (FSS) planning purposes. Six (6) 3-foot core sediment samples were taken from six (6) locations. All of the samples were analyzed by gamma spectroscopy. Since Hard-to-Detect (HTD) analyses were not performed and since Sr-90 was found to be a nuclide of concern in an adjacent discharge canal Survey Unit (SU 9106-0006), for conservatism it was included as a nuclide of concern in Survey Unit 9106-0005. The Sr-90 concentration statistics were also included in the variance calculations to determine the size of the sample population for FSS. Although no additional HTD testing was performed for characterization; four (4) of the fifteen (15) samples taken to demonstrate compliance with the release criteria during FSS were tested for the full suite of HTD nuclides to provide additional assurance that all of the radionuclides of concern were appropriately addressed. As a result of characterization, the radionuclides of concern identified for FSS planning purposes were Cs-137, Co-60 and Sr-90 (refer to Table 1).

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**Table 1 – Basic Statistical Quantities for Cs-137, Co-60 and Sr-90
from the Characterization Survey**

Parameter	Cs-137 (pCi/g)	Co-60 (pCi/g)	Sr-90 (pCi/g)
Minimum Value:	6.64E-02	1.16E-01	1.14E-02
Maximum Value:	2.79E-01	5.59E-01	7.16E-02
Mean:	1.73E-01	3.08E-01	4.17E-02
Median:	1.63E-01	2.64E-01	3.94E-02
Standard Deviation:	8.09E-02	1.52E-01	2.50E-02
NOTE: The Operational DCGLs are 6.01 pCi/g for Cs-137, 2.90 pCi/g for Co-60 and 1.18 pCi/g for Sr-90; these are used in conjunction with the unity rule to achieve nineteen (19) mrem/yr TEDE			

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

Based upon the historical information and the results of radiological surveys performed during characterization, it was concluded that there was a low probability for residual radioactivity to be present in this survey unit in concentrations greater than the Operational DCGLs justifying a final survey unit classification of Class 2 (refer to Section 3).

3. DATA QUALITY OBJECTIVES (DQO)

FSS design and planning is based on 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 incorporates 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 satisfy the release criteria objective of the FSS.

The primary objective of the Final Status Survey Plan (FSSP) was to demonstrate that the level of residual radioactivity in Survey Unit 9106-0005 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).

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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 Derived Concentration Guideline Levels (DCGLs). The DCGLs represent the concentration of radioactivity above background, equivalent to a dose-based release criterion and is 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), for existing groundwater radioactivity and for future groundwater radioactivity that will be contributed by building foundations and footings.

As described in detail in the LTP, the dose model applied to the discharge canal presumes that the canal sediments are dredged to a depth of three (3) feet below the top of the sediment layer and spread for the planting of crops per the Resident Farmer Scenario. Consequently, the soil DCGLs are directly applied to the canal sediment media.

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:

$$H_{\text{Total}} = H_{\text{Soil (sediment)}} + H_{\text{Existing GW}} + H_{\text{Future GW}}$$

The total dose under the LTP criteria is twenty-five (25) mrem/yr TEDE from all three (3) components. The allowable total dose under the Connecticut Department of Environmental Protection (CTDEP) radiological remediation standard for Connecticut Yankee (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 groundwater dose values discussed above.

This survey unit is not affected by existing groundwater or by future groundwater (reference CY memo ISC 06-024). Therefore, dose contribution from existing and future groundwater is zero (0) mrem/yr TEDE, based on field data.

Equation 2:

$$19 \text{ mrem/yr}_{\text{Total}} = 19 \text{ mrem/yr}_{\text{Soil}} + 0 \text{ mrem/yr}_{\text{Existing GW}} + 0 \text{ mrem/yr}_{\text{Future GW}}$$

The allowable dose for soil in this survey unit is nineteen (19) mrem/yr TEDE as shown by Equation 2 above. The concentration of residual radioactivity resulting in nineteen (19) mrem/yr TEDE is designated as the Operational

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DCGL, and has been established for the radionuclides of concern as provided in Table 2.

Note: The survey design used a much smaller value for investigation than the Operational DCGL provided by Table 2 to conservatively account for the contribution to the total dose from existing and future groundwater which had not been established at the time of planning the FSS.

Table 2 – Radionuclide Specific Base Case Soil DCGL, Operational DCGLs and Required Minimum Detectable Concentrations			
Radionuclide ⁽¹⁾	Base Case Soil DCGL (pCi/g) ⁽²⁾	Operational DCGL (pCi/g) ⁽³⁾	Required MDC (pCi/g) ⁽⁴⁾
H-3	4.12E+02	3.13E+02	1.65E+01
C-14	5.66E+00	4.30E+00	2.26E-01
Mn-54	1.74E+01	1.32E+01	6.96E-01
Fe-55	2.74E+04	2.08E+04	1.10E+03
Co-60	3.81E+00	2.90E+00	1.52E-01
Ni-63	7.23E+02	5.49E+02	2.89E+01
Sr-90	1.55E+00	1.18E+00	6.20E-02
Nb-94	7.12E+00	5.41E+00	2.85E-01
Tc-99	1.26E+01	9.58E+00	5.04E-01
Ag-108m	7.14E+00	5.43E+00	2.86E-01
Cs-134	4.67E+00	3.55E+00	1.87E-01
Cs-137	7.91E+00	6.01E+00	3.16E-01
Eu-152	1.01E+01	7.68E+00	4.04E-01
Eu-154	9.29E+00	7.06E+00	3.72E-01
Eu-155	3.92E+02	2.98E+02	1.57E+01
Pu-238	2.96E+01	2.25E+01	1.18E+00
Pu-239/240	2.67E+01	2.03E+01	1.07E+00
Pu-241	8.70E+02	6.61E+02	3.48E+01
Am-241 ⁽⁵⁾	2.58E+01	1.96E+01	1.03E+00
Cm-243/244	2.90E+01	2.20E+01	1.16E+00

(1) **Bold** indicates those radionuclides that are considered to be Hard to Detect (HTD)

(2) The Base Case Soil DCGLs for soil 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 nineteen (19) mrem/yr TEDE

(4) The required MDC is equivalent to 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.

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Another important facet of the DQO process is to identify the radionuclides of concern and determine the concentration variability. The radiological data that was used to support the DQO process, was provided by the characterization surveys performed in 2004 and 2006, as discussed in Section 2. Cs-137, Co-60 and Sr-90 were found to be the predominate radionuclides of concern. The basic statistical quantities (i.e., mean, standard deviation, median) for Cs-137, Co-60 and Sr-90 are provided in Table 1.

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*".

This survey was initially designed to ten (10) mrem/yr TEDE. At the time when the survey was designed, the dose contribution for existing and future groundwater had not yet been determined. Consequently, a conservative value was chosen for the Operational DCGL. This approach is no longer required as the total dose from existing and future groundwater has been established. The dose for soil used for this survey unit to demonstrate compliance with the LTP criteria is nineteen (19) mrem/yr TEDE, as discussed in Section 2 of this Release Record.

The DQO process determined that Cs-137, Co-60 and Sr-90 were the radionuclides of concern (refer to Section 3). The sum of fractions or unity rule was used with the individual Operational DCGLs because multiple radionuclides (Cs-137, Co-60 and Sr-90) were considered in the survey design.

Surrogate DCGLs were not required for this survey unit based on process knowledge from FSS of nearby adjacent areas and via screening process described in LTP Section 5.4.7.3, "Gross Activity DCGLs". Sr-90 concentrations in sediment and soil were ascertained by direct analysis.

Radionuclide screening or de-selection is a process, described in LTP Section 5.4.7.2, where an individual radionuclide or aggregate 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 the aggregate of all radionuclides de-selected. This process was applied to analysis data for this survey unit.

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The Elevated Measurement Comparison (EMC) did not apply to this survey unit since it is a Class 2 area and discrete, elevated areas of contamination were not expected.

The Sign Test was selected as the non-parametric statistical test to demonstrate that the null hypothesis was rejected. The use of the Sign Test did not require the selection or use of a background reference area, which simplified survey design and implementation. In addition, this approach is conservative since it includes background Cs-137 as part of the sample set.

The number of sediment samples for FSS was determined in accordance with Procedure RPM 5.1-12, "*Determination of the Number of Samples for Final Status Survey.*" The Lower Bound of the Gray Region (LBGR) was set to 0.78 in accordance with Procedure RPM 5.1-11 to maintain the relative shift (Δ/σ) in the range of 1 and 3. The resulting relative shift was 2.0. 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 MARSSIM in support of the decommissioning license termination rule (10 CFR 20, Subpart E). The result of the COMPASS computer run showed adequate power for the survey design. This indicates that the survey unit has a high probability of rejecting the null hypothesis, assuming that the characterization data are representative of the FSS results. Survey design specified fifteen (15) sediment core samples for non-parametric statistical testing.

The grid pattern and locations of the sediment 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 2 area.

Judgmental sampling was included as a feature of this survey design to account for any anomalies potentially identified in the field.

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.

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Table 3 - Sample Measurement Locations with Associated GPS Coordinates		
Designation	Northing	Easting
9106-0005-001F	235695.70	670974.93
9106-0005-002F	235618.98	670930.64
9106-0005-003F	235618.98	671019.23
9106-0005-004F	235618.98	671107.82
9106-0005-005F	235618.98	671196.41
9106-0005-007F	235542.25	671152.11
9106-0005-008F	235542.25	671240.70
9106-0005-009F	235542.25	671329.29
9106-0005-010F	235542.25	671417.88
9106-0005-011F	235542.25	671506.47
9106-0005-013F	235465.53	671373.59
9106-0005-014F	235465.53	671462.18
9106-0005-015F	235465.53	671550.77
9106-0005-017F	235576.64	671402.01
9106-0005-018F	235550.83	671137.60

The sample location designations of Table 3 are not sequentially inclusive because of the necessity to relocate some samples due to the accessibility of the original sample locations. Sample locations 9106-0005-006F and 9106-0005-012F were found to be on dry land. Consequently, they were randomly relocated using the VSP software to two (2) new locations designated as 9106-0005-017F and 9106-0005-018F. Since sample 9106-0005-012F was randomly selected as a Quality Control (QC) split sample, sample 9106-0005-018F was designated as the replacement QC sample. Any location(s) identified by biased methods, were not included in Table 3.

One (1) biased sample was required by the sample plan. This sample was designated as sample location 9106-0005-016F. Sample results for sample location 9106-0005-016F are presented in Section 6, "Survey Results" and are also provided in Table 6.

Four (4) sediment samples were analyzed for the full suite of radionuclides specified in Table 1, exceeding the requirement to analyze 5% of the sample population for HTD analysis specified in procedure RPM 5.1-11. Two (2) of the four (4) samples were randomly selected using the Microsoft Excel "RAND" function. The two (2) samples exhibiting the highest observed radionuclide concentrations by gamma analyses were also selected.

The implementation of quality control measures as referenced by Procedure RPM 5.1-24, "Split Sample Assessment for Final Status Survey," required the collection of two (2) soil samples for "split sample" analysis by the off-site laboratory. These locations were selected randomly using the Microsoft Excel

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“RAND” function. The number of quality control samples exceeded the 5% requirement as specified by the LTP.

Section 5.7.3.2.6 of the LTP specifies that scanning is not required for the FSS of the Discharge Canal. Table 4 provides a synopsis of the survey design.

Table 4 – Synopsis of the Survey Design ⁽¹⁾

Feature	Design Criteria	Basis
Survey Unit Land Area	9,716 m ²	Based on AutoCAD-LT and Visual Sample Plan calculations
Number of Measurements	15	Type 1 and Type 2 errors were 0.05, sigma was 0.143 the LBGR was set to 0.78 to maintain Relative Shift in the range of 1 and 3, Relative Shift was 2.0
Grid Spacing	27.4 m	Based on triangular grid
Design DCGL	3.16 pCi/g Cs-137 1.52 pCi/g Co-60 0.62 pCi/g Sr-90	To achieve ten (10) mrem/yr TEDE
Operational DCGL	6.01 pCi/g Cs-137 2.90 pCi/g Co-60 1.18 pCi/g Sr-90	To achieve nineteen (19) mrem/yr TEDE ⁽²⁾ to demonstrate compliance with Equation 2 of this Release Record
Scan Coverage	N/A	The LTP exempts this area
Sediment Investigation Level	6.01 pCi/g Cs-137 2.90 pCi/g Co-60 1.18 pCi/g Sr-90	The Operational DCGL meets the LTP criteria for a Class 2 survey unit

(1) The survey design used a much smaller value for investigation than the Operational DCGL provided by Table 2 as the total dose from existing and future groundwater had not been established at the time of planning the FSS

(2) The allowable dose for soil in this survey unit is nineteen (19) 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) 2006-0021. The WP&IR package included a detailed FSSP, 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.

Measurement locations were identified in North American Datum (NAD) 1927 coordinates that were supplied to the sampling vendor, Ocean Surveys, Inc. (OSI) of Old Saybrook, Connecticut. Discharge Canal sampling was accomplished using direct push technology to collect composite samples of

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bottom and mean high water mark sediments. Sediment cores from the Discharge Canal were obtained by OSI using a vibrating corer that is platform mounted on a sampling vessel. The core barrel was a three (3) inch diameter thin-walled aluminum tube which also served as a core liner (ten (10) feet or less). A core catcher was available to prevent the sample from sliding out of the bottom of the tube. Vessel positioning and the determination of sample locations were accomplished using a GPS interfaced with a navigation and data logging system.

After extraction, water was drained from above the sample by drilling holes above the sediment. The liner was cut, capped, sealed, labeled and turned over to site personnel who processed and controlled the samples under Chain of Custody (COC) protocols in accordance with procedure RPM 5.1-5, "*Chain of Custody for Final Status Survey Samples.*" Rinsing of the barrel and associated equipment was performed between sampling events. New aluminum tubes were used for each sample to prevent cross-contamination of subsequent samples.

The fifteen (15) sediment 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 COC protocols.

Four (4) samples (9106-0005-005F, 9106-0005-009F, 9106-0005-010F and 9106-0005-014F) were selected for HTD radionuclide analysis by the off-site laboratory.

The implementation of quality control measures included the collection of two (2) split samples at locations 9106-0005-003F and 9106-0005-018F for comparative analysis by the off-site laboratory.

6. SURVEY RESULTS

The off-site laboratory employed for the radiological analyses of samples was General Engineering Laboratories (GEL) – Charleston, South Carolina. The laboratory analyzed the fifteen (15) samples taken for non-parametric statistical testing and the associated duplicates using gamma spectroscopy. Sr-90 was analyzed by gas flow proportional counting. All analyses were performed to the required MDC.

Cesium-137 was identified in twelve (12), Co-60 was identified in eight (8) and Sr-90 in four (4) of the fifteen (15) samples.

Several other radionuclides which were positively identified (i.e., a result greater than two (2) standard deviations uncertainty) could be de-selected or excluded using the 5% and 10% rule described in Section 5.4.7.2 of the LTP.

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The off-site laboratory also processed four (4) samples for full HTD analysis as required by the sample plan. The requested analyses included alpha spectroscopy and liquid scintillation depending upon the radionuclide and the measurement method. All analyses were performed to the required MDC. Four (4) of the HTD radionuclides met the acceptance criteria for detection (i.e., a result greater than two standard deviations uncertainty) in more than one (1) sample; however, each of the positive results for HTD radionuclides could be de-selected based on the 5% and 10% rules.

None of the sample results exceeded the Operational DCGL or required further investigation. A summary of the sample results is provided in Table 5.

Table 5- Summary of Soil Sample Results

Sample Number	Cs-137 pCi/g	Co-60 pCi/g	Sr-90 pCi/g	Fraction of the Operational DCGL (1)
9106-0005-001F	2.88E-02	1.91E-02	5.10E-03	1.57E-02
9106-0005-002F	6.60E-02	8.95E-02	8.79E-03	4.93E-02
9106-0005-003F	3.09E-01	3.15E-01	1.15E-02	1.70E-01
9106-0005-004F	1.63E-01	2.10E-01	6.21E-03	1.05E-01
9106-0005-005F	-2.55E-02	9.87E-03	9.56E-03	7.28E-03
9106-0005-007F	-5.19E-04	-7.92E-03	5.15E-03	1.55E-03
9106-0005-008F	1.86E-01	1.69E-01	-1.56E-03	8.80E-02
9106-0005-009F	1.81E-01	2.14E-02	1.30E-02	4.85E-02
9106-0005-010F	2.60E-01	1.38E+00	1.34E-02	5.31E-01
9106-0005-011F	5.76E-02	0.00E+00	1.49E-02	2.22E-02
9106-0005-013F	5.31E-02	1.55E-02	-1.93E-03	1.25E-02
9106-0005-014F	4.73E-01	1.12E+00	3.27E-03	4.68E-01
9106-0005-015F	7.09E-02	2.78E-03	6.68E-03	1.84E-02
9106-0005-017F	1.39E-01	3.43E-01	-8.59E-04	1.41E-01
9106-0005-018F	3.39E-02	4.19E-02	5.37E-02	6.57E-02

(1) The Operational DCGLs from Table 2 are 6.01 pCi/g for Cs-137, 2.90 pCi/g for Co-60 and 1.18 for Sr-90; these are used in conjunction with the unity rule to achieve nineteen (19) mrem/yr TEDE

The sample location designations of Table 5 are not sequentially inclusive because of the necessity to relocate some samples due to the accessibility of the original sample locations. Sample locations 9106-0005-006F and 9106-0005-012F were found to be on dry land. Consequently, they were randomly relocated using the VSP software to two (2) new locations designated as 9106-0005-017F and 9106-0005-018F. Since sample 9106-0005-012F was randomly selected as a Quality Control (QC) split sample, sample 9106-0005-018F was designated as the replacement QC sample.

One (1) biased sample was required by the sample plan. This sample was designated as sample location 9106-0005-016F. Sample results for sample location 9106-0005-016F are presented in Table 6 below.

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Table 6 – Biased Sample Results

Sample Number	Cs-137 pCi/g	Co-60 pCi/g	Sr-90 pCi/g	Fraction of the Operational DCGL ⁽¹⁾
9106-0005-016F	-1.86E-02	2.07E-03	9.07E-04	-1.61E-03

The Operational DCGLs from Table 2 are 6.01 pCi/g for Cs-137, 2.90 pCi/g for Co-60 and 1.18 for Sr-90; these are used in conjunction with the unity rule to achieve nineteen (19) mrem/yr TEDE.

7. QUALITY CONTROL

The two (2) split samples taken for QC were analyzed by the off-site laboratory. The data were evaluated using USNRC acceptance criteria specified in Inspection Procedure 84750 and as detailed in HNP Procedure RPM 5.1-24, "Split Sample Assessment for Final Status Survey." One (1) split-sample (9106-0005-018F/S) did not meet the comparison criterion for Co-60. A possible cause for this anomaly could be the presence of Co-60 in the form of discrete particles. Such a physical form does not lend itself to homogenous mixing in a sediment matrix and, therefore, is not necessarily an indicator of inadequate sampling or sample preparation methodology. In this sample, K-40, a natural radioisotope, was found to be present at an acceptable level of agreement, therefore, the comparison was determined to be acceptable. For the other QC split samples, there was an acceptable level of agreement between the samples for all other detectable radionuclides.

The sample analysis vendor, GEL, maintained quality control and quality assurance plans as part of normal operation. Refer to Attachment 2 for data and data quality analysis results.

8. INVESTIGATIONS AND RESULTS

One (1) sample result was found to exceed the design DCGL, but was below the nineteen (19) mrem/yr operational DCGL, as specified in Table 4. Confirmatory samples were collected to determine the extent of contamination. The extent was bounded by taking four (4) confirmatory samples, one (1) in each major compass direction (i.e., North, East, South, West), two (2) meters distant from the elevated sample location. The gamma spectroscopy results are included in Table 7.

DISCHARGE CANAL
SURVEY UNIT 9106-0005
RELEASE RECORD

Table 7- Confirmatory Sample Results

Original Sample Location	Sample Number (9106-0005)	Cs-137 $\mu\text{Ci/g}$	Co-60 $\mu\text{Ci/g}$	Sr-90 $\mu\text{Ci/g}$	Fraction of the Operational DCGL ⁽¹⁾
010F	010A	4.63E-02	7.70E-02	0.00442	3.80E-02
	010B	9.08E-02	1.15E-01	-0.00561	5.01E-02
	010C	1.92E-01	5.22E-01	0.00471	2.16E-01
	010D	6.30E-01	2.24E+00	0.0219	8.97E-01

- (1) The investigation of sample 010F was initiated upon a sample result greater than the original design dose of ten (10) mrem/yr, prior to finalization of the dose contribution due to groundwater. Final results were evaluated against an Operational DCGL which considered the groundwater dose contribution.
- (2) The Operational DCGLs are 6.01 $\mu\text{Ci/g}$ for Cs-137, 2.90 $\mu\text{Ci/g}$ for Co-60 and 1.18 for Sr-90; these are used in conjunction with the unity rule to achieve nineteen (19) mrem/yr TEDE.

The confirmatory results demonstrated that no measurements exceeded the nineteen (19) mrem/yr Operational DCGL, indicating that no further actions are warranted.

9. REMEDIATION AND RESULTS

Historically, no radiological remedial action as described by MARSSIM Section 5.4 was performed in this survey unit prior to or as a result of the FSS. 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 to be unnecessary and that the remaining residual radioactivity in soil was ALARA.

10. CHANGES FROM THE FINAL STATUS SURVEY PLAN

The survey was designed to ten (10) mrem/yr TEDE which was conservative and necessary at the time of FSS planning. It is no longer required as the total dose from existing and future groundwater has been established. The dose for soil used to demonstrate compliance with the LTP and CTDEP criteria is nineteen (19) mrem/yr TEDE as discussed in Section 2 of this Release Record.

11. DATA QUALITY ASSESSMENT (DQA)

The DQO sample design and data were reviewed in accordance with Procedure RPM 5.1-23, "Data Quality Assessment." The sample 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 indicates that the survey unit passes the unrestricted release criterion, thus, the null hypothesis is rejected.

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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 2.

The preliminary data review consisted of calculating basic statistical quantities (e.g., mean, median, standard deviation). The standard deviation was slightly more than the value used for the survey design. This is represented by the shift in the retrospective power curve as shown in Attachment 2f. This would indicate a need to change the original LBGR in order to maintain the number of samples at fifteen (15) to meet the Operational DCGL. However, the value of LBGR is not a critical issue as the survey unit has passed the statistical test, and the mean and median values are well below the Operational DCGL when used in conjunction with the unity rule. 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 criterion with adequate power as required by the DQOs.

The range of the data, about 3.23 standard deviations, was not unusually large. The difference between the mean and median was 40.8% 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 shows some positive skewness as confirmed by the calculated skew of 2.01.

All data, assessments, and graphical representations are provided in Attachment 2.

12. ANOMALIES

The anomalies associated with the disagreement between the field splits has been discussed in Section 7. The source of the disagreement for Co-60, was likely due to Co-60 being present in the form of discrete particles. Such a physical form does not lend itself to homogenous mixing in a sediment matrix.

No other anomalies were identified in this survey unit.

13. CONCLUSION

Survey Unit 9106-0005 has demonstrated compliance with the dose based, unrestricted release criterion. The sample data passed the Sign Test and the null hypothesis was rejected. The ALARA criteria for soils as specified in Chapter 4 of the LTP were achieved. Reclassification and remediation of this survey unit was not required.

Graphical representation of data indicates some positive skewness that is probably due to localized differences in particulate deposition rates, hydraulic velocity and sedimentation rates. The Retrospective Power Curve generated using COMPASS shows adequate power was achieved. The survey unit was properly designated as a Class 2 survey unit.

DISCHARGE CANAL
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The dose contribution from sediment in this survey unit is 2.2 mrem/yr TEDE based on the average concentration of the samples used for non-parametric statistical sampling.

This survey unit is not affected by existing groundwater (reference CY memo ISC 06-024). It has been determined that the dose contribution from existing groundwater sources is bounded by zero (0) mrem/yr TEDE.

This survey unit is not considered impacted by future groundwater radioactive contamination, as there are no concrete foundations or footings 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, therefore, zero (0) 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 2.2 mrem/yr Total Effective Dose Equivalent (TEDE).

14. ATTACHMENTS

14.1 Attachment 1 – Figures

14.2 Attachment 2 – Sample and Statistical Data

DISCHARGE CANAL
SURVEY UNIT 9106-0005
RELEASE RECORD

Attachment 1
Figures
(9 pages)

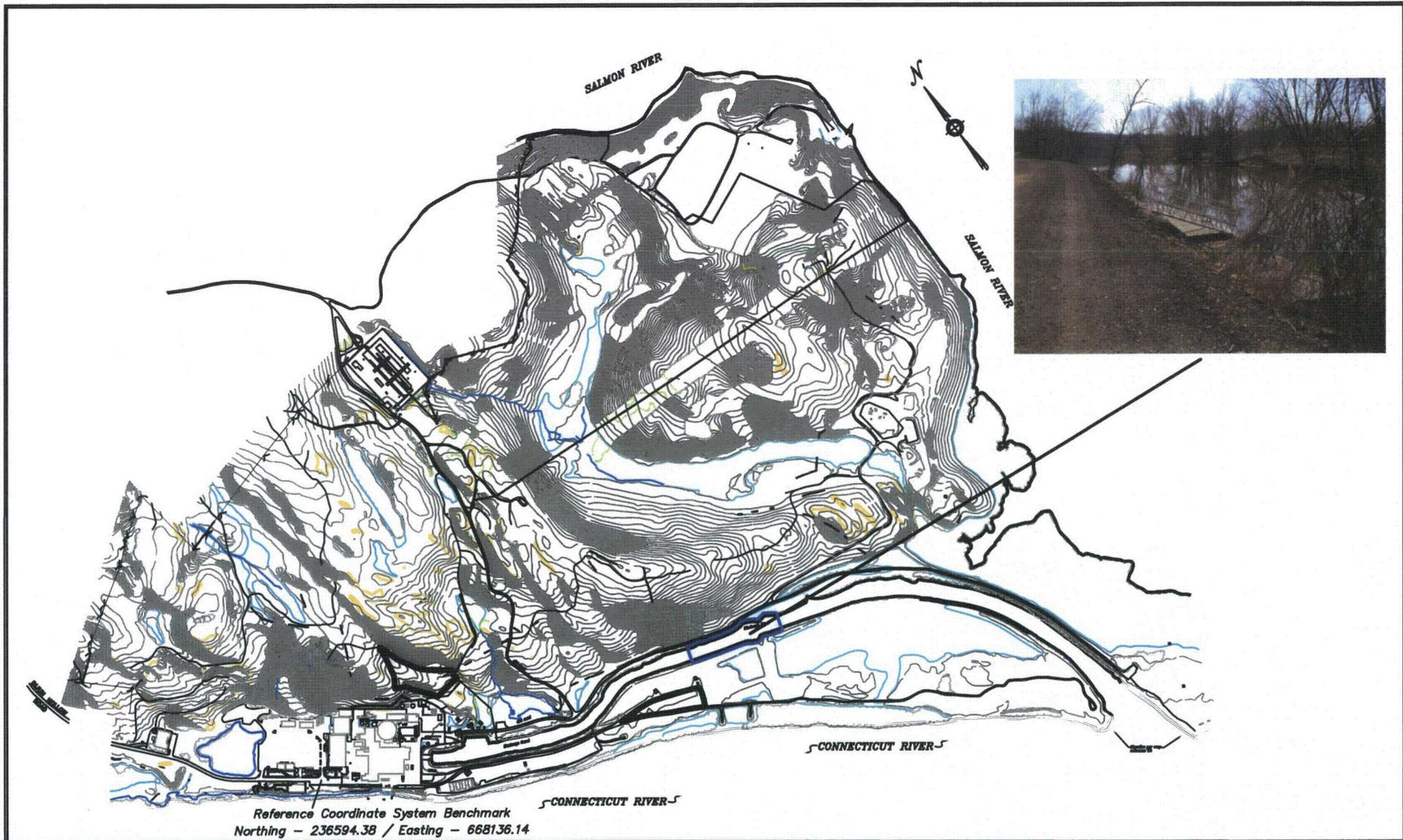


Figure 1



Connecticut Yankee Atomic Power Company
 Site Map With Reference To Survey Unit 9106-0005

Date	By
October 2006	E.E.S.

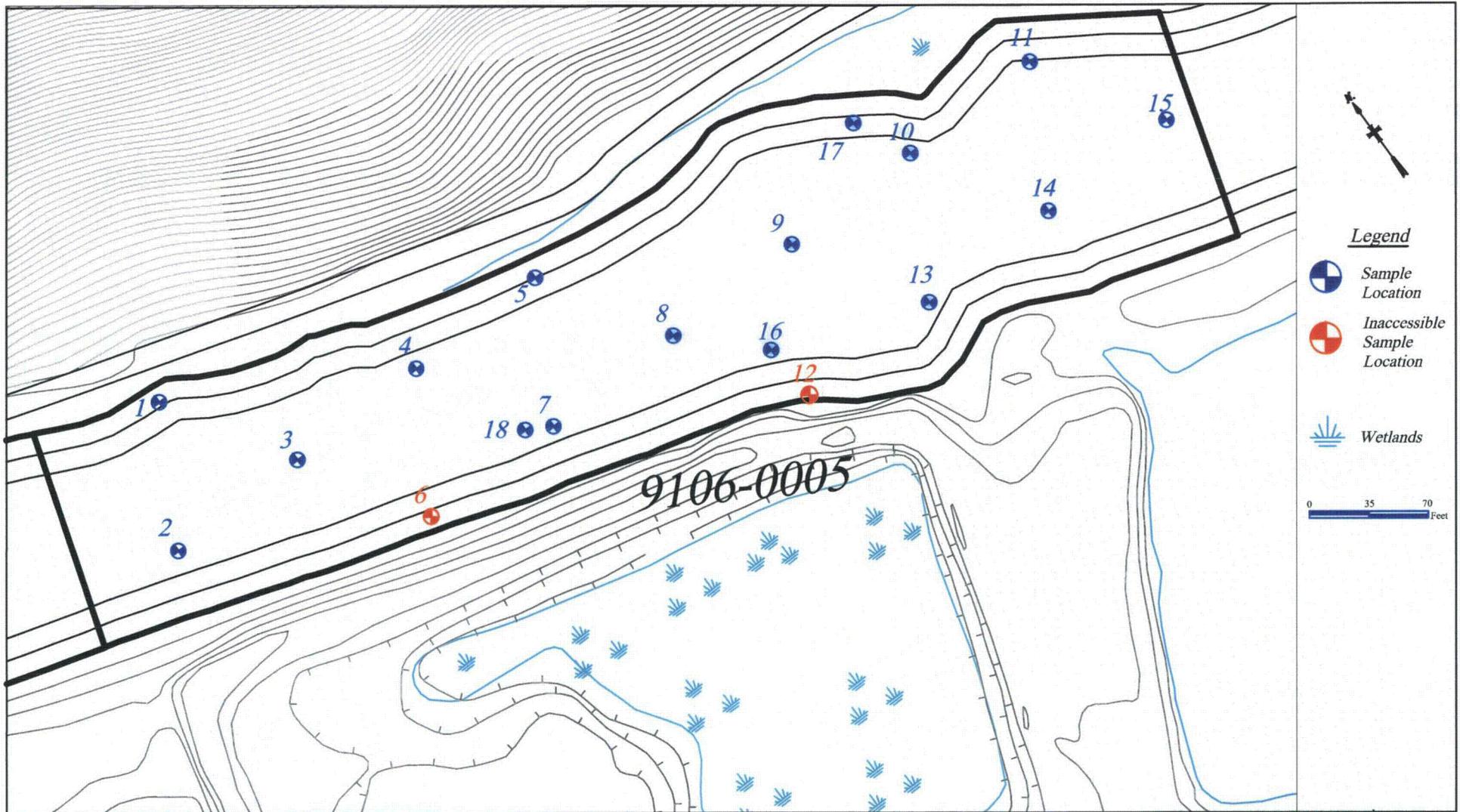


Figure 2

Connecticut Yankee Atomic Power Company
 9106-0005 Final Status Survey Design

Date	By	Rev.
October 2006	E.E.S.	0

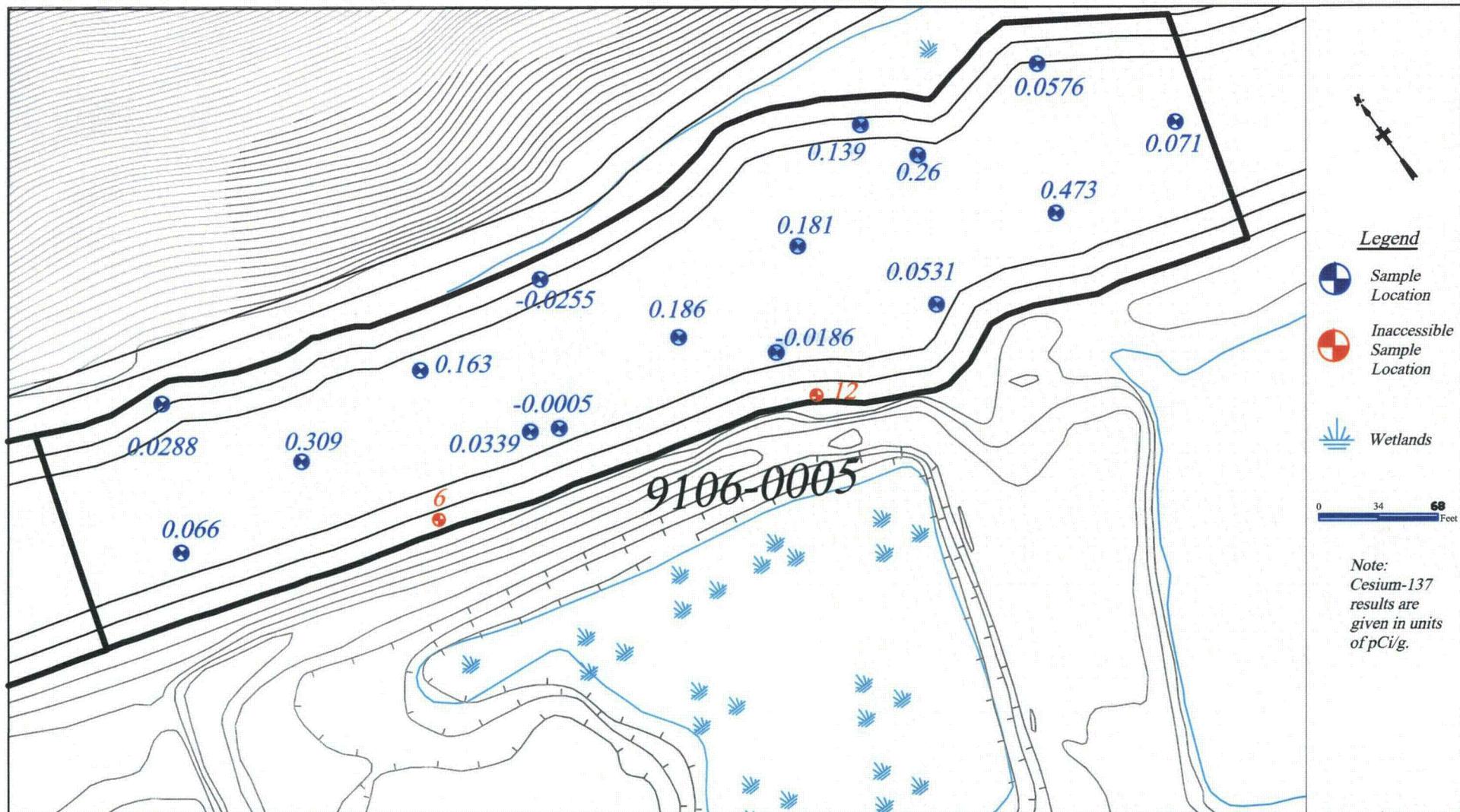


Figure 3

Connecticut Yankee Atomic Power Company
 9106-0005 Final Status Survey Design
 Cesium-137 Posting Plot

Date	By	Rev.
October 2006	E.E.S.	0

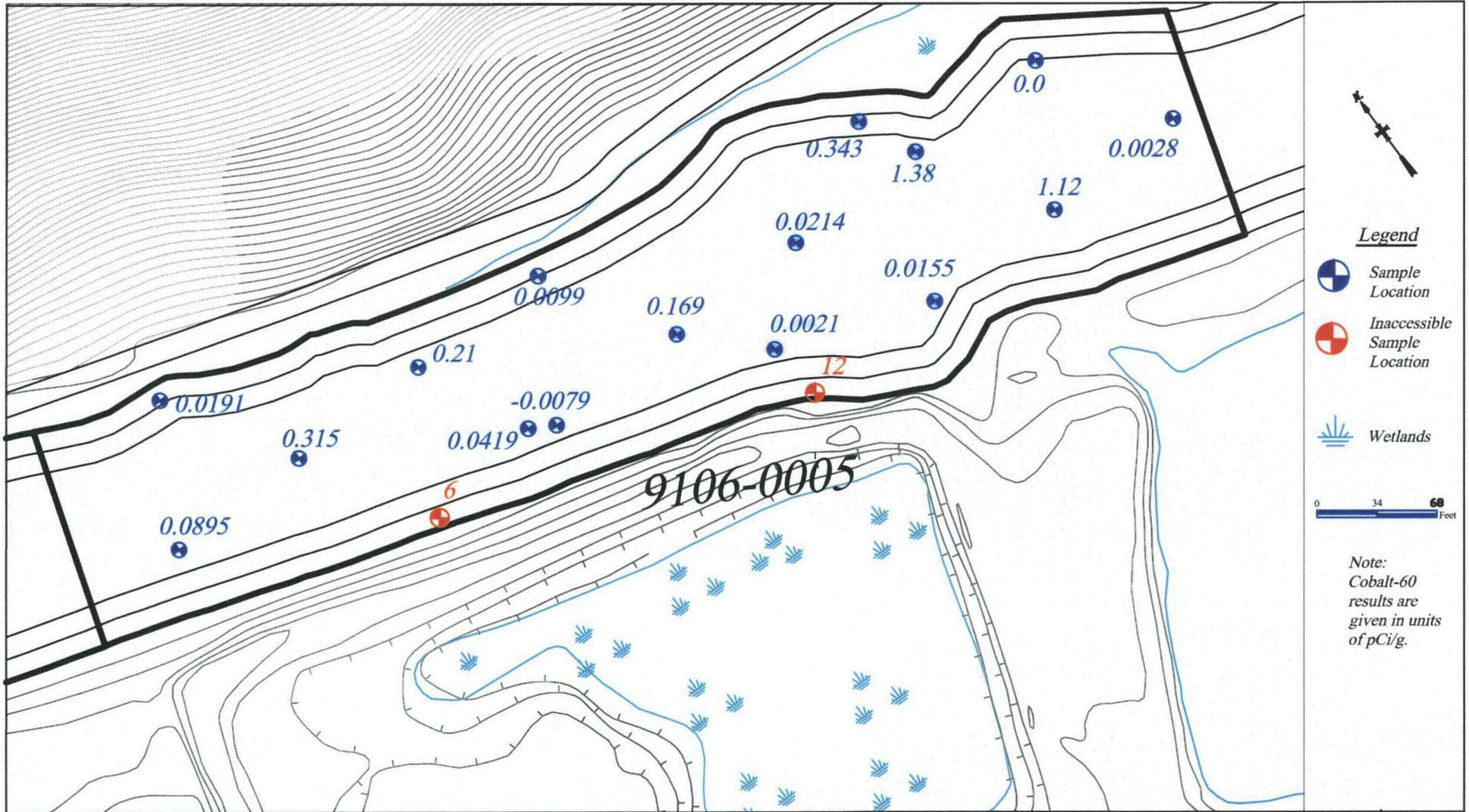
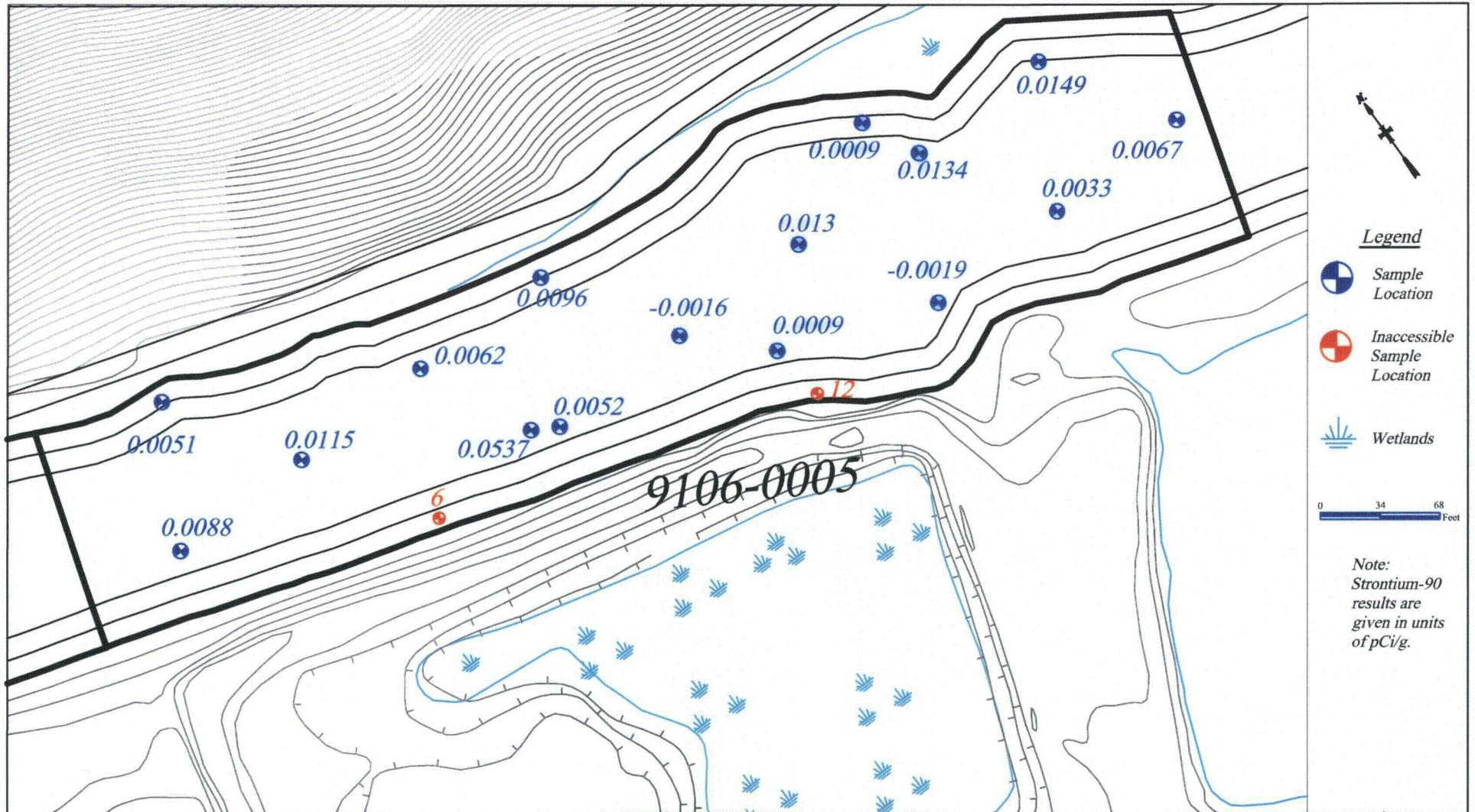


Figure 4

Connecticut Yankee Atomic Power Company
 9106-0005 Final Status Survey Design
 Cobalt-60 Posting Plot

Date	By	Rev.
October 2006	E.E.S.	0



Connecticut Yankee Atomic Power Company
 9106-0005 Final Status Survey Design
 Strontium-90 Posting Plot

Figure 5

Date	By	Rev.
October 2006	E.E.S.	0

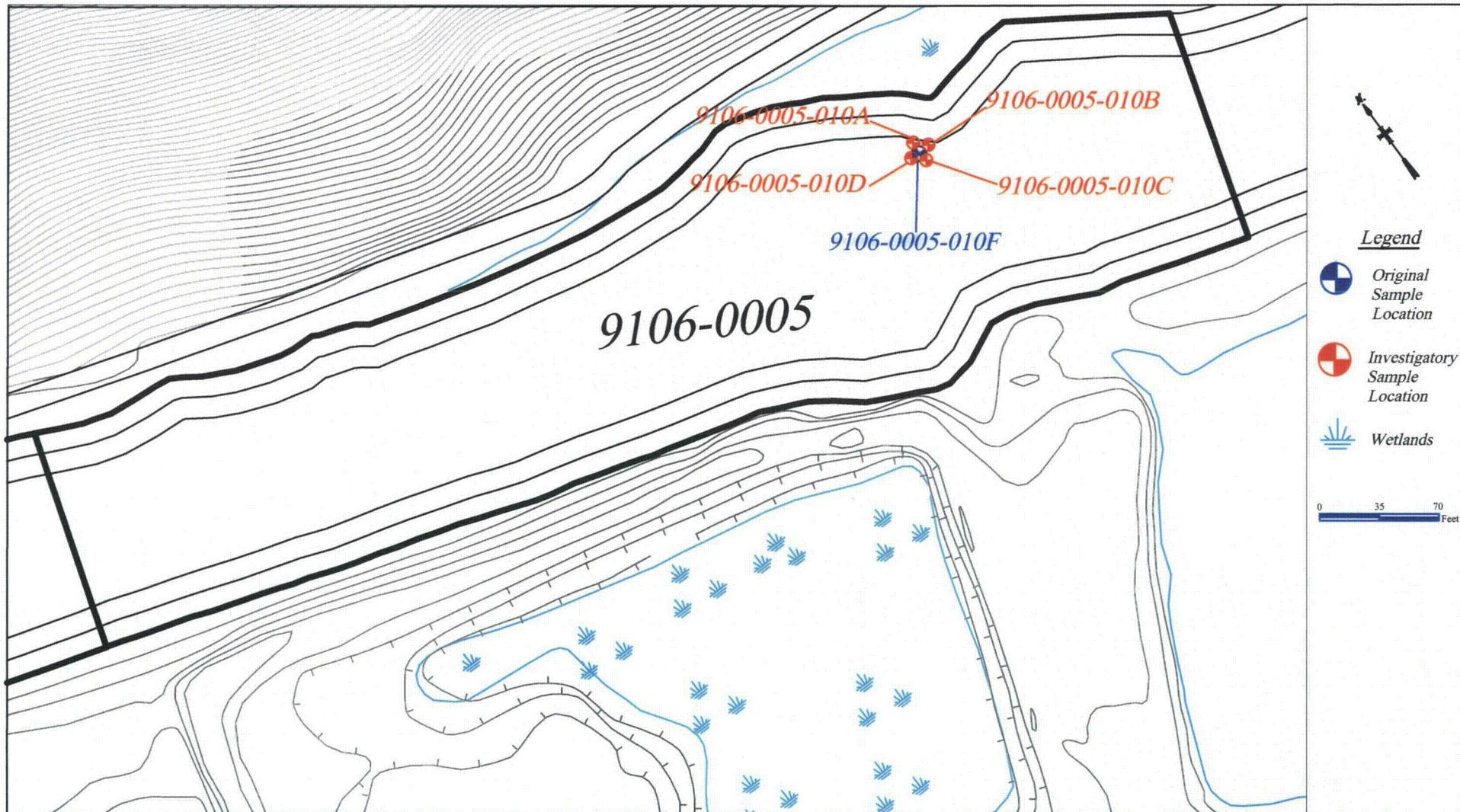


Figure 6

Connecticut Yankee Atomic Power Company
 9106-0005 Final Status Survey Design Investigation Sample Locations

Date	By	Rev.
February 2007	J. McCarthy	1

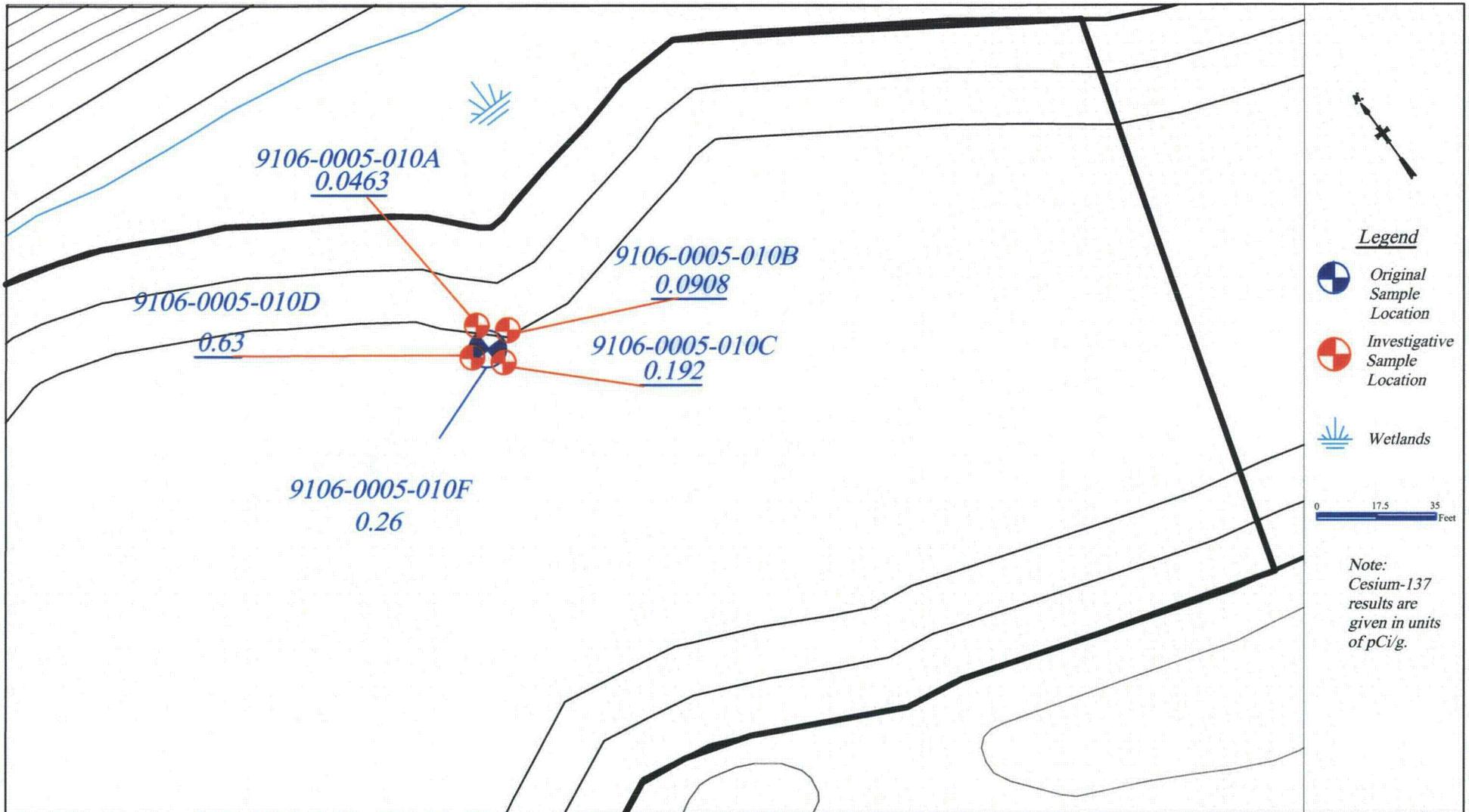


Figure 7	Connecticut Yankee Atomic Power Company		
	9106-0005 (South End) Final Status Survey Investigative Samples Cesium-137 Posting Plot		
	Date	By	Rev.
	February 2007	J. McCarthy	1

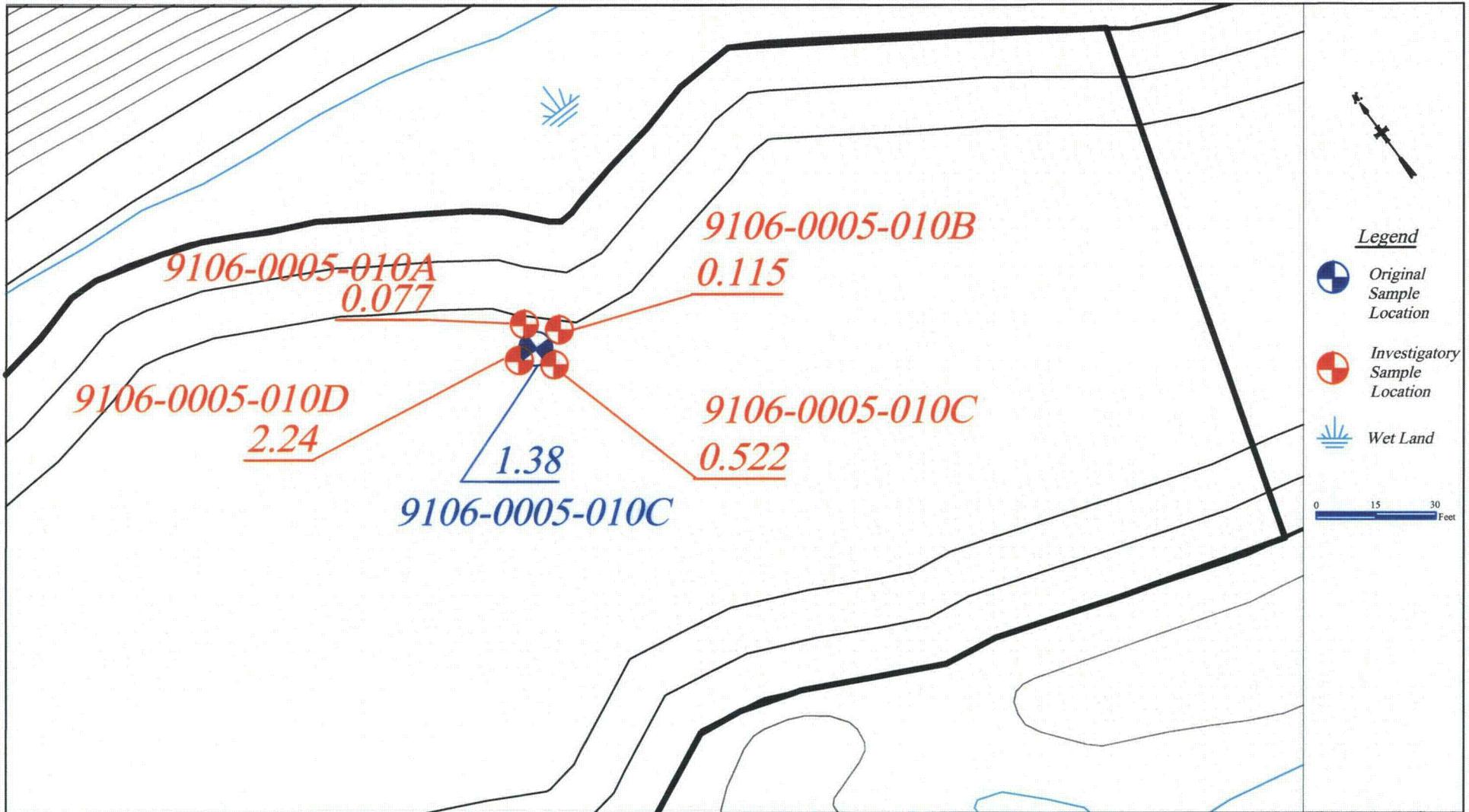


Figure 8

Connecticut Yankee Atomic Power Company
 9106-0005 Final Status Survey Design Investigatory Samples
 Cobalt-60 Posting Plot

Date	By	Rev.
February 2007	J. McCarthy	1

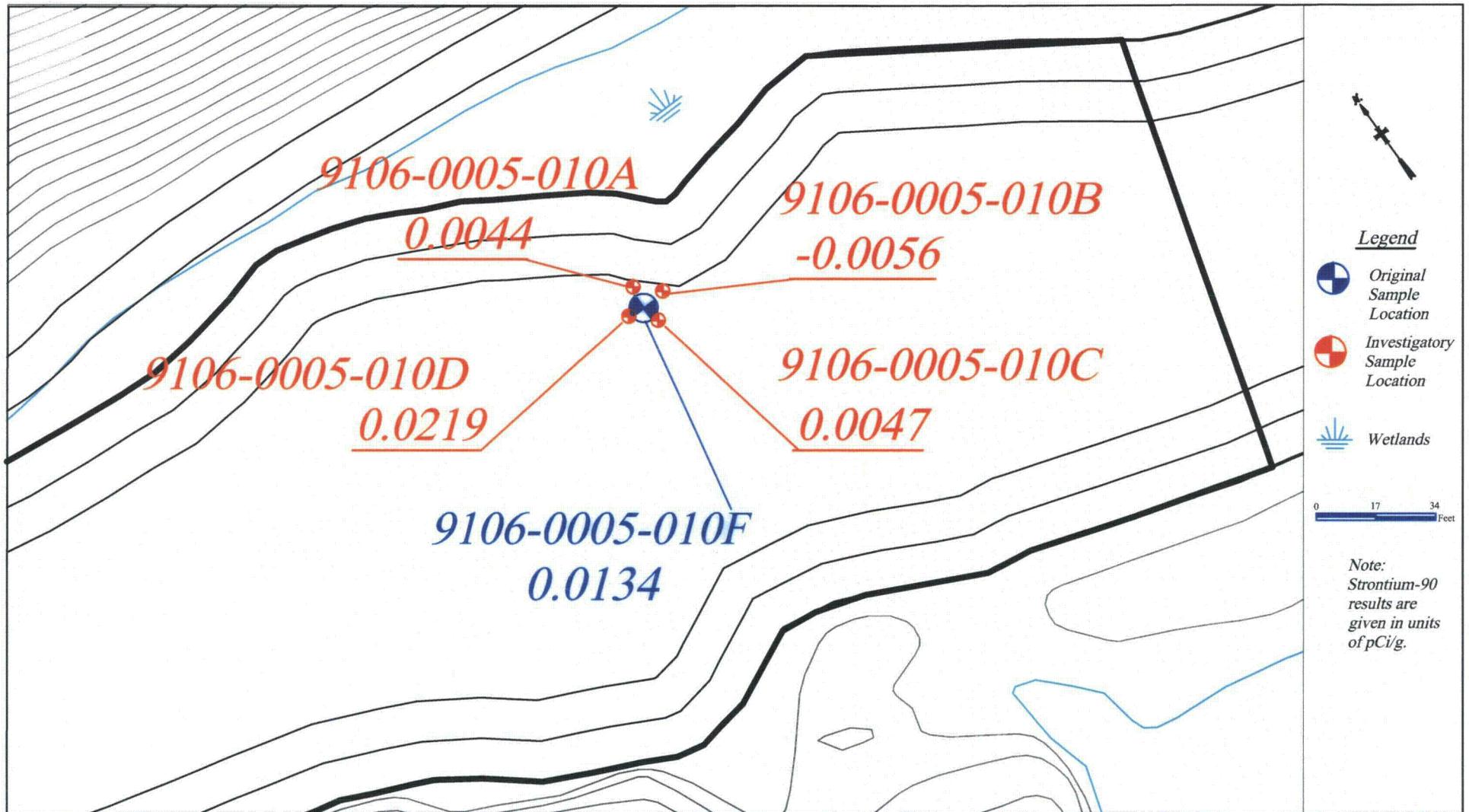


Figure 9

Connecticut Yankee Atomic Power Company
 9106-0005 Final Status Survey Investigatory Samples
 Strontium-90 Posting Plot

Date	By	Rev.
February 2007	J. McCarthy	1

DISCHARGE CANAL
SURVEY UNIT 9106-0005
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Attachment 2
Sample and Statistical Data

DISCHARGE CANAL
SURVEY UNIT 9106-0005
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Attachment 2a
Sample Data
(247 Pages)

Table of Contents

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Quality Control Data	69

General Narrative

CASE NARRATIVE
For
CONNECTICUT YANKEE
RE: Sediment
PO# 002332
Work Order: 162485
SDG: MSR #06-0675

June 7, 2006

Laboratory Identification:

General Engineering Laboratories, LLC

Mailing Address:

P.O. Box 30712
Charleston, South Carolina 29417

Express Mail Delivery and Shipping Address:

2040 Savage Road
Charleston, South Carolina 29407

Telephone Number:

(843) 556-8171

Summary:

Sample receipt

The sample(s) for this Project arrived at General Engineering Laboratories, LLC, (GEL) in Charleston, South Carolina on May 9, 2006. All sample containers arrived without any visible signs of tampering or breakage. The chain of custody contained the proper documentation and signatures.

The laboratory received the following sample(s):

<u>Sample ID</u>	<u>Client Sample ID</u>
162485001	9106-0005-001F
162485002	9106-0005-002F
162485003	9106-0005-003F
162485004	9106-0005-003FS
162485005	9106-0005-004F
162485006	9106-0005-007F
162485007	9106-0005-008F
162485008	9106-0005-010F

<u>Sample ID</u>	<u>Client Sample ID</u>
162485009	9106-0005-011F
162485010	9106-0005-013F
162485011	9106-0005-014F
162485012	9106-0005-016F
162485013	9106-0005-015F
162485014	9106-0005-017F
162485015	9106-0005-018F
162485016	9106-0005-018FS
162485017	9106-0005-005F
162485018	9106-0005-009F

Items of Note:

There are no items of note.

Case Narrative:

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

Analytical Request:

Sixteen sediment samples were analyzed for FSSGAM and Sr-90.
Two sediment samples were analyzed for FSSALL.

Internal Chain of Custody:

Custody was maintained for the sample(s).

Data Package:

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

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



Cheryl Jones
Project Manager

**Chain of Custody
and
Supporting
Documentation**

Connecticut Yankee Atomic Power Company

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

Chain of Custody Form

No. 2006-00318

162485%

Project Name: Haddam Neck Decommissioning			Media Code	Sample Type Code	Container Size- & Type Code	Analyses Requested				Lab Use Only					
Contact Name & Phone: Jack McCarthy 860-267-2556 Ext. 3024						FSSGAM	FSSALL	Sr-90					Comments:		
Analytical Lab (Name, City, State) General Engineering Laboratories 2040 Savage Road, Charleston SC. 29407 843 556 8171. Attn. Cheryl Jones													Comment, Preservation		Lab Sample ID
Priority: <input checked="" type="checkbox"/> 30 D. <input type="checkbox"/> 14 D. <input type="checkbox"/> 7 D.															
Sample Designation	Date	Time													
9106-0005-001F	5/02/06	08:39	SE	C	BP	X		X			Transferred from COC 2006-00311				
9106-0005-002F	5/02/06	09:02	SE	C	BP	X		X			Transferred from COC 2006-00311				
9106-0005-003F	5/01/06	15:28	SE	C	BP	X		X			Transferred from COC 2006-00310				
9106-0005-003FS	5/01/06	15:28	SE	C	BP	X		X			Transferred from COC 2006-00310				
9106-0005-004F	5/02/06	09:33	SE	C	BP	X		X			Transferred from COC 2006-00311				
9106-0005-005F	5/02/06	09:57	SE	C	BP		X	X			Transferred from COC 2006-00311				
9106-0005-007F	5/02/06	12:58	SE	C	BP	X		X			Transferred from COC 2006-00314				
9106-0005-008F	5/02/06	10:37	SE	C	BP	X		X			Transferred from COC 2006-00311				
9106-0005-009F	5/02/06	11:10	SE	C	BP		X	X			Transferred from COC 2006-00311				
NOTES: PO #: 002332 MSR #: 06-0675 SSWP# NA <input checked="" type="checkbox"/> LTP QA <input type="checkbox"/> Radwaste QA <input type="checkbox"/> Non QA										Samples Shipped Via: <input checked="" type="checkbox"/> Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> Hand <input type="checkbox"/> Other		Internal Container Temp <i>18</i> Deg C Custody Sealed? <input checked="" type="checkbox"/> Custody Seal Intact? <input checked="" type="checkbox"/>			
1) Relinquished By <i>[Signature]</i>			Date/Time <i>5-8-06 1440</i>			2) Received By <i>[Signature]</i>			Date/Time <i>5/9/06 0930</i>			Bill of Lading # <i>7920 9195 4363</i>			
3) Relinquished By			Date/Time			4) 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. 2006-00319

Project Name: Haddam Neck Decommissioning			Media Code	Sample Type Code	Container Size & Type Code	Analyses Requested				Lab Use Only				
Contact Name & Phone: Jack McCarthy 860-267-2556 Ext. 3024						FSSGAM	FSSALL	Sr-90	Comments:					
Analytical Lab (Name, City, State) General Engineering Laboratories 2040 Savage Road, Charleston SC. 29407 843 556 8171. Attn. Cheryl Jones														
Priority: <input checked="" type="checkbox"/> 30 D. <input type="checkbox"/> 14 D. <input type="checkbox"/> 7 D.														
Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size & Type Code	FSSGAM	FSSALL	Sr-90			Comment, Preservation	Lab Sample ID		
08 9106-0005-010F	5/02/06	13:16	SE	C	BP	X		X			Transferred from COC 2006-00314			
09 9106-0005-011F	5/02/06	13:39	SE	C	BP	X		X			Transferred from COC 2006-00314			
10 9106-0005-013F	5/02/06	14:35	SE	C	BP	X		X			Transferred from COC 2006-00314			
11 9106-0005-014F	5/02/06	15:04	SE	C	BP	X		X			Transferred from COC 2006-00314			
12 9106-0005-016F	5/02/06	13:59	SE	C	BP	X		X			Transferred from COC 2006-00314			
13 9106-0005-015F	5/03/06	08:03	SE	C	BP	X		X			Transferred from COC 2006-00316			
14 9106-0005-017F	5/03/06	08:13	SE	C	BP	X		X			Transferred from COC 2006-00316			
15 9106-0005-018F	5/03/06	09:09	SE	C	BP	X		X			Transferred from COC 2006-00316			
16 9106-0005-018FS	5/03/06	09:09	SE	C	BP	X		X			Transferred from COC 2006-00316			
NOTES: PO #: 002332 MSR #: 06-0675 SSWP# NA <input checked="" type="checkbox"/> LTP QA <input type="checkbox"/> Radwaste QA <input type="checkbox"/> Non QA											Samples Shipped Via: <input checked="" type="checkbox"/> Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> Hand <input type="checkbox"/> Other		Internal Container Temp: _____ Deg C Custody Sealed? Y <input type="checkbox"/> N <input type="checkbox"/> Custody Seal Intact? Y <input type="checkbox"/> N <input type="checkbox"/>	
1) Relinquished By <i>[Signature]</i>			Date/Time 5-8-06 1440			2) Received By <i>[Signature]</i>			Date/Time 5/9/06 0930			Bill of Lading # 7920 9195 4352		
3) Relinquished By			Date/Time			4) Received By			Date/Time					

Figure 1. Sample Check-in List

Date/Time Received: 5/9/06 0930

SDG#: MSR#06-0675

Work Order Number: 1624851

Shipping Container ID: 7920 9195 4352, 4363 Chain of Custody # 2006-00318/00319

1. Custody Seals on shipping container intact? Yes No
2. Custody Seals dated and signed? Yes No
3. Chain-of-Custody record present? Yes No
4. Cooler temperature 18°C, 19°C
5. Vermiculite/packing materials is: Wet Dry
6. Number of samples in shipping container: 18
7. Sample holding times exceeded? Yes No

8. Samples have:	
<input checked="" type="checkbox"/> tape	<input type="checkbox"/> hazard labels
<input checked="" type="checkbox"/> custody seals	<input type="checkbox"/> appropriate sample labels
9. Samples are:	
<input type="checkbox"/> in good condition	<input checked="" type="checkbox"/> leaking (some bags)
<input type="checkbox"/> broken	<input type="checkbox"/> have air bubbles

10. Were any anomalies identified in sample receipt? Yes No

11. Description of anomalies (include sample numbers): _____

Sample Custodian/Laboratory: Perle Date: 5/9/06 0930

Telephoned to: _____ On _____ By _____



SAMPLE RECEIPT & REVIEW FORM

PM use only

Client: <u>ATMC VANK CD 6/7/06</u>	SDG/ARCOC/Work Order: <u>162485</u>
Date Received: <u>5/9/06</u>	PM(A) Review (ensure non-conforming items are resolved prior to signing): <i>[Signature]</i>
Received By: <u>BHC</u>	

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)				<i>BHC 5/9/06</i>
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				<i>Fed 7920 9195 4352 → 17°C Ex 4363 → 18°C</i>

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*: <u>80 cpm</u>
B PCB Regulated?				Comments:
C Shipped as DOT Hazardous Material? If yes, contact Waste Manager or ESH Manager.				Hazard Class Shipped: UN#:
PM (or PMA) review of Hazard classification: _____				Initials: <u>Cxj</u> Date: <u>5/9/06</u>

RADIOLOGICAL ANALYSIS

**Radiochemistry Case Narrative
Connecticut Yankee Atomic Power Co. (YANK)
Work Order 162485**

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: 533471
Prep Batch Number: 528491
Dry Soil Prep GL-RAD-A-021 Batch Number: 528487

Sample ID	Client ID
162485017	9106-0005-005F
162485018	9106-0005-009F
1201101117	Method Blank (MB)
1201101118	162485017(9106-0005-005F) Sample Duplicate (DUP)
1201101119	162485017(9106-0005-005F) Matrix Spike (MS)
1201101120	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: 162485017 (9106-0005-005F).

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.

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: 533472

Prep Batch Number: 528491

Dry Soil Prep GL-RAD-A-021 Batch Number: 528487

Sample ID	Client ID
162485017	9106-0005-005F
162485018	9106-0005-009F
1201101121	Method Blank (MB)
1201101122	162485017(9106-0005-005F) Sample Duplicate (DUP)
1201101123	162485017(9106-0005-005F) Matrix Spike (MS)
1201101124	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: 162485017 (9106-0005-005F).

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.

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:	533473
Prep Batch Number:	528491
Dry Soil Prep GL-RAD-A-021 Batch Number:	528487

Sample ID	Client ID
162485017	9106-0005-005F
162485018	9106-0005-009F
1201101125	Method Blank (MB)
1201101126	162485017(9106-0005-005F) Sample Duplicate (DUP)
1201101127	162485017(9106-0005-005F) Matrix Spike (MS)
1201101128	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: 162485017 (9106-0005-005F).

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

The tracer yield for sample 1201101127 (9106-0005-005F) was recounted due to poor resolution.

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
Analytical Method:	EML HASL 300, 4.5.2.3
Prep Method:	Dry Soil Prep
Analytical Batch Number:	529776
Prep Batch Number:	528487

Sample ID	Client ID
162485001	9106-0005-001F
162485002	9106-0005-002F
162485003	9106-0005-003F
162485004	9106-0005-003FS
162485005	9106-0005-004F
162485006	9106-0005-007F
162485007	9106-0005-008F
162485008	9106-0005-010F
162485009	9106-0005-011F
162485010	9106-0005-013F
162485011	9106-0005-014F
162485012	9106-0005-016F
162485013	9106-0005-015F
162485014	9106-0005-017F
162485015	9106-0005-018F
162485016	9106-0005-018FS
162485017	9106-0005-005F
162485018	9106-0005-009F
1201092332	Method Blank (MB)
1201092333	162485001(9106-0005-001F) Sample Duplicate (DUP)
1201092334	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# 11.

Calibration Information:**Calibration Information**

All initial and continuing calibration requirements have been met.

Standards Information

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

Sample Geometry

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

Quality Control (QC) Information:**Blank Information**

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

Designated QC

The following sample was used for QC: 162485001 (9106-0005-001F).

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

Samples 162485002 (9106-0005-002F), 162485003 (9106-0005-003F), 162485014 (9106-0005-017F) and 162485015 (9106-0005-018F) were recounted due to high MDAs.

Miscellaneous Information:**NCR Documentation**

Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. 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 interference.	Europium-155	162485006 162485015 1201092333
		Manganese-54	162485008
UI	Data rejected due to low abundance.	Cesium-134	162485001 162485002 162485008 162485011 162485012 162485013 162485014 162485015 162485017 162485018 1201092333
		Cobalt-60	162485016
UI	Data rejected due to no valid peak.		162485009

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:	535512
Prep Batch Number:	528491
Dry Soil Prep GL-RAD-A-021 Batch Number:	528487

Sample ID	Client ID
162485001	9106-0005-001F
162485002	9106-0005-002F
162485003	9106-0005-003F
162485004	9106-0005-003FS
162485005	9106-0005-004F
162485006	9106-0005-007F
162485007	9106-0005-008F
162485008	9106-0005-010F
162485009	9106-0005-011F
162485010	9106-0005-013F
162485011	9106-0005-014F
162485012	9106-0005-016F
162485013	9106-0005-015F
162485014	9106-0005-017F
162485015	9106-0005-018F
162485016	9106-0005-018FS
162485017	9106-0005-005F
162485018	9106-0005-009F
1201105909	Method Blank (MB)
1201105910	162335018(9106-0003-008F) Sample Duplicate (DUP)
1201105911	162335018(9106-0003-008F) Matrix Spike (MS)
1201105912	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: 162335018 (9106-0003-008F).

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.

Additional Comments

Additional comments were not required for this sample set.

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:	531704

Sample ID	Client ID
162485017	9106-0005-005F
162485018	9106-0005-009F
1201096867	Method Blank (MB)
1201096868	162583001(NOL-02-02-005-F-S) Sample Duplicate (DUP)
1201096869	162583001(NOL-02-02-005-F-S) Matrix Spike (MS)
1201096870	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: 162583001 (NOL-02-02-005-F-S).

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:	531618
Prep Batch Number:	528491
Dry Soil Prep GL-RAD-A-021 Batch Number:	528487

Sample ID	Client ID
162485018	9106-0005-009F
1201096631	Method Blank (MB)
1201096632	163173001(9304-0000-063RACR) Sample Duplicate (DUP)
1201096633	163173001(9304-0000-063RACR) Matrix Spike (MS)
1201096634	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: 163173001 (9304-0000-063RACR).

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:	535483
Prep Batch Number:	528491
Dry Soil Prep GL-RAD-A-021 Batch Number:	528487

Sample ID	Client ID
162485017	9106-0005-005F
1201105872	Method Blank (MB)
1201105873	162335018(9106-0003-008F) Sample Duplicate (DUP)
1201105874	162335018(9106-0003-008F) Matrix Spike (MS)
1201105875	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: 162335018 (9106-0003-008F).

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 reprepared due to low/high carrier/tracer yield.

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:	531622
Prep Batch Number:	528491
Dry Soil Prep GL-RAD-A-021 Batch Number:	528487

Sample ID	Client ID
162485017	9106-0005-005F
162485018	9106-0005-009F
1201096644	Method Blank (MB)
1201096645	163173001(9304-0000-063RACR) Sample Duplicate (DUP)
1201096646	163173001(9304-0000-063RACR) Matrix Spike (MS)
1201096647	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: 163173001 (9304-0000-063RACR).

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-HTD2,ALL FSS
Analytical Method:	EPA 906.0 Modified
Analytical Batch Number:	531705

Sample ID	Client ID
162485017	9106-0005-005F
162485018	9106-0005-009F
1201096877	Method Blank (MB)
1201096878	162583001(NOL-02-02-005-F-S) Sample Duplicate (DUP)
1201096879	162583001(NOL-02-02-005-F-S) Matrix Spike (MS)
1201096880	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# 11.

Calibration Information:

Calibration Information

All initial and continuing calibration requirements have been met.

Standards Information

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

Sample Geometry

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

Quality Control (QC) Information:

Blank Information

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

Designated QC

The following sample was used for QC: 162583001 (NOL-02-02-005-F-S).

QC Information

All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time

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

Preparation Information

All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis

Sample 1201096877 (MB) was recounted due to high MDA.

Miscellaneous Information:

NCR Documentation

Nonconformance reports are generated to document any procedural anomalies that may deviate from

referenced SOP or contractual documents. 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: 534984

Sample ID	Client ID
162485017	9106-0005-005F
162485018	9106-0005-009F
1201104745	Method Blank (MB)
1201104746	163173001(9304-0000-063RACR) Sample Duplicate (DUP)
1201104747	163173001(9304-0000-063RACR) Matrix Spike (MS)
1201104748	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.

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#06-0675 GEL Work Order: 162485

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 reporting 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: June 8, 2006

Client Sample ID: 9106 0005 001F
Sample ID: 162485001
Matrix: SE
Collect Date: 02 MAY 06
Receive Date: 09 MAY 06
Collector: Client
Moisture: 13.9%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
<i>Gamma, Solid FSS GAM & ALL FSS</i>													
Actinium 228		1.69	+/- 0.251	0.0613	+/- 0.251	0.131	pCi/g		MJH1	06/02/06	1701	529776	1
Americium 241	U	0.064	+/- 0.113	0.0919	+/- 0.113	0.188	pCi/g						
Bismuth 212		0.887	+/- 0.313	0.147	+/- 0.313	0.310	pCi/g						
Bismuth 214		1.15	+/- 0.147	0.0343	+/- 0.147	0.072	pCi/g						
Cesium 134	UUI	0.00	+/- 0.0385	0.0269	+/- 0.0385	0.0561	pCi/g						
Cesium 137	U	0.0288	+/- 0.0259	0.020	+/- 0.0259	0.042	pCi/g						
Cobalt 60	U	0.0191	+/- 0.0235	0.0194	+/- 0.0235	0.0418	pCi/g						
Europium 152	U	0.0115	+/- 0.0595	0.053	+/- 0.0595	0.110	pCi/g						
Europium 154	U	0.0146	+/- 0.0717	0.0515	+/- 0.0717	0.111	pCi/g						
Europium 155	U	0.0293	+/- 0.0678	0.0581	+/- 0.0678	0.119	pCi/g						
Lead 212		1.62	+/- 0.145	0.0311	+/- 0.145	0.0639	pCi/g						
Lead 214		1.36	+/- 0.154	0.035	+/- 0.154	0.0728	pCi/g						
Manganese 54	U	0.0112	+/- 0.0236	0.021	+/- 0.0236	0.0443	pCi/g						
Niobium 94	U	0.00247	+/- 0.0192	0.0168	+/- 0.0192	0.0353	pCi/g						
Potassium 40		11.3	+/- 1.05	0.148	+/- 1.05	0.326	pCi/g						
Radium 226		1.15	+/- 0.147	0.0343	+/- 0.147	0.072	pCi/g						
Silver 108m	U	0.000679	+/- 0.0191	0.0167	+/- 0.0191	0.0349	pCi/g						
Thallium 208		0.495	+/- 0.0669	0.0186	+/- 0.0669	0.0391	pCi/g						
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid ALL FSS</i>													
Strontium 90	U	0.0051	+/- 0.00834	0.00785	+/- 0.00834	0.0162	pCi/g		BXF1	06/06/06	2315	535512	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL RAD A 021B	LXM1	05/10/06	0855	528491
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	05/09/06	1829	528487

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

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: June 8, 2006

Client Sample ID: 9106 0005 001F
Sample ID: 162485001

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time Batch	Mtd
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits					
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
 - 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
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Report Date: June 8, 2006

Client Sample ID: 9106 0005 002F
Sample ID: 162485002
Matrix: SE
Collect Date: 02 MAY 06
Receive Date: 09 MAY 06
Collector: Client
Moisture: 24.4%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
<i>Gamma, Solid FSS GAM & ALL FSS</i>													
Actinium 228		1.01	+/- 0.158	0.0602	+/- 0.158	0.128	pCi/g		MJH1	06/06/06	2111	529776	1
Americium 241	U	0.0239	+/- 0.128	0.0948	+/- 0.128	0.195	pCi/g						
Bismuth 212		0.970	+/- 0.334	0.131	+/- 0.334	0.276	pCi/g						
Bismuth 214		0.596	+/- 0.0898	0.0351	+/- 0.0898	0.0732	pCi/g						
Cesium 134	UUI	0.00	+/- 0.040	0.0245	+/- 0.040	0.0512	pCi/g						
Cesium 137		0.066	+/- 0.028	0.0183	+/- 0.028	0.0383	pCi/g						
Cobalt 60		0.0895	+/- 0.0523	0.0192	+/- 0.0523	0.0414	pCi/g						
Europium 152	U	0.00476	+/- 0.0525	0.0426	+/- 0.0525	0.0885	pCi/g						
Europium 154	U	0.094	+/- 0.0729	0.054	+/- 0.0729	0.116	pCi/g						
Europium 155	U	0.0792	+/- 0.0731	0.0478	+/- 0.0731	0.0983	pCi/g						
Lead 212		1.12	+/- 0.0645	0.0247	+/- 0.0645	0.0511	pCi/g						
Lead 214		0.709	+/- 0.0806	0.033	+/- 0.0806	0.0684	pCi/g						
Manganese 54	U	0.0279	+/- 0.0326	0.0165	+/- 0.0326	0.035	pCi/g						
Niobium 94	U	0.011	+/- 0.0193	0.0154	+/- 0.0193	0.0323	pCi/g						
Potassium 40		19.7	+/- 1.00	0.165	+/- 1.00	0.358	pCi/g						
Radium 226		0.596	+/- 0.0898	0.0351	+/- 0.0898	0.0732	pCi/g						
Silver 108m	U	0.0068	+/- 0.0174	0.0146	+/- 0.0174	0.0304	pCi/g						
Thallium 208		0.351	+/- 0.0455	0.0182	+/- 0.0455	0.038	pCi/g						
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid ALL FSS</i>													
Strontium 90	U	0.00879	+/- 0.0124	0.0116	+/- 0.0124	0.0241	pCi/g		BXF1	06/06/06	2315	535512	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL RAD A 021B	LXM1	05/10/06	0855	528491
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	05/09/06	1829	528487

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

Report Date: June 8, 2006

Client Sample ID: 9106 0005 002F
Sample ID: 162485002

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time Batch	Mtd
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits					
Carrier/Tracer Recovery	GFPC, Sr90, solid	ALL FSS			77		(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
 - 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: June 8, 2006

Client Sample ID: 9106 0005 003F
Sample ID: 162485003
Matrix: SE
Collect Date: 01 MAY 06
Receive Date: 09 MAY 06
Collector: Client
Moisture: 18%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
<i>Gamma, Solid FSS GAM & ALL FSS</i>													
Actinium 228		0.799	+/- 0.140	0.0393	+/- 0.140	0.0827	pCi/g		MJH1	06/07/06	0542	529776	1
Americium 241	U	0.0143	+/- 0.0558	0.0479	+/- 0.0558	0.0981	pCi/g						
Bismuth 212		0.576	+/- 0.223	0.0854	+/- 0.223	0.179	pCi/g						
Bismuth 214		0.558	+/- 0.0789	0.0206	+/- 0.0789	0.0428	pCi/g						
Cesium 134	U	0.0211	+/- 0.025	0.0143	+/- 0.025	0.0297	pCi/g						
Cesium 137		0.309	+/- 0.0378	0.0108	+/- 0.0378	0.0227	pCi/g						
Cobalt 60		0.315	+/- 0.0352	0.0107	+/- 0.0352	0.0228	pCi/g						
Europium 152	U	0.036	+/- 0.0336	0.0288	+/- 0.0336	0.0598	pCi/g						
Europium 154	U	0.031	+/- 0.0389	0.0304	+/- 0.0389	0.0648	pCi/g						
Europium 155	U	0.049	+/- 0.0404	0.0382	+/- 0.0404	0.0783	pCi/g						
Lead 212		0.770	+/- 0.0726	0.0187	+/- 0.0726	0.0384	pCi/g						
Lead 214		0.591	+/- 0.072	0.0223	+/- 0.072	0.046	pCi/g						
Manganese 54	U	0.0053	+/- 0.0138	0.0123	+/- 0.0138	0.0257	pCi/g						
Niobium 94	U	0.00488	+/- 0.0117	0.0106	+/- 0.0117	0.0221	pCi/g						
Potassium 40		11.1	+/- 0.839	0.090	+/- 0.839	0.195	pCi/g						
Radium 226		0.558	+/- 0.0789	0.0206	+/- 0.0789	0.0428	pCi/g						
Silver 108m	U	0.00339	+/- 0.0112	0.010	+/- 0.0112	0.0208	pCi/g						
Thallium 208		0.241	+/- 0.036	0.00999	+/- 0.036	0.0209	pCi/g						
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid ALL FSS</i>													
Strontium 90	U	0.0115	+/- 0.00646	0.00552	+/- 0.00646	0.0116	pCi/g		BXF1	06/06/06	2315	535512	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL RAD A 021B	LXM1	05/10/06	0855	528491
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	05/09/06	1829	528487

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

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Address : 362 Injun Hollow Rd

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

Report Date: June 8, 2006

Client Sample ID: 9106 0005 003F
Sample ID: 162485003

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time Batch	Mtd
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits					
Carrier/Tracer Recovery	GFPC, Sr90, solid	ALL FSS			80		(25% 125%)					

Notes:

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- * 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
 - 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: June 8, 2006

Client Sample ID: 9106 0005 003FS
Sample ID: 162485004
Matrix: SE
Collect Date: 01 MAY 06
Receive Date: 09 MAY 06
Collector: Client
Moisture: 19.2%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
<i>Gamma, Solid FSS GAM & ALL FSS</i>													
Actinium 228		0.820	+/- 0.171	0.0681	+/- 0.171	0.146	pCi/g		MJH1	06/02/06	1705	529776	1
Americium 241	U	0.213	+/- 0.112	0.0853	+/- 0.112	0.175	pCi/g						
Bismuth 212		0.487	+/- 0.330	0.145	+/- 0.330	0.308	pCi/g						
Bismuth 214		0.660	+/- 0.096	0.0359	+/- 0.096	0.0759	pCi/g						
Cesium 134	U	0.0563	+/- 0.0303	0.027	+/- 0.0303	0.0569	pCi/g						
Cesium 137		0.331	+/- 0.0533	0.0191	+/- 0.0533	0.0406	pCi/g						
Cobalt 60		0.618	+/- 0.0738	0.0204	+/- 0.0738	0.0445	pCi/g						
Europium 152	U	0.0624	+/- 0.0613	0.0496	+/- 0.0613	0.104	pCi/g						
Europium 154	U	0.00151	+/- 0.0757	0.0543	+/- 0.0757	0.119	pCi/g						
Europium 155	U	0.0473	+/- 0.0801	0.058	+/- 0.0801	0.120	pCi/g						
Lead 212		0.789	+/- 0.0601	0.0292	+/- 0.0601	0.0606	pCi/g						
Lead 214		0.663	+/- 0.099	0.0392	+/- 0.099	0.0816	pCi/g						
Manganese 54	U	0.0192	+/- 0.0257	0.0232	+/- 0.0257	0.049	pCi/g						
Niobium 94	U	0.00129	+/- 0.0203	0.0176	+/- 0.0203	0.0372	pCi/g						
Potassium 40		11.6	+/- 0.876	0.156	+/- 0.876	0.349	pCi/g						
Radium 226		0.660	+/- 0.096	0.0359	+/- 0.096	0.0759	pCi/g						
Silver 108m	U	0.00245	+/- 0.0201	0.0169	+/- 0.0201	0.0355	pCi/g						
Thallium 208		0.272	+/- 0.0448	0.022	+/- 0.0448	0.0462	pCi/g						
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid ALL FSS</i>													
Strontium 90	U	0.00413	+/- 0.0087	0.00819	+/- 0.0087	0.0171	pCi/g		BXF1	06/06/06	2315	535512	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL RAD A 021B	LXM1	05/10/06	0855	528491
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	05/09/06	1829	528487

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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Address : 362 Injun Hollow Rd

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

Report Date: June 8, 2006

Client Sample ID: 9106 0005 003FS
Sample ID: 162485004

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time Batch	Mtd
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits					
Carrier/Tracer Recovery	GFPC, Sr90, solid	ALL	FSS		63		(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
 - 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: June 8, 2006

Client Sample ID: 9106 0005 004F
Sample ID: 162485005
Matrix: SE
Collect Date: 02 MAY 06
Receive Date: 09 MAY 06
Collector: Client
Moisture: 15%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
<i>Gamma, Solid FSS GAM & ALL FSS</i>													
Actinium 228		0.988	+/- 0.223	0.0833	+/- 0.223	0.167	pCi/g		MJH1	06/04/06	2031	529776	1
Americium 241	U	0.0868	+/- 0.102	0.0899	+/- 0.102	0.180	pCi/g						
Bismuth 212		0.795	+/- 0.406	0.158	+/- 0.406	0.316	pCi/g						
Bismuth 214		0.652	+/- 0.118	0.044	+/- 0.118	0.088	pCi/g						
Cesium 134	U	0.0438	+/- 0.042	0.0264	+/- 0.042	0.0527	pCi/g						
Cesium 137		0.163	+/- 0.040	0.0208	+/- 0.040	0.0416	pCi/g						
Cobalt 60		0.210	+/- 0.0451	0.0199	+/- 0.0451	0.0398	pCi/g						
Europium 152	U	0.0114	+/- 0.0904	0.0574	+/- 0.0904	0.115	pCi/g						
Europium 154	U	0.0148	+/- 0.069	0.0549	+/- 0.069	0.110	pCi/g						
Europium 155	U	0.0299	+/- 0.0714	0.0676	+/- 0.0714	0.135	pCi/g						
Lead 212		0.971	+/- 0.110	0.0343	+/- 0.110	0.0687	pCi/g						
Lead 214		0.802	+/- 0.122	0.0413	+/- 0.122	0.0826	pCi/g						
Manganese 54	U	0.00298	+/- 0.0268	0.0209	+/- 0.0268	0.0417	pCi/g						
Niobium 94	U	0.0158	+/- 0.0251	0.0187	+/- 0.0251	0.0373	pCi/g						
Potassium 40		9.40	+/- 0.987	0.171	+/- 0.987	0.342	pCi/g						
Radium 226		0.652	+/- 0.118	0.044	+/- 0.118	0.088	pCi/g						
Silver 108m	U	0.016	+/- 0.0227	0.0189	+/- 0.0227	0.0378	pCi/g						
Thallium 208		0.283	+/- 0.0535	0.0232	+/- 0.0535	0.0464	pCi/g						
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid ALL FSS</i>													
Strontium 90	U	0.00621	+/- 0.00726	0.00668	+/- 0.00726	0.0139	pCi/g		BXF1	06/06/06	2315	535512	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL RAD A 021B	LXM1	05/10/06	0855	528491
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	05/09/06	1829	528487

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

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Address : 362 Injun Hollow Rd

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

Report Date: June 8, 2006

Client Sample ID: 9106 0005 004F
Sample ID: 162485005

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time Batch	Mtd
Surrogate/Tracer recovery		Test			Recovery%		Acceptable Limits					
Carrier/Tracer Recovery		GFPC, Sr90, solid	ALL FSS		81		(25% 125%)					

Notes:

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 - > Result is greater than value reported
 - A The TIC is a suspected aldol condensation product
 - 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: June 8, 2006

Client Sample ID: 9106 0005 007F
Sample ID: 162485006
Matrix: SE
Collect Date: 02 MAY 06
Receive Date: 09 MAY 06
Collector: Client
Moisture: 22.7%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
<i>Gamma, Solid FSS GAM & ALL FSS</i>													
Actinium 228		0.864	+/- 0.211	0.0703	+/- 0.211	0.150	pCi/g		MJH1	06/02/06	1814	529776	1
Americium 241	U	0.0181	+/- 0.123	0.0875	+/- 0.123	0.180	pCi/g						
Bismuth 212		0.624	+/- 0.357	0.151	+/- 0.357	0.320	pCi/g						
Bismuth 214		0.550	+/- 0.117	0.0353	+/- 0.117	0.0744	pCi/g						
Cesium 134	U	0.0386	+/- 0.0448	0.0249	+/- 0.0448	0.0524	pCi/g						
Cesium 137	U	0.000519	+/- 0.0237	0.0194	+/- 0.0237	0.0411	pCi/g						
Cobalt 60	U	0.00792	+/- 0.0276	0.0221	+/- 0.0276	0.0479	pCi/g						
Europium 152	U	0.00987	+/- 0.0594	0.0468	+/- 0.0594	0.0979	pCi/g						
Europium 154	U	0.0388	+/- 0.0715	0.0622	+/- 0.0715	0.134	pCi/g						
Europium 155	UUU	0.00	+/- 0.101	0.0505	+/- 0.101	0.104	pCi/g						
Lead 212		1.01	+/- 0.110	0.027	+/- 0.110	0.0559	pCi/g						
Lead 214		0.568	+/- 0.109	0.0352	+/- 0.109	0.0734	pCi/g						
Manganese 54	U	0.00574	+/- 0.025	0.0198	+/- 0.025	0.0421	pCi/g						
Niobium 94	U	0.0306	+/- 0.0288	0.0179	+/- 0.0288	0.0377	pCi/g						
Potassium 40		15.8	+/- 1.48	0.166	+/- 1.48	0.370	pCi/g						
Radium 226		0.550	+/- 0.117	0.0353	+/- 0.117	0.0744	pCi/g						
Silver 108m	U	0.0145	+/- 0.0187	0.015	+/- 0.0187	0.0317	pCi/g						
Thallium 208		0.328	+/- 0.0609	0.0184	+/- 0.0609	0.0389	pCi/g						
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid ALL FSS</i>													
Strontium 90	U	0.00515	+/- 0.0113	0.0106	+/- 0.0113	0.0221	pCi/g		BXF1	06/06/06	2315	535512	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL RAD A 021B	LXM1	05/10/06	0855	528491
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	05/09/06	1829	528487

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

Report Date: June 8, 2006

Client Sample ID: 9106 0005 007F
Sample ID: 162485006

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Surrogate/Tracer recovery	Test				Recovery%	Acceptable Limits							
Carrier/Tracer Recovery	GFPC, Sr90, solid	ALL FSS			56	(25% 125%)							

Notes:

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- * 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
 - 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: June 8, 2006

Client Sample ID: 9106 0005 008F
 Sample ID: 162485007
 Matrix: SE
 Collect Date: 02 MAY 06
 Receive Date: 09 MAY 06
 Collector: Client
 Moisture: 32.4%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
<i>Gamma, Solid FSS GAM & ALL FSS</i>													
Actinium 228		0.561	+/- 0.225	0.0839	+/- 0.225	0.185	pCi/g		MJH1	06/02/06	1815	529776	1
Americium 241	U	0.0421	+/- 0.116	0.0954	+/- 0.116	0.200	pCi/g						
Bismuth 212		0.707	+/- 0.249	0.146	+/- 0.249	0.325	pCi/g						
Bismuth 214		0.454	+/- 0.107	0.0407	+/- 0.107	0.0883	pCi/g						
Cesium 134	U	0.0398	+/- 0.0588	0.0274	+/- 0.0588	0.0597	pCi/g						
Cesium 137		0.186	+/- 0.0582	0.0245	+/- 0.0582	0.0532	pCi/g						
Cobalt 60		0.169	+/- 0.0693	0.0213	+/- 0.0693	0.0491	pCi/g						
Europium 152	U	0.00962	+/- 0.0639	0.0552	+/- 0.0639	0.118	pCi/g						
Europium 154	U	0.0777	+/- 0.0922	0.0673	+/- 0.0922	0.152	pCi/g						
Europium 155	U	0.0611	+/- 0.0741	0.0675	+/- 0.0741	0.141	pCi/g						
Lead 212		0.622	+/- 0.0943	0.0431	+/- 0.0943	0.0899	pCi/g						
Lead 214		0.505	+/- 0.129	0.0406	+/- 0.129	0.0868	pCi/g						
Manganese 54	U	0.0275	+/- 0.0446	0.0233	+/- 0.0446	0.0512	pCi/g						
Niobium 94	U	0.0153	+/- 0.0267	0.0207	+/- 0.0267	0.0451	pCi/g						
Potassium 40		10.4	+/- 1.09	0.223	+/- 1.09	0.510	pCi/g						
Radium 226		0.454	+/- 0.107	0.0407	+/- 0.107	0.0883	pCi/g						
Silver 108m	U	0.00991	+/- 0.0259	0.0229	+/- 0.0259	0.0488	pCi/g						
Thallium 208		0.210	+/- 0.0495	0.0263	+/- 0.0495	0.0564	pCi/g						
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid ALL FSS</i>													
Strontium 90	U	0.00156	+/- 0.00706	0.00692	+/- 0.00706	0.0144	pCi/g		BXF1	06/06/06	2315	535512	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL RAD A 021B	LXM1	05/10/06	0855	528491
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	05/09/06	1829	528487

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

Report Date: June 8, 2006

Client Sample ID: 9106 0005 008F
Sample ID: 162485007

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time Batch	Mtd
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits					
Carrier/Tracer Recovery	GFPC, Sr90, solid	ALL FSS			80		(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
 - 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: June 8, 2006

Client Sample ID: 9106 0005 010F
Sample ID: 162485008
Matrix: SE
Collect Date: 02 MAY 06
Receive Date: 09 MAY 06
Collector: Client
Moisture: 24.2%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
<i>Gamma, Solid FSS GAM & ALL FSS</i>													
Actinium 228		1.07	+/- 0.262	0.0751	+/- 0.262	0.156	pCi/g		MJH1	06/02/06	1816	529776	1
Americium 241	U	0.106	+/- 0.119	0.0922	+/- 0.119	0.189	pCi/g						
Bismuth 212		0.847	+/- 0.369	0.139	+/- 0.369	0.291	pCi/g						
Bismuth 214		0.606	+/- 0.101	0.0329	+/- 0.101	0.0684	pCi/g						
Cesium 134	UUI	0.00	+/- 0.044	0.0243	+/- 0.044	0.0504	pCi/g						
Cesium 137		0.260	+/- 0.0501	0.0189	+/- 0.0501	0.0393	pCi/g						
Cobalt 60		1.38	+/- 0.116	0.0195	+/- 0.116	0.0414	pCi/g						
Europium 152	U	0.026	+/- 0.0529	0.0437	+/- 0.0529	0.0901	pCi/g						
Europium 154	U	0.00723	+/- 0.0668	0.055	+/- 0.0668	0.117	pCi/g						
Europium 155	U	0.0255	+/- 0.0705	0.0421	+/- 0.0705	0.0862	pCi/g						
Lead 212		1.10	+/- 0.107	0.024	+/- 0.107	0.0494	pCi/g						
Lead 214		0.667	+/- 0.104	0.0308	+/- 0.104	0.0637	pCi/g						
Manganese 54	UUI	0.00	+/- 0.0364	0.0196	+/- 0.0364	0.0409	pCi/g						
Niobium 94	U	0.00799	+/- 0.0213	0.0175	+/- 0.0213	0.0363	pCi/g						
Potassium 40		19.5	+/- 1.58	0.162	+/- 1.58	0.348	pCi/g						
Radium 226		0.606	+/- 0.101	0.0329	+/- 0.101	0.0684	pCi/g						
Silver 108m	U	0.00878	+/- 0.0183	0.0155	+/- 0.0183	0.032	pCi/g						
Thallium 208		0.381	+/- 0.062	0.0159	+/- 0.062	0.0332	pCi/g						
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid ALL FSS</i>													
Strontium 90	U	0.0134	+/- 0.00904	0.00803	+/- 0.00905	0.0167	pCi/g		BXF1	06/06/06	2315	535512	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL RAD A 021B	LXM1	05/10/06	0855	528491
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	05/09/06	1829	528487

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

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

Report Date: June 8, 2006

Client Sample ID: 9106 0005 010F
Sample ID: 162485008

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time Batch	Mtd
Surrogate/Tracer recovery		Test			Recovery%		Acceptable Limits					
Carrier/Tracer Recovery		GFPC, Sr90, solid	ALL FSS		70		(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
 - 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: June 8, 2006

Client Sample ID: 9106 0005 011F
Sample ID: 162485009
Matrix: SE
Collect Date: 02 MAY 06
Receive Date: 09 MAY 06
Collector: Client
Moisture: 21.6%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
<i>Gamma, Solid FSS GAM & ALL FSS</i>													
Actinium 228		1.04	+/- 0.322	0.158	+/- 0.322	0.342	pCi/g		MJH1	06/02/06	1816	529776	1
Americium 241	U	0.0209	+/- 0.0723	0.0605	+/- 0.0723	0.125	pCi/g						
Bismuth 212		0.798	+/- 0.698	0.370	+/- 0.698	0.793	pCi/g						
Bismuth 214		0.761	+/- 0.207	0.0856	+/- 0.207	0.182	pCi/g						
Cesium 134	U	0.0368	+/- 0.0558	0.0494	+/- 0.0558	0.107	pCi/g						
Cesium 137	U	0.0576	+/- 0.053	0.0486	+/- 0.053	0.104	pCi/g						
Cobalt 60	UUI	0.00	+/- 0.0718	0.0351	+/- 0.0718	0.0803	pCi/g						
Europium 152	U	0.0149	+/- 0.126	0.106	+/- 0.126	0.223	pCi/g						
Europium 154	U	0.101	+/- 0.0992	0.136	+/- 0.0992	0.298	pCi/g						
Europium 155	U	0.0805	+/- 0.125	0.0965	+/- 0.125	0.201	pCi/g						
Lead 212		0.965	+/- 0.128	0.0608	+/- 0.128	0.127	pCi/g						
Lead 214		0.696	+/- 0.181	0.0702	+/- 0.181	0.149	pCi/g						
Manganese 54	U	0.0519	+/- 0.0609	0.054	+/- 0.0609	0.115	pCi/g						
Niobium 94	U	0.0229	+/- 0.0502	0.0406	+/- 0.0502	0.087	pCi/g						
Potassium 40		13.2	+/- 1.63	0.372	+/- 1.63	0.844	pCi/g						
Radium 226		0.761	+/- 0.207	0.0856	+/- 0.207	0.182	pCi/g						
Silver 108m	U	0.017	+/- 0.046	0.0389	+/- 0.046	0.0825	pCi/g						
Thallium 208		0.307	+/- 0.106	0.0478	+/- 0.106	0.102	pCi/g						
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid ALL FSS</i>													
Strontium 90	U	0.0149	+/- 0.0147	0.0134	+/- 0.0147	0.028	pCi/g		BXF1	06/06/06	2315	535512	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL RAD A 021B	LXM1	05/10/06	0855	528491
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	05/09/06	1829	528487

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

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

Report Date: June 8, 2006

Client Sample ID: 9106 0005 011F
Sample ID: 162485009

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time Batch	Mtd
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits					
Carrier/Tracer Recovery	GFPC, Sr90, solid	ALL FSS			58		(25% 125%)					

Notes:

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 - < Result is less than value reported
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 - A The TIC is a suspected aldol condensation product
 - 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: June 8, 2006

Client Sample ID: 9106 0005 013F
Sample ID: 162485010
Matrix: SE
Collect Date: 02 MAY 06
Receive Date: 09 MAY 06
Collector: Client
Moisture: 28.7%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
<i>Gamma, Solid FSS GAM & ALL FSS</i>													
Actinium 228		0.845	+/- 0.370	0.118	+/- 0.370	0.260	pCi/g		MJH1	06/02/06	1816	529776	1
Americium 241	U	0.0182	+/- 0.0393	0.0327	+/- 0.0393	0.0687	pCi/g						
Bismuth 212		0.534	+/- 0.723	0.226	+/- 0.723	0.500	pCi/g						
Bismuth 214		0.502	+/- 0.163	0.0695	+/- 0.163	0.149	pCi/g						
Cesium 134	U	0.022	+/- 0.0811	0.0372	+/- 0.0811	0.0817	pCi/g						
Cesium 137	U	0.0531	+/- 0.0476	0.0334	+/- 0.0476	0.0728	pCi/g						
Cobalt 60	U	0.0155	+/- 0.0421	0.0365	+/- 0.0421	0.0826	pCi/g						
Europium 152	U	0.0486	+/- 0.0961	0.0732	+/- 0.0961	0.157	pCi/g						
Europium 154	U	0.0487	+/- 0.128	0.0981	+/- 0.128	0.222	pCi/g						
Europium 155	U	0.00245	+/- 0.0732	0.0575	+/- 0.0732	0.121	pCi/g						
Lead 212		0.953	+/- 0.0988	0.0376	+/- 0.0988	0.080	pCi/g						
Lead 214		0.522	+/- 0.113	0.050	+/- 0.113	0.108	pCi/g						
Manganese 54	U	0.0151	+/- 0.044	0.0338	+/- 0.044	0.0744	pCi/g						
Niobium 94	U	0.0023	+/- 0.0308	0.0254	+/- 0.0308	0.0561	pCi/g						
Potassium 40		14.6	+/- 1.53	0.277	+/- 1.53	0.652	pCi/g						
Radium 226		0.502	+/- 0.163	0.0695	+/- 0.163	0.149	pCi/g						
Silver 108m	U	0.0221	+/- 0.0309	0.0278	+/- 0.0309	0.0598	pCi/g						
Thallium 208		0.308	+/- 0.0757	0.0286	+/- 0.0757	0.0626	pCi/g						
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid ALL FSS</i>													
Strontium 90	U	0.00193	+/- 0.00896	0.00878	+/- 0.00896	0.0183	pCi/g		BXF1	06/06/06	2315	535512	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL RAD A 021B	LXM1	05/10/06	0855	528491
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	05/09/06	1829	528487

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

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

Report Date: June 8, 2006

Client Sample ID: 9106 0005 013F
Sample ID: 162485010

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time Batch	Mtd
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits					
Carrier/Tracer Recovery	GFPC, Sr90, solid	ALL FSS			69		(25% 125%)					

Notes:

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 - < Result is less than value reported
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 - A The TIC is a suspected aldol condensation product
 - 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: June 8, 2006

Client Sample ID:	9106 0005 014F	Project:	YANK01204
Sample ID:	162485011	Client ID:	YANK001
Matrix:	SE	Vol. Recv.:	
Collect Date:	02 MAY 06		
Receive Date:	09 MAY 06		
Collector:	Client		
Moisture:	22.8%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
<i>Gamma, Solid FSS GAM & ALL FSS</i>													
Actinium 228		0.767	+/- 0.372	0.142	+/- 0.372	0.308	pCi/g		MJH1	06/02/06	1817	529776	1
Americium 241	U	0.00567	+/- 0.0503	0.0456	+/- 0.0503	0.0945	pCi/g						
Bismuth 212		0.678	+/- 0.625	0.288	+/- 0.625	0.621	pCi/g						
Bismuth 214		0.568	+/- 0.137	0.0579	+/- 0.137	0.125	pCi/g						
Cesium 134	UUI	0.00	+/- 0.123	0.0505	+/- 0.123	0.108	pCi/g						
Cesium 137		0.473	+/- 0.101	0.0326	+/- 0.101	0.0707	pCi/g						
Cobalt 60		1.12	+/- 0.136	0.027	+/- 0.136	0.0629	pCi/g						
Europium 152	U	0.0376	+/- 0.092	0.0787	+/- 0.092	0.167	pCi/g						
Europium 154	U	0.0403	+/- 0.128	0.103	+/- 0.128	0.231	pCi/g						
Europium 155	U	0.0272	+/- 0.0791	0.0682	+/- 0.0791	0.143	pCi/g						
Lead 212		0.752	+/- 0.097	0.0449	+/- 0.097	0.0942	pCi/g						
Lead 214		0.520	+/- 0.136	0.0599	+/- 0.136	0.127	pCi/g						
Manganese 54	U	0.0183	+/- 0.0478	0.0378	+/- 0.0478	0.0819	pCi/g						
Niobium 94	U	0.0317	+/- 0.0391	0.0351	+/- 0.0391	0.0753	pCi/g						
Potassium 40		10.6	+/- 1.36	0.285	+/- 1.36	0.660	pCi/g						
Radium 226		0.568	+/- 0.137	0.0579	+/- 0.137	0.125	pCi/g						
Silver 108m	U	0.00517	+/- 0.0328	0.028	+/- 0.0328	0.060	pCi/g						
Thallium 208		0.240	+/- 0.0841	0.0342	+/- 0.0841	0.0735	pCi/g						
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid ALL FSS</i>													
Strontium 90	U	0.00327	+/- 0.00761	0.00719	+/- 0.00761	0.015	pCi/g		BXF1	06/06/06	2315	535512	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL RAD A 021B	LXM1	05/10/06	0855	528491
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	05/09/06	1829	528487

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

Report Date: June 8, 2006

Client Sample ID: 9106 0005 014F
Sample ID: 162485011

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time Batch	Mtd
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits					
Carrier/Tracer Recovery	GFPC, Sr90, solid	ALL FSS			73		(25% 125%)					

Notes:

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

Report Date: June 8, 2006

Client Sample ID: 9106 0005 016F
Sample ID: 162485012
Matrix: SE
Collect Date: 02 MAY 06
Receive Date: 09 MAY 06
Collector: Client
Moisture: 36.9%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
<i>Gamma, Solid FSS GAM & ALL FSS</i>													
Actinium 228		0.892	+/- 0.211	0.0546	+/- 0.211	0.115	pCi/g		MJH1	06/02/06	1817	529776	1
Americium 241	U	0.036	+/- 0.0698	0.0577	+/- 0.0698	0.118	pCi/g						
Bismuth 212		0.921	+/- 0.305	0.118	+/- 0.305	0.247	pCi/g						
Bismuth 214		0.623	+/- 0.110	0.0294	+/- 0.110	0.0612	pCi/g						
Cesium 134	UUI	0.00	+/- 0.032	0.0203	+/- 0.032	0.0422	pCi/g						
Cesium 137	U	0.0186	+/- 0.0188	0.014	+/- 0.0188	0.0294	pCi/g						
Cobalt 60	U	0.00207	+/- 0.019	0.0155	+/- 0.019	0.033	pCi/g						
Europium 152	U	0.011	+/- 0.0492	0.041	+/- 0.0492	0.0848	pCi/g						
Europium 154	U	0.0157	+/- 0.0583	0.0481	+/- 0.0583	0.102	pCi/g						
Europium 155	U	0.00321	+/- 0.0586	0.0472	+/- 0.0586	0.0967	pCi/g						
Lead 212		1.03	+/- 0.099	0.0244	+/- 0.099	0.0502	pCi/g						
Lead 214		0.733	+/- 0.119	0.0269	+/- 0.119	0.0559	pCi/g						
Manganese 54	U	0.0111	+/- 0.0205	0.0175	+/- 0.0205	0.0365	pCi/g						
Niobium 94	U	0.000839	+/- 0.0174	0.0146	+/- 0.0174	0.0305	pCi/g						
Potassium 40		17.2	+/- 1.29	0.129	+/- 1.29	0.279	pCi/g						
Radium 226		0.623	+/- 0.110	0.0294	+/- 0.110	0.0612	pCi/g						
Silver 108m	U	0.00106	+/- 0.0164	0.0134	+/- 0.0164	0.0278	pCi/g						
Thallium 208		0.336	+/- 0.0543	0.0152	+/- 0.0543	0.0317	pCi/g						
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr-90, solid ALL FSS</i>													
Strontium 90	U	0.000907	+/- 0.00836	0.00805	+/- 0.00836	0.0168	pCi/g		BXF1	06/06/06	2316	535512	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL RAD A 021B	LXM1	05/10/06	0855	528491
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	05/09/06	1829	528487

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

Report Date: June 8, 2006

Client Sample ID: 9106 0005 016F
Sample ID: 162485012

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time Batch	Mtd
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits					
Carrier/Tracer Recovery	GFPC, Sr90, solid	ALL FSS			69		(25% 125%)					

Notes:

The Qualifiers in this report are defined as follows :

- * 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
 - 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: June 8, 2006

Client Sample ID: 9106 0005 015F
Sample ID: 162485013
Matrix: SE
Collect Date: 03 MAY 06
Receive Date: 09 MAY 06
Collector: Client
Moisture: 11.9%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
<i>Gamma, Solid FSS GAM & ALL FSS</i>													
Actinium 228		0.779	+/- 0.111	0.0398	+/- 0.111	0.0838	pCi/g		MJH1	06/04/06	2021	529776	1
Americium 241	U	0.0415	+/- 0.0889	0.0568	+/- 0.0889	0.116	pCi/g						
Bismuth 212		0.716	+/- 0.201	0.0882	+/- 0.201	0.185	pCi/g						
Bismuth 214		0.693	+/- 0.0601	0.0215	+/- 0.0601	0.0448	pCi/g						
Cesium 134	UUI	0.00	+/- 0.0256	0.0163	+/- 0.0256	0.0337	pCi/g						
Cesium 137		0.0709	+/- 0.0212	0.0112	+/- 0.0212	0.0234	pCi/g						
Cobalt 60	U	0.00278	+/- 0.0149	0.0126	+/- 0.0149	0.0269	pCi/g						
Europium 152	U	0.0239	+/- 0.0383	0.0328	+/- 0.0383	0.0677	pCi/g						
Europium 154	U	0.0182	+/- 0.0424	0.0343	+/- 0.0424	0.0729	pCi/g						
Europium 155	U	0.0206	+/- 0.0452	0.0394	+/- 0.0452	0.0803	pCi/g						
Lead 212		0.762	+/- 0.0411	0.0201	+/- 0.0411	0.0411	pCi/g						
Lead 214		0.764	+/- 0.0661	0.0228	+/- 0.0661	0.0471	pCi/g						
Manganese 54	U	0.0066	+/- 0.0146	0.0123	+/- 0.0146	0.0258	pCi/g						
Niobium 94	U	0.00534	+/- 0.0121	0.0104	+/- 0.0121	0.0218	pCi/g						
Potassium 40		10.6	+/- 0.537	0.0994	+/- 0.537	0.215	pCi/g						
Radium 226		0.693	+/- 0.0601	0.0215	+/- 0.0601	0.0448	pCi/g						
Silver 108m	U	0.000726	+/- 0.0125	0.0108	+/- 0.0125	0.0224	pCi/g						
Thallium 208		0.275	+/- 0.0298	0.0109	+/- 0.0298	0.0228	pCi/g						
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid ALL FSS</i>													
Strontium 90	U	0.00668	+/- 0.00736	0.00679	+/- 0.00736	0.0141	pCi/g		BXF1	06/06/06	2316	535512	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL RAD A 021B	LXM1	05/10/06	0855	528491
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	05/09/06	1829	528487

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

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Address : 362 Injun Hollow Rd

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

Report Date: June 8, 2006

Client Sample ID: 9106 0005 015F
Sample ID: 162485013

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time Batch	Mtd
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits					
Carrier/Tracer Recovery	GFPC, Sr90, solid	ALL FSS			88		(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
 - 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: June 8, 2006

Client Sample ID: 9106 0005 017F
Sample ID: 162485014
Matrix: SE
Collect Date: 03 MAY 06
Receive Date: 09 MAY 06
Collector: Client
Moisture: 16.1%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
<i>Gamma, Solid FSS GAM & ALL FSS</i>													
Actinium 228		1.34	+/- 0.186	0.0567	+/- 0.186	0.118	pCi/g		MJH1	06/07/06	0543	529776	1
Americium 241	U	0.074	+/- 0.123	0.0919	+/- 0.123	0.188	pCi/g						
Bismuth 212		0.895	+/- 0.265	0.121	+/- 0.265	0.253	pCi/g						
Bismuth 214		1.01	+/- 0.0975	0.0317	+/- 0.0975	0.0656	pCi/g						
Cesium 134	UUI	0.00	+/- 0.0273	0.0211	+/- 0.0273	0.0437	pCi/g						
Cesium 137		0.139	+/- 0.0335	0.0184	+/- 0.0335	0.0381	pCi/g						
Cobalt 60		0.343	+/- 0.0511	0.0168	+/- 0.0511	0.0355	pCi/g						
Europium 152	U	0.0397	+/- 0.0485	0.0403	+/- 0.0485	0.0832	pCi/g						
Europium 154	U	0.0218	+/- 0.0616	0.049	+/- 0.0616	0.103	pCi/g						
Europium 155	U	0.0712	+/- 0.0622	0.0548	+/- 0.0622	0.112	pCi/g						
Lead 212		1.60	+/- 0.0709	0.0252	+/- 0.0709	0.0518	pCi/g						
Lead 214		1.29	+/- 0.094	0.0289	+/- 0.094	0.0597	pCi/g						
Manganese 54	U	0.0295	+/- 0.0263	0.0165	+/- 0.0263	0.0344	pCi/g						
Niobium 94	U	0.00962	+/- 0.0185	0.0154	+/- 0.0185	0.0319	pCi/g						
Potassium 40		22.8	+/- 0.878	0.140	+/- 0.878	0.299	pCi/g						
Radium 226		1.01	+/- 0.0975	0.0317	+/- 0.0975	0.0656	pCi/g						
Silver 108m	U	0.00158	+/- 0.0168	0.0141	+/- 0.0168	0.0292	pCi/g						
Thallium 208		0.487	+/- 0.0422	0.0162	+/- 0.0422	0.0336	pCi/g						
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid ALL FSS</i>													
Strontium 90	U	0.000859	+/- 0.00856	0.00834	+/- 0.00856	0.0173	pCi/g		BXF1	06/06/06	2316	535512	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL RAD A 021B	LXM1	05/10/06	0855	528491
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	05/09/06	1829	528487

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

Report Date: June 8, 2006

Client Sample ID: 9106 0005 017F
Sample ID: 162485014

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits						
Carrier/Tracer Recovery	GFPC, Sr90, solid	ALL FSS			81		(25% 125%)						

Notes:

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- * 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
 - 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: June 8, 2006

Client Sample ID: 9106 0005 018F
Sample ID: 162485015
Matrix: SE
Collect Date: 03 MAY 06
Receive Date: 09 MAY 06
Collector: Client
Moisture: 17.6%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
<i>Gamma, Solid FSS GAM & ALL FSS</i>													
Actinium 228		1.02	+/- 0.245	0.0737	+/- 0.245	0.158	pCi/g		MJH1	06/06/06	2355	529776	1
Americium 241	U	0.134	+/- 0.127	0.0923	+/- 0.127	0.191	pCi/g						
Bismuth 212		0.808	+/- 0.337	0.155	+/- 0.337	0.330	pCi/g						
Bismuth 214		0.608	+/- 0.117	0.038	+/- 0.117	0.0803	pCi/g						
Cesium 134	UUI	0.00	+/- 0.0567	0.0308	+/- 0.0567	0.0646	pCi/g						
Cesium 137	U	0.0339	+/- 0.0308	0.0238	+/- 0.0308	0.050	pCi/g						
Cobalt 60	U	0.0419	+/- 0.0323	0.0295	+/- 0.0323	0.0631	pCi/g						
Europium 152	U	0.0249	+/- 0.0653	0.0503	+/- 0.0653	0.105	pCi/g						
Europium 154	U	0.0153	+/- 0.0841	0.0681	+/- 0.0841	0.147	pCi/g						
Europium 155	UUI	0.00	+/- 0.0972	0.0544	+/- 0.0972	0.112	pCi/g						
Lead 212		1.09	+/- 0.121	0.0297	+/- 0.121	0.0616	pCi/g						
Lead 214		0.665	+/- 0.127	0.0364	+/- 0.127	0.0762	pCi/g						
Manganese 54	U	0.0255	+/- 0.0288	0.0246	+/- 0.0288	0.0521	pCi/g						
Niobium 94	U	0.0151	+/- 0.0247	0.0209	+/- 0.0247	0.044	pCi/g						
Potassium 40		18.6	+/- 1.71	0.203	+/- 1.71	0.447	pCi/g						
Radium 226		0.608	+/- 0.117	0.038	+/- 0.117	0.0803	pCi/g						
Silver 108m	U	0.00395	+/- 0.0202	0.0167	+/- 0.0202	0.0353	pCi/g						
Thallium 208		0.381	+/- 0.0688	0.0206	+/- 0.0688	0.0436	pCi/g						
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid ALL FSS</i>													
Strontium 90		0.0537	+/- 0.0144	0.011	+/- 0.0145	0.023	pCi/g		BXF1	06/06/06	2316	535512	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL RAD A 021B	LXM1	05/10/06	0855	528491
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	05/09/06	1829	528487

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

Report Date: June 8, 2006

Client Sample ID: 9106 0005 018F
Sample ID: 162485015

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits						
Carrier/Tracer Recovery		GFPC, Sr90, solid	ALL FSS		49		(25% 125%)						

Notes:

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- * 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
 - 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: June 8, 2006

Client Sample ID: 9106 0005 018FS
Sample ID: 162485016
Matrix: SE
Collect Date: 03 MAY 06
Receive Date: 09 MAY 06
Collector: Client
Moisture: 24.2%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
<i>Gamma, Solid FSS GAM & ALL FSS</i>													
Actinium 228		1.15	+/- 0.407	0.148	+/- 0.407	0.313	pCi/g		MJH1	06/04/06	2022	529776	1
Americium 241	U	0.0465	+/- 0.0698	0.0523	+/- 0.0698	0.107	pCi/g						
Bismuth 212	U	0.509	+/- 0.589	0.330	+/- 0.589	0.693	pCi/g						
Bismuth 214		0.740	+/- 0.172	0.0759	+/- 0.172	0.159	pCi/g						
Cesium 134	U	0.0988	+/- 0.0652	0.0488	+/- 0.0652	0.103	pCi/g						
Cesium 137		0.105	+/- 0.0796	0.0395	+/- 0.0796	0.0829	pCi/g						
Cobalt 60	UUI	0.00	+/- 0.145	0.0515	+/- 0.145	0.109	pCi/g						
Europium 152	U	0.0375	+/- 0.119	0.0988	+/- 0.119	0.205	pCi/g						
Europium 154	U	0.0127	+/- 0.171	0.122	+/- 0.171	0.260	pCi/g						
Europium 155	U	0.0362	+/- 0.105	0.0853	+/- 0.105	0.175	pCi/g						
Lead 212		1.25	+/- 0.117	0.048	+/- 0.117	0.0995	pCi/g						
Lead 214		0.924	+/- 0.192	0.0659	+/- 0.192	0.137	pCi/g						
Manganese 54	U	0.0155	+/- 0.0534	0.0446	+/- 0.0534	0.0936	pCi/g						
Niobium 94	U	0.000986	+/- 0.0449	0.0372	+/- 0.0449	0.078	pCi/g						
Potassium 40		20.1	+/- 1.60	0.375	+/- 1.60	0.812	pCi/g						
Radium 226		0.740	+/- 0.172	0.0759	+/- 0.172	0.159	pCi/g						
Silver 108m	U	0.00684	+/- 0.0501	0.035	+/- 0.0501	0.0729	pCi/g						
Thallium 208		0.389	+/- 0.104	0.0401	+/- 0.104	0.0839	pCi/g						
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid ALL FSS</i>													
Strontium 90	U	0.00484	+/- 0.00859	0.00803	+/- 0.00859	0.0168	pCi/g		BXF1	06/06/06	2316	535512	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL RAD A 021B	LXM1	05/10/06	0855	528491
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	05/09/06	1829	528487

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

GENERAL ENGINEERING LABORATORIES, LLC

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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: June 8, 2006

Client Sample ID: 9106 0005 018FS
Sample ID: 162485016

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time Batch	Mtd
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits					
Carrier/Tracer Recovery	GFPC, Sr90, solid	ALL FSS			69		(25% 125%)					

Notes:

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 - A The TIC is a suspected aldol condensation product
 - 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: June 8, 2006

Client Sample ID: 9106 0005 005F
Sample ID: 162485017
Matrix: SE
Collect Date: 02 MAY 06
Receive Date: 09 MAY 06
Collector: Client
Moisture: 17.4%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Alpha Spec Analysis													
<i>Alphaspec Am241, Cm, Solid ALL FSS</i>													
Americium 241	U	0.0415	+/- 0.0591	0.055	+/- 0.0591	0.185	pCi/g		LCW1	05/30/06	1156	533471	1
Curium 242	U	0.00755	+/- 0.0634	0.0358	+/- 0.0634	0.157	pCi/g						
Curium 243/244	U	0.00112	+/- 0.0607	0.0636	+/- 0.0607	0.203	pCi/g						
<i>Alphaspec Pu, Solid ALL FSS</i>													
Plutonium 238	U	0.0261	+/- 0.0511	0.00	+/- 0.0512	0.0707	pCi/g		LCW1	05/30/06	2129	533472	2
Plutonium 239/240	U	0.0459	+/- 0.0733	0.0297	+/- 0.0734	0.130	pCi/g						
<i>Liquid Scint Pu241, Solid ALL FSS</i>													
Plutonium 241	U	8.66	+/- 8.72	7.70	+/- 8.77	16.0	pCi/g		LCW1	06/03/06	0541	533473	3
Rad Gamma Spec Analysis													
<i>Gamma, Solid FSS GAM & ALL FSS</i>													
Actinium 228		1.63	+/- 0.304	0.0844	+/- 0.304	0.169	pCi/g		MJH1	06/02/06	1826	529776	4
Americium 241	U	0.108	+/- 0.121	0.0993	+/- 0.121	0.199	pCi/g						
Bismuth 212		1.23	+/- 0.459	0.190	+/- 0.459	0.380	pCi/g						
Bismuth 214		1.47	+/- 0.188	0.0487	+/- 0.188	0.0974	pCi/g						
Cesium 134	UUI	0.00	+/- 0.0421	0.0364	+/- 0.0421	0.0728	pCi/g						
Cesium 137	U	0.0255	+/- 0.0345	0.0274	+/- 0.0345	0.0547	pCi/g						
Cobalt 60	U	0.00987	+/- 0.0303	0.0263	+/- 0.0303	0.0526	pCi/g						
Europium 152	U	0.0498	+/- 0.0944	0.0728	+/- 0.0944	0.145	pCi/g						
Europium 154	U	0.0234	+/- 0.112	0.0779	+/- 0.112	0.156	pCi/g						
Europium 155	U	0.0501	+/- 0.0964	0.0839	+/- 0.0964	0.168	pCi/g						
Lead 212		1.74	+/- 0.170	0.0432	+/- 0.170	0.0864	pCi/g						
Lead 214		1.52	+/- 0.181	0.0528	+/- 0.181	0.106	pCi/g						
Manganese 54	U	0.000314	+/- 0.0388	0.029	+/- 0.0388	0.0579	pCi/g						
Niobium 94	U	0.0128	+/- 0.0275	0.0234	+/- 0.0275	0.0467	pCi/g						
Potassium 40		13.1	+/- 1.29	0.222	+/- 1.29	0.443	pCi/g						
Radium 226		1.47	+/- 0.188	0.0487	+/- 0.188	0.0974	pCi/g						
Silver 108m	U	0.00614	+/- 0.0289	0.0248	+/- 0.0289	0.0495	pCi/g						
Thallium 208		0.548	+/- 0.078	0.0254	+/- 0.078	0.0507	pCi/g						
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid ALL FSS</i>													
Strontium 90	U	0.00956	+/- 0.00903	0.00831	+/- 0.00904	0.0172	pCi/g		BXF1	06/06/06	2316	535512	5
Rad Liquid Scintillation Analysis													
<i>LSC, Tritium Dist, Solid HTD2, ALL FSS</i>													
Tritium	U	3.49	+/- 6.18	5.06	+/- 6.18	10.5	pCi/g		NXP1	05/28/06	0323	531705	7
<i>Liquid Scint C14, Solid All, FSS</i>													

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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: June 8, 2006

Client Sample ID: 9106 0005 005F
 Sample ID: 162485017

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Liquid Scintillation Analysis													
<i>Liquid Scint C14, Solid All,FSS</i>													
Carbon 14	U	0.048	+/- 0.107	0.0885	+/- 0.107	0.183	pCi/g		ATH2	06/03/06	1732	534984	8
<i>Liquid Scint Fe55, Solid ALL FSS</i>													
Iron 55	U	5.82	+/- 15.5	11.7	+/- 15.5	24.6	pCi/g		AF1	06/05/06	1626	535483	10
<i>Liquid Scint Ni63, Solid ALL FSS</i>													
Nickel 63	U	2.31	+/- 4.11	3.49	+/- 4.11	7.11	pCi/g		SLN1	05/26/06	2217	531622	12
<i>Liquid Scint Tc99, Solid ALL FSS</i>													
Technetium 99	U	0.298	+/- 0.271	0.218	+/- 0.271	0.450	pCi/g		SXE1	05/30/06	2126	531704	13

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL RAD A 021B	LXM1	05/10/06	0855	528491
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	05/09/06	1829	528487

The following Analytical Methods were performed

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium 243	Alphaspec Am241, Cm, Solid ALL	96	(15% 125%)
Plutonium 242	Alphaspec Pu, Solid ALL FSS	91	(15% 125%)
Carrier/Tracer Recovery	Liquid Scint Pu241, Solid ALL FS	82	(25% 125%)

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Project: Soils PO# 002332

Report Date: June 8, 2006

Client Sample ID: 9106 0005 005F
Sample ID: 162485017

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Carrier/Tracer Recovery	GFPC, Sr90, solid	ALL FSS			80		(25% 125%)						
Carrier/Tracer Recovery	Liquid Scint Fe55, Solid	ALL FS			94		(15% 125%)						
Carrier/Tracer Recovery	Liquid Scint Ni63, Solid	ALL FS			90		(25% 125%)						
Carrier/Tracer Recovery	Liquid Scint Tc99, Solid	ALL FS			72		(15% 125%)						

Notes:

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

Report Date: June 8, 2006

Client Sample ID: 9106 0005 009F
Sample ID: 162485018
Matrix: SE
Collect Date: 02 MAY 06
Receive Date: 09 MAY 06
Collector: Client
Moisture: 14.4%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Alpha Spec Analysis													
<i>Alphaspec Am241, Cm, Solid ALL FSS</i>													
Americium 241	U	0.0451	+/- 0.104	0.0757	+/- 0.104	0.241	pCi/g		LCW1	05/30/06	1156	533471	1
Curium 242	U	0.0375	+/- 0.0735	0.00	+/- 0.0736	0.102	pCi/g						
Curium 243/244	U	0.0173	+/- 0.0689	0.0537	+/- 0.0689	0.197	pCi/g						
<i>Alphaspec Pu, Solid ALL FSS</i>													
Plutonium 238	U	0.0133	+/- 0.0575	0.0447	+/- 0.0575	0.165	pCi/g		LCW1	05/30/06	2129	533472	2
Plutonium 239/240	U	0.0211	+/- 0.0559	0.0316	+/- 0.056	0.138	pCi/g						
<i>Liquid Scint Pu241, Solid ALL FSS</i>													
Plutonium 241	U	4.2	+/- 9.77	8.38	+/- 9.78	17.5	pCi/g		LCW1	06/03/06	0557	533473	3
Rad Gamma Spec Analysis													
<i>Gamma, Solid FSS GAM & ALL FSS</i>													
Actinium 228		0.558	+/- 0.165	0.0655	+/- 0.165	0.131	pCi/g		MJH1	06/02/06	1827	529776	4
Americium 241	U	0.0512	+/- 0.0953	0.0797	+/- 0.0953	0.159	pCi/g						
Bismuth 212	U	0.288	+/- 0.274	0.224	+/- 0.274	0.447	pCi/g						
Bismuth 214		0.541	+/- 0.106	0.0381	+/- 0.106	0.0762	pCi/g						
Cesium 134	UUI	0.00	+/- 0.0381	0.0252	+/- 0.0381	0.0504	pCi/g						
Cesium 137		0.181	+/- 0.0535	0.0218	+/- 0.0535	0.0435	pCi/g						
Cobalt 60	U	0.0214	+/- 0.0242	0.0239	+/- 0.0242	0.0478	pCi/g						
Europium 152	U	0.0156	+/- 0.0758	0.0566	+/- 0.0758	0.113	pCi/g						
Europium 154	U	0.0435	+/- 0.0786	0.0615	+/- 0.0786	0.123	pCi/g						
Europium 155	U	0.079	+/- 0.116	0.0597	+/- 0.116	0.119	pCi/g						
Lead 212		0.569	+/- 0.0793	0.031	+/- 0.0793	0.062	pCi/g						
Lead 214		0.445	+/- 0.109	0.038	+/- 0.109	0.0759	pCi/g						
Manganese 54	U	0.0259	+/- 0.0233	0.0226	+/- 0.0233	0.0452	pCi/g						
Niobium 94	U	0.00303	+/- 0.0254	0.0218	+/- 0.0254	0.0435	pCi/g						
Potassium 40		10.5	+/- 1.11	0.182	+/- 1.11	0.364	pCi/g						
Radium 226		0.541	+/- 0.106	0.0381	+/- 0.106	0.0762	pCi/g						
Silver 108m	U	0.00846	+/- 0.0219	0.0198	+/- 0.0219	0.0396	pCi/g						
Thallium 208		0.156	+/- 0.058	0.0188	+/- 0.058	0.0376	pCi/g						
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid ALL FSS</i>													
Strontium 90	U	0.013	+/- 0.00829	0.00722	+/- 0.0083	0.0152	pCi/g		BXF1	06/06/06	2316	535512	5
Rad Liquid Scintillation Analysis													
<i>LSC, Tritium Dist, Solid HTD2, ALL FSS</i>													
Tritium	U	6.86	+/- 6.34	5.06	+/- 6.34	10.5	pCi/g		NXP1	05/28/06	0354	531705	7
<i>Liquid Scint C14, Solid All, FSS</i>													

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

Report Date: June 8, 2006

Client Sample ID: 9106 0005 009F
Sample ID: 162485018

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Liquid Scintillation Analysis													
<i>Liquid Scint C14, Solid All, FSS</i>													
Carbon 14	U	0.043	+/- 0.0961	0.0793	+/- 0.0961	0.164	pCi/g		ATH2	06/03/06	1934	534984	8
<i>Liquid Scint Fe55, Solid ALL FSS</i>													
Iron 55	U	1.25	+/- 22.5	17.0	+/- 22.5	35.7	pCi/g		SLN1	05/29/06	1526	531618	10
<i>Liquid Scint Ni63, Solid ALL FSS</i>													
Nickel 63	U	0.696	+/- 4.99	4.21	+/- 4.99	8.57	pCi/g		SLN1	05/26/06	2318	531622	11
<i>Liquid Scint Tc99, Solid ALL FSS</i>													
Technetium 99	U	0.333	+/- 0.298	0.239	+/- 0.298	0.494	pCi/g		SXE1	05/30/06	2142	531704	12

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Ash Soil Prep	Ash Soil Prep, GL RAD A 021B	LXM1	05/10/06	0855	528491
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	05/09/06	1829	528487

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL 300, Am 05 RC Modified
2	DOE EML HASL 300, Pu 11 RC Modified
3	DOE EML HASL 300, Pu 11 RC Modified
4	EML HASL 300, 4.5.2.3
5	EPA 905.0 Modified
6	EPA 905.0 Modified
7	EPA 906.0 Modified
8	EPA EERF C 01 Modified
9	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	85	(15% 125%)
Carrier/Tracer Recovery	Liquid Scint Pu241, Solid ALL FS	77	(25% 125%)
Carrier/Tracer Recovery	GFPC, Sr90, solid ALL FSS	71	(25% 125%)

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

Report Date: June 8, 2006

Client Sample ID: 9106 0005 009F
Sample ID: 162485018

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time Batch	Mtd
Carrier/Tracer Recovery		Liquid Scint Fe55, Solid	ALL FS		72		(15% 125%)					
Carrier/Tracer Recovery		Liquid Scint Ni63, Solid	ALL FS		67		(25% 125%)					
Carrier/Tracer Recovery		Liquid Scint Tc99, Solid	ALL FS		65		(15% 125%)					

Notes:

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 - 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

Client : Connecticut Yankee Atomic Power
362 Injun Hollow Rd

Report Date: June 8, 2006
Page 1 of 9

Contact: East Hampton, Connecticut
Mr. Jack McCarthy

Workorder: 162485

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Alpha Spec											
Batch	533471										
QC1201101118	162485017 DUP										
Americium-241	U	-0.0415	U	-0.00249	pCi/g	177		(0% - 100%)	LCW1	05/30/06	11:55
		Uncert: +/-0.0591		+/-0.0219							
		TPU: +/-0.0591		+/-0.0219							
Curium-242	U	-0.00755	U	0.0283	pCi/g	346		(0% - 100%)			
		Uncert: +/-0.0634		+/-0.0555							
		TPU: +/-0.0634		+/-0.0556							
Curium-243/244	U	0.00112	U	0.0131	pCi/g	168		(0% - 100%)			
		Uncert: +/-0.0607		+/-0.0521							
		TPU: +/-0.0607		+/-0.0521							
QC1201101120	LCS										
Americium-241		12.2		10.8	pCi/g		89	(75%-125%)		05/30/06	11:55
		Uncert: +/-0.975		+/-1.73							
		TPU: +/-1.73		+/-0.047							
Curium-242			U	-0.0056	pCi/g						
		Uncert: +/-0.047		+/-0.0471							
		TPU: +/-0.0471		12.4							
Curium-243/244		14.9		12.4	pCi/g		83	(75%-125%)			
		Uncert: +/-1.04		+/-1.95							
		TPU: +/-1.95									
QC1201101117	MB										
Americium-241			U	-0.00902	pCi/g					05/30/06	11:55
		Uncert: +/-0.019		+/-0.019							
		TPU: +/-0.019		0.0399							
Curium-242			U	0.0399	pCi/g						
		Uncert: +/-0.0638		+/-0.064							
		TPU: +/-0.064		0.0392							
Curium-243/244			U	0.0392	pCi/g						
		Uncert: +/-0.0626		+/-0.0628							
		TPU: +/-0.0628									
QC1201101119	162485017 MS										
Americium-241	12.7	U	-0.0415	12.5	pCi/g		98	(75%-125%)		05/30/06	11:55
		Uncert: +/-0.0591		+/-1.06							
		TPU: +/-0.0591		+/-1.96							
Curium-242		U	-0.00755	0.00	pCi/g						
		Uncert: +/-0.0634		+/-0.0517							
		TPU: +/-0.0634		+/-0.0517							
Curium-243/244	15.5	U	0.00112	12.6	pCi/g		81	(75%-125%)			
		Uncert: +/-0.0607		+/-1.06							
		TPU: +/-0.0607		+/-1.98							
Batch	533472										
QC1201101122	162485017 DUP										
Plutonium-238	U	0.0261	U	0.00	pCi/g			(0% - 100%)	LCW1	05/30/06	21:29

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QC Summary

Workorder: 162485

Page 2 of 9

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Alpha Spec											
Batch	533472										
Plutonium-239/240		Uncert:	+/-0.0511	+/-0.0498							
		TPU:	+/-0.0512	+/-0.0498							
		U	0.0459	U	-0.00609			(0% - 100%)			
		Uncert:	+/-0.0733	+/-0.0511	pCi/g	261					
		TPU:	+/-0.0734	+/-0.0512							
QC1201101124	LCS										
Plutonium-238				0.216	pCi/g			(75%-125%)		05/30/06	21:29
		Uncert:		+/-0.181							
		TPU:		+/-0.182							
Plutonium-239/240	11.3			10.3	pCi/g		91	(75%-125%)			
		Uncert:		+/-1.21							
		TPU:		+/-1.76							
QC1201101121	MB										
Plutonium-238			U	-0.00623	pCi/g					05/31/06	07:44
		Uncert:		+/-0.0692							
		TPU:		+/-0.0693							
Plutonium-239/240			U	-0.0274	pCi/g						
		Uncert:		+/-0.100							
		TPU:		+/-0.100							
QC1201101123	162485017	MS									
Plutonium-238		U	0.0261	U	0.0634			(75%-125%)		05/30/06	21:29
		Uncert:	+/-0.0511		+/-0.0787						
		TPU:	+/-0.0512		+/-0.079						
Plutonium-239/240	11.7	U	0.0459		10.7	pCi/g		92 (75%-125%)			
		Uncert:	+/-0.0733		+/-0.971						
		TPU:	+/-0.0734		+/-1.52						
Batch	533473										
QC1201101126	162485017	DUP									
Plutonium-241		U	-8.66	U	-6.36	pCi/g	0	(0% - 100%)	CW1	06/03/06	07:35
		Uncert:	+/-8.72		+/-6.79						
		TPU:	+/-8.77		+/-6.82						
QC1201101128	LCS										
Plutonium-241		131			106	pCi/g		81 (75%-125%)		06/03/06	08:07
		Uncert:			+/-12.3						
		TPU:			+/-16.4						
QC1201101125	MB										
Plutonium-241				U	-1.18	pCi/g				06/03/06	07:18
		Uncert:			+/-9.02						
		TPU:			+/-9.02						
QC1201101127	162485017	MS									
Plutonium-241		135	U	-8.66	146	pCi/g		108 (75%-125%)		06/03/06	07:51
		Uncert:	+/-8.72		+/-14.7						
		TPU:	+/-8.77		+/-20.1						
Rad Gamma Spec											
Batch	529776										
QC1201092333	162485001	DUP									
Actinium-228			1.69		1.64	pCi/g	7	(0% - 100%)	MJH1	06/04/06	20:23
		Uncert:	+/-0.251		+/-0.254						
					+/-0.254						

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch	529776										
Americium-241		TPU:	+/-0.251								
		U	0.064	U	-0.0181	pCi/g	137	(0% - 100%)			
		Uncert:	+/-0.113		+/-0.0823						
Bismuth-212		TPU:	+/-0.113		+/-0.0823						
			0.887		0.973	pCi/g	21	(0% - 100%)			
		Uncert:	+/-0.313		+/-0.274						
Bismuth-214		TPU:	+/-0.313		+/-0.274						
			1.15		1.17	pCi/g	4	(0% - 20%)			
		Uncert:	+/-0.147		+/-0.142						
Cesium-134		TPU:	+/-0.147		+/-0.142						
		UUI	0.00	UUI	0.00	pCi/g	25	(0% - 100%)			
		Uncert:	+/-0.0385		+/-0.0358						
Cesium-137		TPU:	+/-0.0385		+/-0.0358						
		U	0.0288	U	0.0105	pCi/g	78	(0% - 100%)			
		Uncert:	+/-0.0259		+/-0.0211						
Cobalt-60		TPU:	+/-0.0259		+/-0.0211						
		U	0.0191	U	0.00611	pCi/g	18	(0% - 100%)			
		Uncert:	+/-0.0235		+/-0.0196						
Europium-152		TPU:	+/-0.0235		+/-0.0196						
		U	-0.0115	U	-0.0143	pCi/g	1550	(0% - 100%)			
		Uncert:	+/-0.0595		+/-0.0523						
Europium-154		TPU:	+/-0.0595		+/-0.0523						
		U	-0.0146	U	-0.0672	pCi/g	515	(0% - 100%)			
		Uncert:	+/-0.0717		+/-0.0591						
Europium-155		TPU:	+/-0.0717		+/-0.0591						
		U	0.0293	UUI	0.00	pCi/g	153	(0% - 100%)			
		Uncert:	+/-0.0678		+/-0.100						
Lead-212		TPU:	+/-0.0678		+/-0.100						
			1.62		1.68	pCi/g	5	(0% - 20%)			
		Uncert:	+/-0.145		+/-0.148						
Lead-214		TPU:	+/-0.145		+/-0.148						
			1.36		1.39	pCi/g	6	(0% - 20%)			
		Uncert:	+/-0.154		+/-0.153						
Manganese-54		TPU:	+/-0.154		+/-0.153						
		U	0.0112	U	0.0321	pCi/g	282	(0% - 100%)			
		Uncert:	+/-0.0236		+/-0.0318						
Niobium-94		TPU:	+/-0.0236		+/-0.0318						
		U	-0.00247	U	0.0167	pCi/g	54	(0% - 100%)			
		Uncert:	+/-0.0192		+/-0.0171						
Potassium-40		TPU:	+/-0.0192		+/-0.0171						
			11.3		10.7	pCi/g	9	(0% - 20%)			
		Uncert:	+/-1.05		+/-0.964						
Radium-226		TPU:	+/-1.05		+/-0.964						
			1.15		1.17	pCi/g	4	(0% - 100%)			
		Uncert:	+/-0.147		+/-0.142						
Silver-108m		TPU:	+/-0.147		+/-0.142						
		U	-0.000679	U	0.0103	pCi/g	19	(0% - 100%)			
		Uncert:	+/-0.0191		+/-0.017						

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch	529776										
Thallium-208		TPU:	+/-0.0191	+/-0.017							
			0.495	0.525	pCi/g	2		(0% - 20%)			
		Uncert:	+/-0.0669	+/-0.0635							
		TPU:	+/-0.0669	+/-0.0635							
QC1201092334	LCS										
Actinium-228				U	0.508	pCi/g				06/03/06	15:39
		Uncert:			+/-0.559						
		TPU:			+/-0.559						
Americium-241	23.4				21.0	pCi/g	90	(75%-125%)			
		Uncert:			+/-3.45						
		TPU:			+/-3.45						
Bismuth-212				U	0.361	pCi/g					
		Uncert:			+/-1.07						
		TPU:			+/-1.07						
Bismuth-214				U	0.102	pCi/g					
		Uncert:			+/-0.286						
		TPU:			+/-0.286						
Cesium-134				U	-0.0467	pCi/g					
		Uncert:			+/-0.181						
		TPU:			+/-0.181						
Cesium-137	9.64				9.06	pCi/g	94	(75%-125%)			
		Uncert:			+/-0.729						
		TPU:			+/-0.729						
Cobalt-60	15.1				15.9	pCi/g	106	(75%-125%)			
		Uncert:			+/-1.18						
		TPU:			+/-1.18						
Europium-152				U	-0.0491	pCi/g					
		Uncert:			+/-0.335						
		TPU:			+/-0.335						
Europium-154				U	-0.249	pCi/g					
		Uncert:			+/-0.328						
		TPU:			+/-0.328						
Europium-155				U	0.077	pCi/g					
		Uncert:			+/-0.360						
		TPU:			+/-0.360						
Lead-212				U	-0.00061	pCi/g					
		Uncert:			+/-0.196						
		TPU:			+/-0.196						
Lead-214				U	0.0856	pCi/g					
		Uncert:			+/-0.227						
		TPU:			+/-0.227						
Manganese-54				U	-0.0065	pCi/g					
		Uncert:			+/-0.133						
		TPU:			+/-0.133						
Niobium-94				U	0.101	pCi/g					
		Uncert:			+/-0.118						
		TPU:			+/-0.118						
Potassium-40				U	1.38	pCi/g					

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QC Summary

Workorder: 162485

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Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec										
Batch	529776									
Radium-226		U	0.102	pCi/g			(75%-125%)			
			Uncert: +/-1.23							
			TPU: +/-1.23							
Silver-108m		U	0.0169	pCi/g						
			Uncert: +/-0.286							
			TPU: +/-0.286							
Thallium-208		U	0.0217	pCi/g						
			Uncert: +/-0.119							
			TPU: +/-0.119							
QC1201092332 MB										
Actinium-228		U	0.0231	pCi/g					06/04/06	20:22
			Uncert: +/-0.0503							
			TPU: +/-0.0503							
Americium-241		U	-0.0485	pCi/g						
			Uncert: +/-0.0565							
			TPU: +/-0.0565							
Bismuth-212		U	0.100	pCi/g						
			Uncert: +/-0.114							
			TPU: +/-0.114							
Bismuth-214		U	-0.00311	pCi/g						
			Uncert: +/-0.0254							
			TPU: +/-0.0254							
Cesium-134		U	0.00344	pCi/g						
			Uncert: +/-0.0146							
			TPU: +/-0.0146							
Cesium-137		U	0.0114	pCi/g						
			Uncert: +/-0.0135							
			TPU: +/-0.0135							
Cobalt-60		U	0.00208	pCi/g						
			Uncert: +/-0.0154							
			TPU: +/-0.0154							
Europium-152		U	0.0236	pCi/g						
			Uncert: +/-0.0367							
			TPU: +/-0.0367							
Europium-154		U	-0.0158	pCi/g						
			Uncert: +/-0.0399							
			TPU: +/-0.0399							
Europium-155		U	0.00786	pCi/g						
			Uncert: +/-0.0328							
			TPU: +/-0.0328							
Lead-212		U	0.0278	pCi/g						
			Uncert: +/-0.0312							
			TPU: +/-0.0312							
Lead-214		U	0.0263	pCi/g						
			Uncert: +/-0.0251							
			TPU: +/-0.0251							

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch	529776										
Manganese-54			U	0.0016	pCi/g						
				Uncert: +/-0.015							
				TPU: +/-0.015							
Niobium-94			U	-0.000762	pCi/g						
				Uncert: +/-0.0129							
				TPU: +/-0.0129							
Potassium-40			U	0.145	pCi/g						
				Uncert: +/-0.122							
				TPU: +/-0.122							
Radium-226			U	-0.00311	pCi/g						
				Uncert: +/-0.0254							
				TPU: +/-0.0254							
Silver-108m			U	-0.00522	pCi/g						
				Uncert: +/-0.0117							
				TPU: +/-0.0117							
Thallium-208			U	0.00116	pCi/g						
				Uncert: +/-0.0158							
				TPU: +/-0.0158							
Rad Gas Flow											
Batch	535512										
QC1201105910	162335018	DUP									
Strontium-90			U	0.00669	pCi/g	0		(0% - 100%)	BXF1	06/06/06	23:16
				Uncert: +/-0.00923							
				TPU: +/-0.00923							
QC1201105912	LCS										
Strontium-90			1.43		pCi/g		83	(75%-125%)		06/07/06	10:08
				Uncert: +/-0.081							
				TPU: +/-0.0854							
QC1201105909	MB										
Strontium-90			U	0.0107	pCi/g					06/06/06	23:16
				Uncert: +/-0.00663							
				TPU: +/-0.00664							
QC1201105911	162335018	MS									
Strontium-90			1.54	U	0.00669					06/07/06	10:08
					1.54	pCi/g	100	(75%-125%)			
				Uncert: +/-0.00923							
				TPU: +/-0.00923							
Rad Liquid Scintillation											
Batch	531618										
QC1201096632	163173001	DUP									
Iron-55			U	10.3	pCi/g	0		(0% - 100%)	SLN1	05/31/06	12:49
				Uncert: +/-20.1							
				TPU: +/-20.1							
QC1201096634	LCS										
Iron-55			437		pCi/g		98	(75%-125%)		05/31/06	13:22
				Uncert: +/-40.6							
				TPU: +/-62.3							
QC1201096631	MB										
Iron-55			U	3.58	pCi/g					05/31/06	12:32

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Liquid Scintillation											
Batch	531618										
		Uncert:		+/-24.7							
		TPU:		+/-24.7							
QC1201096633	163173001	MS									
Iron-55		569	U	10.3	544	pCi/g	96	(75%-125%)		05/31/06	13:05
		Uncert:		+/-20.1	+/-39.3						
		TPU:		+/-20.1	+/-69.3						
Batch	531622										
QC1201096645	163173001	DUP									
Nickel-63			U	-6.64	-5.49	pCi/g	0	(0% - 100%)	SLN1	05/28/06	01:38
		Uncert:		+/-7.30	+/-4.33						
		TPU:		+/-7.31	+/-4.33						
QC1201096647	LCS										
Nickel-63		362			301	pCi/g	83	(75%-125%)		05/28/06	03:40
		Uncert:			+/-7.49						
		TPU:			+/-11.1						
QC1201096644	MB										
Nickel-63			U	-1.66		pCi/g				05/28/06	00:37
		Uncert:			+/-3.41						
		TPU:			+/-3.41						
QC1201096646	163173001	MS									
Nickel-63		460	U	-6.64	395	pCi/g	86	(75%-125%)		05/28/06	02:39
		Uncert:		+/-7.30	+/-9.22						
		TPU:		+/-7.31	+/-14.9						
Batch	531704										
QC1201096868	162583001	DUP									
Technetium-99			U	0.161	0.239	pCi/g	0	(0% - 100%)	SXE1	05/31/06	00:27
		Uncert:		+/-0.254	+/-0.273						
		TPU:		+/-0.255	+/-0.273						
QC1201096870	LCS										
Technetium-99		12.5			11.1	pCi/g	89	(75%-125%)		05/31/06	01:00
		Uncert:			+/-0.474						
		TPU:			+/-0.545						
QC1201096867	MB										
Technetium-99			U	0.163		pCi/g				05/31/06	00:11
		Uncert:			+/-0.214						
		TPU:			+/-0.214						
QC1201096869	162583001	MS									
Technetium-99		13.1	U	0.161	11.6	pCi/g	89	(75%-125%)		05/31/06	00:44
		Uncert:		+/-0.254	+/-0.583						
		TPU:		+/-0.255	+/-0.649						
Batch	531705										
QC1201096878	162583001	DUP									
Tritium			U	1.17	6.01	pCi/g	0	(0% - 100%)	NXP1	05/28/06	09:10
		Uncert:		+/-4.09	+/-4.70						
		TPU:		+/-4.09	+/-4.70						
QC1201096880	LCS										
Tritium		41.4			44.8	pCi/g	108	(75%-125%)		05/28/06	10:14
		Uncert:			+/-5.68						
		TPU:			+/-5.73						

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Liquid Scintillation											
Batch	531705										
QC1201096877	MB										
Tritium			U	0.0641	pCi/g					06/03/06	05:11
		Uncert:		+/-0.533							
		TPU:		+/-0.533							
QC1201096879	162583001	MS									
Tritium	45.7	U	1.17	52.3	pCi/g		114	(75%-125%)		05/28/06	09:42
		Uncert:	+/-4.09	+/-6.44							
		TPU:	+/-4.09	+/-6.50							
Batch	534984										
QC1201104746	163173001	DUP									
Carbon-14		U	0.00714	U	0.00246	pCi/g	0	(0% - 100%)	ATH2	06/05/06	03:00
		Uncert:	+/-0.0996	+/-0.103							
		TPU:	+/-0.0996	+/-0.103							
QC1201104748	LCS										
Carbon-14	12.1			11.3	pCi/g		94	(75%-125%)		06/05/06	05:20
		Uncert:		+/-0.855							
		TPU:		+/-0.873							
QC1201104745	MB										
Carbon-14			U	-0.0368	pCi/g					06/05/06	00:57
		Uncert:		+/-0.101							
		TPU:		+/-0.101							
QC1201104747	163173001	MS									
Carbon-14	12.9	U	0.00714	12.1	pCi/g		94	(75%-125%)		06/05/06	05:02
		Uncert:	+/-0.0996	+/-0.917							
		TPU:	+/-0.0996	+/-0.936							
Batch	535483										
QC1201105873	162335018	DUP									
Iron-55		U	-15.8	U	0.079	pCi/g	0	(0% - 100%)	AF1	06/05/06	17:00
		Uncert:	+/-16.9	+/-20.4							
		TPU:	+/-17.0	+/-20.4							
QC1201105875	LCS										
Iron-55	485			492	pCi/g		101	(75%-125%)		06/05/06	17:33
		Uncert:		+/-39.7							
		TPU:		+/-61.9							
QC1201105872	MB										
Iron-55			U	5.04	pCi/g					06/05/06	16:43
		Uncert:		+/-22.8							
		TPU:		+/-22.8							
QC1201105874	162335018	MS									
Iron-55	655	U	-15.8	628	pCi/g		96	(75%-125%)		06/05/06	17:16
		Uncert:	+/-16.9	+/-39.8							
		TPU:	+/-17.0	+/-71.2							

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

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Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
>	Result is greater than value reported									
A	The TIC is a suspected aldol-condensation product									
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									

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 acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

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

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General Narrative

CASE NARRATIVE
For
CONNECTICUT YANKEE
RE: Soil
PO# 002332
Work Order: 170256
SDG: MSR #06-1160

September 6, 2006

Laboratory Identification:

General Engineering Laboratories, LLC

Mailing Address:

P.O. Box 30712
Charleston, South Carolina 29417

Express Mail Delivery and Shipping Address:

2040 Savage Road
Charleston, South Carolina 29407

Telephone Number:

(843) 556-8171

Summary:

Sample receipt

The sample(s) for this Project arrived at General Engineering Laboratories, LLC, (GEL) in Charleston, South Carolina on August 25, 2006. All sample containers arrived without any visible signs of tampering or breakage. The chain of custody contained the proper documentation and signatures.

The laboratory received the following sample(s):

<u>Sample ID</u>	<u>Client Sample ID</u>
170256001	9106-0006-005A
170256002	9106-0006-005B
170256003	9106-0006-005C
170256004	9106-0006-005D
170256005	9106-0005-010A
170256006	9106-0005-010B
170256007	9106-0005-010C
170256008	9106-0005-010D
170256009	9106-0014-033A

GENERAL ENGINEERING LABORATORIES, LLC

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170256010	9106-0014-033B
170256011	9106-0014-033C
170256012	9106-0014-033D
170256013	9106-0004-013A
170256014	9106-0004-013B
170256015	9106-0004-013C
170256016	9106-0004-013D
170256017	9106-0004-005A
170256018	9106-0004-005B
170256019	9106-0004-005C
170256020	9106-0004-005D

Items of Note:

There are no items of note.

Case Narrative:

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

Analytical Request:

Twenty soil samples were analyzed for FSSGAM and Sr-90.

Internal Chain of Custody:

Custody was maintained for the sample(s).

Data Package:

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

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



Cheryl Jones
Project Manager

List of current GEL Certifications as of 06 September 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)
Idaho	N/A
Illinois	200029
Indiana	C-SC-01
Kansas	E-10332
Kentucky	90129
Maryland	270
Massachusetts	M-SC012
Michigan	9903
Nevada	SC12
New Jersey	SC002
New York	11501
North Carolina	233
North Carolina Drinking W	45709
North Dakota	R-158
Oklahoma	9904
Pennsylvania	68-485
South Carolina	10120001/10585001/10120002
Tennessee	02934
Texas	TX213-2006A
U.S. Dept. of Agriculture	S-52597
US Army Corps of Engineer	N/A
Utah	8037697376 GEL
Vermont	N/A
Virginia	00151
Washington	C223

**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. 2006-00512

Project Name: Haddam Neck Decommissioning						Analyses Requested				Lab Use Only				
Contact Name & Phone: Jack McCarthy 860-267-3924						FSSGAM	FSSALL	Sr-90	Comments:					
Analytical Lab (Name, City, State) General Engineering Laboratories 2040 Savage Road, Charleston SC. 29407 843 556 8171. Attn. Cheryl Jones														
Priority: <input type="checkbox"/> 30 D. <input checked="" type="checkbox"/> 14 D. <input type="checkbox"/> 7 D.														
Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size & Type Code									
9106-0005-010A	8/9/06	09:03	SE	C	BP	X		X		Transferred from COC # 2006-00489				
9106-0005-010B	8/9/06	09:33	SE	C	BP	X		X		Transferred from COC # 2006-00489				
9106-0005-010C	8/9/06	10:04	SE	C	BP	X		X		Transferred from COC # 2006-00489				
9106-0005-010D	8/9/06	10:56	SE	C	BP	X		X		Transferred from COC # 2006-00489				
NOTES: PO #: 002332 MSR #: 06-1160 SSWP# NA <input checked="" type="checkbox"/> LTP QA <input type="checkbox"/> Radwaste QA <input type="checkbox"/> Non QA											Samples Shipped Via: <input checked="" type="checkbox"/> Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> Hand <input type="checkbox"/> Other		Internal Container Temp.: ___ Deg. C Custody Sealed? Y <input type="checkbox"/> N <input type="checkbox"/> Custody Seal Intact? Y <input type="checkbox"/> N <input type="checkbox"/>	
1) Relinquished By JAME RUCARTE			Date/Time 8-24-06 / 1340			2) Received By <i>Marcus [Signature]</i>			Date/Time 8/25/06 0900			Bill of Lading # 7900 4639 6427		
3) Relinquished By			Date/Time			4) 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. 2006-00513

Project Name: Haddam Neck Decommissioning			Media Code	Sample Type Code	Container Size & Type Code	Analyses Requested				Lab Use Only					
Contact Name & Phone: Jack McCarthy 860-267-3924						FSSGAM	FSSALL	Sr-90					Comments:		
Analytical Lab (Name, City, State) General Engineering Laboratories 2040 Savage Road. Charleston SC. 29407 843 556 8171. Attn. Cheryl Jones													Comment, Preservation		Lab Sample ID
Priority: <input type="checkbox"/> 30 D. <input checked="" type="checkbox"/> 14 D. <input type="checkbox"/> 7 D.															
Sample Designation	Date	Time													
9106-0014-033A	8/11/06	07:58	SE	C	BP	X		X			Transferred from COC # 2006-00493				
9106-0014-033B	8/11/06	08:24	SE	C	BP	X		X			Transferred from COC # 2006-00493				
9106-0014-033C	8/11/06	08:45	SE	C	BP	X		X			Transferred from COC # 2006-00493				
9106-0014-033D	8/11/06	09:16	SE	C	BP	X		X			Transferred from COC # 2006-00493				
NOTES: PO #: 002332 MSR #: 06-1160 SSWP# NA <input checked="" type="checkbox"/> LTP QA <input type="checkbox"/> Radwaste QA <input type="checkbox"/> Non QA										Samples Shipped Via: <input checked="" type="checkbox"/> Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> Hand <input type="checkbox"/> Other					
										Internal Container Temp.: ___ Deg. C					
										Custody Sealed? Y <input type="checkbox"/> N <input type="checkbox"/>					
										Custody Seal Intact? Y <input type="checkbox"/> N <input type="checkbox"/>					
1) Relinquished By JAMIE REARTE			Date/Time 8-24-06 / 1340			2) Received By <i>Maria St...</i>			Date/Time 8/25/06 0900						
3) Relinquished By			Date/Time			4) Received By			Date/Time						
										Bill of Lading # 7900 4639 6449					

Connecticut Yankee Atomic Power Company 362 Injun Hollow Road, East Hampton, CT 06424 860-267-2556						Chain of Custody Form				No. 2006-00520			
Project Name: Haddam Neck Decommissioning			Media Code	Sample Type Code	Container Size & Type Code	Analyses Requested				Lab Use Only			
Contact Name & Phone: Jack McCarthy 860-267-3924						FSSGAM	FSSALL	Sr-90				Comments:	
Analytical Lab (Name, City, State) General Engineering Laboratories 2040 Savage Road, Charleston SC. 29407 843 556 8171. Attn. Cheryl Jones													
Priority: <input type="checkbox"/> 30 D. <input checked="" type="checkbox"/> 14 D. <input type="checkbox"/> 7 D.													
Sample Designation	Date	Time	Comment, Preservation		Lab Sample ID								
9106-0004-013A	8/9/06	12:53	SE	C	BP	X		X		Transferred from COC 2006-00490			
9106-0004-013B	8/9/06	13:27	SE	C	BP	X		X		Transferred from COC 2006-00490			
9106-0004-013C	8/9/06	13:57	SE	C	BP	X		X		Transferred from COC 2006-00490			
9106-0004-013D	8/9/06	14:28	SE	C	BP	X		X		Transferred from COC 2006-00490			
9106-0004-005A	8/9/06	14:58	SE	C	BP	X		X		Transferred from COC 2006-00490			
9106-0004-005B	8/10/06	07:41	SE	C	BP	X		X		Transferred from COC 2006-00491			
9106-0004-005C	8/10/06	08:09	SE	C	BP	X		X		Transferred from COC 2006-00491			
9106-0004-005D	8/10/06	08:49	SE	C	BP	X		X		Transferred from COC 2006-00491			
NOTES: PO #: 002332 MSR #: 06-1160 SSWP# NA <input checked="" type="checkbox"/> LTP QA <input type="checkbox"/> Radwaste QA <input type="checkbox"/> Non QA						Samples Shipped Via: <input checked="" type="checkbox"/> Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> Hand <input type="checkbox"/> Other			Internal Container Temp.: ____ Deg. C Custody Sealed? Y <input type="checkbox"/> N <input type="checkbox"/> Custody Seal Intact? Y <input type="checkbox"/> N <input type="checkbox"/>				
1) Relinquished By <i>JAMIE RICARTE</i>			Date/Time 8-24-06/1340			2) Received By <i>Maria Gathas</i>			Date/Time 8/25/06 0900				
3) Relinquished By			Date/Time			4) Received By			Date/Time				
						Bill of Lading # 7900 4639 6449							

Figure 1. Sample Check-in List

Date/Time Received: 8/25/06

SDG#: MSR# 06-1160

Work Order Number: 170250

Shipping Container ID: 7200 4639 649 Chain of Custody #: 2006 00513, 00520

1. Custody Seals on shipping container intact? Yes No
2. Custody Seals dated and signed? Yes No
3. Chain-of-Custody record present? Yes No
4. Cooler temperature 22°
5. Vermiculite/packing materials is: Wet Dry
6. Number of samples in shipping container: 12
7. Sample holding times exceeded? Yes No

8. Samples have: <input checked="" type="checkbox"/> tape <input checked="" type="checkbox"/> custody seals <input type="checkbox"/> hazard labels <input type="checkbox"/> appropriate sample labels
9. Samples are: <input checked="" type="checkbox"/> in good condition <input type="checkbox"/> broken <input type="checkbox"/> leaking <input type="checkbox"/> have air bubbles

10. Were any anomalies identified in sample receipt? Yes No

11. Description of anomalies (include sample numbers):

Sample Custodian/Laboratory: Marion D. Smith Date: 8/25/06 0900

Telephoned to: _____ On _____ By _____

Figure 1. Sample Check-in List

Date/Time Received: 8/25/06

SDG#: USR# 06-1160

Work Order Number: 170256

Shipping Container ID: 79004639 Chain of Custody #: 2006-00511
2006-00512

- 1. Custody Seals on shipping container intact? Yes No
- 2. Custody Seals dated and signed? Yes No
- 3. Chain-of-Custody record present? Yes No
- 4. Cooler temperature 22°
- 5. Vermiculite/packing materials is: Wet Dry
- 6. Number of samples in shipping container: 8
- 7. Sample holding times exceeded? Yes No

8. Samples have:	
<input checked="" type="checkbox"/> tape	<input type="checkbox"/> hazard labels
<input checked="" type="checkbox"/> custody seals	<input type="checkbox"/> appropriate sample labels
9. Samples are:	
<input type="checkbox"/> in good condition	<input checked="" type="checkbox"/> leaking
<input checked="" type="checkbox"/> broken	<input type="checkbox"/> have air bubbles

10. Were any anomalies identified in sample receipt? Yes No

11. Description of anomalies (include sample numbers): ID # 9106-0005 - 10D was leaking and had a hole in the bag

Sample Custodian/Laboratory: Maria L. Santos Date: 8/25/06 0900

Telephoned to: _____ On _____ By _____

RADIOLOGICAL ANALYSIS

**Radiochemistry Case Narrative
Connecticut Yankee Atomic Power Co. (YANK)
Work Order 170256**

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: 563436
Prep Batch Number: 562444

Sample ID	Client ID
170256001	9106-0006-005A
170256002	9106-0006-005B
170256003	9106-0006-005C
170256004	9106-0006-005D
170256005	9106-0005-010A
170256006	9106-0005-010B
170256007	9106-0005-010C
170256008	9106-0005-010D
170256009	9106-0014-033A
170256010	9106-0014-033B
170256011	9106-0014-033C
170256012	9106-0014-033D
170256013	9106-0004-013A
170256014	9106-0004-013B
170256015	9106-0004-013C
170256016	9106-0004-013D
170256017	9106-0004-005A
170256018	9106-0004-005B
170256019	9106-0004-005C
170256020	9106-0004-005D
1201171525	Method Blank (MB)
1201171526	170256001(9106-0006-005A) Sample Duplicate (DUP)
1201171527	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# 12.

Calibration Information:

Calibration Information

All initial and continuing calibration requirements have been met.

Standards Information

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

Sample Geometry

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

Quality Control (QC) Information:

Blank Information

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

Designated QC

The following sample was used for QC: 170256001 (9106-0006-005A).

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 170256007 (9106-0005-010C), 170256016 (9106-0004-013D) and 170256019 (9106-0004-005C) were recounted due to high MDAs.

Miscellaneous Information:

NCR Documentation

Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. 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 counting uncertainty	Bismuth-212	170256009
UI	Data rejected due to interference.	Europium-155	170256003
			170256009
			170256019
			170256020
UI	Data rejected due to low abundance.	Bismuth-214	170256008
		Cesium-134	170256005
			170256007
			170256008
			170256012
			170256013
			170256019
			1201171526
		Europium-155	170256018

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: 562563

Prep Batch Number: 562478

Dry Soil Prep GL-RAD-A-021 Batch Number: 562444

Sample ID	Client ID
170256001	9106-0006-005A
170256002	9106-0006-005B
170256003	9106-0006-005C
170256004	9106-0006-005D
170256005	9106-0005-010A
170256006	9106-0005-010B
170256007	9106-0005-010C
170256008	9106-0005-010D
170256009	9106-0014-033A
170256010	9106-0014-033B
170256011	9106-0014-033C
170256012	9106-0014-033D
170256013	9106-0004-013A
170256014	9106-0004-013B
170256015	9106-0004-013C
170256016	9106-0004-013D
170256017	9106-0004-005A
170256018	9106-0004-005B
170256019	9106-0004-005C
170256020	9106-0004-005D
1201169421	Method Blank (MB)
1201169422	170256002(9106-0006-005B) Sample Duplicate (DUP)
1201169423	170256002(9106-0006-005B) Matrix Spike (MS)
1201169424	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: 170256002 (9106-0006-005B).

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#06-1160 GEL Work Order: 170256

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: September 8, 2006

Client Sample ID:	9106 0006 005A	Project:	YANK01204
Sample ID:	170256001	Client ID:	YANK001
Matrix:	SE	Vol. Recv.:	
Collect Date:	08 AUG 06		
Receive Date:	25 AUG 06		
Collector:	Client		
Moisture:	15.8%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
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Rad Gamma Spec Analysis

*Gamma, Solid FSS GAM & ALL FSS 226 Ingrowth
Waived*

Actinium 228		0.966	+/- 0.192	0.0743	+/- 0.192	0.149	pCi/g		MJH1	09/01/06	1057	563436	1
Americium 241	U	0.0375	+/- 0.0387	0.0329	+/- 0.0387	0.0658	pCi/g						
Bismuth 212		0.366	+/- 0.306	0.175	+/- 0.306	0.350	pCi/g						
Bismuth 214		0.650	+/- 0.135	0.042	+/- 0.135	0.0839	pCi/g						
Cesium 134	U	0.0366	+/- 0.0355	0.0288	+/- 0.0355	0.0576	pCi/g						
Cesium 137		0.0666	+/- 0.0355	0.0236	+/- 0.0355	0.0472	pCi/g						
Cobalt 60		0.104	+/- 0.0726	0.0286	+/- 0.0726	0.0573	pCi/g						
Europium 152	U	0.00636	+/- 0.0728	0.0538	+/- 0.0728	0.108	pCi/g						
Europium 154	U	0.0788	+/- 0.0938	0.0718	+/- 0.0938	0.143	pCi/g						
Europium 155	U	0.0672	+/- 0.0554	0.0518	+/- 0.0554	0.104	pCi/g						
Lead 212		0.871	+/- 0.0971	0.0305	+/- 0.0971	0.061	pCi/g						
Lead 214		0.727	+/- 0.105	0.0379	+/- 0.105	0.0757	pCi/g						
Manganese 54	U	0.00916	+/- 0.0319	0.0232	+/- 0.0319	0.0465	pCi/g						
Niobium 94	U	0.0101	+/- 0.0244	0.0223	+/- 0.0244	0.0445	pCi/g						
Potassium 40		11.3	+/- 0.986	0.201	+/- 0.986	0.403	pCi/g						
Radium 226		0.650	+/- 0.135	0.042	+/- 0.135	0.0839	pCi/g						
Silver 108m	U	0.0067	+/- 0.0208	0.018	+/- 0.0208	0.036	pCi/g						
Thallium 208		0.283	+/- 0.0618	0.0212	+/- 0.0618	0.0423	pCi/g						

Rad Gas Flow Proportional Counting

GFPC, Sr90, solid ALL FSS

Strontium 90	U	0.0254	+/- 0.0193	0.0126	+/- 0.0193	0.0298	pCi/g		KSD1	09/07/06	1742	562563	2
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	08/27/06	1545	562444

The following Analytical Methods were performed

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

GENERAL ENGINEERING LABORATORIES, LLC

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

Certificate of Analysis

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

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

Report Date: September 8, 2006

Client Sample ID: 9106 0006 005A
Sample ID: 170256001

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time Batch	Mtd
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits					
Carrier/Tracer Recovery		GFPC, Sr90, solid	ALL FSS		96		(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.

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: September 8, 2006

Client Sample ID: 9106 0006 005B
Sample ID: 170256002
Matrix: SE
Collect Date: 08 AUG 06
Receive Date: 25 AUG 06
Collector: Client
Moisture: 14.4%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
<i>Gamma, Solid FSS GAM & ALL FSS 226 Ingrowth</i>													
<i>Waived</i>													
Actinium 228		0.606	+/- 0.152	0.0599	+/- 0.152	0.131	pCi/g		MJH1	09/01/06	1220	563436	1
Americium 241	U	0.101	+/- 0.114	0.0861	+/- 0.114	0.179	pCi/g						
Bismuth 212		0.685	+/- 0.232	0.134	+/- 0.232	0.290	pCi/g						
Bismuth 214		0.435	+/- 0.0852	0.0332	+/- 0.0852	0.0708	pCi/g						
Cesium 134	U	0.0313	+/- 0.0286	0.0238	+/- 0.0286	0.0507	pCi/g						
Cesium 137		0.114	+/- 0.0348	0.0206	+/- 0.0348	0.0438	pCi/g						
Cobalt 60		0.436	+/- 0.0586	0.0151	+/- 0.0586	0.0345	pCi/g						
Europium 152	U	0.0448	+/- 0.0525	0.0416	+/- 0.0525	0.0882	pCi/g						
Europium 154	U	0.0186	+/- 0.0685	0.0562	+/- 0.0685	0.124	pCi/g						
Europium 155	U	0.0423	+/- 0.0579	0.0552	+/- 0.0579	0.114	pCi/g						
Lead 212		0.643	+/- 0.0623	0.0268	+/- 0.0623	0.056	pCi/g						
Lead 214		0.462	+/- 0.0885	0.033	+/- 0.0885	0.0696	pCi/g						
Manganese 54	U	0.0167	+/- 0.0261	0.0174	+/- 0.0261	0.0377	pCi/g						
Niobium 94	U	0.00909	+/- 0.0195	0.0173	+/- 0.0195	0.0369	pCi/g						
Potassium 40		11.1	+/- 0.983	0.179	+/- 0.983	0.399	pCi/g						
Radium 226		0.435	+/- 0.0852	0.0332	+/- 0.0852	0.0708	pCi/g						
Silver 108m	U	0.00194	+/- 0.0168	0.0149	+/- 0.0168	0.0317	pCi/g						
Thallium 208		0.243	+/- 0.0457	0.0176	+/- 0.0457	0.0377	pCi/g						
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid ALL FSS</i>													
Strontium 90	U	0.00501	+/- 0.0149	0.0117	+/- 0.0149	0.0278	pCi/g		KSD1	09/07/06	1742	562563	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	08/27/06	1545	562444

The following Analytical Methods were performed

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
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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: September 8, 2006

Client Sample ID: 9106 0006 005B
Sample ID: 170256002

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits						
Carrier/Tracer Recovery	GFPC, Sr90, solid	ALL FSS			101		(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.

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: September 8, 2006

Client Sample ID: 9106 0006 005C
Sample ID: 170256003
Matrix: SE
Collect Date: 09 AUG 06
Receive Date: 25 AUG 06
Collector: Client
Moisture: 31.7%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
<i>Gamma, Solid FSS GAM & ALL FSS 226 Ingrowth</i>													
<i>Waived</i>													
Actinium 228		1.07	+/- 0.284	0.101	+/- 0.284	0.215	pCi/g		MJH1	09/01/06	1221	563436	1
Americium 241	U	0.0251	+/- 0.0367	0.0332	+/- 0.0367	0.0683	pCi/g						
Bismuth 212		0.684	+/- 0.424	0.178	+/- 0.424	0.383	pCi/g						
Bismuth 214		0.673	+/- 0.121	0.0445	+/- 0.121	0.0947	pCi/g						
Cesium 134	U	0.0516	+/- 0.0548	0.0344	+/- 0.0548	0.0729	pCi/g						
Cesium 137		0.317	+/- 0.0544	0.0247	+/- 0.0544	0.0528	pCi/g						
Cobalt 60		0.821	+/- 0.0911	0.0294	+/- 0.0911	0.064	pCi/g						
Europium 152	U	0.049	+/- 0.0652	0.0539	+/- 0.0652	0.114	pCi/g						
Europium 154	U	0.0883	+/- 0.0913	0.0839	+/- 0.0913	0.182	pCi/g						
Europium 155	UI	0.00	+/- 0.0926	0.0506	+/- 0.0926	0.105	pCi/g						
Lead 212		1.01	+/- 0.0819	0.0329	+/- 0.0819	0.0685	pCi/g						
Lead 214		0.828	+/- 0.117	0.0423	+/- 0.117	0.089	pCi/g						
Manganese 54	U	0.0228	+/- 0.0296	0.0238	+/- 0.0296	0.0513	pCi/g						
Niobium 94	U	0.0353	+/- 0.0279	0.0205	+/- 0.0279	0.044	pCi/g						
Potassium 40		12.4	+/- 1.15	0.189	+/- 1.15	0.431	pCi/g						
Radium 226		0.673	+/- 0.121	0.0445	+/- 0.121	0.0947	pCi/g						
Silver 108m	U	0.00475	+/- 0.0263	0.0227	+/- 0.0263	0.0477	pCi/g						
Thallium 208		0.382	+/- 0.0567	0.0242	+/- 0.0567	0.0515	pCi/g						
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid ALL FSS</i>													
Strontium 90	U	0.00738	+/- 0.0142	0.0107	+/- 0.0142	0.0255	pCi/g		KSD1	09/07/06	1745	562563	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	08/27/06	1545	562444

The following Analytical Methods were performed

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
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Certificate of Analysis

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

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

Report Date: September 8, 2006

Client Sample ID: 9106 0006 005C
Sample ID: 170256003

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time Batch	Mtd
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits					
Carrier/Tracer Recovery	GFPC, Sr90, solid	ALL	FSS		104		(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: September 8, 2006

Client Sample ID: 9106 0006 005D
Sample ID: 170256004
Matrix: SE
Collect Date: 09 AUG 06
Receive Date: 25 AUG 06
Collector: Client
Moisture: 28.2%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
<i>Gamma, Solid FSS GAM & ALL FSS 226 Ingrowth</i>													
<i>Waived</i>													
Actinium 228		1.01	+/- 0.197	0.0659	+/- 0.197	0.143	pCi/g		MJH1	09/01/06	1221	563436	1
Americium 241	U	0.0605	+/- 0.132	0.088	+/- 0.132	0.182	pCi/g						
Bismuth 212		0.534	+/- 0.328	0.168	+/- 0.328	0.358	pCi/g						
Bismuth 214		0.594	+/- 0.105	0.0384	+/- 0.105	0.0813	pCi/g						
Cesium 134	U	0.0478	+/- 0.046	0.0253	+/- 0.046	0.0537	pCi/g						
Cesium 137		0.103	+/- 0.0401	0.0181	+/- 0.0401	0.0389	pCi/g						
Cobalt 60		0.148	+/- 0.0644	0.0204	+/- 0.0644	0.045	pCi/g						
Europium 152	U	0.00143	+/- 0.0589	0.0517	+/- 0.0589	0.109	pCi/g						
Europium 154	U	0.0154	+/- 0.0766	0.0653	+/- 0.0766	0.142	pCi/g						
Europium 155	U	0.0625	+/- 0.0643	0.0586	+/- 0.0643	0.121	pCi/g						
Lead 212		0.900	+/- 0.0831	0.0345	+/- 0.0831	0.0714	pCi/g						
Lead 214		0.854	+/- 0.106	0.0372	+/- 0.106	0.078	pCi/g						
Manganese 54	U	0.013	+/- 0.0244	0.0203	+/- 0.0244	0.0434	pCi/g						
Niobium 94	U	0.0144	+/- 0.022	0.0192	+/- 0.022	0.0408	pCi/g						
Potassium 40		11.6	+/- 0.886	0.177	+/- 0.886	0.396	pCi/g						
Radium 226		0.594	+/- 0.105	0.0384	+/- 0.105	0.0813	pCi/g						
Silver 108m	U	0.0118	+/- 0.0187	0.0169	+/- 0.0187	0.0357	pCi/g						
Thallium 208		0.310	+/- 0.0591	0.0199	+/- 0.0591	0.0422	pCi/g						
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid ALL FSS</i>													
Strontium 90	U	0.000446	+/- 0.0198	0.0166	+/- 0.0198	0.0376	pCi/g		KSD1	09/07/06	1740	562563	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	08/27/06	1545	562444

The following Analytical Methods were performed

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
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Certificate of Analysis

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

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

Report Date: September 8, 2006

Client Sample ID: 9106 0006 005D
Sample ID: 170256004

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits						
Carrier/Tracer Recovery	GFPC, Sr90, solid	ALL FSS			50		(25% 125%)						

Notes:

The Qualifiers in this report are defined as follows :

- * 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: September 8, 2006

Client Sample ID: 9106 0005 010A
Sample ID: 170256005
Matrix: SE
Collect Date: 09 AUG 06
Receive Date: 25 AUG 06
Collector: Client
Moisture: 60.7%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
<i>Gamma, Solid FSS GAM & ALL FSS 226 Ingrowth</i>													
<i>Waived</i>													
Actinium 228		1.22	+/- 0.394	0.120	+/- 0.394	0.255	pCi/g		MJH1	09/01/06	1221	563436	1
Americium 241	U	0.0503	+/- 0.0522	0.0424	+/- 0.0522	0.0872	pCi/g						
Bismuth 212		0.628	+/- 0.547	0.277	+/- 0.547	0.584	pCi/g						
Bismuth 214		0.834	+/- 0.160	0.0633	+/- 0.160	0.133	pCi/g						
Cesium 134	UI	0.00	+/- 0.0832	0.0429	+/- 0.0832	0.0903	pCi/g						
Cesium 137	U	0.0463	+/- 0.0542	0.0333	+/- 0.0542	0.0703	pCi/g						
Cobalt 60	U	0.077	+/- 0.0516	0.0472	+/- 0.0516	0.100	pCi/g						
Europium 152	U	0.00822	+/- 0.0958	0.0766	+/- 0.0958	0.160	pCi/g						
Europium 154	U	0.000512	+/- 0.129	0.0917	+/- 0.129	0.199	pCi/g						
Europium 155	U	0.0659	+/- 0.115	0.0674	+/- 0.115	0.139	pCi/g						
Lead 212		0.933	+/- 0.111	0.0593	+/- 0.111	0.122	pCi/g						
Lead 214		0.787	+/- 0.146	0.0602	+/- 0.146	0.125	pCi/g						
Manganese 54	U	0.0199	+/- 0.0442	0.0342	+/- 0.0442	0.0725	pCi/g						
Niobium 94	U	0.0359	+/- 0.0364	0.0275	+/- 0.0364	0.0583	pCi/g						
Potassium 40		20.0	+/- 1.50	0.288	+/- 1.50	0.634	pCi/g						
Radium 226		0.834	+/- 0.160	0.0633	+/- 0.160	0.133	pCi/g						
Silver 108m	U	0.00415	+/- 0.0338	0.0282	+/- 0.0338	0.0591	pCi/g						
Thallium 208		0.347	+/- 0.0918	0.0332	+/- 0.0918	0.0698	pCi/g						
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid ALL FSS</i>													
Strontium 90	U	0.00442	+/- 0.0146	0.0116	+/- 0.0146	0.0274	pCi/g		KSD1	09/07/06	1745	562563	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	08/27/06	1545	562444

The following Analytical Methods were performed

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
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Certificate of Analysis

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

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

Report Date: September 8, 2006

Client Sample ID: 9106 0005 010A
Sample ID: 170256005

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time Batch	Mtd
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits					
Carrier/Tracer Recovery	GFPC, Sr90, solid	ALL FSS			103		(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: September 8, 2006

Client Sample ID: 9106 0005 010B
Sample ID: 170256006
Matrix: SE
Collect Date: 09 AUG 06
Receive Date: 25 AUG 06
Collector: Client
Moisture: 61.3%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
<i>Gamma, Solid FSS GAM & ALL FSS 226 Ingrowth</i>													
<i>Waived</i>													
Actinium 228		1.10	+/- 0.245	0.0778	+/- 0.245	0.168	pCi/g		MJH1	09/01/06	1221	563436	1
Americium 241	U	0.00576	+/- 0.0366	0.0263	+/- 0.0366	0.0543	pCi/g						
Bismuth 212		0.760	+/- 0.351	0.189	+/- 0.351	0.402	pCi/g						
Bismuth 214		0.576	+/- 0.139	0.0442	+/- 0.139	0.0936	pCi/g						
Cesium 134	U	0.0332	+/- 0.0438	0.0314	+/- 0.0438	0.0665	pCi/g						
Cesium 137		0.0908	+/- 0.0468	0.0231	+/- 0.0468	0.0493	pCi/g						
Cobalt 60		0.115	+/- 0.0522	0.0225	+/- 0.0522	0.0499	pCi/g						
Europium 152	U	0.00833	+/- 0.068	0.0546	+/- 0.068	0.115	pCi/g						
Europium 154	U	0.0828	+/- 0.106	0.0808	+/- 0.106	0.175	pCi/g						
Europium 155	U	0.0871	+/- 0.0591	0.0504	+/- 0.0591	0.104	pCi/g						
Lead 212		1.08	+/- 0.0778	0.0306	+/- 0.0778	0.0636	pCi/g						
Lead 214		0.812	+/- 0.0928	0.0385	+/- 0.0928	0.081	pCi/g						
Manganese 54	U	0.0145	+/- 0.0313	0.0262	+/- 0.0313	0.0557	pCi/g						
Niobium 94	U	0.00876	+/- 0.0271	0.0226	+/- 0.0271	0.0479	pCi/g						
Potassium 40		19.3	+/- 1.35	0.236	+/- 1.35	0.521	pCi/g						
Radium 226		0.576	+/- 0.139	0.0442	+/- 0.139	0.0936	pCi/g						
Silver 108m	U	0.00887	+/- 0.0232	0.0191	+/- 0.0232	0.0403	pCi/g						
Thallium 208		0.282	+/- 0.0641	0.0224	+/- 0.0641	0.0475	pCi/g						
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid ALL FSS</i>													
Strontium 90	U	0.00561	+/- 0.0185	0.0162	+/- 0.0185	0.0368	pCi/g		KSD1	09/07/06	1746	562563	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	08/27/06	1545	562444

The following Analytical Methods were performed

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
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Certificate of Analysis

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

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

Report Date: September 8, 2006

Client Sample ID: 9106 0005 010B
Sample ID: 170256006

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits						
Carrier/Tracer Recovery	GFPC, Sr90, solid	ALL FSS			89		(25% 125%)						

Notes:

The Qualifiers in this report are defined as follows :

- * 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: September 8, 2006

Client Sample ID: 9106 0005 010C
Sample ID: 170256007
Matrix: SE
Collect Date: 09 AUG 06
Receive Date: 25 AUG 06
Collector: Client
Moisture: 49.2%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
<i>Gamma, Solid FSS GAM & ALL FSS 226 Ingrowth</i>													
<i>Waived</i>													
Actinium 228		1.05	+/- 0.196	0.0698	+/- 0.196	0.148	pCi/g		MJH1	09/05/06	2124	563436	1
Americium 241	U	0.00111	+/- 0.108	0.0862	+/- 0.108	0.177	pCi/g						
Bismuth 212		0.539	+/- 0.392	0.142	+/- 0.392	0.300	pCi/g						
Bismuth 214		0.626	+/- 0.101	0.0371	+/- 0.101	0.0775	pCi/g						
Cesium 134	UI	0.00	+/- 0.0318	0.025	+/- 0.0318	0.0524	pCi/g						
Cesium 137		0.192	+/- 0.0408	0.0197	+/- 0.0408	0.0414	pCi/g						
Cobalt 60		0.522	+/- 0.0639	0.0211	+/- 0.0639	0.0453	pCi/g						
Europium 152	U	0.0379	+/- 0.0596	0.0464	+/- 0.0596	0.0966	pCi/g						
Europium 154	U	0.0318	+/- 0.0732	0.0585	+/- 0.0732	0.126	pCi/g						
Europium 155	U	0.0641	+/- 0.0925	0.0488	+/- 0.0925	0.100	pCi/g						
Lead 212		1.14	+/- 0.0696	0.0264	+/- 0.0696	0.0544	pCi/g						
Lead 214		0.753	+/- 0.0911	0.0337	+/- 0.0911	0.070	pCi/g						
Manganese 54	U	0.0134	+/- 0.0217	0.0193	+/- 0.0217	0.0408	pCi/g						
Niobium 94	U	0.0073	+/- 0.0216	0.0181	+/- 0.0216	0.038	pCi/g						
Potassium 40		17.9	+/- 1.02	0.190	+/- 1.02	0.412	pCi/g						
Radium 226		0.626	+/- 0.101	0.0371	+/- 0.101	0.0775	pCi/g						
Silver 108m	U	0.00496	+/- 0.0191	0.0165	+/- 0.0191	0.0344	pCi/g						
Thallium 208		0.354	+/- 0.0504	0.0183	+/- 0.0504	0.0384	pCi/g						
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid ALL FSS</i>													
Strontium 90	U	0.00471	+/- 0.0144	0.0114	+/- 0.0145	0.027	pCi/g		KSD1	09/07/06	1758	562563	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	08/27/06	1545	562444

The following Analytical Methods were performed

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
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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: September 8, 2006

Client Sample ID: 9106 0005 010C
Sample ID: 170256007

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits						
Carrier/Tracer Recovery	GFPC, Sr90, solid	ALL FSS			101		(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: September 8, 2006

Client Sample ID: 9106 0005 010D
Sample ID: 170256008
Matrix: SE
Collect Date: 09 AUG 06
Receive Date: 25 AUG 06
Collector: Client
Moisture: 58.1%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
<i>Gamma, Solid FSS GAM & ALL FSS 226 Ingrowth</i>													
<i>Waived</i>													
Actinium 228		0.920	+/- 0.431	0.163	+/- 0.431	0.345	pCi/g		MJH1	09/01/06	1222	563436	1
Americium 241	U	0.159	+/- 0.0868	0.0423	+/- 0.0868	0.0871	pCi/g						
Bismuth 212		0.975	+/- 0.615	0.310	+/- 0.615	0.654	pCi/g						
Bismuth 214	UI	0.00	+/- 0.170	0.126	+/- 0.170	0.259	pCi/g						
Cesium 134	UI	0.00	+/- 0.0619	0.0563	+/- 0.0619	0.118	pCi/g						
Cesium 137		0.630	+/- 0.105	0.037	+/- 0.105	0.0784	pCi/g						
Cobalt 60		2.24	+/- 0.161	0.0361	+/- 0.161	0.0793	pCi/g						
Europium 152	U	0.0801	+/- 0.100	0.0874	+/- 0.100	0.182	pCi/g						
Europium 154	U	0.159	+/- 0.180	0.124	+/- 0.180	0.267	pCi/g						
Europium 155	U	0.0923	+/- 0.117	0.0649	+/- 0.117	0.134	pCi/g						
Lead 212		1.10	+/- 0.108	0.0414	+/- 0.108	0.086	pCi/g						
Lead 214		0.707	+/- 0.194	0.0578	+/- 0.194	0.121	pCi/g						
Manganese 54	U	0.0291	+/- 0.050	0.0419	+/- 0.050	0.0886	pCi/g						
Niobium 94	U	0.0114	+/- 0.0446	0.0367	+/- 0.0446	0.0774	pCi/g						
Potassium 40		16.4	+/- 1.57	0.341	+/- 1.57	0.753	pCi/g						
Radium 226		0.761	+/- 0.170	0.0744	+/- 0.170	0.156	pCi/g						
Silver 108m	U	0.00643	+/- 0.0377	0.0316	+/- 0.0377	0.0662	pCi/g						
Thallium 208		0.396	+/- 0.103	0.0362	+/- 0.103	0.0763	pCi/g						
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid ALL FSS</i>													
Strontium 90	U	0.0219	+/- 0.0196	0.0135	+/- 0.0196	0.0315	pCi/g		KSD1	09/07/06	1805	562563	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	08/27/06	1545	562444

The following Analytical Methods were performed

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
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Certificate of Analysis

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

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

Report Date: September 8, 2006

Client Sample ID: 9106 0005 010D
Sample ID: 170256008

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits						
Carrier/Tracer Recovery	GFPC, Sr90, solid	ALL FSS			97		(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: September 8, 2006

Client Sample ID: 9106 0014 033A
Sample ID: 170256009
Matrix: SE
Collect Date: 11 AUG 06
Receive Date: 25 AUG 06
Collector: Client
Moisture: 26.2%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
<i>Gamma, Solid FSS GAM & ALL FSS 226 Ingrowth</i>													
<i>Waived</i>													
Actinium 228		1.28	+/- 0.272	0.0796	+/- 0.272	0.171	pCi/g		MJH1	09/01/06	1223	563436	1
Americium 241	U	0.0199	+/- 0.0632	0.0541	+/- 0.0632	0.112	pCi/g						
Bismuth 212	UI	0.00	+/- 0.484	0.171	+/- 0.484	0.363	pCi/g						
Bismuth 214		0.920	+/- 0.139	0.0421	+/- 0.139	0.089	pCi/g						
Cesium 134	U	0.0188	+/- 0.0338	0.0298	+/- 0.0338	0.0628	pCi/g						
Cesium 137		0.709	+/- 0.0983	0.0246	+/- 0.0983	0.0519	pCi/g						
Cobalt 60		0.697	+/- 0.0935	0.0267	+/- 0.0935	0.0577	pCi/g						
Europium 152	U	0.0119	+/- 0.0643	0.0538	+/- 0.0643	0.113	pCi/g						
Europium 154	U	0.0763	+/- 0.0741	0.0675	+/- 0.0741	0.147	pCi/g						
Europium 155	UI	0.00	+/- 0.0951	0.052	+/- 0.0951	0.108	pCi/g						
Lead 212		1.13	+/- 0.134	0.0457	+/- 0.134	0.0938	pCi/g						
Lead 214		1.04	+/- 0.151	0.0416	+/- 0.151	0.0871	pCi/g						
Manganese 54	U	0.0049	+/- 0.0275	0.023	+/- 0.0275	0.049	pCi/g						
Niobium 94	U	0.014	+/- 0.0236	0.0211	+/- 0.0236	0.0446	pCi/g						
Potassium 40		14.3	+/- 1.30	0.185	+/- 1.30	0.412	pCi/g						
Radium 226		0.920	+/- 0.139	0.0421	+/- 0.139	0.089	pCi/g						
Silver 108m	U3.080E	05	+/- 0.0263	0.0202	+/- 0.0263	0.0424	pCi/g						
Thallium 208		0.405	+/- 0.066	0.0235	+/- 0.066	0.0495	pCi/g						
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid ALL FSS</i>													
Strontium 90		0.0366	+/- 0.0205	0.0124	+/- 0.0205	0.0291	pCi/g		KSD1	09/07/06	1807	562563	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	08/27/06	1545	562444

The following Analytical Methods were performed

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
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Certificate of Analysis

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

Report Date: September 8, 2006

Client Sample ID: 9106 0014 033A
Sample ID: 170256009

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time Batch	Mtd
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits					
Carrier/Tracer Recovery	GFPC, Sr90, solid	ALL FSS			99		(25% 125%)					

Notes:

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 - < Result is less than value reported
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 - 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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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: September 8, 2006

Client Sample ID: 9106 0014 033B
Sample ID: 170256010
Matrix: SE
Collect Date: 11 AUG 06
Receive Date: 25 AUG 06
Collector: Client
Moisture: 16.3%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
<i>Gamma, Solid FSS GAM & ALL FSS 226 Ingrowth</i>													
<i>Waived</i>													
Actinium 228		1.03	+/- 0.272	0.113	+/- 0.272	0.225	pCi/g		MJH1	09/01/06	1559	563436	1
Americium 241	U	0.037	+/- 0.0519	0.0353	+/- 0.0519	0.0705	pCi/g						
Bismuth 212		0.897	+/- 0.563	0.237	+/- 0.563	0.473	pCi/g						
Bismuth 214		0.681	+/- 0.143	0.057	+/- 0.143	0.114	pCi/g						
Cesium 134	U	0.062	+/- 0.0748	0.0371	+/- 0.0748	0.0742	pCi/g						
Cesium 137		0.862	+/- 0.117	0.0301	+/- 0.117	0.0601	pCi/g						
Cobalt 60		0.944	+/- 0.113	0.0281	+/- 0.113	0.0562	pCi/g						
Europium 152	U	0.00733	+/- 0.118	0.0695	+/- 0.118	0.139	pCi/g						
Europium 154	U	0.00812	+/- 0.115	0.0959	+/- 0.115	0.192	pCi/g						
Europium 155	U	0.0592	+/- 0.0677	0.0595	+/- 0.0677	0.119	pCi/g						
Lead 212		0.896	+/- 0.109	0.0377	+/- 0.109	0.0754	pCi/g						
Lead 214		0.773	+/- 0.141	0.0491	+/- 0.141	0.0981	pCi/g						
Manganese 54	U	0.0465	+/- 0.0487	0.032	+/- 0.0487	0.0639	pCi/g						
Niobium 94	U	0.00334	+/- 0.0333	0.029	+/- 0.0333	0.0579	pCi/g						
Potassium 40		11.6	+/- 1.25	0.247	+/- 1.25	0.494	pCi/g						
Radium 226		0.681	+/- 0.143	0.057	+/- 0.143	0.114	pCi/g						
Silver 108m	U	0.00313	+/- 0.0324	0.0274	+/- 0.0324	0.0548	pCi/g						
Thallium 208		0.278	+/- 0.0682	0.0296	+/- 0.0682	0.0592	pCi/g						
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid ALL FSS</i>													
Strontium 90	U	0.00794	+/- 0.015	0.0113	+/- 0.015	0.0268	pCi/g		KSD1	09/07/06	1807	562563	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	08/27/06	1545	562444

The following Analytical Methods were performed

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits

GENERAL ENGINEERING LABORATORIES, LLC

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Certificate of Analysis

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

Report Date: September 8, 2006

Client Sample ID: 9106 0014 033B
Sample ID: 170256010

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits						
Carrier/Tracer Recovery	GFPC, Sr90, solid	ALL FSS			103		(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: September 8, 2006

Client Sample ID:	9106 0014 033C	Project:	YANK01204
Sample ID:	170256011	Client ID:	YANK001
Matrix:	SE	Vol. Recv.:	
Collect Date:	11 AUG 06		
Receive Date:	25 AUG 06		
Collector:	Client		
Moisture:	14.2%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
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Rad Gamma Spec Analysis

*Gamma, Solid FSS GAM & ALL FSS 226 Ingrowth
Waived*

Actinium 228		0.841	+/- 0.277	0.100	+/- 0.277	0.212	pCi/g		MJH1	09/01/06	1829	563436	1
Americium 241	U	0.028	+/- 0.048	0.0331	+/- 0.048	0.068	pCi/g						
Bismuth 212		0.476	+/- 0.345	0.223	+/- 0.345	0.468	pCi/g						
Bismuth 214		0.628	+/- 0.128	0.0439	+/- 0.128	0.0928	pCi/g						
Cesium 134	U	0.0398	+/- 0.0385	0.0344	+/- 0.0385	0.0721	pCi/g						
Cesium 137		0.609	+/- 0.0698	0.0277	+/- 0.0698	0.0581	pCi/g						
Cobalt 60		0.916	+/- 0.0989	0.0255	+/- 0.0989	0.0552	pCi/g						
Europium 152	U	0.0803	+/- 0.0732	0.0581	+/- 0.0732	0.121	pCi/g						
Europium 154	U	0.0175	+/- 0.0895	0.0738	+/- 0.0895	0.159	pCi/g						
Europium 155	U	0.0335	+/- 0.0642	0.0553	+/- 0.0642	0.114	pCi/g						
Lead 212		0.710	+/- 0.0819	0.0392	+/- 0.0819	0.0808	pCi/g						
Lead 214		0.810	+/- 0.110	0.0428	+/- 0.110	0.0895	pCi/g						
Manganese 54	U	0.0149	+/- 0.0338	0.0272	+/- 0.0338	0.0575	pCi/g						
Niobium 94	U	0.00772	+/- 0.0304	0.0254	+/- 0.0304	0.0533	pCi/g						
Potassium 40		11.0	+/- 1.00	0.220	+/- 1.00	0.484	pCi/g						
Radium 226		0.628	+/- 0.128	0.0439	+/- 0.128	0.0928	pCi/g						
Silver 108m	U	0.0295	+/- 0.0254	0.0239	+/- 0.0254	0.0499	pCi/g						
Thallium 208		0.237	+/- 0.0761	0.0244	+/- 0.0761	0.0513	pCi/g						

Rad Gas Flow Proportional Counting

GFPC, Sr90, solid ALL FSS

Strontium 90	U	0.0326	+/- 0.013	0.0158	+/- 0.013	0.0359	pCi/g		KSD1	09/07/06	1842	562563	2
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	08/27/06	1545	562444

The following Analytical Methods were performed

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

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Certificate of Analysis

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

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

Report Date: September 8, 2006

Client Sample ID: 9106 0014 033C
Sample ID: 170256011

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits						
Carrier/Tracer Recovery	GFPC, Sr90, solid	ALL FSS			90		(25% 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
 - B Target analyte was detected in the associated blank
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 - 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: September 8, 2006

Client Sample ID: 9106 0014 033D
Sample ID: 170256012
Matrix: SE
Collect Date: 11 AUG 06
Receive Date: 25 AUG 06
Collector: Client
Moisture: 11.9%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
<i>Gamma, Solid FSS GAM & ALL FSS 226 Ingrowth</i>													
<i>Waived</i>													
Actinium 228		0.800	+/- 0.169	0.0584	+/- 0.169	0.125	pCi/g		MJH1	09/05/06	0531	563436	1
Americium 241	U	0.00757	+/- 0.0849	0.0733	+/- 0.0849	0.151	pCi/g						
Bismuth 212		0.514	+/- 0.239	0.125	+/- 0.239	0.265	pCi/g						
Bismuth 214		0.496	+/- 0.079	0.0289	+/- 0.079	0.0614	pCi/g						
Cesium 134	UI	0.00	+/- 0.0333	0.0215	+/- 0.0333	0.0454	pCi/g						
Cesium 137		0.240	+/- 0.0466	0.0172	+/- 0.0466	0.0365	pCi/g						
Cobalt 60		0.329	+/- 0.0616	0.0159	+/- 0.0616	0.0349	pCi/g						
Europium 152	U	0.0221	+/- 0.047	0.0418	+/- 0.047	0.0875	pCi/g						
Europium 154	U	0.0277	+/- 0.0651	0.0444	+/- 0.0651	0.0974	pCi/g						
Europium 155	U	0.0409	+/- 0.050	0.0464	+/- 0.050	0.0959	pCi/g						
Lead 212		0.618	+/- 0.0549	0.0246	+/- 0.0549	0.0511	pCi/g						
Lead 214		0.582	+/- 0.0773	0.0304	+/- 0.0773	0.0635	pCi/g						
Manganese 54	U	0.0209	+/- 0.0191	0.0165	+/- 0.0191	0.0352	pCi/g						
Niobium 94	U	0.0124	+/- 0.0174	0.0157	+/- 0.0174	0.0331	pCi/g						
Potassium 40		10.8	+/- 0.796	0.144	+/- 0.796	0.320	pCi/g						
Radium 226		0.496	+/- 0.079	0.0289	+/- 0.079	0.0614	pCi/g						
Silver 108m	U	0.00363	+/- 0.0168	0.0148	+/- 0.0168	0.0312	pCi/g						
Thallium 208		0.222	+/- 0.040	0.0156	+/- 0.040	0.033	pCi/g						
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid ALL FSS</i>													
Strontium 90	U	0.020	+/- 0.0174	0.0117	+/- 0.0174	0.0276	pCi/g		KSD1	09/07/06	1842	562563	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	08/27/06	1545	562444

The following Analytical Methods were performed

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
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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: September 8, 2006

Client Sample ID: 9106 0014 033D
Sample ID: 170256012

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits						
Carrier/Tracer Recovery	GFPC, Sr90, solid	ALL FSS			103		(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: September 8, 2006

Client Sample ID: 9106 0004 013A
 Sample ID: 170256013
 Matrix: SE
 Collect Date: 09 AUG 06
 Receive Date: 25 AUG 06
 Collector: Client
 Moisture: 17.1%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
<i>Gamma, Solid FSS GAM & ALL FSS 226 Ingrowth Waived</i>													
Actinium 228		1.15	+/- 0.162	0.0511	+/- 0.162	0.109	pCi/g		MJH1	09/01/06	1830	563436	1
Americium 241	U	0.0596	+/- 0.0865	0.0665	+/- 0.0865	0.136	pCi/g						
Bismuth 212		0.731	+/- 0.295	0.115	+/- 0.295	0.242	pCi/g						
Bismuth 214		0.959	+/- 0.0845	0.0284	+/- 0.0845	0.0597	pCi/g						
Cesium 134	UI	0.00	+/- 0.0287	0.0195	+/- 0.0287	0.041	pCi/g						
Cesium 137	U	0.00113	+/- 0.0196	0.0162	+/- 0.0196	0.034	pCi/g						
Cobalt 60	U	0.00569	+/- 0.0174	0.0139	+/- 0.0174	0.0301	pCi/g						
Europium 152	U	0.0275	+/- 0.0539	0.0402	+/- 0.0539	0.0837	pCi/g						
Europium 154	U	0.0292	+/- 0.0495	0.0385	+/- 0.0495	0.0835	pCi/g						
Europium 155	U	0.0375	+/- 0.0594	0.0534	+/- 0.0594	0.110	pCi/g						
Lead 212		1.19	+/- 0.0671	0.0261	+/- 0.0671	0.0537	pCi/g						
Lead 214		1.08	+/- 0.090	0.0305	+/- 0.090	0.0634	pCi/g						
Manganese 54	U	0.0199	+/- 0.0202	0.0165	+/- 0.0202	0.0347	pCi/g						
Niobium 94	U	6.020E-05	+/- 0.0164	0.0143	+/- 0.0164	0.030	pCi/g						
Potassium 40		14.3	+/- 0.771	0.130	+/- 0.771	0.283	pCi/g						
Radium 226		0.959	+/- 0.0845	0.0284	+/- 0.0845	0.0597	pCi/g						
Silver 108m	U	0.00566	+/- 0.0152	0.0128	+/- 0.0152	0.0268	pCi/g						
Thallium 208		0.423	+/- 0.0539	0.0142	+/- 0.0539	0.030	pCi/g						
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid ALL FSS</i>													
Strontium 90	U	0.00331	+/- 0.0151	0.0131	+/- 0.0151	0.0304	pCi/g		KSD1	09/07/06	1842	562563	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	08/27/06	1545	562444

The following Analytical Methods were performed

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

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Certificate of Analysis

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

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

Report Date: September 8, 2006

Client Sample ID: 9106 0004 013A
Sample ID: 170256013

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits						
Carrier/Tracer Recovery	GFPC, Sr90, solid	ALL FSS			101		(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: September 8, 2006

Client Sample ID: 9106 0004 013B
Sample ID: 170256014
Matrix: SE
Collect Date: 09 AUG 06
Receive Date: 25 AUG 06
Collector: Client
Moisture: 19.6%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
<i>Gamma, Solid FSS GAM & ALL FSS 226 Ingrowth</i>													
<i>Waived</i>													
Actinium 228		1.23	+/- 0.302	0.0948	+/- 0.302	0.190	pCi/g		MJH1	09/01/06	2110	563436	1
Americium 241	U	0.0581	+/- 0.0456	0.0383	+/- 0.0456	0.0765	pCi/g						
Bismuth 212		0.606	+/- 0.361	0.199	+/- 0.361	0.399	pCi/g						
Bismuth 214		0.990	+/- 0.154	0.046	+/- 0.154	0.0919	pCi/g						
Cesium 134	U	0.0447	+/- 0.0383	0.033	+/- 0.0383	0.066	pCi/g						
Cesium 137		0.0831	+/- 0.037	0.0286	+/- 0.037	0.0571	pCi/g						
Cobalt 60		0.196	+/- 0.0645	0.0258	+/- 0.0645	0.0515	pCi/g						
Europium 152	U	0.0248	+/- 0.116	0.061	+/- 0.116	0.122	pCi/g						
Europium 154	U	0.0401	+/- 0.106	0.0809	+/- 0.106	0.162	pCi/g						
Europium 155	U	0.067	+/- 0.0826	0.0584	+/- 0.0826	0.117	pCi/g						
Lead 212		1.32	+/- 0.136	0.0337	+/- 0.136	0.0674	pCi/g						
Lead 214		0.989	+/- 0.153	0.0431	+/- 0.153	0.0862	pCi/g						
Manganese 54	U	0.00696	+/- 0.0306	0.0262	+/- 0.0306	0.0523	pCi/g						
Niobium 94	U	0.00306	+/- 0.0256	0.0228	+/- 0.0256	0.0455	pCi/g						
Potassium 40		9.89	+/- 0.996	0.207	+/- 0.996	0.414	pCi/g						
Radium 226		0.990	+/- 0.154	0.046	+/- 0.154	0.0919	pCi/g						
Silver 108m	U	0.017	+/- 0.0253	0.0211	+/- 0.0253	0.0422	pCi/g						
Thallium 208		0.456	+/- 0.084	0.0253	+/- 0.084	0.0505	pCi/g						
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid ALL FSS</i>													
Strontium 90	U	0.00221	+/- 0.0172	0.0143	+/- 0.0172	0.0316	pCi/g		KSD1	09/07/06	1843	562563	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	08/27/06	1545	562444

The following Analytical Methods were performed

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
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Certificate of Analysis

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Address : 362 Injun Hollow Rd

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

Report Date: September 8, 2006

Client Sample ID: 9106 0004 013B
Sample ID: 170256014

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits						
Carrier/Tracer Recovery	GFPC, Sr90, solid	ALL FSS			103		(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: September 8, 2006

Client Sample ID: 9106 0004 013C
Sample ID: 170256015
Matrix: SE
Collect Date: 09 AUG 06
Receive Date: 25 AUG 06
Collector: Client
Moisture: 17.3%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
<i>Gamma, Solid FSS GAM & ALL FSS 226 Ingrowth</i>													
<i>Waived</i>													
Actinium 228		1.07	+/- 0.236	0.0703	+/- 0.236	0.154	pCi/g		MJH1	09/01/06	2118	563436	1
Americium 241	U	0.00337	+/- 0.0367	0.034	+/- 0.0367	0.0701	pCi/g						
Bismuth 212		0.808	+/- 0.311	0.157	+/- 0.311	0.341	pCi/g						
Bismuth 214		0.614	+/- 0.118	0.0422	+/- 0.118	0.0899	pCi/g						
Cesium 134	U	0.0481	+/- 0.0502	0.033	+/- 0.0502	0.0699	pCi/g						
Cesium 137		0.0789	+/- 0.0569	0.0226	+/- 0.0569	0.0484	pCi/g						
Cobalt 60		0.074	+/- 0.0564	0.0239	+/- 0.0564	0.0531	pCi/g						
Europium 152	U	0.0203	+/- 0.0622	0.0547	+/- 0.0622	0.115	pCi/g						
Europium 154	U	0.0129	+/- 0.0828	0.0688	+/- 0.0828	0.152	pCi/g						
Europium 155	U	0.0479	+/- 0.0527	0.0529	+/- 0.0527	0.109	pCi/g						
Lead 212		0.903	+/- 0.0714	0.0332	+/- 0.0714	0.069	pCi/g						
Lead 214		0.651	+/- 0.103	0.0431	+/- 0.103	0.0904	pCi/g						
Manganese 54	U	0.0163	+/- 0.0298	0.0235	+/- 0.0298	0.0506	pCi/g						
Niobium 94	U	0.022	+/- 0.0284	0.0226	+/- 0.0284	0.0481	pCi/g						
Potassium 40		12.9	+/- 1.11	0.250	+/- 1.11	0.553	pCi/g						
Radium 226		0.614	+/- 0.118	0.0422	+/- 0.118	0.0899	pCi/g						
Silver 108m	U	0.00256	+/- 0.0199	0.0177	+/- 0.0199	0.0378	pCi/g						
Thallium 208		0.248	+/- 0.0569	0.0239	+/- 0.0569	0.0508	pCi/g						
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid ALL FSS</i>													
Strontium 90	U	0.00157	+/- 0.0143	0.0123	+/- 0.0143	0.0289	pCi/g		KSD1	09/07/06	1845	562563	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	08/27/06	1545	562444

The following Analytical Methods were performed

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
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Certificate of Analysis

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

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

Report Date: September 8, 2006

Client Sample ID: 9106 0004 013C
Sample ID: 170256015

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Surrogate/Tracer recovery		Test				Recovery%							Acceptable Limits
Carrier/Tracer Recovery		GFPC, Sr90, solid	ALL FSS			98							(25% 125%)

Notes:

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- * 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: September 8, 2006

Client Sample ID: 9106 0004 013D
Sample ID: 170256016
Matrix: SE
Collect Date: 09 AUG 06
Receive Date: 25 AUG 06
Collector: Client
Moisture: 25.9%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
<i>Gamma, Solid FSS GAM & ALL FSS 226 Ingrowth</i>													
<i>Waived</i>													
Actinium 228		1.03	+/- 0.160	0.0664	+/- 0.160	0.142	pCi/g		MJH1	09/05/06	0521	563436	1
Americium 241	U	0.0216	+/- 0.0981	0.0845	+/- 0.0981	0.174	pCi/g						
Bismuth 212		0.420	+/- 0.350	0.142	+/- 0.350	0.301	pCi/g						
Bismuth 214		0.689	+/- 0.0898	0.0339	+/- 0.0898	0.0715	pCi/g						
Cesium 134	U	0.0488	+/- 0.0307	0.0247	+/- 0.0307	0.0519	pCi/g						
Cesium 137		0.170	+/- 0.0491	0.019	+/- 0.0491	0.0402	pCi/g						
Cobalt 60		0.566	+/- 0.0694	0.0198	+/- 0.0694	0.0431	pCi/g						
Europium 152	U	0.0265	+/- 0.0524	0.0453	+/- 0.0524	0.0946	pCi/g						
Europium 154	U	0.0628	+/- 0.0639	0.0591	+/- 0.0639	0.127	pCi/g						
Europium 155	U	0.0541	+/- 0.0561	0.0528	+/- 0.0561	0.109	pCi/g						
Lead 212		0.958	+/- 0.0653	0.0265	+/- 0.0653	0.055	pCi/g						
Lead 214		0.784	+/- 0.0896	0.0297	+/- 0.0896	0.0623	pCi/g						
Manganese 54	U	0.00917	+/- 0.0221	0.019	+/- 0.0221	0.0403	pCi/g						
Niobium 94	U	0.0056	+/- 0.019	0.0164	+/- 0.019	0.0347	pCi/g						
Potassium 40		12.6	+/- 0.931	0.166	+/- 0.931	0.367	pCi/g						
Radium 226		0.689	+/- 0.0898	0.0339	+/- 0.0898	0.0715	pCi/g						
Silver 108m	U	0.00656	+/- 0.0175	0.0151	+/- 0.0175	0.0318	pCi/g						
Thallium 208		0.314	+/- 0.0426	0.0189	+/- 0.0426	0.0398	pCi/g						
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid ALL FSS</i>													
Strontium 90	U	0.00738	+/- 0.0147	0.0112	+/- 0.0147	0.0265	pCi/g		KSD1	09/07/06	1846	562563	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	08/27/06	1545	562444

The following Analytical Methods were performed

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
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Certificate of Analysis

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

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

Report Date: September 8, 2006

Client Sample ID: 9106 0004 013D
Sample ID: 170256016

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits						
Carrier/Tracer Recovery	GFPC, Sr90, solid	ALL FSS			106		(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.

GENERAL ENGINEERING LABORATORIES, LLC

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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: September 8, 2006

Client Sample ID: 9106 0004 005A
Sample ID: 170256017
Matrix: SE
Collect Date: 09 AUG 06
Receive Date: 25 AUG 06
Collector: Client
Moisture: 17.9%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
<i>Gamma, Solid FSS GAM & ALL FSS 226 Ingrowth</i>													
<i>Waived</i>													
Actinium 228		0.975	+/- 0.164	0.0814	+/- 0.164	0.174	pCi/g		MJH1	09/01/06	2119	563436	1
Americium 241	U	0.0504	+/- 0.0306	0.030	+/- 0.0306	0.0616	pCi/g						
Bismuth 212		0.804	+/- 0.393	0.165	+/- 0.393	0.351	pCi/g						
Bismuth 214		0.647	+/- 0.112	0.0371	+/- 0.112	0.0787	pCi/g						
Cesium 134	U	0.0288	+/- 0.0288	0.0271	+/- 0.0288	0.0574	pCi/g						
Cesium 137		0.249	+/- 0.0491	0.0255	+/- 0.0491	0.0537	pCi/g						
Cobalt 60		0.682	+/- 0.0884	0.0206	+/- 0.0884	0.0453	pCi/g						
Europium 152	U	0.0893	+/- 0.0683	0.0526	+/- 0.0683	0.110	pCi/g						
Europium 154	U	0.0167	+/- 0.0707	0.0611	+/- 0.0707	0.134	pCi/g						
Europium 155	U	0.00619	+/- 0.0524	0.0476	+/- 0.0524	0.0982	pCi/g						
Lead 212		0.912	+/- 0.0658	0.0281	+/- 0.0658	0.0584	pCi/g						
Lead 214		0.747	+/- 0.0939	0.036	+/- 0.0939	0.0755	pCi/g						
Manganese 54	U	0.0235	+/- 0.0494	0.0228	+/- 0.0494	0.0486	pCi/g						
Niobium 94	U	0.00608	+/- 0.0244	0.0201	+/- 0.0244	0.0426	pCi/g						
Potassium 40		10.5	+/- 0.910	0.155	+/- 0.910	0.351	pCi/g						
Radium 226		0.647	+/- 0.112	0.0371	+/- 0.112	0.0787	pCi/g						
Silver 108m	U	0.00189	+/- 0.0202	0.0178	+/- 0.0202	0.0376	pCi/g						
Thallium 208		0.322	+/- 0.0462	0.0209	+/- 0.0462	0.0442	pCi/g						
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid ALL FSS</i>													
Strontium 90	U	0.00262	+/- 0.0137	0.012	+/- 0.0137	0.0286	pCi/g		KSD1	09/07/06	1857	562563	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	08/27/06	1545	562444

The following Analytical Methods were performed

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits

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: September 8, 2006

Client Sample ID: 9106 0004 005A
Sample ID: 170256017

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits						
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
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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
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Report Date: September 8, 2006

Client Sample ID: 9106 0004 005B
Sample ID: 170256018
Matrix: SE
Collect Date: 10 AUG 06
Receive Date: 25 AUG 06
Collector: Client
Moisture: 14%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
<i>Gamma, Solid FSS GAM & ALL FSS 226 Ingrowth</i>													
<i>Waived</i>													
Actinium 228		0.787	+/- 0.187	0.0725	+/- 0.187	0.153	pCi/g		MJH1	09/02/06	1713	563436	1
Americium 241	U	0.0759	+/- 0.0649	0.0382	+/- 0.0649	0.0789	pCi/g						
Bismuth 212		0.403	+/- 0.233	0.139	+/- 0.233	0.294	pCi/g						
Bismuth 214		0.636	+/- 0.108	0.0306	+/- 0.108	0.0647	pCi/g						
Cesium 134	U	0.0378	+/- 0.0274	0.0229	+/- 0.0274	0.0482	pCi/g						
Cesium 137		0.181	+/- 0.0421	0.019	+/- 0.0421	0.040	pCi/g						
Cobalt 60		0.710	+/- 0.0716	0.0155	+/- 0.0716	0.034	pCi/g						
Europium 152	U	0.0183	+/- 0.0466	0.0421	+/- 0.0466	0.0881	pCi/g						
Europium 154	U	0.0204	+/- 0.0516	0.0449	+/- 0.0516	0.0982	pCi/g						
Europium 155	UI	0.00	+/- 0.0804	0.0458	+/- 0.0804	0.0944	pCi/g						
Lead 212		0.722	+/- 0.086	0.0317	+/- 0.086	0.0651	pCi/g						
Lead 214		0.832	+/- 0.115	0.0288	+/- 0.115	0.0605	pCi/g						
Manganese 54	U	0.0204	+/- 0.0232	0.0192	+/- 0.0232	0.0406	pCi/g						
Niobium 94	U	0.0129	+/- 0.0173	0.0161	+/- 0.0173	0.0339	pCi/g						
Potassium 40		9.30	+/- 0.895	0.130	+/- 0.895	0.291	pCi/g						
Radium 226		0.636	+/- 0.108	0.0306	+/- 0.108	0.0647	pCi/g						
Silver 108m	U	0.0081	+/- 0.0194	0.0154	+/- 0.0194	0.0324	pCi/g						
Thallium 208		0.299	+/- 0.0505	0.0157	+/- 0.0505	0.0332	pCi/g						
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid ALL FSS</i>													
Strontium 90	U	0.0109	+/- 0.0167	0.0123	+/- 0.0167	0.0293	pCi/g		KSD1	09/07/06	1857	562563	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	08/27/06	1545	562444

The following Analytical Methods were performed

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
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GENERAL ENGINEERING LABORATORIES, LLC

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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: September 8, 2006

Client Sample ID: 9106 0004 005B
Sample ID: 170256018

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time Batch	Mtd
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits					
Carrier/Tracer Recovery	GFPC, Sr90, solid	ALL FSS			95		(25% 125%)					

Notes:

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 - < Result is less than value reported
 - > 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
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Report Date: September 8, 2006

Client Sample ID: 9106 0004 005C
Sample ID: 170256019
Matrix: SE
Collect Date: 10 AUG 06
Receive Date: 25 AUG 06
Collector: Client
Moisture: 24.6%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
<i>Gamma, Solid FSS GAM & ALL FSS 226 Ingrowth</i>													
<i>Waived</i>													
Actinium 228		0.810	+/- 0.116	0.0431	+/- 0.116	0.090	pCi/g		MJH1	09/05/06	2143	563436	1
Americium 241	U	0.0147	+/- 0.0176	0.0169	+/- 0.0176	0.0345	pCi/g						
Bismuth 212		0.365	+/- 0.171	0.099	+/- 0.171	0.206	pCi/g						
Bismuth 214		0.623	+/- 0.0633	0.0212	+/- 0.0633	0.044	pCi/g						
Cesium 134	UI	0.00	+/- 0.0297	0.0166	+/- 0.0297	0.0343	pCi/g						
Cesium 137		0.113	+/- 0.0242	0.0124	+/- 0.0242	0.0257	pCi/g						
Cobalt 60		0.268	+/- 0.0379	0.012	+/- 0.0379	0.0254	pCi/g						
Europium 152	U	0.00617	+/- 0.0317	0.0284	+/- 0.0317	0.0585	pCi/g						
Europium 154	U	0.0248	+/- 0.0417	0.0337	+/- 0.0417	0.0714	pCi/g						
Europium 155	UI	0.00	+/- 0.0407	0.0265	+/- 0.0407	0.054	pCi/g						
Lead 212		0.840	+/- 0.0404	0.0162	+/- 0.0404	0.0332	pCi/g						
Lead 214		0.686	+/- 0.0505	0.0197	+/- 0.0505	0.0406	pCi/g						
Manganese 54	U	0.00306	+/- 0.0143	0.0127	+/- 0.0143	0.0265	pCi/g						
Niobium 94	U	0.0053	+/- 0.013	0.0112	+/- 0.013	0.0232	pCi/g						
Potassium 40		10.2	+/- 0.535	0.0857	+/- 0.535	0.186	pCi/g						
Radium 226		0.623	+/- 0.0633	0.0212	+/- 0.0633	0.044	pCi/g						
Silver 108m	U	0.0071	+/- 0.0113	0.00971	+/- 0.0113	0.0201	pCi/g						
Thallium 208		0.288	+/- 0.031	0.0115	+/- 0.031	0.0239	pCi/g						
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid ALL FSS</i>													
Strontium 90	U	0.0082	+/- 0.0158	0.012	+/- 0.0158	0.0284	pCi/g		KSD1	09/07/06	1857	562563	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	08/27/06	1545	562444

The following Analytical Methods were performed

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits

GENERAL ENGINEERING LABORATORIES, LLC

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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: September 8, 2006

Client Sample ID: 9106 0004 005C
Sample ID: 170256019

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits						
Carrier/Tracer Recovery	GFPC, Sr90, solid	ALL FSS			96		(25% 125%)						

Notes:

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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.

GENERAL ENGINEERING LABORATORIES, LLC

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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: September 8, 2006

Client Sample ID: 9106 0004 005D
Sample ID: 170256020
Matrix: SE
Collect Date: 10 AUG 06
Receive Date: 25 AUG 06
Collector: Client
Moisture: 19.1%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Gamma Spec Analysis													
<i>Gamma, Solid FSS GAM & ALL FSS 226 Ingrowth</i>													
<i>Waived</i>													
Actinium 228		0.995	+/- 0.411	0.146	+/- 0.411	0.291	pCi/g		MJH1	09/02/06	1725	563436	1
Americium 241	U	0.0557	+/- 0.0479	0.0365	+/- 0.0479	0.0729	pCi/g						
Bismuth 212		0.635	+/- 0.589	0.261	+/- 0.589	0.521	pCi/g						
Bismuth 214		0.760	+/- 0.165	0.0601	+/- 0.165	0.120	pCi/g						
Cesium 134	U	0.0627	+/- 0.0504	0.0463	+/- 0.0504	0.0926	pCi/g						
Cesium 137		0.503	+/- 0.0894	0.0338	+/- 0.0894	0.0676	pCi/g						
Cobalt 60		1.72	+/- 0.132	0.0307	+/- 0.132	0.0614	pCi/g						
Europium 152	U	0.00265	+/- 0.0988	0.0745	+/- 0.0988	0.149	pCi/g						
Europium 154	U	0.0538	+/- 0.114	0.0996	+/- 0.114	0.199	pCi/g						
Europium 155	UI	0.00	+/- 0.119	0.0591	+/- 0.119	0.118	pCi/g						
Lead 212		1.09	+/- 0.126	0.0386	+/- 0.126	0.0772	pCi/g						
Lead 214		0.802	+/- 0.135	0.0517	+/- 0.135	0.103	pCi/g						
Manganese 54	U	0.0185	+/- 0.0434	0.0383	+/- 0.0434	0.0766	pCi/g						
Niobium 94	U	0.0168	+/- 0.0366	0.0309	+/- 0.0366	0.0618	pCi/g						
Potassium 40		10.7	+/- 1.11	0.276	+/- 1.11	0.551	pCi/g						
Radium 226		0.760	+/- 0.165	0.0601	+/- 0.165	0.120	pCi/g						
Silver 108m	U	0.021	+/- 0.0301	0.0247	+/- 0.0301	0.0494	pCi/g						
Thallium 208		0.343	+/- 0.0887	0.0298	+/- 0.0887	0.0595	pCi/g						
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid ALL FSS</i>													
Strontium 90	U	0.00322	+/- 0.0146	0.0127	+/- 0.0146	0.0299	pCi/g		KSD1	09/07/06	1857	562563	2

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	08/27/06	1545	562444

The following Analytical Methods were performed

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
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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: September 8, 2006

Client Sample ID: 9106 0004 005D
Sample ID: 170256020

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits						
Carrier/Tracer Recovery	GFPC, Sr90, solid	ALL FSS			99		(25% 125%)						

Notes:

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 - 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

Client : Connecticut Yankee Atomic Power
362 Injun Hollow Rd

Report Date: September 8, 2006
Page 1 of 5

Contact: East Hampton, Connecticut
Mr. Jack McCarthy

Workorder: 170256

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch	563436										
QC1201171526 170256001 DUP											
Actinium-228		0.966		1.01	pCi/g	4		(0% - 100%)	MJH1	09/02/06	17:26
	Uncert:	+/-0.192		+/-0.200							
	TPU:	+/-0.192		+/-0.200							
Americium-241	U	0.0375	U	0.0258	pCi/g	37		(0% - 100%)			
	Uncert:	+/-0.0387		+/-0.075							
	TPU:	+/-0.0387		+/-0.075							
Bismuth-212		0.366		0.592	pCi/g	47		(0% - 100%)			
	Uncert:	+/-0.306		+/-0.276							
	TPU:	+/-0.306		+/-0.276							
Bismuth-214		0.650		0.690	pCi/g	6		(0% - 100%)			
	Uncert:	+/-0.135		+/-0.0955							
	TPU:	+/-0.135		+/-0.0955							
Cesium-134	U	0.0366	UI	0.00	pCi/g	56		(0% - 100%)			
	Uncert:	+/-0.0355		+/-0.035							
	TPU:	+/-0.0355		+/-0.035							
Cesium-137		0.0666		0.0611	pCi/g	9		(0% - 100%)			
	Uncert:	+/-0.0355		+/-0.0415							
	TPU:	+/-0.0355		+/-0.0415							
Cobalt-60		0.104		0.159	pCi/g	41		(0% - 100%)			
	Uncert:	+/-0.0726		+/-0.0325							
	TPU:	+/-0.0726		+/-0.0325							
Europium-152	U	0.00636	U	-0.00858	pCi/g	1350		(0% - 100%)			
	Uncert:	+/-0.0728		+/-0.0624							
	TPU:	+/-0.0728		+/-0.0624							
Europium-154	U	-0.0788	U	0.00919	pCi/g	253		(0% - 100%)			
	Uncert:	+/-0.0938		+/-0.0602							
	TPU:	+/-0.0938		+/-0.0602							
Europium-155	U	0.0672	U	0.0817	pCi/g	20		(0% - 100%)			
	Uncert:	+/-0.0554		+/-0.0557							
	TPU:	+/-0.0554		+/-0.0557							
Lead-212		0.871		0.847	pCi/g	3		(0% - 20%)			
	Uncert:	+/-0.0971		+/-0.0867							
	TPU:	+/-0.0971		+/-0.0867							
Lead-214		0.727		0.699	pCi/g	4		(0% - 20%)			
	Uncert:	+/-0.105		+/-0.102							
	TPU:	+/-0.105		+/-0.102							
Manganese-54	U	-0.00916	U	-0.00665	pCi/g	32		(0% - 100%)			
	Uncert:	+/-0.0319		+/-0.0225							
	TPU:	+/-0.0319		+/-0.0225							
Niobium-94	U	0.0101	U	-0.00339	pCi/g	402		(0% - 100%)			
	Uncert:	+/-0.0244		+/-0.0176							
	TPU:	+/-0.0244		+/-0.0176							

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QC Summary

Workorder: 170256

Page 2 of 5

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch	563436										
Potassium-40		11.3		11.7	pCi/g	3		(0% - 20%)			
	Uncert:	+/-0.986		+/-1.03							
	TPU:	+/-0.986		+/-1.03							
Radium-226		0.650		0.690	pCi/g	6		(0% - 100%)			
	Uncert:	+/-0.135		+/-0.0955							
	TPU:	+/-0.135		+/-0.0955							
Silver-108m	U	-0.0067	U	0.000104	pCi/g	206		(0% - 100%)			
	Uncert:	+/-0.0208		+/-0.018							
	TPU:	+/-0.0208		+/-0.018							
Thallium-208		0.283		0.283	pCi/g	0		(0% - 100%)			
	Uncert:	+/-0.0618		+/-0.048							
	TPU:	+/-0.0618		+/-0.048							
QC1201171527	LCS										
Actinium-228			U	0.254	pCi/g					09/03/06	22:31
	Uncert:			+/-0.565							
	TPU:			+/-0.565							
Americium-241	23.4			24.1	pCi/g		103	(75%-125%)			
	Uncert:			+/-1.28							
	TPU:			+/-1.28							
Bismuth-212			U	0.575	pCi/g						
	Uncert:			+/-0.944							
	TPU:			+/-0.944							
Bismuth-214			U	0.0248	pCi/g						
	Uncert:			+/-0.213							
	TPU:			+/-0.213							
Cesium-134			U	0.00032	pCi/g						
	Uncert:			+/-0.147							
	TPU:			+/-0.147							
Cesium-137	9.58			9.84	pCi/g		103	(75%-125%)			
	Uncert:			+/-0.487							
	TPU:			+/-0.487							
Cobalt-60	14.5			14.7	pCi/g		101	(75%-125%)			
	Uncert:			+/-0.660							
	TPU:			+/-0.660							
Europium-152			U	0.125	pCi/g						
	Uncert:			+/-0.292							
	TPU:			+/-0.292							
Europium-154			U	0.0779	pCi/g						
	Uncert:			+/-0.277							
	TPU:			+/-0.277							
Europium-155			U	-0.0876	pCi/g						
	Uncert:			+/-0.277							
	TPU:			+/-0.277							
Lead-212			U	0.0524	pCi/g						
	Uncert:			+/-0.155							
	TPU:			+/-0.155							
Lead-214			U	-0.103	pCi/g						
	Uncert:			+/-0.212							

GENERAL ENGINEERING LABORATORIES, LLC
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QC Summary

Workorder: 170256

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Parname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec										
Batch	563436									
Manganese-54	TPU:	U	+/-0.212 0.0306	pCi/g						
	Uncert:		+/-0.135							
Niobium-94	TPU:	U	+/-0.135 -0.0513	pCi/g						
	Uncert:		+/-0.115							
Potassium-40	TPU:	U	+/-0.115 0.769	pCi/g						
	Uncert:		+/-1.10							
Radium-226	TPU:	U	+/-1.10 0.0248	pCi/g			(75%-125%)			
	Uncert:		+/-0.213							
Silver-108m	TPU:	U	+/-0.213 0.0782	pCi/g						
	Uncert:		+/-0.105							
Thallium-208	TPU:	U	+/-0.105 0.180	pCi/g						
	Uncert:		+/-0.177							
	TPU:		+/-0.177							
QC1201171525 MB										
Actinium-228		U	0.0216	pCi/g					09/02/06	17:16
	Uncert:		+/-0.0479							
Americium-241	TPU:	U	+/-0.0479 -0.0654	pCi/g						
	Uncert:		+/-0.0396							
Bismuth-212	TPU:	U	+/-0.0396 0.110	pCi/g						
	Uncert:		+/-0.0705							
Bismuth-214	TPU:	U	+/-0.0705 0.00843	pCi/g						
	Uncert:		+/-0.0317							
Cesium-134	TPU:	U	+/-0.0317 -0.00203	pCi/g						
	Uncert:		+/-0.012							
Cesium-137	TPU:	U	+/-0.012 -0.00757	pCi/g						
	Uncert:		+/-0.0117							
Cobalt-60	TPU:	U	+/-0.0117 -0.00589	pCi/g						
	Uncert:		+/-0.0128							
Europium-152	TPU:	U	+/-0.0128 -0.0169	pCi/g						
	Uncert:		+/-0.0308							
Europium-154	TPU:	U	+/-0.0308 0.00802	pCi/g						
	Uncert:		+/-0.0305							
Europium-155	TPU:	U	+/-0.0305 -0.00342	pCi/g						

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QC Summary

Workorder: 170256

Page 4 of 5

Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch	563436										
				Uncert:							
				TPU:							
Lead-212			U	0.0151	pCi/g						
				Uncert:							
				TPU:							
Lead-214			U	0.00738	pCi/g						
				Uncert:							
				TPU:							
Manganese-54			U	0.0127	pCi/g						
				Uncert:							
				TPU:							
Niobium-94			U	-0.00293	pCi/g						
				Uncert:							
				TPU:							
Potassium-40			U	0.112	pCi/g						
				Uncert:							
				TPU:							
Radium-226			U	0.00843	pCi/g						
				Uncert:							
				TPU:							
Silver-108m			U	0.00354	pCi/g						
				Uncert:							
				TPU:							
Thallium-208			U	-0.011	pCi/g						
				Uncert:							
				TPU:							
Rad Gas Flow											
Batch	562563										
QC1201169422	170256002	DUP									
Strontium-90			U	0.00501	pCi/g	0		(0% - 100%)	KSD1	09/07/06	18:59
				Uncert:							
				TPU:							
QC1201169424	LCS										
Strontium-90				1.74	pCi/g		90	(75%-125%)		09/07/06	19:16
				Uncert:							
				TPU:							
QC1201169421	MB										
Strontium-90			U	0.0172	pCi/g					09/07/06	18:59
				Uncert:							
				TPU:							
QC1201169423	170256002	MS									
Strontium-90			U	0.00501	pCi/g		76	(75%-125%)		09/07/06	19:16
				Uncert:							
				TPU:							

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

GENERAL ENGINEERING LABORATORIES, LLC
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QC Summary

Workorder: 170256

Page 5 of 5

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

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 acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

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

CASE NARRATIVE
For
CONNECTICUT YANKEE
RE: Soil
PO# 002332

Work Order: 168404

SDG: MSR #06-0652, 06-0675, 06-0687, 06-0688, 06-0707, 06-0743, 06-0755

August 15, 2006

Laboratory Identification:

General Engineering Laboratories, LLC

Mailing Address:

P.O. Box 30712
Charleston, South Carolina 29417

Express Mail Delivery and Shipping Address:

2040 Savage Road
Charleston, South Carolina 29407

Telephone Number:

(843) 556-8171

Summary:

Sample receipt

The sample(s) for this Project arrived at General Engineering Laboratories, LLC, (GEL) in Charleston, South Carolina on May 5, May 9, May 12, May 17, May 26, June 2, June 8, 2006. All sample containers arrived without any visible signs of tampering or breakage. The chain of custody contained the proper documentation and signatures.

The laboratory received the following sample(s):

<u>Sample ID</u>	<u>Client Sample ID</u>
168404001	9106-0002-007F
168404002	9106-0002-011F
168404003	9106-0003-004F
168404004	9106-0003-015F
168404005	9106-0004-005F
168404006	9106-0004-015F
168404007	9106-0005-010F
168404008	9106-0005-014F
168404009	9106-0006-005F

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

168404010	9106-0008-006F
168404011	9106-0008-008F
168404012	9106-0009-002F
168404013	9106-0009-017F
168404014	9106-0010-001F
168404015	9106-0010-012F

Items of Note:

At the request of Dale Randall on July 20, 2006, GEL analyzed the above samples according to the spreadsheet in the attached email.

Case Narrative:

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

Analytical Request:

Seven soil samples were reanalyzed for FSSALL, except gamma and Sr-90.
Four soil samples were reanalyzed for FSSALL, except gamma and Ni-63.
Two soil samples were reanalyzed for FSSALL, except gamma.
Two soil samples were reanalyzed for FSALL, except gamma, Sr-90 and Ni-63.

Internal Chain of Custody:

Custody was maintained for the sample(s).

Data Package:

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

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



Cheryl Jones
Project Manager

168404%

Subject: Additional HTD analyses
From: "Dale Randall" <randall@cyapco.com>
Date: Thu, 20 Jul 2006 11:04:54 -0400
To: "Cheryl Jones" <cj@gel.com>
CC: "Clyde Newson" <Newson@CYAPCO.com>, "John McCarthy" <McCarthy@CYAPCO.com>

Cheryl:

Per our earlier discussion, attached is a list of samples that we would like to have analyzed to the FSSALL protocol. I have included a list of test protocols performed on each sample to date. Once you have had an opportunity to determine our options for each sample please call or e-mail me at your convenience.

Thank You,

Dale

(860) 267-3133

GEL FSSALL analyses request.xls	Content-Description: GEL FSSALL analyses request.xls
	Content-Type: application/vnd.ms-excel
	Content-Encoding: base64

Done

To be done

Previous GEL ID	CY sample location IDs	Done			To be done									
		FSS Gam	Sr-90	Ni-63	Am	Pu	Sr90	Pu241	Fe55	Ni63	Tc99	H3	C14	
164220008	9106-0002-007F	x	x		x	x		x	x	x	x	x	x	
164220012	9106-0002-011F	x	x		x	x		x	x	x	x	x	x	
162335004	9106-0003-004F	x			x	x	x	x	x	x	x	x	x	
162335014	9106-0003-015F	x			x	x	x	x	x	x	x	x	x	
162832015	9106-0004-005F	x	x		x	x		x	x	x	x	x	x	
162832009	9106-0004-015F	x	x		x	x		x	x	x	x	x	x	
162485008	9106-0005-010F	x	x		x	x		x	x	x	x	x	x	
162485011	9106-0005-014F	x	x		x	x		x	x	x	x	x	x	
162850014	9106-0006-005F	x	x		x	x		x	x	x	x	x	x	
163741005	9106-0008-006F	x	x	x	x	x		x	x		x	x	x	
163741009	9106-0008-008F	x	x	x	x	x		x	x		x	x	x	
164542008	9106-0009-002F	x		x	x	x	x	x	x		x	x	x	
164542003	9106-0009-017F	x		x	x	x	x	x	x		x	x	x	
163105009	9106-0010-001F	x		x	x	x	x	x	x		x	x	x	
163105016	9106-0010-012F	x		x	x	x	x	x	x		x	x	x	

Chain of Custody and Supporting Documentation

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Connecticut Yankee Atomic Power Company

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

Chain of Custody Form

No. 2006-00372

Project Name: Haddam Neck Decommissioning						Analyses Requested					Lab Use Only			
Contact Name & Phone: Jack McCarthy 860-267-2556 Ext. 3024						FSSGAM	FSSALL	Sr-90					Comments:	
Analytical Lab (Name, City, State) General Engineering Laboratories 2040 Savage Road, Charleston SC. 29407 843 556 8171. Attn. Cheryl Jones														
Priority: <input checked="" type="checkbox"/> 30 D. <input type="checkbox"/> 14 D. <input type="checkbox"/> 7 D.														
Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size- & Type Code						Comment, Preservation	Lab Sample ID		
9106-0002-009F	5/18/06	14:28	SE	C	BP			X			Transferred from COC 2006-00364			
9106-0002-010F	5/18/06	14:50	SE	C	BP	X		X			Transferred from COC 2006-00364			
9106-0002-011F	5/19/06	08:10	SE	C	BP	X		X			Transferred from COC 2006-00365			
9106-0002-012F	5/19/06	08:31	SE	C	BP	X		X			Transferred from COC 2006-00365			
9106-0002-013F	5/19/06	09:00	SE	C	BP	X		X			Transferred from COC 2006-00365			
9106-0002-014F	5/19/06	09:58	SE	C	BP	X		X			Transferred from COC 2006-00365			
9106-0002-014FS	5/19/06	09:58	SE	C	BP	X		X			Transferred from COC 2006-00365			
9106-0002-015F	5/19/06	10:29	SE	C	BP	X		X			Transferred from COC 2006-00365			
9106-0002-016F	5/19/06	13:19	SE	C	BP	X		X			Transferred from COC 2006-00365			
NOTES: PO #: 002332 MSR #: 06- SSWP# NA <input checked="" type="checkbox"/> LTP QA <input type="checkbox"/> Radwaste QA <input type="checkbox"/> Non QA 0755										Samples Shipped Via: <input checked="" type="checkbox"/> Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> Hand <input type="checkbox"/> Other		Internal Container Temp.: _____ Deg. C Custody Sealed? Custody Seal Intact? Y <input type="checkbox"/> N <input type="checkbox"/>		
1) Relinquished By			Date/Time		2) Received By			Date/Time		Bill of Lading # 7909 4145 5709				
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: 6-2-06 9:20

SDG#: MSR# 06-0755

Work Order Number: 1642201

Shipping Container ID: 7909 41455710 Chain of Custody #: 2006-00371

- 1. Custody Seals on shipping container intact? Yes No
- 2. Custody Seals dated and signed? Yes No
- 3. Chain-of-Custody record present? Yes No
- 4. Cooler temperature 23°
- 5. Vermiculite/packing materials is: Wet Dry NO PACKING Bot wet
- 6. Number of samples in shipping container: 9
- 7. Sample holding times exceeded? Yes No

8. Samples have:	
<input type="checkbox"/> tape	<input type="checkbox"/> hazard labels
<input checked="" type="checkbox"/> custody seals	<input type="checkbox"/> appropriate sample labels
9. Samples are:	
<input checked="" type="checkbox"/> in good condition	<input type="checkbox"/> leaking
<input type="checkbox"/> broken	<input type="checkbox"/> have air bubbles

10. Were any anomalies identified in sample receipt? Yes No

11. Description of anomalies (include sample numbers): _____

Sample Custodian/Laboratory: *Chen* Date: 6-2-06

Telephoned to: _____ On _____ By _____

Figure 1. Sample Check-in List

Date/Time Received: 6-2-06 9:20
SDG#: MSR#06-0755
Work Order Number: 1642201
Shipping Container ID: 1909 4145 5109 Chain of Custody #: 2006-00372

- 1. Custody Seals on shipping container intact? Yes No
- 2. Custody Seals dated and signed? Yes No
- 3. Chain-of-Custody record present? Yes No
- 4. Cooler temperature 23°
- 5. Vermiculite/packing materials is: Wet Dry no packing bot wet
- 6. Number of samples in shipping container: 9
- 7. Sample holding times exceeded? Yes No

8. Samples have:	
<input checked="" type="checkbox"/> tape	<input type="checkbox"/> hazard labels
<input type="checkbox"/> custody seals	<input type="checkbox"/> appropriate sample labels
9. Samples are:	
<input checked="" type="checkbox"/> in good condition	<input type="checkbox"/> leaking
<input type="checkbox"/> broken	<input type="checkbox"/> have air bubbles

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

Sample Custodian/Laboratory: Candice Hus Date: 6-2-06
Telephoned to: _____ On _____ By _____



SAMPLE RECEIPT & REVIEW FORM

PM use only

Client: <u>Connecticut Yankee</u>	SDG/ARCO/Work Order: <u>164220</u>
Date Received: <u>6/2/06</u>	PM(A) Review (ensure non-conforming items are resolved prior to signing): <i>[Signature]</i>
Received By: <i>[Signature]</i>	

#	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?				<u>COC # 2006-00371</u>
14	Air Bill ,Tracking #'s, & Additional Comments				

Suspected Hazard Information	Non-Regulated	Regulated	High Level	RSO RAD Receipt #
A Radiological Classification?				*If > x2 area background is observed on samples identified as "non-regulated/non-radioactive", contact the Radiation Safety group for further investigation.
B PCB Regulated?	✓			Maximum Counts Observed*: <u>25CPM</u>
C Shipped as DOT Hazardous Material? If yes, contact Waste Manager or ESH Manager.	✓			Comments: Hazard Class Shipped: UN#:
PM (or PMA) review of Hazard classification:				Initials: <i>[Signature]</i> Date: <u>6/2/06</u>



SAMPLE RECEIPT & REVIEW FORM

PM use only

Client: <u>Connecticut Yankee</u>	SDG/ARCOC/Work Order: <u>164220</u>
Date Received: <u>6-2-06</u>	PM(A) Review (ensure non-conforming items are resolved prior to signing):
Received By: <u>CG</u>	<i>[Signature]</i>

	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?				COC # <u>2006-00372</u> ⁰⁰³⁷² 00371 _{adj} 6/2/06

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?				
B	PCB Regulated?	✓			Maximum Counts Observed*: <u>200CPM</u>
C	Shipped as DOT Hazardous Material? If yes, contact Waste Manager or ESH Manager.	✓			Comments: Hazard Class Shipped: UN#:

PM (or PMA) review of Hazard classification:	Initials <u>CG</u>	Date: <u>6/2/06</u>
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2006-00312

Connecticut Yankee Atomic Power Company

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

Chain of Custody Form

No. 2006-00312

1623347 1623351 CD 5/8/06

Project Name: Haddam Neck Decommissioning			Analyses Requested						Lab Use Only		
Contact Name & Phone: Jack McCarthy 860-267-2556 Ext. 3024			Media Code	Sample Type Code	Container Size- & Type Code	FSSGAM	FSSALL	Sr-90	Comments:		
Analytical Lab (Name, City, State) General Engineering Laboratories 2040 Savage Road, Charleston SC. 29407 843 556 8171. Attn. Cheryl Jones											
Priority: <input checked="" type="checkbox"/> 30 D. <input type="checkbox"/> 14 D. <input type="checkbox"/> 7 D.									Comment, Preservation	Lab Sample ID	
Sample Designation	Date	Time									
9106-0003-001F	4/24/06	14:13	SE	C	BP	X			Transferred from COC2006-00221		
9106-0003-002F	4/24/06	14:39	SE	C	BP	X			Transferred from COC2006-00221		
9106-0003-003F	4/24/06	15:01	SE	C	BP	X			Transferred from COC2006-00221		
9106-0003-004F	4/25/06	08:41	SE	C	BP	X			Transferred from COC2006-00223		
9106-0003-004FS	4/25/06	08:41	SE	C	BP	X			Transferred from COC2006-00223		
9106-0003-005F	4/25/06	09:21	SE	C	BP	X			Transferred from COC2006-00223		
9106-0003-006F	4/25/06	09:46	SE	C	BP	X			Transferred from COC2006-00223		
9106-0003-007F	4/25/06	10:28	SE	C	BP	X			Transferred from COC2006-00223		
9106-0003-008F	4/25/06	11:15	SE	C	BP		X		Transferred from COC2006-00223		
NOTES: PO #: 002332 MSR #: 06- ⁰⁶⁵² SSWP# NA <input checked="" type="checkbox"/> LTP QA <input type="checkbox"/> Radwaste QA <input type="checkbox"/> Non QA Combined samples 9106-0003-003F taken on 4/25/06 @08:19 and 9106-0003-003FB taken on 4/25/06 @ 08:19 in order to have sufficient sample for counting.									Samples Shipped Via: <input checked="" type="checkbox"/> Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> Hand <input type="checkbox"/> Other		
1) Relinquished By JAIME RICARTE			Date/Time 5-4-06/13:30			2) Received By C. Demicetto			Date/Time 5/5/06/1015		
3) Relinquished By			Date/Time			4) Received By			Date/Time		
5) Relinquished By			Date/Time			6) Received By			Date/Time		
									Bill of Lading # 7920-8920-0240		
									Internal Container Temp.: _____ Deg. C Custody Sealed? Y <input type="checkbox"/> N <input type="checkbox"/> Custody Seal Intact? Y <input type="checkbox"/> N <input type="checkbox"/>		

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Connecticut Yankee Atomic Power Company

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

Chain of Custody Form

No. 2006-00313

162334f. 162335°1.

Project Name: Haddam Neck Decommissioning			Analyses Requested				Lab Use Only		
Contact Name & Phone: Jack McCarthy 860-267-2556 Ext. 3024			Media Code	Sample Type Code	Container Size- & Type Code	FSSGAM	FSSALL	Sr-90	Comments:
Analytical Lab (Name, City, State) General Engineering Laboratories 2040 Savage Road. Charleston SC. 29407 843 556 8171. Attn. Cheryl Jones									
Priority: <input checked="" type="checkbox"/> 30 D. <input type="checkbox"/> 14 D. <input type="checkbox"/> 7 D.									

009
010
011
012
013
014
015
016
017

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size- & Type Code	FSSGAM	FSSALL	Sr-90	Comment, Preservation	Lab Sample ID
9106-0003-009F	4/25/06	13:00	SE	C	BP	X			Transferred from COC 2006-00236	
9106-0003-010F	4/25/06	13:23	SE	C	BP	X			Transferred from COC 2006-00236	
9106-0003-010FS	4/25/06	13:23	SE	C	BP	X			Transferred from COC 2006-00236	
9106-0003-012F	4/25/06	15:12	SE	C	BP	X			Transferred from COC 2006-00236	
9106-0003-013F	4/25/06	14:21	SE	C	BP	X			Transferred from COC 2006-00236	
9106-0003-014F	4/25/06	14:48	SE	C	BP		X		Transferred from COC 2006-00236	
9106-0003-015F	4/26/06	08:16	SE	C	BP	X			Transferred from COC 2006-00237	
9106-0003-016F	4/26/06	09:41	SE	C	BP	X			Transferred from COC 2006-00237	
9106-0003-017F	4/26/06	09:18	SE	C	BP	X			Transferred from COC 2006-00237	
9106-0003-018F	4/26/06	08:59	SE	C	BP	X			Transferred from COC 2006-00237	

NOTES: PO #: 002332 MSR #: 06-⁰⁶⁵² SSWP# NA LTP QA Radwaste QA Non QA

Samples Shipped Via:
 Fed Ex
 UPS
 Hand
 Other

Bill of Lading #
7920-8920-0261

Internal Container Temp: _____ Deg. C
 Custody Sealed? YES NO
 Custody Seal Intact? YES NO

1) Relinquished By <i>JAMES RICARTE</i>	Date/Time <i>5-1-06 / 1330</i>	2) Received By <i>C. Derricott</i>	Date/Time <i>5/5/06 / 1015</i>
3) Relinquished By	Date/Time	4) Received By	Date/Time

Cheryl

162335

Figure 1. Sample Check-in List

Date/Time Received: 5/5/06 1015.

SDG#: MSR#06-0652

Work Order Number: 162335

Shipping Container ID: 7920 8920 0261 Chain of Custody # 2006-00312
" " 0240 2006-00313

- 1. Custody Seals on shipping container intact? Yes No
- 2. Custody Seals dated and signed? Yes No
- 3. Chain-of-Custody record present? Yes No
- 4. Cooler temperature 19°C
- 5. Vermiculite/packing materials is: Wet Dry n/a
- 6. Number of samples in shipping container: [10] ten / [9] nine
- 7. Sample holding times exceeded? Yes No

8. Samples have:	
<input checked="" type="checkbox"/> tape	<input type="checkbox"/> hazard labels
<input checked="" type="checkbox"/> custody seals	<input type="checkbox"/> appropriate sample labels
9. Samples are:	
<input checked="" type="checkbox"/> in good condition	<input checked="" type="checkbox"/> leaking
<input type="checkbox"/> broken	<input type="checkbox"/> have air bubbles

10. Were any anomalies identified in sample receipt? Yes No

11. Description of anomalies (include sample numbers): _____

Sample Custodian/Laboratory: C. Derricotte Date: 5/5/06

Telephoned to: _____ On _____ By _____



SAMPLE RECEIPT & REVIEW FORM

PM use only 162335

Client: <u>Yankel</u>	SDG/ARCOC/Work Order:
Date Received: <u>COA 5/5/06</u>	PM(A) Review (ensure non-conforming items are resolved prior to signing):
Received By: <u>C. Derricotte</u>	<i>Clyde</i>

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 <u>other describe</u> <u>1900</u> <u>Peanutts</u>
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				<u>FedEx #</u> <u>7920 8920 0261</u> <u>" " 0240</u>

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*: <u>30 CPM</u>
B PCB Regulated?	✓			Comments:
C Shipped as DOT Hazardous Material? If yes, contact Waste Manager or ESH Manager.	✓			Hazard Class Shipped: UN#:
PM (or PMA) review of Hazard classification: _____				Initials: <u>CDJ</u> Date: <u>5/5/06</u>

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Connecticut Yankee Atomic Power Company

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

Chain of Custody Form

No. 2006-00336

Project Name: Haddam Neck Decommissioning			Media Code	Sample Type Code	Container Size- & Type Code	Analyses Requested				Lab Use Only				
Contact Name & Phone: Jack McCarthy 860-267-2556 Ext. 3024						FSSGAM	FSSALL	Sr-90					Comments	
Analytical Lab (Name, City, State) General Engineering Laboratories 2040 Savage Road, Charleston SC. 29407 843 556 8171. Attn. Cheryl Jones														
Priority: <input checked="" type="checkbox"/> 30 D. <input type="checkbox"/> 14 D. <input type="checkbox"/> 7 D.														
Sample Designation	Date	Time								Comment, Preservation	Lab Sample ID			
9106-0004-001F	05/3/06	09:37	SE	C	BP		X	X			Transferred from COC 2006-00316			
9106-0004-002F	05/3/06	09:56	SE	C	BP	X		X			Transferred from COC 2006-00316			
9106-0004-003F	05/3/06	10:28	SE	C	BP	X		X			Transferred from COC 2006-00316			
9106-0004-004F	05/3/06	10:48	SE	C	BP	X		X			Transferred from COC 2006-00316			
9106-0004-004FS	05/3/06	10:48	SE	C	BP	X		X			Transferred from COC 2006-00316			
9106-0004-005F	05/3/06	11:07	SE	C	BP	X		X			Transferred from COC 2006-00316			
9106-0004-006F	05/3/06	12:46	SE	C	BP	X		X			Transferred from COC 2006-00317			
9106-0004-007F	05/4/06	07:55	SE	C	BP	X		X			Transferred from COC 2006-00320			
9106-0004-017F	05/4/06	09:27	SE	C	BP	X		X			Transferred from COC 2006-00320			
NOTES: PO #: 002332 MSR #: 06-028P SSWP# NA <input checked="" type="checkbox"/> LTP QA <input type="checkbox"/> Radwaste QA <input type="checkbox"/> Non QA											Samples Shipped Via: <input checked="" type="checkbox"/> Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> Hand <input type="checkbox"/> Other		Internal Container Tamper Evident Chain of Custody Seal Intact NPS Custody Seal Intact	
1) Relinquished By			Date/Time		2) Received By			Date/Time						
3) Relinquished By			Date/Time		4) Received By			Date/Time						
											Bill of Lading # 7919-3895-8881			

11/11/06

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Connecticut Yankee Atomic Power Company

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

Chain of Custody Form

No. 2006-00337

Project Name: Haddam Neck Decommissioning							Analyses Requested			Lab Use Only	
Contact Name & Phone: Jack McCarthy 860-267-2556 Ext. 3024							FSSGAM	FSSALL	Sr-90	Comments <i>100732-1</i>	
Analytical Lab (Name, City, State) General Engineering Laboratories 2040 Savage Road, Charleston SC. 29407 843 556 8171. Attn. Cheryl Jones											
Priority: <input checked="" type="checkbox"/> 30 D. <input type="checkbox"/> 14 D. <input type="checkbox"/> 7 D.											
Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size & Type Code					Comment, Preservation	Sub Sample ID
9106-0004-008F ✓	5/04/06	08:58	SE	C	BP	X		X		Transferred from COC 2006-00320	
9106-0004-009F ✓	5/04/06	08:23	SE	C	BP	X		X		Transferred from COC 2006-00320	
9106-0004-010F ✓	5/03/06	15:11	SE	C	BP	X		X		Transferred from COC 2006-00317	
9106-0004-010FS ✓	5/03/06	15:11	SE	C	BP	X		X		Transferred from COC 2006-00317	
9106-0004-011F ✓	5/03/06	13:08	SE	C	BP	X		X		Transferred from COC 2006-00317	
9106-0004-012F ✓	5/03/06	13:33	SE	C	BP	X		X		Transferred from COC 2006-00317	
9106-0004-013F ✓	5/03/06	13:54	SE	C	BP	X		X		Transferred from COC 2006-00317	
9106-0004-014F ✓	5/03/06	14:43	SE	C	BP		X	X		Transferred from COC 2006-00317	
9106-0004-015F ✓	5/03/06	14:18	SE	C	BP	X		X		Transferred from COC 2006-00317	
NOTES: PO #: 002332 MSR #: 06-0688 SSWP# NA <input checked="" type="checkbox"/> LTP QA <input type="checkbox"/> Radwaste QA <input type="checkbox"/> Non QA						Samples Shipped Via: <input checked="" type="checkbox"/> Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> Hand <input type="checkbox"/> Other				Internal Container: Temp: 17 Deg C Custody Sealed? Custody Seal Intact?	
1) Relinquished By		Date/Time		2) Received By		Date/Time					
				<i>[Signature]</i>		5/12/06 09:20					
3) Relinquished By		Date/Time		4) Received By		Date/Time		Bill of Lading # 7919 3875 8872			

Figure 1. Sample Check-in List

Date/Time Received: 5.12.06 09:20

SDG#: MSR#06-0688

Work Order Number: 162832.1

Shipping Container ID: 7919 3895 8892 Chain of Custody # 2006-00337

- 1. Custody Seals on shipping container intact? Yes No
- 2. Custody Seals dated and signed? Yes No
- 3. Chain-of-Custody record present? Yes No
- 4. Cooler temperature N/A
- 5. Vermiculite/packing materials is: Wet Dry
- 6. Number of samples in shipping container: 9
- 7. Sample holding times exceeded? Yes No

8. Samples have:	
<input checked="" type="checkbox"/> tape	<input type="checkbox"/> hazard labels
<input checked="" type="checkbox"/> custody seals	<input type="checkbox"/> appropriate sample labels
9. Samples are:	
<input type="checkbox"/> in good condition	<input checked="" type="checkbox"/> leaking
<input type="checkbox"/> broken	<input type="checkbox"/> have air bubbles

10. Were any anomalies identified in sample receipt? Yes No

11. Description of anomalies (include sample numbers): _____

Sample Custodian/Laboratory: Emily Martin Date: 5.12.06 09:20

Telephoned to: _____ On _____ By _____

Figure 1. Sample Check-in List

Date/Time Received: 5/12/06 @ 0920

SDG#: NSR #06-0688

Work Order Number: 1628321

Shipping Container ID: 799 3895 8892 Chain of Custody #: 8006-00337

- 1. Custody Seals on shipping container intact? Yes [] No
- 2. Custody Seals dated and signed? Yes [] No
- 3. Chain-of-Custody record present? Yes No []
- 4. Cooler temperature 17°C
- 5. Vermiculite/packing materials is: Wet Dry []
- 6. Number of samples in shipping container: 1
- 7. Sample holding times exceeded? Yes [] No

8. Samples have:	
<input checked="" type="checkbox"/> tape	<input type="checkbox"/> hazard labels
<input checked="" type="checkbox"/> custody seals	<input type="checkbox"/> appropriate sample labels
9. Samples are:	
<input type="checkbox"/> in good condition	<input checked="" type="checkbox"/> leaking
<input type="checkbox"/> broken	<input type="checkbox"/> have air bubbles

10. Were any anomalies identified in sample receipt? Yes No []

11. Description of anomalies (include sample numbers): soil was busting out of container bag

Sample Custodian/Laboratory: C. Demicco Date: 5/12/06

Telephoned to: _____ On _____ By _____



SAMPLE RECEIPT & REVIEW FORM

PM use only

Client: <u>CT Yankee</u>	SDG/ARCOC/Work Order: <u>162832</u>
Date Received: <u>5.12.06</u>	PM(A) Review (ensure non-conforming items are resolved prior to signing):
Received By: <u>E. Martin</u>	<u>[Signature]</u>

Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
2 Samples requiring cold preservation within (4 +/- 2 C)? Record preservation method.		X		Circle Coolant # ice bags blue ice dry ice none other describe
3 Chain of custody documents included with shipment?	X			
4 Sample containers intact and sealed?			X	Circle Applicable: seals broken damaged container <u>leaking container</u> other (describe) <u>SN: 9106-0004-014F</u>
5 Samples requiring chemical preservation at proper pH?		X		Sample ID's, containers affected and observed pH:
6 VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7 Are Encore containers present? (If yes, immediately deliver to VOA laboratory)			X	
8 Samples received within holding time?	X			ID's and tests affected:
9 Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10 Date & time on COC match date & time on bottles?	X			Sample ID's affected:
11 Number of containers received match number indicated on COC?	X			Sample ID's affected:
12 COC form is properly signed in relinquished/received sections?			X	<u>Coc Not Relinquished</u>
14 Air Bill ,Tracking #'s, & Additional Comments				<u>7919 3895 8892</u>

Suspected Hazard Information	Non-Regulated	Regulated	High Level	Comments
A Radiological Classification?		X		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.
B PCB Regulated?	X			Maximum Counts Observed*: <u>< Bkgd.</u> Comments: <u>Bkgd = 40 cpm</u>
C Shipped as DOT Hazardous Material? If yes, contact Waste Manager or ESH Manager.	X			Hazard Class Shipped: <u>N/A</u> UN#: _____

PM (or PMA) review of Hazard classification: _____ Initials OM Date: 5/12/06



SAMPLE RECEIPT & REVIEW FORM

PM use only

Client: <u>Yankel</u>	SDG/ARCOC/Work Order: <u>162832</u>
Date Received: <u>5/12/06</u>	PM(A) Review (ensure non-conforming items are resolved prior to signing):
Received By: <u>C. Derricote</u>	<i>[Signature]</i>

Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>			Circle Applicable: seals broken damaged container leaking container other (describe)
2 Samples requiring cold preservation within (4 +/- 2 C)? Record preservation method.		<input checked="" type="checkbox"/>		Circle Coolant # ice bags blue ice dry ice <u>none</u> other (describe) <u>17°C</u>
3 Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>			<u>COG's are wet</u>
4 Sample containers intact and sealed?			<input checked="" type="checkbox"/>	Circle Applicable: seals broken damaged container leaking container other (describe) <u>busted bag w/ RSO's</u> <u>cooler 7970 9480 6058 (1)</u>
5 Samples requiring chemical preservation at proper pH?		<input checked="" type="checkbox"/>		Sample ID's, containers affected and observed pH: <u>8892</u>
6 VOA vials free of headspace (defined as < 6mm bubble)?		<input checked="" type="checkbox"/>		Sample ID's and containers affected:
7 Are Encore containers present? (If yes, immediately deliver to VOA laboratory)			<input checked="" type="checkbox"/>	
8 Samples received within holding time?	<input checked="" type="checkbox"/>			Id's and tests affected:
9 Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>			Sample ID's and containers affected:
10 Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>			Sample ID's affected:
11 Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>			Sample ID's affected:
12 COC form is properly signed in relinquished/received sections?			<input checked="" type="checkbox"/>	<u>no COG's are relinquished</u>
14 Air Bill, Tracking #'s, & Additional Comments	<u>FedEx #'s</u> <u>see continuation sheet</u>			

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?		<input checked="" type="checkbox"/>		Maximum Counts Observed*: <u>100 (CD) 40 CPMA</u>
B PCB Regulated?	<input checked="" type="checkbox"/>			Comments:
C Shipped as DOT Hazardous Material? If yes, contact Waste Manager or ESH Manager.	<input checked="" type="checkbox"/>			Hazard Class Shipped: UN#:

PM (or PMA) review of Hazard classification: _____ Initials CD Date: 5/12/06

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Connecticut Yankee Atomic Power Company

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

Chain of Custody Form

No. 2006-00319

Project Name: Haddam Neck Decommissioning			Media Code	Sample Type Code	Container Size- & Type Code	Analyses Requested				Date/Time	Comment, Preservation	Initial Sample ID			
Contact Name & Phone: Jack McCarthy 860-267-2556 Ext. 3024						FSSGAM	FSSALL	Sr-90							
Analytical Lab (Name, City, State) General Engineering Laboratories 2040 Savage Road, Charleston SC. 29407 843 556 8171. Attn. Cheryl Jones															
Priority: <input checked="" type="checkbox"/> 30 D. <input type="checkbox"/> 14 D. <input type="checkbox"/> 7 D.															
Sample Designation	Date	Time													
9106-0005-010F	5/02/06	13:16	SE	C	BP	X		X			Transferred from COC 2006-00314				
9106-0005-011F	5/02/06	13:39	SE	C	BP	X		X			Transferred from COC 2006-00314				
9106-0005-013F	5/02/06	14:35	SE	C	BP	X		X			Transferred from COC 2006-00314				
9106-0005-014F	5/02/06	15:04	SE	C	BP	X		X			Transferred from COC 2006-00314				
9106-0005-016F	5/02/06	13:59	SE	C	BP	X		X			Transferred from COC 2006-00314				
9106-0005-015F	5/03/06	08:03	SE	C	BP	X		X			Transferred from COC 2006-00316				
9106-0005-017F	5/03/06	08:13	SE	C	BP	X		X			Transferred from COC 2006-00316				
9106-0005-018F	5/03/06	09:09	SE	C	BP	X		X			Transferred from COC 2006-00316				
9106-0005-018FS	5/03/06	09:09	SE	C	BP	X		X			Transferred from COC 2006-00316				

NOTES: PO #: 002332 MSR #: 06-0675 SSWP# NA LTP QA Radwaste QA Non QA

Samples Shipped Via:

- Fed Ex
- UPS
- Hand

Other

Bill of Lading #

1920 9195 4352

1) Relinquished By *[Signature]* Date/Time 5-8-06 1440

2) Received By *[Signature]* Date/Time 5/9/06 0930

3) Relinquished By _____ Date/Time _____

4) Received By _____ Date/Time _____

Internal Chain of Custody Form
Temp. Control
Drip Proof Sealed
Chain of Custody Seal Intact
Y N

Figure 1. Sample Check-in List

Date/Time Received: 5/9/06 0930

SDG#: MSR# 06-0675

Work Order Number: 1624851

Shipping Container ID: 7920 9195 4352, 4363 Chain of Custody #: 2006-00318/00319

1. Custody Seals on shipping container intact? Yes No
2. Custody Seals dated and signed? Yes No
3. Chain-of-Custody record present? Yes No
4. Cooler temperature 18°C, 19°C
5. Vermiculite/packing materials is: Wet Dry
6. Number of samples in shipping container: 18
7. Sample holding times exceeded? Yes No

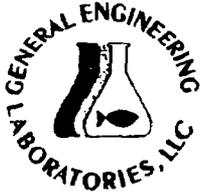
8. Samples have:	
<input checked="" type="checkbox"/> tape	<input type="checkbox"/> hazard labels
<input checked="" type="checkbox"/> custody seals	<input type="checkbox"/> appropriate sample labels
9. Samples are:	
<input type="checkbox"/> in good condition	<input checked="" type="checkbox"/> leaking (some bags)
<input type="checkbox"/> broken	<input type="checkbox"/> have air bubbles

10. Were any anomalies identified in sample receipt? Yes No

11. Description of anomalies (include sample numbers): _____

Sample Custodian/Laboratory: *Perle* Date: 5/9/06 0930

Telephoned to: _____ On _____ By _____



SAMPLE RECEIPT & REVIEW FORM

PM use only

Client: ATMC	SDG/ARCOC/Work Order: 162485
Date Received: 5/9/06	PM(A) Review (ensure non-conforming items are resolved prior to signing): <i>[Signature]</i>
Received By: BHC	

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)				<i>BHC 5/9/06</i>
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	Fed 7920 9195 4352 → 17°C Ex 4363 → 18°C
--	---

Suspected Hazard Information	Non-Regulated	Regulated	High Level	RSO RAD Receipt # _____
A Radiological Classification?				*If > x2 area background is observed on samples identified as "non-regulated/non-radioactive", contact the Radiation Safety group for further investigation.
B PCB Regulated?	/			Maximum Counts Observed*: 80 cpm
C Shipped as DOT Hazardous Material? If yes, contact Waste Manager or ESH Manager.	/			Comments: Hazard Class Shipped: UN#:

PM (or PMA) review of Hazard classification: Initials *[Signature]* Date: **5/9/06**

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Connecticut Yankee Atomic Power Company

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

Chain of Custody Form

No. 2006-00332

Project Name: Haddam Neck Decommissioning						Analyses Requested				Lab Use Only							
Contact Name & Phone: Jack McCarthy 860-267-2556 Ext. 3024						<table border="1" style="width: 100%; text-align: center;"> <tr> <td style="width: 15%;">FSSGAM</td> <td style="width: 15%;">FSSALL</td> <td style="width: 15%;">Sr-90</td> <td style="width: 15%;"></td> <td style="width: 15%;"></td> <td style="width: 15%;"></td> </tr> </table>				FSSGAM	FSSALL	Sr-90				Comments	
FSSGAM	FSSALL	Sr-90															
Analytical Lab (Name, City, State) General Engineering Laboratories 2040 Savage Road. Charleston SC. 29407 843 556 8171. Attn. Cheryl Jones																	
Priority: <input checked="" type="checkbox"/> 30 D. <input type="checkbox"/> 14 D. <input type="checkbox"/> 7 D.																	
Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size- & Type Code					Comment, Preservation	Lab Sample ID						
9106-0006-004F	4/28/06	12:46	SE	C	BP	X		X		Transferred from COC 2006-00317							
9106-0006-005F	4/28/06	13:03	SE	C	BP	X		X		Transferred from COC 2006-00317							
9106-0006-006F	4/28/06	13:22	SE	C	BP	X		X		Transferred from COC 2006-00317							
9106-0006-007F	4/28/06	13:41	SE	C	BP	X		X		Transferred from COC 2006-00317							
9106-0006-007FS	4/28/06	13:41	SE	C	BP	X		X		Transferred from COC 2006-00317							
9106-0006-012F	5/01/06	13:40	SE	C	BP	X		X		Transferred from COC 2006-00317							
9106-0006-017F	5/01/06	14:03	SE	C	BP	X		X		Transferred from COC 2006-00317							
NOTES: PO #: 002332 MSR #: 06-0687 SSWP# NA <input checked="" type="checkbox"/> LTP QA <input type="checkbox"/> Radwaste QA <input type="checkbox"/> Non QA																	
1) Relinquished By						Date/Time		2) Received By				Date/Time					
3) Relinquished By						Date/Time		4) Received By				Date/Time					
								Samples Shipped Via: <input checked="" type="checkbox"/> Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> Hand <input type="checkbox"/> Other				Internal Container Temp: 19 Deg. C Custody Sealed: No Custody Seal Intact: No Y E N E					
								Bill of Lading #				7 920-9480-6688					

Figure 1. Sample Check-in List

Date/Time Received: 5/10/06 @ 0920

SDG#: MSR#06-0687

Work Order Number: 1628501

Shipping Container ID: see cont sheet Chain of Custody #: see cont sheet

- 1. Custody Seals on shipping container intact? Yes [] No
- 2. Custody Seals dated and signed? Yes [] No
- 3. Chain-of-Custody record present? Yes No []
- 4. Cooler temperature 1700
- 5. Vermiculite/packing materials is: Wet Dry []
- 6. Number of samples in shipping container: see cont sheet
- 7. Sample holding times exceeded? Yes [] No

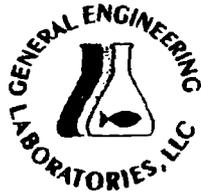
8. Samples have:	
<input checked="" type="checkbox"/> tape	<input type="checkbox"/> hazard labels
<input checked="" type="checkbox"/> custody seals	<input type="checkbox"/> appropriate sample labels
9. Samples are:	
<input checked="" type="checkbox"/> in good condition	<input type="checkbox"/> leaking
<input type="checkbox"/> broken	<input type="checkbox"/> have air bubbles

10. Were any anomalies identified in sample receipt? Yes [] No

11. Description of anomalies (include sample numbers): N/A

Sample Custodian/Laboratory: C. D. M. Co. Inc. Date: 5/12/06

Telephoned to: _____ On _____ By _____



SAMPLE RECEIPT & REVIEW FORM

PM use only

Client: <u>Yankel</u>	SDG/ARCOC/Work Order: <u>162832, 162850</u>
Date Received: <u>5/12/06</u>	PM(A) Review (ensure non-conforming items are resolved prior to signing):
Received By: <u>C. Derricote</u>	<u>[Signature]</u>

Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>			Circle Applicable: seals broken damaged container leaking container other (describe)
2 Samples requiring cold preservation within (4 +/- 2 C)? Record preservation method.		<input checked="" type="checkbox"/>		Circle Coolant # ice bags blue ice dry ice <u>none</u> other (describe) <u>170C</u>
3 Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>			<u>COG's are wet</u>
4 Sample containers intact and sealed?			<input checked="" type="checkbox"/>	Circle Applicable: seals broken damaged container leaking container other (describe) <u>busted bag w/ RSDs cooler 7920 9480 6082</u>
5 Samples requiring chemical preservation at proper pH?		<input checked="" type="checkbox"/>		Sample ID's, containers affected and observed pH: <u>8892</u>
6 VOA vials free of headspace (defined as < 6mm bubble)?		<input checked="" type="checkbox"/>		Sample ID's and containers affected:
7 Are Encore containers present? (If yes, immediately deliver to VOA laboratory)			<input checked="" type="checkbox"/>	
8 Samples received within holding time?	<input checked="" type="checkbox"/>			Id's and tests affected:
9 Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>			Sample ID's and containers affected:
10 Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>			Sample ID's affected:
11 Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>			Sample ID's affected:
12 COC form is properly signed in relinquished/received sections?			<input checked="" type="checkbox"/>	<u>no COG's are relinquished</u>
14 Air Bill ,Tracking #'s, & Additional Comments	<u>FedEx #'s see continuation sheet</u>			

Suspected Hazard Information		Non-Regulated	Regulated	High Level	RSO RAD Receipt #
A	Radiological Classification?		<input checked="" type="checkbox"/>		*If > x2 area background is observed on samples identified as "non-regulated/non-radioactive", contact the Radiation Safety group for further investigation.
B	PCB Regulated?	<input checked="" type="checkbox"/>			Maximum Counts Observed*: <u>100 @ 40 cpm</u>
C	Shipped as DOT Hazardous Material? If yes, contact Waste Manager or ESH Manager.	<input checked="" type="checkbox"/>			Hazard Class Shipped: UN#:

PM (or PMA) review of Hazard classification: _____ Initials [Signature] Date: 5/12/06

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Connecticut Yankee Atomic Power Company

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

Chain of Custody Form

No. 2006-00367

163741%

Project Name: Haddam Neck Decommissioning			Media Code	Sample Type Code	Container Size & Type Code	Analyses Requested				Lab Use Only	
Contact Name & Phone: Jack McCarthy 860-267-2556 Ext. 3024						FSSGAM	FSSALL	Sr-90	Ni-63	Comments:	
Analytical Lab (Name, City, State) General Engineering Laboratories 2040 Savage Road, Charleston SC. 29407 843 556 8171. Attn. Cheryl Jones											
Priority: <input checked="" type="checkbox"/> 30 D. <input type="checkbox"/> 14 D. <input type="checkbox"/> 7 D.											
Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size & Type Code	FSSGAM	FSSALL	Sr-90	Ni-63	Comment, Preservation	Lab Sample ID
9106-0008-001F	5/05/06	11:13	SE	C	BP	X		X	X	Transferred from COC # 2006-00324	
9106-0008-003F	5/5/06	13:35	SE	C	BP	X		X	X	Transferred from COC # 2006-00325	
9106-0008-004F	5/5/06	13:51	SE	C	BP	X		X	X	Transferred from COC # 2006-00325	
9106-0008-005F	5/5/06	14:17	SE	C	BP	X		X	X	Transferred from COC # 2006-00325	
9106-0008-006F	5/5/06	14:36	SE	C	BP	X		X	X	Transferred from COC # 2006-00325	
9106-0008-006FS	5/5/06	14:36	SE	C	BP	X		X	X	Transferred from COC # 2006-00325	
9106-0008-007F	5/5/06	15:03	SE	C	BP		X			Transferred from COC # 2006-00325	
9106-0008-002F	5/5/06	13:10	SE	C	BP	X		X	X	Transferred from COC # 2006-00325	

NOTES: PO #: 002332 MSR #: 06-0743 SSWP# NA LTP QA Radwaste QA Non QA

Samples Shipped Via:
 Fed Ex
 UPS
 Hand
 Other

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

1) Relinquished By *[Signature]* Date/Time 5/25/06 09:50

2) Received By *[Signature]* Date/Time 5/25/06 09:30

3) Relinquished By *[Signature]* Date/Time

4) Received By *[Signature]* Date/Time

Bill of Lading #
R275154 1162

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Connecticut Yankee Atomic Power Company

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

Chain of Custody Form

No. 2006-00366

163741%

Project Name: Haddam Neck Decommissioning			Media Code	Sample Type Code	Container Size- & Type Code	Analyses Requested					Lab Use Only			
Contact Name & Phone: Jack McCarthy 860-267-2556 Ext. 3024						FSSGAM	FSSALL	Sr-90	Ni-63	Comments:				
Analytical Lab (Name, City, State) General Engineering Laboratories 2040 Savage Road, Charleston SC. 29407 843 556 8171. Attn. Cheryl Jones														
Priority: <input checked="" type="checkbox"/> 30 D. <input type="checkbox"/> 14 D. <input type="checkbox"/> 7 D.														
Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size- & Type Code	FSSGAM	FSSALL	Sr-90	Ni-63	Comment, Preservation	Lab Sample ID			
009 9106-0008-008F	5/08/06	08:01	SE	C	BP	X		X	X	Transferred from COC # 2006-00327				
010 9106-0008-009F	5/08/06	08:32	SE	C	BP	X		X	X	Transferred from COC # 2006-00327				
011 9106-0008-010F	5/08/06	09:09	SE	C	BP	X		X	X	Transferred from COC # 2006-00327				
012 9106-0008-010FS	5/08/06	09:09	SE	C	BP	X		X	X	Transferred from COC # 2006-00327				
013 9106-0008-011F	5/08/06	09:30	SE	C	BP	X		X	X	Transferred from COC # 2006-00327				
014 9106-0008-012F	5/08/06	09:53	SE	C	BP		X			Transferred from COC # 2006-00327				
015 9106-0008-013F	5/08/06	10:16	SE	C	BP	X		X	X	Transferred from COC # 2006-00327				
9106-0008-014F	5/08/06	10:47	SE	C	BP	X		X	X	Transferred from COC # 2006-00327				
NOTES: PO #: 002332 MSR #: 06-0743 SSWP#NA <input checked="" type="checkbox"/> LTP QA <input type="checkbox"/> Radwaste QA <input type="checkbox"/> Non QA						Samples Shipped Via: <input checked="" type="checkbox"/> Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> Hand <input type="checkbox"/> Other			Internal Container Temp.: <u>21</u> Deg. C Custody Sealed? Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Custody Seal Intact? Y <input checked="" type="checkbox"/> N <input type="checkbox"/>					
1) Relinquished By		Date/Time		2) Received By		Date/Time		Bill of Lading #						
				C. Pericatto		5/26/06 0930								
3) Relinquished By		Date/Time		4) Received By		Date/Time								

Figure 1. Sample Check-in List

Date/Time Received: 5/26/06 0930

SDG#: _____

Work Order Number: _____

Shipping Container ID: 79275154 1162 Chain of Custody #: 2006-00367

1. Custody Seals on shipping container intact? Yes [] No []
2. Custody Seals dated and signed? Yes [] No []
3. Chain-of-Custody record present? Yes [] No []
4. Cooler temperature 19°C
5. Vermiculite/packing materials is: Wet [] Dry [] NA
6. Number of samples in shipping container: 8
7. Sample holding times exceeded? Yes [] No []

8. Samples have:	
<input checked="" type="checkbox"/> tape	<input type="checkbox"/> hazard labels
<input checked="" type="checkbox"/> custody seals	<input checked="" type="checkbox"/> appropriate sample labels
9. Samples are:	
<input checked="" type="checkbox"/> in good condition	<input type="checkbox"/> leaking
<input type="checkbox"/> broken	<input type="checkbox"/> have air bubbles

10. Were any anomalies identified in sample receipt? Yes [] No []

11. Description of anomalies (include sample numbers): _____

Sample Custodian/Laboratory: [Signature] Date: 5/26/06

Telephoned to: _____ On _____ By _____



SAMPLE RECEIPT & REVIEW FORM

PM use only

Client: <u>Conn. Yankee</u>	SDG/ARCOC/Work Order: <u>1637417</u>
Date Received: <u>5/26/06</u>	PM(A) Review (ensure non-conforming items are resolved prior to signing): <u>[Signature]</u>
Received By: <u>[Signature]</u>	

#	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 <u>none</u> other describe <u>19°C</u>
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				<u>7927 SF54 1162</u>

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? <u>4/24/06</u>	/	/		Maximum Counts Observed*: <u>cpm 20 Per R50</u>
B PCB Regulated?	/			Comments:
C Shipped as DOT Hazardous Material? If yes, contact Waste Manager or BSH Manager.	/			Hazard Class Shipped: UN#:
PM (or PMA) review of Hazard classification: <u>[Signature]</u>				Initials <u>5/26/06</u> Date:



SAMPLE RECEIPT & REVIEW FORM

PM use only

Client: <u>Yankee</u>	SDG/ARCO/Work Order: <u>1637417.</u>
Date Received: <u>5/26/06</u>	PM(A) Review (ensure non-conforming items are resolved prior to signing): <u>OK</u>
Received By: <u>C. Duricich</u>	

#	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within (4 +/- 2 C)? Record preservation method.		<input checked="" type="checkbox"/>		Circle Coolant # ice bags blue ice dry ice <u>none</u> other (describe) <u>21°C</u>
3	Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>			
4	Sample containers intact and sealed?	<input checked="" type="checkbox"/>			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?		<input checked="" type="checkbox"/>		Sample ID's, containers affected and observed pH:
6	VOA vials free of headspace (defined as < 6mm bubble)?		<input checked="" type="checkbox"/>		Sample ID's and containers affected:
7	Are Encore containers present? (If yes, immediately deliver to VOA laboratory)			<input checked="" type="checkbox"/>	
8	Samples received within holding time?	<input checked="" type="checkbox"/>			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>			Sample ID's affected:
11	Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<u>not relinquished</u>

14	Air Bill ,Tracking #'s, & Additional Comments	<u>7927 5154 1173</u>	<u>COC # 2004-00364</u>
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#	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?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Maximum Counts Observed*: <u>40 cpm</u>
B	PCB Regulated?	<input checked="" type="checkbox"/>			Comments:
C	Shipped as DOT Hazardous Material? If yes, contact Waste Manager or ESH Manager.	<input checked="" type="checkbox"/>			Hazard Class Shipped: UN#:

PM (or PMA) review of Hazard classification: OK Initials 5/26/06 Date:

1637417

Figure 1. Sample Check-in List

Date/Time Received: 5/25/06 @ 0930

SDG#: _____

Work Order Number: _____

Shipping Container ID: 79215K41173 Chain of Custody # 2006-08364

- 1. Custody Seals on shipping container intact? Yes No
- 2. Custody Seals dated and signed? Yes No
- 3. Chain-of-Custody record present? Yes No
- 4. Cooler temperature 21°
- 5. Vermiculite/packing materials is: Wet Dry
- 6. Number of samples in shipping container: (8) eight
- 7. Sample holding times exceeded? Yes No

8. Samples have:	
<input checked="" type="checkbox"/> tape	<input type="checkbox"/> hazard labels
<input checked="" type="checkbox"/> custody seals	<input type="checkbox"/> appropriate sample labels
9. Samples are:	
<input checked="" type="checkbox"/> in good condition	<input type="checkbox"/> leaking
<input type="checkbox"/> broken	<input type="checkbox"/> have air bubbles

10. Were any anomalies identified in sample receipt? Yes No

11. Description of anomalies (include sample numbers): N/A

Sample Custodian/Laboratory: C. DeWitt Date: 5/26/06

Telephoned to: _____ On _____ By _____

164542-1

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Connecticut Yankee Atomic Power Company

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

Chain of Custody Form

No. 2006-00380

Project Name: Haddam Neck Decommissioning			Media Code	Sample Type Code	Container Size- & Type Code	Analyses Requested				Lab Use Only				
Contact Name & Phone: Jack McCarthy 860-267-2556 Ext. 3024						FSSGAM	FSSALL	Ni-63					Comments:	
Analytical Lab (Name, City, State) General Engineering Laboratories 2040 Savage Road, Charleston SC. 29407 843 556 8171. Attn. Cheryl Jones														
Priority: <input checked="" type="checkbox"/> 30 D. <input type="checkbox"/> 14 D. <input type="checkbox"/> 7 D.														
Sample Designation	Date	Time									Comment, Preservation	Lab Sample ID		
9106-0009-016F	5/15/06	13:28	SE	C	BP	X		X			Transferred from COC 2006-00352			
9106-0009-016FS	5/15/06	13:28	SE	C	BP	X		X			Transferred from COC 2006-00352			
9106-0009-017F	5/15/06	14:03	SE	C	BP	X		X			Transferred from COC 2006-00352			
9106-0009-011F	5/15/06	08:05	SE	C	BP		X				Transferred from COC 2006-00351			
9106-0009-013F	5/15/06	08:35	SE	C	BP	X		X			Transferred from COC 2006-00351			
9106-0009-013FS	5/15/06	08:35	SE	C	BP	X		X			Transferred from COC 2006-00351			
9106-0009-014F	5/15/06	08:59	SE	C	BP		X				Transferred from COC 2006-00351			
9106-0009-015F	5/15/06	09:36	SE	C	BP	X		X			Transferred from COC 2006-00351			

NOTES: PO #: 002332 MSR #: 06-0818 SSWP# NA LTP QA Radwaste QA Non QA

Samples Shipped Via:

- Fed Ex
- UPS
- Hand

Other

Internal Container Temp.: ___ Deg. C

Custody Sealed?
Y N
Custody Seal Intact?

Y N

1) Relinquished By Jane Ricart Date/Time 6-7-06/11:00

2) Received By [Signature] Date/Time 6-8-06 9:00

3) Relinquished By _____ Date/Time _____

4) Received By _____ Date/Time _____

Bill of Lading #

7921-1915 2869

164542-1

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Connecticut Yankee Atomic Power Company

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

Chain of Custody Form

No. 2006-00381

Project Name: Haddam Neck Decommissioning			Media Code	Sample Type Code	Container Size & Type Code	Analyses Requested				Lab Use Only				
Contact Name & Phone: Jack McCarthy 860-267-2556 Ext. 3024						FSSGAM	FSSALL	Ni-63					Comments:	
Analytical Lab (Name, City, State) General Engineering Laboratories 2040 Savage Road, Charleston SC. 29407 843 556 8171. Attn. Cheryl Jones														
Priority: <input checked="" type="checkbox"/> 30 D. <input type="checkbox"/> 14 D. <input type="checkbox"/> 7 D.														

007
008
009
010
011
012
013
014
016

Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size & Type Code	FSSGAM	FSSALL	Ni-63				Comment, Preservation	Lab Sample ID
9106-0009-001F	5/11/06	13:22	SE	C	BP	X		X				Transferred from COC 2006-00347	
9106-0009-002F	5/11/06	13:46	SE	C	BP	X		X				Transferred from COC 2006-00347	
9106-0009-003F	5/11/06	14:06	SE	C	BP	X		X				Transferred from COC 2006-00347	
9106-0009-004F	5/11/06	14:30	SE	C	BP	X		X				Transferred from COC 2006-00347	
9106-0009-005F	5/11/06	14:55	SE	C	BP	X		X				Transferred from COC 2006-00347	
9106-0009-007F	5/12/06	07:44	SE	C	BP	X		X				Transferred from COC 2006-00348	
9106-0009-008F	5/12/06	08:16	SE	C	BP	X		X				Transferred from COC 2006-00348	
9106-0009-009F	5/12/06	08:35	SE	C	BP	X		X				Transferred from COC 2006-00348	
9106-0009-010F	5/12/06	09:07	SE	C	BP	X		X				Transferred from COC 2006-00348	

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

Samples Shipped Via:
 Fed Ex
 UPS
 Hand
 Other

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

Bill of Lading #
7921 1415 2858

1) Relinquished By <i>JAMC RICHARTE</i>	Date/Time 6-7-06/11:00	2) Received By <i>A. Maly</i>	Date/Time 6/8/06 900
3) Relinquished By	Date/Time	4) Received By	Date/Time

Cheryl 14551% 164551%

CPM 40

Figure 1. Sample Check-in List

Date/Time Received: 6-8-06 900

SDG#: MSR# 06-0819, 0818

Work Order Number: _____

Shipping Container ID: 7921-1915-2858 Chain of Custody # 2006-00382
11-11-8186 2006-00380
2006-00381

- 1. Custody Seals on shipping container intact? Yes No
- 2. Custody Seals dated and signed? Yes No
- 3. Chain-of-Custody record present? Yes No
- 4. Cooler temperature 20°C
- 5. Vermiculite/packing materials is: Wet Dry
- 6. Number of samples in shipping container: _____
- 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: A. Malin Date: 6-8-06 900

Telephoned to: _____ On _____ By _____

Figure 1. Sample Check-in List

Date/Time Received: 945 5/17/06

SDG#: MAP# 00-0707

Work Order Number: 1631051

Shipping Container ID: 7904 3113 8541 Chain of Custody #: 2006-00349

1. Custody Seals on shipping container intact? Yes No
2. Custody Seals dated and signed? Yes No
3. Chain-of-Custody record present? Yes No
4. Cooler temperature 17°C
5. Vermiculite/packing materials is: Wet Dry
6. Number of samples in shipping container: 9
7. Sample holding times exceeded? Yes No

8. Samples have:	
<input type="checkbox"/> tape	<input type="checkbox"/> hazard labels
<input checked="" type="checkbox"/> custody seals	<input type="checkbox"/> appropriate sample labels
9. Samples are:	
<input checked="" type="checkbox"/> in good condition	<input checked="" type="checkbox"/> ^{AM} leaking
<input type="checkbox"/> broken	<input type="checkbox"/> have air bubbles

10. Were any anomalies identified in sample receipt? Yes No

11. Description of anomalies (include sample numbers): _____

Sample Custodian/Laboratory: AMaly Date: 5-17-06

Telephoned to: _____ On _____ By _____



SAMPLE RECEIPT & REVIEW FORM

CHERYL

PM use only

Client: CONN. YANKEE		SDG/ARCOC/Work Order:	
Date Received: 5-17-06		PM(A) Review (ensure non-conforming items are resolved prior to signing):	
Received By: ALM			

	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 <u>none</u> 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				7904 3113 8541

	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 60
B	PCB Regulated?	✓			Comments:
C	Shipped as DOT Hazardous Material? If yes, contact Waste Manager or ESH Manager.	✓			Hazard Class Shipped: UN#:

PM (or PMA) review of Hazard classification:	Initials CD	Date: 5/17/06
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List of current GEL Certifications as of 15 August 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)
Idaho	N/A
Illinois	200029
Indiana	C-SC-01
Kansas	E-10332
Kentucky	90129
Maryland	270
Massachusetts	M-SC012
Michigan	9903
Nevada	SC12
New Jersey	SC002
New York	11501
North Carolina	233
North Carolina Drinking W	45709
North Dakota	R-158
Oklahoma	9904
Pennsylvania	68-485
South Carolina	10120001/10585001/10120002
Tennessee	02934
Texas	TX213-2006A
U.S. Dept. of Agriculture	S-52597
US Army Corps of Engineer	N/A
Utah	8037697376 GEL
Vermont	N/A
Virginia	00151
Washington	C223

RADIOLOGICAL ANALYSIS

**Radiochemistry Case Narrative
Connecticut Yankee Atomic Power Co. (YANK)
Work Order 168404**

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: 555696
Prep Batch Number: 554650
Dry Soil Prep GL-RAD-A-021 Batch Number: 554649

Sample ID	Client ID
168404001	9106-0002-007F
168404002	9106-0002-011F
168404003	9106-0003-004F
168404004	9106-0003-015F
168404005	9106-0004-005F
168404006	9106-0004-015F
168404007	9106-0005-010F
168404008	9106-0005-014F
168404011	9106-0008-008F
168404012	9106-0009-002F
168404013	9106-0009-017F
168404014	9106-0010-001F
168404015	9106-0010-012F
1201153129	Method Blank (MB)
1201153130	168340011(9304-01-005C) Sample Duplicate (DUP)
1201153131	168340011(9304-01-005C) Matrix Spike (MS)
1201153132	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: 168340011 (9304-01-005C).

QC Information

All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time

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

Preparation Information

All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis

Sample 168404003 (9106-0003-004F) was recounted due to high MDA.

Miscellaneous Information:

NCR Documentation

Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. 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 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: 557837
Prep Batch Number: 554650
Dry Soil Prep GL-RAD-A-021 Batch Number: 554649

Sample ID	Client ID
168404009	9106-0006-005F
168404010	9106-0008-006F
1201158316	Method Blank (MB)
1201158317	168404009(9106-0006-005F) Sample Duplicate (DUP)
1201158318	168404009(9106-0006-005F) Matrix Spike (MS)
1201158319	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: 168404009 (9106-0006-005F).

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.

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:	555697
Prep Batch Number:	554650
Dry Soil Prep GL-RAD-A-021 Batch Number:	554649

Sample ID	Client ID
168404001	9106-0002-007F
168404002	9106-0002-011F
168404003	9106-0003-004F
168404004	9106-0003-015F
168404005	9106-0004-005F
168404006	9106-0004-015F
168404007	9106-0005-010F
168404008	9106-0005-014F
168404009	9106-0006-005F
168404010	9106-0008-006F
168404011	9106-0008-008F
168404012	9106-0009-002F
168404013	9106-0009-017F
168404014	9106-0010-001F
168404015	9106-0010-012F
1201153133	Method Blank (MB)
1201153134	168340011(9304-01-005C) Sample Duplicate (DUP)
1201153135	168340011(9304-01-005C) Matrix Spike (MS)
1201153136	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: 168340011 (9304-01-005C).

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:	555698
Prep Batch Number:	554650
Dry Soil Prep GL-RAD-A-021 Batch Number:	554649

Sample ID	Client ID
168404001	9106-0002-007F
168404002	9106-0002-011F
168404003	9106-0003-004F
168404004	9106-0003-015F
168404005	9106-0004-005F
168404006	9106-0004-015F
168404007	9106-0005-010F
168404008	9106-0005-014F
168404009	9106-0006-005F
168404010	9106-0008-006F
168404011	9106-0008-008F
168404012	9106-0009-002F
168404013	9106-0009-017F
168404014	9106-0010-001F
168404015	9106-0010-012F
1201153137	Method Blank (MB)
1201153138	168340011(9304-01-005C) Sample Duplicate (DUP)
1201153139	168340011(9304-01-005C) Matrix Spike (MS)
1201153140	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: 168340011 (9304-01-005C).

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:	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:	556350
Prep Batch Number:	554650
Dry Soil Prep GL-RAD-A-021 Batch Number:	554649

Sample ID	Client ID
168404003	9106-0003-004F
168404004	9106-0003-015F
168404012	9106-0009-002F
168404013	9106-0009-017F
168404014	9106-0010-001F
168404015	9106-0010-012F
1201154644	Method Blank (MB)
1201154645	168404003(9106-0003-004F) Sample Duplicate (DUP)
1201154646	168404003(9106-0003-004F) Matrix Spike (MS)
1201154647	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: 168404003 (9106-0003-004F).

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.

Additional Comments

Samples 1201154644 (MB), 1201154645 (9106-0003-004F), 1201154646 (9106-0003-004F), 1201154647 (LCS), 168404003 (9106-0003-004F), 168404004 (9106-0003-015F), 168404012 (9106-0009-002F), 168404013 (9106-0009-017F), 168404014 (9106-0010-001F) and 168404015 (9106-0010-012F) were dried and reweighed due to low matrix spike/laboratory control sample recovery.

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:	554580

Sample ID	Client ID
168404001	9106-0002-007F
168404002	9106-0002-011F
168404003	9106-0003-004F
168404004	9106-0003-015F
168404005	9106-0004-005F
168404006	9106-0004-015F
168404007	9106-0005-010F
168404008	9106-0005-014F
168404009	9106-0006-005F
168404010	9106-0008-006F
168404011	9106-0008-008F
168404012	9106-0009-002F
168404013	9106-0009-017F
168404014	9106-0010-001F
168404015	9106-0010-012F
1201150561	Method Blank (MB)
1201150562	168340012(9304-02-003C) Sample Duplicate (DUP)
1201150563	168340012(9304-02-003C) Matrix Spike (MS)
1201150564	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: 168340012 (9304-02-003C).

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:	555722
Prep Batch Number:	554650
Dry Soil Prep GL-RAD-A-021 Batch Number:	554649

Sample ID	Client ID
168404001	9106-0002-007F
168404002	9106-0002-011F
168404003	9106-0003-004F
168404004	9106-0003-015F
168404005	9106-0004-005F
168404006	9106-0004-015F
168404007	9106-0005-010F
168404008	9106-0005-014F
168404009	9106-0006-005F
168404010	9106-0008-006F
168404011	9106-0008-008F
168404012	9106-0009-002F
168404013	9106-0009-017F
168404014	9106-0010-001F
168404015	9106-0010-012F
1201153222	Method Blank (MB)
1201153223	168340012(9304-02-003C) Sample Duplicate (DUP)
1201153224	168340012(9304-02-003C) Matrix Spike (MS)
1201153225	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: 168340012 (9304-02-003C).

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:	555723
Prep Batch Number:	554650
Dry Soil Prep GL-RAD-A-021 Batch Number:	554649

Sample ID	Client ID
168404001	9106-0002-007F
168404002	9106-0002-011F
168404003	9106-0003-004F
168404004	9106-0003-015F
168404005	9106-0004-005F
168404006	9106-0004-015F
168404007	9106-0005-010F
168404008	9106-0005-014F
168404009	9106-0006-005F
1201153226	Method Blank (MB)
1201153227	168340012(9304-02-003C) Sample Duplicate (DUP)
1201153228	168340012(9304-02-003C) Matrix Spike (MS)
1201153229	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: 168340012 (9304-02-003C).

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-HTD2,ALL FSS
Analytical Method:	EPA 906.0 Modified
Analytical Batch Number:	554582

Sample ID	Client ID
168404001	9106-0002-007F
168404002	9106-0002-011F
168404003	9106-0003-004F
168404004	9106-0003-015F
168404005	9106-0004-005F
168404006	9106-0004-015F
168404007	9106-0005-010F
168404008	9106-0005-014F
168404009	9106-0006-005F
168404010	9106-0008-006F
168404011	9106-0008-008F
168404012	9106-0009-002F
168404013	9106-0009-017F
168404014	9106-0010-001F
168404015	9106-0010-012F
1201150569	Method Blank (MB)
1201150570	168340011(9304-01-005C) Sample Duplicate (DUP)
1201150571	168340011(9304-01-005C) Matrix Spike (MS)
1201150572	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# 12.

Calibration Information:**Calibration Information**

All initial and continuing calibration requirements have been met.

Standards Information

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

Sample Geometry

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

Quality Control (QC) Information:**Blank Information**

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

Designated QC

The following sample was used for QC: 168340011 (9304-01-005C).

QC Information

All of the QC samples met the required acceptance limits.

Technical Information:**Holding Time**

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

Preparation Information

All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis

Sample 168404010 (9106-0008-006F) was recounted due to high MDA.

Miscellaneous Information:**NCR Documentation**

Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. 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: 554583

Sample ID	Client ID
168404001	9106-0002-007F
168404002	9106-0002-011F
168404003	9106-0003-004F
168404004	9106-0003-015F
168404005	9106-0004-005F
168404006	9106-0004-015F
168404007	9106-0005-010F
168404008	9106-0005-014F
168404009	9106-0006-005F
168404010	9106-0008-006F
168404011	9106-0008-008F
168404012	9106-0009-002F
168404013	9106-0009-017F
168404014	9106-0010-001F
168404015	9106-0010-012F
1201150573	Method Blank (MB)
1201150574	168404003(9106-0003-004F) Sample Duplicate (DUP)
1201150575	168404003(9106-0003-004F) Matrix Spike (MS)
1201150576	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: 168404003 (9106-0003-004F).

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: Kath Bellatt 8/22/66

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: 168404 GEL Work Order: 168404

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.
- 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: August 21, 2006

Client Sample ID:	9106 0002 007F	Project:	YANK01204
Sample ID:	168404001	Client ID:	YANK001
Matrix:	SE	Vol. Recv.:	
Collect Date:	18 MAY 06		
Receive Date:	02 JUN 06		
Collector:	Client		
Moisture:	20.9%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Alpha Spec Analysis													
<i>Alphaspec Am241, Cm, Solid ALL FSS</i>													
Americium 241	U	0.0762	+/- 0.102	0.00	+/- 0.102	0.0956	pCi/g		BXL1	08/11/06	1336	555696	1
Curium 242	U	0.00	+/- 0.0995	0.00	+/- 0.0995	0.138	pCi/g						
Curium 243/244	U	0.00853	+/- 0.0717	0.0405	+/- 0.0717	0.177	pCi/g						
<i>Alphaspec Pu, Solid ALL FSS</i>													
Plutonium 238	U	0.199	+/- 0.228	0.181	+/- 0.229	0.444	pCi/g		BXL1	08/11/06	1633	555697	2
Plutonium 239/240	U	0.0341	+/- 0.129	0.120	+/- 0.129	0.323	pCi/g						
<i>Liquid Scint Pu241, Solid ALL FSS</i>													
Plutonium 241	U	10.0	+/- 6.64	5.08	+/- 6.72	10.7	pCi/g		BXL1	08/16/06	1220	555698	3
Rad Liquid Scintillation Analysis													
<i>LSC, Tritium Dist, Solid HTD2, ALL FSS</i>													
Tritium	U	4.17	+/- 6.67	5.28	+/- 6.67	11.4	pCi/g		DFA1	08/09/06	1128	554582	4
<i>Liquid Scint C14, Solid All, FSS</i>													
Carbon 14	U	0.0813	+/- 0.0797	0.0634	+/- 0.0797	0.132	pCi/g		ATH2	08/09/06	0324	554583	5
<i>Liquid Scint Fe55, Solid ALL FSS</i>													
Iron 55	U	9.90	+/- 48.1	32.0	+/- 48.1	65.9	pCi/g		MXP1	08/12/06	1633	555722	6
<i>Liquid Scint Ni63, Solid ALL FSS</i>													
Nickel 63	U	7.02	+/- 6.39	5.18	+/- 6.40	10.6	pCi/g		MXP1	08/11/06	0738	555723	7
<i>Liquid Scint Te99, Solid ALL FSS</i>													
Technetium 99	U	0.139	+/- 0.213	0.173	+/- 0.213	0.360	pCi/g		EGD1	08/11/06	2027	554580	8

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	08/03/06	1534	554649

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL 300, Am 05 RC Modified
2	DOE EML HASL 300, Pu 11 RC Modified
3	DOE EML HASL 300, Pu 11 RC Modified
4	EPA 906.0 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
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Report Date: August 21, 2006

Client Sample ID: 9106 0002 007F
Sample ID: 168404001

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
5	EPA EERF C 01	Modified											
6	DOE RESL Fe 1,	Modified											
7	DOE RESL Ni 1,	Modified											
8	DOE EML HASL 300,	Tc 02 RC Modified											

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium 243	Alphaspec Am241, Cm, Solid ALL	80	(15% 125%)
Plutonium 242	Alphaspec Pu, Solid ALL FSS	100	(15% 125%)
Carrier/Tracer Recovery	Liquid Scint Pu241, Solid ALL FS	98	(25% 125%)
Carrier/Tracer Recovery	Liquid Scint Fe55, Solid ALL FS	75	(15% 125%)
Carrier/Tracer Recovery	Liquid Scint Ni63, Solid ALL FS	76	(25% 125%)
Carrier/Tracer Recovery	Liquid Scint Tc99, Solid ALL FS	74	(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
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Report Date: August 21, 2006

Client Sample ID: 9106 0002 011F
Sample ID: 168404002
Matrix: SE
Collect Date: 19 MAY 06
Receive Date: 02 JUN 06
Collector: Client
Moisture: 17.4%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Alpha Spec Analysis													
<i>Alphaspec Am241, Cm, Solid ALL FSS</i>													
Americium 241	U	0.120	+/- 0.154	0.0683	+/- 0.155	0.251	pCi/g	BXL1	08/11/06	1336	555696		1
Curium 242	U	0.0146	+/- 0.122	0.0692	+/- 0.123	0.303	pCi/g						
Curium 243/244	U	0.0103	+/- 0.0861	0.0487	+/- 0.0862	0.213	pCi/g						
<i>Alphaspec Pu, Solid ALL FSS</i>													
Plutonium 238	U	0.0121	+/- 0.125	0.127	+/- 0.125	0.344	pCi/g	BXL1	08/11/06	1633	555697		2
Plutonium 239/240	U	0.0254	+/- 0.0675	0.0381	+/- 0.0675	0.167	pCi/g						
<i>Liquid Scint Pu241, Solid ALL FSS</i>													
Plutonium 241	U	6.72	+/- 7.02	5.56	+/- 7.05	11.7	pCi/g	BXL1	08/16/06	1237	555698		3
Rad Liquid Scintillation Analysis													
<i>LSC, Tritium Dist, Solid HTD2, ALL FSS</i>													
Tritium	U	0.521	+/- 7.03	5.94	+/- 7.03	12.8	pCi/g	DFA1	08/09/06	1143	554582		4
<i>Liquid Scint C14, Solid All, FSS</i>													
Carbon 14	U	0.023	+/- 0.0828	0.0685	+/- 0.0828	0.143	pCi/g	ATH2	08/09/06	0426	554583		5
<i>Liquid Scint Fe55, Solid ALL FSS</i>													
Iron 55	U	3.93	+/- 47.7	31.9	+/- 47.7	65.7	pCi/g	MXP1	08/12/06	1649	555722		6
<i>Liquid Scint Ni63, Solid ALL FSS</i>													
Nickel 63	U	7.52	+/- 5.81	4.68	+/- 5.81	9.60	pCi/g	MXP1	08/11/06	0825	555723		7
<i>Liquid Scint Tc99, Solid ALL FSS</i>													
Technetium 99	U	0.173	+/- 0.203	0.164	+/- 0.203	0.341	pCi/g	EGD1	08/11/06	2043	554580		8

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	08/03/06	1534	554649

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL 300, Am 05 RC Modified
2	DOE EML HASL 300, Pu 11 RC Modified
3	DOE EML HASL 300, Pu 11 RC Modified
4	EPA 906.0 Modified
5	EPA EERF C 01 Modified

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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: August 21, 2006

Client Sample ID: 9106 0002 011F
Sample ID: 168404002

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time Batch	Mtd
6	DOE RESL Fe	1, Modified										
7	DOE RESL Ni	1, Modified										
8	DOE EML HASL	300, Tc 02 RC Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium 243	Alphaspec Am241, Cm, Solid ALL	76	(15% 125%)
Plutonium 242	Alphaspec Pu, Solid ALL FSS	100	(15% 125%)
Carrier/Tracer Recovery	Liquid Scint Pu241, Solid ALL FS	88	(25% 125%)
Carrier/Tracer Recovery	Liquid Scint Fe55, Solid ALL FS	72	(15% 125%)
Carrier/Tracer Recovery	Liquid Scint Ni63, Solid ALL FS	76	(25% 125%)
Carrier/Tracer Recovery	Liquid Scint Tc99, Solid ALL FS	79	(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
 Contact: Mr. Jack McCarthy
 Project: Soils PO# 002332

Report Date: August 21, 2006

Client Sample ID: 9106 0003 004F
 Sample ID: 168404003
 Matrix: SE
 Collect Date: 25 APR 06
 Receive Date: 05 MAY 06
 Collector: Client
 Moisture: 23.5%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Alpha Spec Analysis													
<i>Alphaspec Am241, Cm, Solid ALL FSS</i>													
Americium 241	U	0.027	+/- 0.117	0.153	+/- 0.117	0.488	pCi/g		BXL1	08/13/06	0819	555696	1
Curium 242	U	0.112	+/- 0.315	0.245	+/- 0.315	0.781	pCi/g						
Curium 243/244	U	0.0217	+/- 0.206	0.205	+/- 0.206	0.594	pCi/g						
<i>Alphaspec Pu, Solid ALL FSS</i>													
Plutonium 238	U	0.061	+/- 0.189	0.176	+/- 0.189	0.449	pCi/g		BXL1	08/11/06	1633	555697	2
Plutonium 239/240	U	0.0551	+/- 0.103	0.0584	+/- 0.103	0.215	pCi/g						
<i>Liquid Scint Pu241, Solid ALL FSS</i>													
Plutonium 241	U	8.31	+/- 5.73	4.40	+/- 5.78	9.25	pCi/g		BXL1	08/16/06	1253	555698	3
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid ALL FSS</i>													
Strontium 90	U	0.00343	+/- 0.0203	0.0172	+/- 0.0203	0.036	pCi/g		BXF1	08/14/06	0834	556350	4
Rad Liquid Scintillation Analysis													
<i>LSC, Tritium Dist, Solid HTD2, ALL FSS</i>													
Tritium	U	0.603	+/- 8.25	6.87	+/- 8.25	14.8	pCi/g		DFA1	08/09/06	1159	554582	5
<i>Liquid Scint C14, Solid All, FSS</i>													
Carbon 14	U	0.0937	+/- 0.0813	0.0642	+/- 0.0813	0.134	pCi/g		ATH2	08/09/06	0529	554583	6
<i>Liquid Scint Fe55, Solid ALL FSS</i>													
Iron 55	U	7.68	+/- 51.2	34.2	+/- 51.2	70.4	pCi/g		MXP1	08/12/06	1706	555722	7
<i>Liquid Scint Ni63, Solid ALL FSS</i>													
Nickel 63	U	5.74	+/- 7.12	6.58	+/- 7.13	13.6	pCi/g		MXP1	08/11/06	0912	555723	8
<i>Liquid Scint Tc99, Solid ALL FSS</i>													
Technetium 99	U	0.0643	+/- 0.198	0.169	+/- 0.198	0.351	pCi/g		EGD1	08/11/06	2059	554580	9

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	08/03/06	1534	554649

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

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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: August 21, 2006

Client Sample ID: 9106 0003 004F
Sample ID: 168404003

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time Batch	Mtd
3	DOE EML HASL 300, Pu 11		RC Modified									
4	EPA 905.0		Modified									
5	EPA 906.0		Modified									
6	EPA EERF C 01		Modified									
7	DOE RESL Fe 1,		Modified									
8	DOE RESL Ni 1,		Modified									
9	DOE EML HASL 300, Tc 02		RC Modified									

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium 243	Alphaspec Am241, Cm, Solid ALL	42	(15% 125%)
Plutonium 242	Alphaspec Pu, Solid ALL FSS	92	(15% 125%)
Carrier/Tracer Recovery	Liquid Scint Pu241, Solid ALL FS	113	(25% 125%)
Carrier/Tracer Recovery	GFPC, Sr90, solid ALL FSS	59	(25% 125%)
Carrier/Tracer Recovery	Liquid Scint Fe55, Solid ALL FS	71	(15% 125%)
Carrier/Tracer Recovery	Liquid Scint Ni63, Solid ALL FS	83	(25% 125%)
Carrier/Tracer Recovery	Liquid Scint Tc99, Solid ALL FS	76	(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

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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: August 21, 2006

Client Sample ID: 9106 0003 004F
Sample ID: 168404003

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
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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: August 21, 2006

Client Sample ID: 9106 0003 015F
Sample ID: 168404004
Matrix: SE
Collect Date: 25 APR 06
Receive Date: 05 MAY 06
Collector: Client
Moisture: 22.5%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Alpha Spec Analysis													
<i>Alphaspec Am241, Cm, Solid ALL FSS</i>													
Americium 241	U	0.0456	+/- 0.155	0.139	+/- 0.155	0.387	pCi/g		BXL1	08/11/06	1434	555696	1
Curium 242	U	0.113	+/- 0.181	0.0733	+/- 0.182	0.321	pCi/g						
Curium 243/244	U	0.180	+/- 0.239	0.181	+/- 0.240	0.472	pCi/g						
<i>Alphaspec Pu, Solid ALL FSS</i>													
Plutonium 238	U	0.0196	+/- 0.121	0.118	+/- 0.121	0.324	pCi/g		BXL1	08/11/06	1633	555697	2
Plutonium 239/240	U	0.0326	+/- 0.0639	0.00	+/- 0.064	0.0884	pCi/g						
<i>Liquid Scint Pu241, Solid ALL FSS</i>													
Plutonium 241	U	6.63	+/- 6.19	4.86	+/- 6.22	10.2	pCi/g		BXL1	08/16/06	1309	555698	3
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid ALL FSS</i>													
Strontium 90	U	0.00477	+/- 0.0216	0.0179	+/- 0.0216	0.0375	pCi/g		BXF1	08/14/06	0834	556350	4
Rad Liquid Scintillation Analysis													
<i>LSC, Tritium Dist, Solid HTD2, ALL FSS</i>													
Tritium	U	1.03	+/- 7.06	5.85	+/- 7.06	12.6	pCi/g		DFA1	08/09/06	1215	554582	5
<i>Liquid Scint C14, Solid All, FSS</i>													
Carbon 14		0.156	+/- 0.0912	0.0699	+/- 0.0913	0.146	pCi/g		ATH2	08/09/06	0632	554583	6
<i>Liquid Scint Fe55, Solid ALL FSS</i>													
Iron 55	U	9.99	+/- 42.7	28.7	+/- 42.7	59.2	pCi/g		MXP1	08/12/06	1722	555722	7
<i>Liquid Scint Ni63, Solid ALL FSS</i>													
Nickel 63	U	0.939	+/- 10.1	10.3	+/- 10.1	21.6	pCi/g		MXP1	08/11/06	1001	555723	8
<i>Liquid Scint Tc99, Solid ALL FSS</i>													
Technetium 99	U	0.237	+/- 0.213	0.170	+/- 0.213	0.353	pCi/g		EGD1	08/11/06	2115	554580	9

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	08/03/06	1534	554649

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

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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: August 21, 2006

Client Sample ID: 9106 0003 015F
Sample ID: 168404004

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time Batch	Mtd
3	DOE EML HASL	300, Pu	11 RC Modified									
4	EPA 905.0		Modified									
5	EPA 906.0		Modified									
6	EPA EERF C	01	Modified									
7	DOE RESL Fe	1,	Modified									
8	DOE RESL Ni	1,	Modified									
9	DOE EML HASL	300, Tc	02 RC Modified									

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium 243	Alphaspec Am241, Cm, Solid ALL	78	(15% 125%)
Plutonium 242	Alphaspec Pu, Solid ALL FSS	94	(15% 125%)
Carrier/Tracer Recovery	Liquid Scint Pu241, Solid ALL FS	101	(25% 125%)
Carrier/Tracer Recovery	GFPC, Sr90, solid ALL FSS	58	(25% 125%)
Carrier/Tracer Recovery	Liquid Scint Fe55, Solid ALL FS	75	(15% 125%)
Carrier/Tracer Recovery	Liquid Scint Ni63, Solid ALL FS	62	(25% 125%)
Carrier/Tracer Recovery	Liquid Scint Tc99, Solid ALL FS	75	(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.
- Ul 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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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: August 21, 2006

Client Sample ID: 9106 0003 015F
Sample ID: 168404004

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
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The above sample is reported on a dry weight basis.

GENERAL ENGINEERING LABORATORIES, LLC

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Certificate of Analysis

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

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

Report Date: August 21, 2006

Client Sample ID: 9106 0004 005F
Sample ID: 168404005
Matrix: SE
Collect Date: 03 MAY 06
Receive Date: 12 MAY 06
Collector: Client
Moisture: 15.4%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Alpha Spec Analysis													
<i>Alphaspec Am241, Cm, Solid ALL FSS</i>													
Americium 241	U	0.036	+/- 0.123	0.157	+/- 0.123	0.437	pCi/g	BXL1	08/11/06	1434	555696		1
Curium 242	U	0.0169	+/- 0.033	0.080	+/- 0.0331	0.350	pCi/g						
Curium 243/244	U	0.0129	+/- 0.227	0.247	+/- 0.227	0.619	pCi/g						
<i>Alphaspec Pu, Solid ALL FSS</i>													
Plutonium 238	U	0.0217	+/- 0.163	0.181	+/- 0.163	0.444	pCi/g	BXL1	08/11/06	1633	555697		2
Plutonium 239/240	U	0.0708	+/- 0.0791	0.128	+/- 0.0795	0.337	pCi/g						
<i>Liquid Scint Pu241, Solid ALL FSS</i>													
Plutonium 241	U	9.52	+/- 6.00	4.57	+/- 6.07	9.61	pCi/g	BXL1	08/16/06	1326	555698		3
Rad Liquid Scintillation Analysis													
<i>LSC, Tritium Dist, Solid HTD2, ALL FSS</i>													
Tritium	U	0.854	+/- 5.88	4.87	+/- 5.88	10.5	pCi/g	DFA1	08/09/06	1231	554582		4
<i>Liquid Scint C14, Solid All, FSS</i>													
Carbon 14		0.347	+/- 0.097	0.0674	+/- 0.0972	0.141	pCi/g	ATH2	08/09/06	0734	554583		5
<i>Liquid Scint Fe55, Solid ALL FSS</i>													
Iron 55	U	1.57	+/- 46.0	30.7	+/- 46.0	63.2	pCi/g	MXP1	08/12/06	1738	555722		6
<i>Liquid Scint Ni63, Solid ALL FSS</i>													
Nickel 63	U	6.39	+/- 7.62	7.40	+/- 7.62	15.5	pCi/g	MXP1	08/11/06	1017	555723		7
<i>Liquid Scint Tc99, Solid ALL FSS</i>													
Technetium 99	U	0.0198	+/- 0.187	0.156	+/- 0.187	0.324	pCi/g	EGD1	08/11/06	2131	554580		8

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	08/03/06	1534	554649

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL 300, Am 05 RC Modified
2	DOE EML HASL 300, Pu 11 RC Modified
3	DOE EML HASL 300, Pu 11 RC Modified
4	EPA 906.0 Modified
5	EPA EERF C 01 Modified

GENERAL ENGINEERING LABORATORIES, LLC

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

Certificate of Analysis

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

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

Report Date: August 21, 2006

Client Sample ID: 9106 0004 005F
Sample ID: 168404005

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time Batch	Mtd
6	DOE RESL Fe 1, Modified											
7	DOE RESL Ni 1, Modified											
8	DOE EML HASL 300, Tc 02 RC Modified											

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium 243	Alphaspec Am241, Cm, Solid ALL	65	(15% 125%)
Plutonium 242	Alphaspec Pu, Solid ALL FSS	95	(15% 125%)
Carrier/Tracer Recovery	Liquid Scint Pu241, Solid ALL FS	105	(25% 125%)
Carrier/Tracer Recovery	Liquid Scint Fe55, Solid ALL FS	78	(15% 125%)
Carrier/Tracer Recovery	Liquid Scint Ni63, Solid ALL FS	80	(25% 125%)
Carrier/Tracer Recovery	Liquid Scint Tc99, Solid ALL FS	80	(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
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Report Date: August 21, 2006

Client Sample ID: 9106 0004 015F
Sample ID: 168404006
Matrix: SE
Collect Date: 03 MAY 06
Receive Date: 12 MAY 06
Collector: Client
Moisture: 26.5%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Alpha Spec Analysis													
<i>Alphaspec Am241, Cm, Solid ALL FSS</i>													
Americium 241	U	0.0823	+/- 0.203	0.178	+/- 0.203	0.469	pCi/g	BXL1	08/11/06	1434	555696	1	
Curium 242	U	0.0154	+/- 0.0301	0.0729	+/- 0.0302	0.319	pCi/g						
Curium 243/244	U	0.0994	+/- 0.251	0.300	+/- 0.251	0.713	pCi/g						
<i>Alphaspec Pu, Solid ALL FSS</i>													
Plutonium 238	U	0.0466	+/- 0.213	0.210	+/- 0.213	0.521	pCi/g	BXL1	08/11/06	1633	555697	2	
Plutonium 239/240	U	0.142	+/- 0.108	0.191	+/- 0.109	0.483	pCi/g						
<i>Liquid Scint Pu241, Solid ALL FSS</i>													
Plutonium 241	U	6.64	+/- 6.53	5.16	+/- 6.57	10.8	pCi/g	BXL1	08/16/06	1342	555698	3	
Rad Liquid Scintillation Analysis													
<i>LSC, Tritium Dist, Solid HTD2, ALL FSS</i>													
Tritium	U	2.9	+/- 7.59	6.60	+/- 7.59	14.2	pCi/g	DFA1	08/09/06	1247	554582	4	
<i>Liquid Scint C14, Solid All, FSS</i>													
Carbon 14	U	0.0352	+/- 0.0868	0.0713	+/- 0.0868	0.149	pCi/g	ATH2	08/09/06	0837	554583	5	
<i>Liquid Scint Fe55, Solid ALL FSS</i>													
Iron 55	U	1.88	+/- 46.8	31.3	+/- 46.8	64.4	pCi/g	MXP1	08/12/06	1754	555722	6	
<i>Liquid Scint Ni63, Solid ALL FSS</i>													
Nickel 63	U	3.88	+/- 7.46	7.40	+/- 7.46	15.5	pCi/g	MXP1	08/11/06	1033	555723	7	
<i>Liquid Scint Tc99, Solid ALL FSS</i>													
Technetium 99	U	0.0894	+/- 0.198	0.163	+/- 0.198	0.338	pCi/g	EGD1	08/11/06	2147	554580	8	

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	08/03/06	1534	554649

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL 300, Am 05 RC Modified
2	DOE EML HASL 300, Pu 11 RC Modified
3	DOE EML HASL 300, Pu 11 RC Modified
4	EPA 906.0 Modified
5	EPA EERF C 01 Modified

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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: August 21, 2006

Client Sample ID: 9106 0004 015F
Sample ID: 168404006

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time Batch	Mtd
6	DOE RESL Fe 1, Modified											
7	DOE RESL Ni 1, Modified											
8	DOE EML HASL 300, Tc 02 RC Modified											

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium 243	Alphaspec Am241, Cm, Solid ALL	72	(15% 125%)
Plutonium 242	Alphaspec Pu, Solid ALL FSS	72	(15% 125%)
Carrier/Tracer Recovery	Liquid Scint Pu241, Solid ALL FS	94	(25% 125%)
Carrier/Tracer Recovery	Liquid Scint Fe55, Solid ALL FS	73	(15% 125%)
Carrier/Tracer Recovery	Liquid Scint Ni63, Solid ALL FS	80	(25% 125%)
Carrier/Tracer Recovery	Liquid Scint Tc99, Solid ALL FS	78	(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
 Contact: Mr. Jack McCarthy
 Project: Soils PO# 002332

Report Date: August 21, 2006

Client Sample ID: 9106 0005 010F
 Sample ID: 168404007
 Matrix: SE
 Collect Date: 02 MAY 06
 Receive Date: 09 MAY 06
 Collector: Client
 Moisture: 56.2%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Alpha Spec Analysis													
<i>Alphaspec Am241, Cm, Solid ALL FSS</i>													
Americium 241	U	0.128	+/- 0.0939	0.142	+/- 0.0942	0.385	pCi/g	BXL1	08/11/06	1434	555696		1
Curium 242	U	0.0115	+/- 0.128	0.147	+/- 0.128	0.450	pCi/g						
Curium 243/244	U	0.0333	+/- 0.122	0.149	+/- 0.122	0.401	pCi/g						
<i>Alphaspec Pu, Solid ALL FSS</i>													
Plutonium 238	U	0.0548	+/- 0.169	0.158	+/- 0.170	0.403	pCi/g	BXL1	08/11/06	1633	555697		2
Plutonium 239/240	U	0.0195	+/- 0.121	0.117	+/- 0.121	0.322	pCi/g						
<i>Liquid Scint Pu241, Solid ALL FSS</i>													
Plutonium 241	U	10.4	+/- 6.89	5.27	+/- 6.97	11.1	pCi/g	BXL1	08/16/06	1358	555698		3
Rad Liquid Scintillation Analysis													
<i>LSC, Tritium Dist, Solid HTD2, ALL FSS</i>													
Tritium	U	0.00	+/- 6.86	5.76	+/- 6.86	12.4	pCi/g	DFA1	08/09/06	1303	554582		4
<i>Liquid Scint C14, Solid All, FSS</i>													
Carbon 14	U	0.0636	+/- 0.0801	0.0644	+/- 0.0801	0.135	pCi/g	ATH2	08/09/06	1017	554583		5
<i>Liquid Scint Fe55, Solid ALL FSS</i>													
Iron 55	U	36.1	+/- 44.1	28.7	+/- 44.1	59.0	pCi/g	MXP1	08/12/06	1811	555722		6
<i>Liquid Scint Ni63, Solid ALL FSS</i>													
Nickel 63	U	7.26	+/- 10.2	10.0	+/- 10.2	20.9	pCi/g	MXP1	08/11/06	1049	555723		7
<i>Liquid Scint Tc99, Solid ALL FSS</i>													
Technetium 99	U	0.05	+/- 0.199	0.169	+/- 0.199	0.351	pCi/g	EGD1	08/11/06	2203	554580		8

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	08/03/06	1534	554649

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL 300, Am 05 RC Modified
2	DOE EML HASL 300, Pu 11 RC Modified
3	DOE EML HASL 300, Pu 11 RC Modified
4	EPA 906.0 Modified
5	EPA EERF C 01 Modified

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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: August 21, 2006

Client Sample ID: 9106 0005 010F
Sample ID: 168404007

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time Batch	Mtd
6		DOE RESL Fe 1, Modified										
7		DOE RESL Ni 1, Modified										
8		DOE EML HASL 300, Tc 02 RC Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium 243	Alphaspec Am241, Cm, Solid ALL	85	(15% 125%)
Plutonium 242	Alphaspec Pu, Solid ALL FSS	91	(15% 125%)
Carrier/Tracer Recovery	Liquid Scint Pu241, Solid ALL FS	92	(25% 125%)
Carrier/Tracer Recovery	Liquid Scint Fe55, Solid ALL FS	81	(15% 125%)
Carrier/Tracer Recovery	Liquid Scint Ni63, Solid ALL FS	64	(25% 125%)
Carrier/Tracer Recovery	Liquid Scint Tc99, Solid ALL FS	77	(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
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Report Date: August 21, 2006

Client Sample ID: 9106 0005 014F
Sample ID: 168404008
Matrix: SE
Collect Date: 02 MAY 06
Receive Date: 09 MAY 06
Collector: Client
Moisture: 32.3%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Alpha Spec Analysis													
<i>Alphaspec Am241, Cm, Solid ALL FSS</i>													
Americium 241	U	0.00591	+/- 0.219	0.231	+/- 0.219	0.608	pCi/g	BXL1	08/11/06	1434	555696	1	
Curium 242	U	0.04	+/- 0.0554	0.134	+/- 0.0557	0.494	pCi/g						
Curium 243/244	U	0.0634	+/- 0.261	0.249	+/- 0.261	0.646	pCi/g						
<i>Alphaspec Pu, Solid ALL FSS</i>													
Plutonium 238	U	0.0694	+/- 0.106	0.160	+/- 0.106	0.434	pCi/g	BXL1	08/11/06	1633	555697	2	
Plutonium 239/240	U	0.0287	+/- 0.098	0.127	+/- 0.0981	0.369	pCi/g						
<i>Liquid Scint Pu241, Solid ALL FSS</i>													
Plutonium 241	U	4.68	+/- 8.01	6.48	+/- 8.02	13.6	pCi/g	BXL1	08/16/06	1415	555698	3	
Rad Liquid Scintillation Analysis													
<i>LSC, Tritium Dist, Solid HTD2, ALL FSS</i>													
Tritium	U	6.02	+/- 6.38	4.90	+/- 6.38	10.6	pCi/g	DFA1	08/09/06	1319	554582	4	
<i>Liquid Scint C14, Solid All, FSS</i>													
Carbon 14	U	0.0892	+/- 0.0827	0.0655	+/- 0.0827	0.137	pCi/g	ATH2	08/09/06	1424	554583	5	
<i>Liquid Scint Fe55, Solid ALL FSS</i>													
Iron 55	U	19.8	+/- 46.3	30.6	+/- 46.3	62.9	pCi/g	MXP1	08/12/06	1827	555722	6	
<i>Liquid Scint Ni63, Solid ALL FSS</i>													
Nickel 63	U	5.41	+/- 7.91	7.77	+/- 7.91	16.2	pCi/g	MXP1	08/11/06	1106	555723	7	
<i>Liquid Scint Tc99, Solid ALL FSS</i>													
Technetium 99	U	0.134	+/- 0.192	0.167	+/- 0.192	0.346	pCi/g	EGD1	08/11/06	2218	554580	8	

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	08/03/06	1534	554649

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL 300, Am 05 RC Modified
2	DOE EML HASL 300, Pu 11 RC Modified
3	DOE EML HASL 300, Pu 11 RC Modified
4	EPA 906.0 Modified
5	EPA EERF C 01 Modified

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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: August 21, 2006

Client Sample ID: 9106 0005 014F
Sample ID: 168404008

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time Batch	Mtd
6	DOE RESL Fe 1, Modified											
7	DOE RESL Ni 1, Modified											
8	DOE EML HASL 300, Tc 02 RC Modified											

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium 243	Alphaspec Am241, Cm, Solid ALL	50	(15% 125%)
Plutonium 242	Alphaspec Pu, Solid ALL FSS	61	(15% 125%)
Carrier/Tracer Recovery	Liquid Scint Pu241, Solid ALL FS	74	(25% 125%)
Carrier/Tracer Recovery	Liquid Scint Fe55, Solid ALL FS	76	(15% 125%)
Carrier/Tracer Recovery	Liquid Scint Ni63, Solid ALL FS	76	(25% 125%)
Carrier/Tracer Recovery	Liquid Scint Tc99, Solid ALL FS	75	(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
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Report Date: August 21, 2006

Client Sample ID: 9106 0006 005F
Sample ID: 168404009
Matrix: SE
Collect Date: 28 APR 06
Receive Date: 12 MAY 06
Collector: Client
Moisture: 16.5%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Alpha Spec Analysis													
<i>Alphaspec Am241, Cm, Solid ALL FSS</i>													
Americium 241	U	0.0851	+/- 0.136	0.106	+/- 0.136	0.390	pCi/g	BXL1	08/16/06	0949	557837	1	
Curium 242	U	0.0253	+/- 0.0495	0.120	+/- 0.0496	0.525	pCi/g						
Curium 243/244	U	0.0479	+/- 0.0542	0.131	+/- 0.0545	0.443	pCi/g						
<i>Alphaspec Pu, Solid ALL FSS</i>													
Plutonium 238	U	0.0183	+/- 0.113	0.110	+/- 0.113	0.303	pCi/g	BXL1	08/11/06	1633	555697	3	
Plutonium 239/240	U	0.00122	+/- 0.0662	0.0694	+/- 0.0662	0.221	pCi/g						
<i>Liquid Scint Pu241, Solid ALL FSS</i>													
Plutonium 241	U	4.43	+/- 5.83	4.67	+/- 5.85	9.82	pCi/g	BXL1	08/16/06	1431	555698	4	
Rad Liquid Scintillation Analysis													
<i>LSC, Tritium Dist, Solid HTD2, ALL FSS</i>													
Tritium	U	2.02	+/- 6.67	5.76	+/- 6.67	12.4	pCi/g	DFA1	08/09/06	1335	554582	5	
<i>Liquid Scint C14, Solid All, FSS</i>													
Carbon 14		0.142	+/- 0.0798	0.061	+/- 0.0799	0.127	pCi/g	ATH2	08/09/06	1719	554583	6	
<i>Liquid Scint Fe55, Solid ALL FSS</i>													
Iron 55	U	12.6	+/- 47.6	31.7	+/- 47.6	65.3	pCi/g	MXP1	08/12/06	1843	555722	7	
<i>Liquid Scint Ni63, Solid ALL FSS</i>													
Nickel 63	U	7.70	+/- 9.56	9.31	+/- 9.56	19.5	pCi/g	MXP1	08/11/06	1122	555723	8	
<i>Liquid Scint Tc99, Solid ALL FSS</i>													
Technetium 99	U	0.00659	+/- 0.185	0.156	+/- 0.185	0.323	pCi/g	EGD1	08/11/06	2234	554580	9	

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	08/03/06	1534	554649

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL 300, Am 05 RC Modified
2	DOE EML HASL 300, Am 05 RC Modified
3	DOE EML HASL 300, Pu 11 RC Modified
4	DOE EML HASL 300, Pu 11 RC Modified
5	EPA 906.0 Modified

GENERAL ENGINEERING LABORATORIES, LLC

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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: August 21, 2006

Client Sample ID: 9106 0006 005F
Sample ID: 168404009

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time Batch	Mtd
6	EPA EERF C 01	Modified										
7	DOE RESL Fe 1,	Modified										
8	DOE RESL Ni 1,	Modified										
9	DOE EML HASL 300,	Tc 02 RC Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium 243	Alphaspec Am241, Cm, Solid ALL	76	(15% 125%)
Plutonium 242	Alphaspec Pu, Solid ALL FSS	93	(15% 125%)
Carrier/Tracer Recovery	Liquid Scint Pu241, Solid ALL FS	105	(25% 125%)
Carrier/Tracer Recovery	Liquid Scint Fe55, Solid ALL FS	72	(15% 125%)
Carrier/Tracer Recovery	Liquid Scint Ni63, Solid ALL FS	64	(25% 125%)
Carrier/Tracer Recovery	Liquid Scint Tc99, Solid ALL FS	81	(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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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: August 21, 2006

Client Sample ID: 9106 0008 006F
Sample ID: 168404010
Matrix: SE
Collect Date: 05 MAY 06
Receive Date: 26 MAY 06
Collector: Client
Moisture: 34.8%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Alpha Spec Analysis													
<i>Alphaspec Am241, Cm, Solid ALL FSS</i>													
Americium 241	U	0.129	+/- 0.195	0.0758	+/- 0.196	0.332	pCi/g	BXL1	08/16/06	0949	557837		1
Curium 242	U	0.103	+/- 0.202	0.00	+/- 0.203	0.280	pCi/g						
Curium 243/244	U	0.0161	+/- 0.0316	0.0766	+/- 0.0317	0.335	pCi/g						
<i>Alphaspec Pu, Solid ALL FSS</i>													
Plutonium 238	U	0.0276	+/- 0.0711	0.0967	+/- 0.0712	0.275	pCi/g	BXL1	08/11/06	1633	555697		3
Plutonium 239/240	U	0.00359	+/- 0.113	0.118	+/- 0.113	0.317	pCi/g						
<i>Liquid Scint Pu241, Solid ALL FSS</i>													
Plutonium 241		14.9	+/- 6.37	4.64	+/- 6.51	9.75	pCi/g	BXL1	08/16/06	1447	555698		4
Rad Liquid Scintillation Analysis													
<i>LSC, Tritium Dist, Solid HTD2, ALL FSS</i>													
Tritium	U	0.00	+/- 6.06	5.09	+/- 6.06	10.7	pCi/g	DFA1	08/10/06	2150	554582		5
<i>Liquid Scint C14, Solid All, FSS</i>													
Carbon 14	U	0.107	+/- 0.0846	0.0664	+/- 0.0846	0.139	pCi/g	ATH2	08/09/06	1822	554583		6
<i>Liquid Scint Fe55, Solid ALL FSS</i>													
Iron 55	U	15.1	+/- 41.4	27.5	+/- 41.4	56.6	pCi/g	MXP1	08/12/06	1900	555722		7
<i>Liquid Scint Tc99, Solid ALL FSS</i>													
Technetium 99	U	0.258	+/- 0.225	0.179	+/- 0.225	0.373	pCi/g	EGD1	08/11/06	2251	554580		8

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	08/03/06	1534	554649

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL 300, Am 05 RC Modified
2	DOE EML HASL 300, Am 05 RC Modified
3	DOE EML HASL 300, Pu 11 RC Modified
4	DOE EML HASL 300, Pu 11 RC Modified
5	EPA 906.0 Modified
6	EPA EERF C 01 Modified
7	DOE RESL Fe 1, Modified

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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: August 21, 2006

Client Sample ID: 9106 0008 006F
 Sample ID: 168404010

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
8		DOE EML HASL 300, Tc 02	RC Modified										

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium 243	Alphaspec Am241, Cm, Solid ALL	77	(15% 125%)
Plutonium 242	Alphaspec Pu, Solid ALL FSS	94	(15% 125%)
Carrier/Tracer Recovery	Liquid Scint Pu241, Solid ALL FS	103	(25% 125%)
Carrier/Tracer Recovery	Liquid Scint Fe55, Solid ALL FS	72	(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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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: August 21, 2006

Client Sample ID:	9106 0008 008F	Project:	YANK01204
Sample ID:	168404011	Client ID:	YANK001
Matrix:	SE	Vol. Recv.:	
Collect Date:	08 MAY 06		
Receive Date:	26 MAY 06		
Collector:	Client		
Moisture:	35.7%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Alpha Spec Analysis													
<i>Alphaspec Am241, Cm, Solid ALL FSS</i>													
Americium 241	U	0.0969	+/- 0.192	0.152	+/- 0.193	0.426	pCi/g		BXL1	08/11/06	1434	555696	1
Curium 242	U	0.0482	+/- 0.142	0.132	+/- 0.142	0.446	pCi/g						
Curium 243/244	U	0.0576	+/- 0.202	0.240	+/- 0.203	0.603	pCi/g						
<i>Alphaspec Pu, Solid ALL FSS</i>													
Plutonium 238	U	0.0397	+/- 0.096	0.125	+/- 0.096	0.328	pCi/g		BXL1	08/11/06	1633	555697	2
Plutonium 239/240	U	0.0315	+/- 0.114	0.137	+/- 0.114	0.353	pCi/g						
<i>Liquid Scint Pu241, Solid ALL FSS</i>													
Plutonium 241		11.5	+/- 6.72	5.08	+/- 6.80	10.7	pCi/g		BXL1	08/16/06	1504	555698	3
Rad Liquid Scintillation Analysis													
<i>LSC, Tritium Dist, Solid HTD2, ALL FSS</i>													
Tritium	U	0.00	+/- 5.92	4.97	+/- 5.92	10.7	pCi/g		DFA1	08/09/06	1407	554582	4
<i>Liquid Scint C14, Solid All, FSS</i>													
Carbon 14	U	0.0238	+/- 0.0745	0.0636	+/- 0.0745	0.133	pCi/g		ATH2	08/09/06	1924	554583	5
<i>Liquid Scint Fe55, Solid ALL FSS</i>													
Iron 55	U	10.7	+/- 40.9	27.5	+/- 40.9	56.8	pCi/g		MXP1	08/12/06	1916	555722	6
<i>Liquid Scint Tc99, Solid ALL FSS</i>													
Technetium 99	U	0.0956	+/- 0.211	0.174	+/- 0.211	0.361	pCi/g		EGD1	08/11/06	2307	554580	7

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	08/03/06	1534	554649

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL 300, Am 05 RC Modified
2	DOE EML HASL 300, Pu 11 RC Modified
3	DOE EML HASL 300, Pu 11 RC Modified
4	EPA 906.0 Modified
5	EPA EERF C 01 Modified
6	DOE RESL Fe 1, Modified

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Certificate of Analysis

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

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

Report Date: August 21, 2006

Client Sample ID: 9106 0008 008F
Sample ID: 168404011

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time Batch	Mtd
7	DOE EML HASL	300, Tc	02 RC Modified									

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium 243	Alphaspec Am241, Cm, Solid ALL	65	(15% 125%)
Plutonium 242	Alphaspec Pu, Solid ALL FSS	98	(15% 125%)
Carrier/Tracer Recovery	Liquid Scint Pu241, Solid ALL FS	96	(25% 125%)
Carrier/Tracer Recovery	Liquid Scint Fe55, Solid ALL FS	76	(15% 125%)
Carrier/Tracer Recovery	Liquid Scint Tc99, Solid ALL FS	74	(15% 125%)

Notes:

The Qualifiers in this report are defined as follows :

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 - < Result is less than value reported
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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

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

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

Report Date: August 21, 2006

Client Sample ID: 9106 0009 002F
Sample ID: 168404012
Matrix: SE
Collect Date: 11 MAY 06
Receive Date: 08 JUN 06
Collector: Client
Moisture: 33%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Alpha Spec Analysis													
<i>Alphaspec Am241, Cm, Solid ALL FSS</i>													
Americium 241	U	0.00144	+/- 0.155	0.166	+/- 0.155	0.458	pCi/g	BXL1	08/11/06	1434	555696	1	
Curium 242	U	0.0192	+/- 0.145	0.135	+/- 0.145	0.455	pCi/g						
Curium 243/244	U	0.013	+/- 0.268	0.281	+/- 0.268	0.687	pCi/g						
<i>Alphaspec Pu, Solid ALL FSS</i>													
Plutonium 238	U	0.00587	+/- 0.0493	0.0279	+/- 0.0494	0.122	pCi/g	BXL1	08/11/06	1632	555697	2	
Plutonium 239/240	U	0.0186	+/- 0.0492	0.0278	+/- 0.0493	0.122	pCi/g						
<i>Liquid Scint Pu241, Solid ALL FSS</i>													
Plutonium 241		13.6	+/- 6.90	5.13	+/- 7.01	10.8	pCi/g	BXL1	08/16/06	1520	555698	3	
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid ALL FSS</i>													
Strontium 90	U	0.0151	+/- 0.0146	0.0114	+/- 0.0146	0.0242	pCi/g	BXF1	08/14/06	0834	556350	4	
Rad Liquid Scintillation Analysis													
<i>LSC, Tritium Dist, Solid HTD2, ALL FSS</i>													
Tritium	U	4.12	+/- 8.36	6.70	+/- 8.36	14.5	pCi/g	DFA1	08/09/06	1422	554582	5	
<i>Liquid Scint C14, Solid All, FSS</i>													
Carbon 14	U	0.046	+/- 0.0755	0.0613	+/- 0.0755	0.128	pCi/g	ATH2	08/09/06	2027	554583	6	
<i>Liquid Scint Fe55, Solid ALL FSS</i>													
Iron 55	U	12.9	+/- 40.6	26.8	+/- 40.6	55.2	pCi/g	MXP1	08/12/06	1932	555722	7	
<i>Liquid Scint Tc99, Solid ALL FSS</i>													
Technetium 99	U	0.078	+/- 0.203	0.168	+/- 0.203	0.348	pCi/g	EGD1	08/11/06	2323	554580	8	

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	08/03/06	1534	554649

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL 300, Am 05 RC Modified
2	DOE EML HASL 300, Pu 11 RC Modified
3	DOE EML HASL 300, Pu 11 RC Modified
4	EPA 905.0 Modified

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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: August 21, 2006

Client Sample ID: 9106 0009 002F
Sample ID: 168404012

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time Batch	Mtd
5	EPA 906.0 Modified											
6	EPA EERF C 01 Modified											
7	DOE RESL Fe 1, Modified											
8	DOE EML HASL 300, Tc 02 RC Modified											

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium 243	Alphaspec Am241, Cm, Solid ALL	61	(15% 125%)
Plutonium 242	Alphaspec Pu, Solid ALL FSS	98	(15% 125%)
Carrier/Tracer Recovery	Liquid Scint Pu241, Solid ALL FS	94	(25% 125%)
Carrier/Tracer Recovery	GFPC, Sr90, solid ALL FSS	69	(25% 125%)
Carrier/Tracer Recovery	Liquid Scint Fe55, Solid ALL FS	81	(15% 125%)
Carrier/Tracer Recovery	Liquid Scint Tc99, Solid ALL FS	75	(15% 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.

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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: August 21, 2006

Client Sample ID: 9106 0009 017F
Sample ID: 168404013
Matrix: SE
Collect Date: 15 MAY 06
Receive Date: 08 JUN 06
Collector: Client
Moisture: 28.4%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Alpha Spec Analysis													
<i>Alphaspec Am241, Cm, Solid ALL FSS</i>													
Americium 241	U	0.0755	+/- 0.242	0.230	+/- 0.243	0.574	pCi/g	BXL1	08/11/06	1434	555696		1
Curium 242	U	0.0957	+/- 0.220	0.171	+/- 0.220	0.509	pCi/g						
Curium 243/244	U	0.073	+/- 0.214	0.256	+/- 0.214	0.627	pCi/g						
<i>Alphaspec Pu, Solid ALL FSS</i>													
Plutonium 238	U	0.00629	+/- 0.0529	0.0299	+/- 0.0529	0.131	pCi/g	BXL1	08/11/06	1632	555697		2
Plutonium 239/240	U	0.0262	+/- 0.0513	0.00	+/- 0.0514	0.0709	pCi/g						
<i>Liquid Scint Pu241, Solid ALL FSS</i>													
Plutonium 241		13.3	+/- 6.66	4.95	+/- 6.77	10.4	pCi/g	BXL1	08/16/06	1536	555698		3
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid ALL FSS</i>													
Strontium 90	U	0.0205	+/- 0.0151	0.0116	+/- 0.0151	0.0246	pCi/g	BXF1	08/14/06	0833	556350		4
Rad Liquid Scintillation Analysis													
<i>LSC, Tritium Dist, Solid HTD2, ALL FSS</i>													
Tritium	U	0.583	+/- 7.98	6.65	+/- 7.98	14.4	pCi/g	DFA1	08/09/06	1438	554582		5
<i>Liquid Scint C14, Solid All, FSS</i>													
Carbon 14	U	0.0271	+/- 0.0759	0.0625	+/- 0.0759	0.131	pCi/g	ATH2	08/09/06	2129	554583		6
<i>Liquid Scint Fe55, Solid ALL FSS</i>													
Iron 55	U	61.9	+/- 150	102	+/- 150	210	pCi/g	MXP1	08/12/06	1949	555722		7
<i>Liquid Scint Tc99, Solid ALL FSS</i>													
Technetium 99	U	0.0628	+/- 0.200	0.165	+/- 0.200	0.343	pCi/g	EGD1	08/11/06	2338	554580		8

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	08/03/06	1534	554649

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL 300, Am 05 RC Modified
2	DOE EML HASL 300, Pu 11 RC Modified
3	DOE EML HASL 300, Pu 11 RC Modified
4	EPA 905.0 Modified

GENERAL ENGINEERING LABORATORIES, LLC

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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: August 21, 2006

Client Sample ID: 9106 0009 017F
Sample ID: 168404013

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time Batch	Mtd
5	EPA 906.0 Modified											
6	EPA EERF C 01 Modified											
7	DOE RESL Fe 1, Modified											
8	DOE EML HASL 300, Tc 02 RC Modified											

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium 243	Alphaspec Am241, Cm, Solid ALL	64	(15% 125%)
Plutonium 242	Alphaspec Pu, Solid ALL FSS	91	(15% 125%)
Carrier/Tracer Recovery	Liquid Scint Pu241, Solid ALL FS	96	(25% 125%)
Carrier/Tracer Recovery	GFPC, Sr90, solid ALL FSS	72	(25% 125%)
Carrier/Tracer Recovery	Liquid Scint Fe55, Solid ALL FS	73	(15% 125%)
Carrier/Tracer Recovery	Liquid Scint Tc99, Solid ALL FS	79	(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.
 - U1 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: August 21, 2006

Client Sample ID: 9106 0010 001F
Sample ID: 168404014
Matrix: SE
Collect Date: 04 MAY 06
Receive Date: 17 MAY 06
Collector: Client
Moisture: 27.3%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Alpha Spec Analysis													
<i>Alphaspec Am241, Cm, Solid ALL FSS</i>													
Americium 241	U	0.00677	+/- 0.227	0.238	+/- 0.227	0.628	pCi/g	BXL1	08/11/06	1434	555696	1	
Curium 242	U	0.0854	+/- 0.167	0.00	+/- 0.168	0.231	pCi/g						
Curium 243/244	U	0.0361	+/- 0.242	0.241	+/- 0.242	0.634	pCi/g						
<i>Alphaspec Pu, Solid ALL FSS</i>													
Plutonium 238	U	0.173	+/- 0.181	0.143	+/- 0.182	0.331	pCi/g	BXL1	08/11/06	2250	555697	2	
Plutonium 239/240	U	0.0342	+/- 0.0865	0.0951	+/- 0.0866	0.235	pCi/g						
<i>Liquid Scint Pu241, Solid ALL FSS</i>													
Plutonium 241		13.0	+/- 6.44	4.78	+/- 6.54	10.0	pCi/g	BXL1	08/16/06	1553	555698	3	
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid ALL FSS</i>													
Strontium 90	U	0.0128	+/- 0.0141	0.0125	+/- 0.0141	0.0262	pCi/g	BXF1	08/14/06	0833	556350	4	
Rad Liquid Scintillation Analysis													
<i>LSC, Tritium Dist, Solid HTD2, ALL FSS</i>													
Tritium	U	0.548	+/- 7.50	6.25	+/- 7.50	13.5	pCi/g	DFA1	08/09/06	1454	554582	5	
<i>Liquid Scint C14, Solid All, FSS</i>													
Carbon 14	U	0.0555	+/- 0.0809	0.0655	+/- 0.0809	0.137	pCi/g	ATH2	08/09/06	2232	554583	6	
<i>Liquid Scint Fe55, Solid ALL FSS</i>													
Iron 55	U	18.1	+/- 47.6	32.3	+/- 47.6	66.6	pCi/g	MXP1	08/12/06	2005	555722	7	
<i>Liquid Scint Tc99, Solid ALL FSS</i>													
Technetium 99	U	0.134	+/- 0.205	0.167	+/- 0.205	0.347	pCi/g	EGD1	08/11/06	2354	554580	8	

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	08/03/06	1534	554649

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL 300, Am 05 RC Modified
2	DOE EML HASL 300, Pu 11 RC Modified
3	DOE EML HASL 300, Pu 11 RC Modified
4	EPA 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
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Report Date: August 21, 2006

Client Sample ID: 9106 0010 001F
Sample ID: 168404014

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time Batch	Mtd
5	EPA 906.0 Modified											
6	EPA EERF C 01 Modified											
7	DOE RESL Fe 1, Modified											
8	DOE EML HASL 300, Tc 02 RC Modified											

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium 243	Alphaspec Am241, Cm, Solid ALL	50	(15% 125%)
Plutonium 242	Alphaspec Pu, Solid ALL FSS	85	(15% 125%)
Carrier/Tracer Recovery	Liquid Scint Pu241, Solid ALL FS	99	(25% 125%)
Carrier/Tracer Recovery	GFPC, Sr90, solid ALL FSS	74	(25% 125%)
Carrier/Tracer Recovery	Liquid Scint Fe55, Solid ALL FS	70	(15% 125%)
Carrier/Tracer Recovery	Liquid Scint Tc99, Solid ALL FS	75	(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
Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Report Date: August 21, 2006

Client Sample ID: 9106 0010 012F
Sample ID: 168404015
Matrix: SE
Collect Date: 04 MAY 06
Receive Date: 17 MAY 06
Collector: Client
Moisture: 28.1%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	Mtd
Rad Alpha Spec Analysis													
<i>Alphaspec Am241, Cm, Solid ALL FSS</i>													
Americium 241	U	0.110	+/- 0.184	0.140	+/- 0.184	0.386	pCi/g	BXL1	08/11/06	1434	555696		1
Curium 242	U	0.0547	+/- 0.141	0.192	+/- 0.141	0.544	pCi/g						
Curium 243/244	U	0.126	+/- 0.184	0.245	+/- 0.185	0.597	pCi/g						
<i>Alphaspec Pu, Solid ALL FSS</i>													
Plutonium 238	U	0.00157	+/- 0.126	0.122	+/- 0.126	0.291	pCi/g	BXL1	08/11/06	2250	555697		2
Plutonium 239/240	U	0.0867	+/- 0.0869	0.0406	+/- 0.0872	0.128	pCi/g						
<i>Liquid Scint Pu241, Solid ALL FSS</i>													
Plutonium 241	U	8.31	+/- 6.16	4.77	+/- 6.21	10.0	pCi/g	BXL1	08/16/06	1609	555698		3
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid ALL FSS</i>													
Strontium 90	U	0.00771	+/- 0.0144	0.0124	+/- 0.0144	0.0263	pCi/g	BXF1	08/14/06	0833	556350		4
Rad Liquid Scintillation Analysis													
<i>LSC, Tritium Dist, Solid HTD2, ALL FSS</i>													
Tritium	U	0.896	+/- 6.17	5.11	+/- 6.17	11.0	pCi/g	DFA1	08/09/06	1510	554582		5
<i>Liquid Scint C14, Solid All, FSS</i>													
Carbon 14	U	0.0162	+/- 0.0763	0.0633	+/- 0.0763	0.132	pCi/g	ATH2	08/09/06	2334	554583		6
<i>Liquid Scint Fe55, Solid ALL FSS</i>													
Iron 55	U	23.3	+/- 49.3	32.5	+/- 49.3	67.0	pCi/g	MXP1	08/12/06	2021	555722		7
<i>Liquid Scint Tc99, Solid ALL FSS</i>													
Technetium 99	U	0.0577	+/- 0.206	0.171	+/- 0.206	0.354	pCi/g	EGD1	08/12/06	0010	554580		8

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL RAD A 021	LXM2	08/03/06	1534	554649

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL 300, Am 05 RC Modified
2	DOE EML HASL 300, Pu 11 RC Modified
3	DOE EML HASL 300, Pu 11 RC Modified
4	EPA 905.0 Modified

GENERAL ENGINEERING LABORATORIES, LLC

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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: August 21, 2006

Client Sample ID: 9106 0010 012F
Sample ID: 168404015

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time Batch	Mtd
5	EPA 906.0 Modified											
6	EPA EERF C 01 Modified											
7	DOE RESL Fe 1, Modified											
8	DOE EML HASL 300, Tc 02 RC Modified											

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium 243	Alphaspec Am241, Cm, Solid ALL	81	(15% 125%)
Plutonium 242	Alphaspec Pu, Solid ALL FSS	91	(15% 125%)
Carrier/Tracer Recovery	Liquid Scint Pu241, Solid ALL FS	99	(25% 125%)
Carrier/Tracer Recovery	GFPC, Sr90, solid ALL FSS	68	(25% 125%)
Carrier/Tracer Recovery	Liquid Scint Fe55, Solid ALL FS	74	(15% 125%)
Carrier/Tracer Recovery	Liquid Scint Tc99, Solid ALL FS	75	(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
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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.

QUALITY CONTROL DATA

GENERAL ENGINEERING LABORATORIES, LLC

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QC Summary

Report Date: August 21, 2006

Page 1 of 6

Client : Connecticut Yankee Atomic Power
362 Injun Hollow Rd

Contact: East Hampton, Connecticut
Mr. Jack McCarthy

Workorder: 168404

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Alpha Spec											
Batch	555696										
QC1201153130	168340011	DUP									
Americium-241	U	-0.000522	U	0.0578	pCi/g	204		(0% - 100%)	BXL1	08/11/06	14:34
		Uncert:		+/-0.278							
		TPU:		+/-0.279							
Curium-242	U	0.00	U	-0.0405	pCi/g	200		(0% - 100%)			
		Uncert:		+/-0.0562							
		TPU:		+/-0.0565							
Curium-243/244	U	-0.0177	U	-0.0517	pCi/g	98		(0% - 100%)			
		Uncert:		+/-0.257							
		TPU:		+/-0.257							
QC1201153132	LCS										
Americium-241	12.8			12.8	pCi/g		100	(75%-125%)			
		Uncert:		+/-1.84							
		TPU:		+/-2.70							
Curium-242			U	-0.0328	pCi/g						
		Uncert:		+/-0.0454							
		TPU:		+/-0.0457							
Curium-243/244	15.5			14.3	pCi/g		92	(75%-125%)			
		Uncert:		+/-1.94							
		TPU:		+/-2.92							
QC1201153129	MB										
Americium-241			U	0.0471	pCi/g						
		Uncert:		+/-0.157							
		TPU:		+/-0.157							
Curium-242			U	-0.0469	pCi/g						
		Uncert:		+/-0.0459							
		TPU:		+/-0.0464							
Curium-243/244			U	-0.00385	pCi/g						
		Uncert:		+/-0.210							
		TPU:		+/-0.210							
QC1201153131	168340011	MS									
Americium-241	13.3	U	-0.000522	12.0	pCi/g		91	(75%-125%)			
		Uncert:		+/-1.38							
		TPU:		+/-2.08							
Curium-242		U	0.00	0.0427	pCi/g						
		Uncert:		+/-0.0837							
		TPU:		+/-0.0839							
Curium-243/244	16.1	U	-0.0177	15.9	pCi/g		99	(75%-125%)			
		Uncert:		+/-1.58							
		TPU:		+/-2.61							
Batch	555697										
QC1201153134	168340011	DUP									
Plutonium-238	U	-0.0155	U	0.0237	pCi/g	956		(0% - 100%)	BXL1	08/11/06	22:51

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QC Summary

Workorder: 168404

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Alpha Spec											
Batch 555697											
Plutonium-239/240	Uncert:	+/-0.0215		+/-0.0465							
	TPU:	+/-0.0216		+/-0.0466							
	U	0.0414	U	-0.0489	pCi/g	2410		(0% - 100%)			
	Uncert:	+/-0.0934		+/-0.124							
QC1201153136 LCS Plutonium-238	TPU:	+/-0.0935		+/-0.124							
			U	0.155	pCi/g			(75%-125%)			
	Uncert:			+/-0.141							
	TPU:			+/-0.142							
Plutonium-239/240	11.8			11.5	pCi/g		98	(75%-125%)			
	Uncert:			+/-0.856							
	TPU:			+/-1.32							
	QC1201153133 MB Plutonium-238			U	0.0552	pCi/g					08/11/06
Uncert:				+/-0.186							
TPU:				+/-0.186							
Plutonium-239/240				U	-0.0978	pCi/g					
	Uncert:			+/-0.0892							
	TPU:			+/-0.0899							
	QC1201153135 168340011 MS Plutonium-238	U	-0.0155	U	0.0539	pCi/g			(75%-125%)		08/11/06
Uncert:		+/-0.0215		+/-0.112							
TPU:		+/-0.0216		+/-0.112							
Plutonium-239/240		12.3	U	0.0414	10.3	pCi/g		84	(75%-125%)		
	Uncert:	+/-0.0934		+/-0.796							
	TPU:	+/-0.0935		+/-1.19							
	Batch 555698 QC1201153138 168340011 DUP Plutonium-241	U	7.28	U	10.1	pCi/g	0		(0% - 100%)	BXL1	08/16/06
Uncert:		+/-6.30		+/-6.39							
TPU:		+/-6.35		+/-6.46							
QC1201153140 LCS Plutonium-241		137			145	pCi/g		106	(75%-125%)		08/16/06
	Uncert:			+/-12.5							
	TPU:			+/-19.9							
	QC1201153137 MB Plutonium-241			U	8.57	pCi/g					08/16/06
Uncert:				+/-6.93							
TPU:				+/-6.98							
QC1201153139 168340011 MS Plutonium-241		138	U	7.28	142	pCi/g		103	(75%-125%)		08/16/06
	Uncert:	+/-6.30		+/-12.4							
	TPU:	+/-6.35		+/-19.7							
	Batch 557837 QC1201158317 168404009 DUP Americium-241	U	-0.0851	U	0.167	pCi/g	616		(0% - 100%)	BXL1	08/16/06
Uncert:		+/-0.136		+/-0.220							
TPU:		+/-0.136		+/-0.221							
Curium-242		U	-0.0253	U	0.241	pCi/g	247		(0% - 100%)		

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QC Summary

Workorder: 168404

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Alpha Spec											
Batch	557837										
Curium-243/244		Uncert:	+/-0.0495								
		TPU:	+/-0.0496								
		U	-0.0479	U	0.0761	pCi/g	879	(0% - 100%)			
		Uncert:	+/-0.0542								
		TPU:	+/-0.0545								
QC1201158319	LCS										
Americium-241	24.5			25.4	pCi/g		104	(75%-125%)			
		Uncert:		+/-2.47							
		TPU:		+/-4.16							
Curium-242				U	0.0477	pCi/g					
		Uncert:		+/-0.127							
		TPU:		+/-0.127							
Curium-243/244	29.7			27.0	pCi/g		91	(75%-125%)			
		Uncert:		+/-2.54							
		TPU:		+/-4.38							
QC1201158316	MB										
Americium-241				U	0.234	pCi/g					
		Uncert:		+/-0.275							
		TPU:		+/-0.277							
Curium-242				U	0.00	pCi/g					
		Uncert:		+/-0.152							
		TPU:		+/-0.152							
Curium-243/244				U	-0.0551	pCi/g					
		Uncert:		+/-0.0624							
		TPU:		+/-0.0628							
QC1201158318	168404009	MS									
Americium-241	26.4	U	-0.0851	29.1	pCi/g		110	(75%-125%)			
		Uncert:	+/-0.136	+/-2.97							
		TPU:	+/-0.136	+/-5.01							
Curium-242		U	-0.0253	U	0.126	pCi/g					
		Uncert:	+/-0.0495	+/-0.247							
		TPU:	+/-0.0496	+/-0.248							
Curium-243/244	32.4	U	-0.0479	31.7	pCi/g		98	(75%-125%)			
		Uncert:	+/-0.0542	+/-3.12							
		TPU:	+/-0.0545	+/-5.39							
Rad Gas Flow											
Batch	556350										
QC1201154645	168404003	DUP									
Strontium-90		U	-0.00343	U	-0.00637	pCi/g	0	(0% - 100%)	BXF1	08/14/06	08:33
		Uncert:	+/-0.0203	+/-0.0152							
		TPU:	+/-0.0203	+/-0.0152							
QC1201154647	LCS										
Strontium-90	1.56			1.30	pCi/g		83	(75%-125%)			
		Uncert:		+/-0.0563							
		TPU:		+/-0.0881							
QC1201154644	MB										
Strontium-90				U	0.0176	pCi/g					
		Uncert:		+/-0.018							
		TPU:		+/-0.018							

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QC Summary

Workorder: 168404

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Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gas Flow											
Batch	556350										
QC1201154646	168404003	MS									
Strontium-90	1.58	U	-0.00343	1.29	pCi/g		82	(75%-125%)			
	Uncert:		+/-0.0203	+/-0.0535							
	TPU:		+/-0.0203	+/-0.0813							
Rad Liquid Scintillation											
Batch	554580										
QC1201150562	168340012	DUP									
Technetium-99		U	0.0338	U 0.266	pCi/g	0		(0% - 100%) EGD1		08/12/06	00:42
	Uncert:		+/-0.192	+/-0.226							
	TPU:		+/-0.192	+/-0.226							
QC1201150564	LCS										
Technetium-99	13.1			13.6	pCi/g		103	(75%-125%)		08/12/06	01:14
	Uncert:			+/-0.496							
	TPU:			+/-0.599							
QC1201150561	MB										
Technetium-99				U 0.0311	pCi/g					08/12/06	00:26
	Uncert:			+/-0.177							
	TPU:			+/-0.177							
QC1201150563	168340012	MS									
Technetium-99	13.0	U	0.0338	12.0	pCi/g		92	(75%-125%)		08/12/06	00:58
	Uncert:		+/-0.192	+/-0.523							
	TPU:		+/-0.192	+/-0.602							
Batch	554582										
QC1201150570	168340011	DUP									
Tritium		U	1.77	U 1.62	pCi/g	0		(0% - 100%) DFA1		08/09/06	15:42
	Uncert:		+/-8.20	+/-7.47							
	TPU:		+/-8.20	+/-7.47							
QC1201150572	LCS										
Tritium	68.3			76.2	pCi/g		111	(75%-125%)		08/09/06	16:14
	Uncert:			+/-14.0							
	TPU:			+/-14.1							
QC1201150569	MB										
Tritium				U 0.586	pCi/g					08/09/06	15:26
	Uncert:			+/-8.01							
	TPU:			+/-8.01							
QC1201150571	168340011	MS									
Tritium	61.3	U	1.77	61.8	pCi/g		101	(75%-125%)		08/09/06	15:58
	Uncert:		+/-8.20	+/-12.2							
	TPU:		+/-8.20	+/-12.3							
Batch	554583										
QC1201150574	168404003	DUP									
Carbon-14		U	0.0937	U 0.0422	pCi/g	0		(0% - 100%) ATH2		08/10/06	01:39
	Uncert:		+/-0.0813	+/-0.075							
	TPU:		+/-0.0813	+/-0.0751							
QC1201150576	LCS										
Carbon-14	7.27			7.14	pCi/g		98	(75%-125%)		08/10/06	03:00
	Uncert:			+/-0.508							
	TPU:			+/-0.520							
QC1201150573	MB										

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QC Summary

Workorder: 168404

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Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anist	Date	Time
Rad Liquid Scintillation										
Batch	554583									
Carbon-14			U	-0.0315	pCi/g					
		Uncert:		+/-0.0776						
		TPU:		+/-0.0776						
QC1201150575	168404003	MS								
Carbon-14	15.1	U	0.0937	13.8	pCi/g	92	(75%-125%)		08/10/06	02:43
		Uncert:	+/-0.0813	+/-1.00						
		TPU:	+/-0.0813	+/-1.03						
Batch	555722									
QC1201153223	168340012	DUP								
Iron-55		U	-26.5	U	5.83	0	(0% - 100%)	MXPI	08/12/06	20:54
		Uncert:	+/-65.1	+/-36.9						
		TPU:	+/-65.1	+/-36.9						
QC1201153225	LCS									
Iron-55	641			660	pCi/g	103	(75%-125%)		08/12/06	21:27
		Uncert:		+/-56.2						
		TPU:		+/-67.2						
QC1201153222	MB									
Iron-55			U	18.2	pCi/g				08/12/06	20:38
		Uncert:		+/-39.6						
		TPU:		+/-39.6						
QC1201153224	168340012	MS								
Iron-55	717	U	-26.5	688	pCi/g	96	(75%-125%)		08/12/06	21:11
		Uncert:	+/-65.1	+/-60.2						
		TPU:	+/-65.1	+/-71.6						
Batch	555723									
QC1201153227	168340012	DUP								
Nickel-63		U	3.79	U	6.68	0	(0% - 100%)	MXPI	08/11/06	11:55
		Uncert:	+/-5.39	+/-7.43						
		TPU:	+/-5.40	+/-7.43						
QC1201153229	LCS									
Nickel-63	512			479	pCi/g	94	(75%-125%)		08/11/06	12:27
		Uncert:		+/-22.4						
		TPU:		+/-27.1						
QC1201153226	MB									
Nickel-63			U	15.7	pCi/g				08/11/06	11:38
		Uncert:		+/-9.92						
		TPU:		+/-9.93						
QC1201153228	168340012	MS								
Nickel-63	530	U	3.79	511	pCi/g	96	(75%-125%)		08/11/06	12:11
		Uncert:	+/-5.39	+/-23.5						
		TPU:	+/-5.40	+/-28.7						

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

GENERAL ENGINEERING LABORATORIES, LLC
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QC Summary

Workorder: 168404

Page 6 of 6

Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
>										
A										
B										
BD										
C										
D										
H										
J										
N/A										
R										
U										
UI										
X										
Y										
^										
h										

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 acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

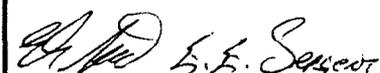
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

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

DISCHARGE CANAL
SURVEY UNIT 9106-0005
RELEASE RECORD

Attachment 2b
Split Sample Assessment Forms
(2 Pages)

Split Sample Assessment Form

Survey Area #: 9106	Survey Unit #: 0005	Survey Unit Name: Discharge Canal						
Sample Plan or WPIR#: 2006-021				SML #: 9106-0005-003				
Sample Description: Comparison of split samples collected from sample measurement location #03 and analyzed using gamma spectroscopy by an off-site vendor laboratory. The standard sample was 9106-0005-003F the comparison sample was 9106-0005-003FS.								
STANDARD				COMPARISON				
Radionuclide	Activity Value	Standard Error	Resolution	Agreement Range	Activity Value	Standard Error	Comparison Ratio	Acceptable (Y/N)
Cs-137	3.39E-02	1.89E-02	2	NONE -	3.31E-01	2.67E-02	9.76	N/A
Co-60	3.15E-01	1.76E-02	18	0.75 - 1.33	6.18E-01	3.69E-02	1.96	N
Sr-90	1.15E-02	3.23E-03	4	0.50- 2.00	4.13E-03	4.35E-03	0.36	N/A
K-40	1.11E+01	4.20E-01	26	0.75 1.33	1.16E+01	4.38E-01	1.05	Y
<p>Comments/Corrective Actions: In consideration of Cs-137 results, guidance for agreement ranges, obtained from USNRC Inspection Procedure 84750, does not address resolution ratios less than 4, therefore, a determination of acceptability for such ratios is not appropriate. Since Co-60 has a likelihood to be present in the sample matrix in particulate form, one would not necessarily expect it to be homogeneously mixed from processing of the sample-split aliquot. Regarding Sr-90 results, the guidance is primarily intended for use with gamma spectroscopy (Sr-90 was measured using liquid scintillation). Consequently, a much smaller quantity of media was used for the analyses from the sample and its split (on the order of 1 gram). A much higher level of sample homogenization than is routinely performed would be required to achieve consistent agreement. While the measurement and sample preparation methodology is appropriate for FSS purposes, the cited guidance considers that the sample methodology may not be well suited for sample analyses by means other than gamma spectroscopy. As K-40 was found to be present in both samples at an acceptable level of agreement, no further action is warranted.</p>					Table is provided to show acceptance criteria used to assess split samples.			
					Resolution		Agreement Range	
					4	7	0.50	2.00
					8	15	0.60	1.66
16	50	0.75	1.33					
51	200	0.80	1.25					
> 200		0.85	1.18					
Performed By: 			Date: 10-30-06		Reviewed By: 		Date: 11/20/06	

WPIR – Work Plan and Inspection Record
SML – Sample Measurement Location designation

Split Sample Assessment Form

Survey Area#:	9106	Survey Unit #:	0005	Survey Unit Name: Discharge Canal							
Sample Plan or WPIR#: 2006-0021				SML #: 9106-0005-018							
Sample Description: Comparison of split samples collected from sample measurement location #18 and analyzed using gamma spectroscopy by an off-site vendor laboratory. The standard sample was 9106-0005-018F, the comparison sample was 9106-0005-018FS.											
STANDARD				COMPARISON							
Radionuclide	Activity Value	Standard Error	Resolution	Agreement Range	Activity Value	Standard Error	Comparison Ratio	Acceptable (Y/N)			
Cs-137	3.39E-02	1.54E-02	2	N/A	1.05E-01	3.98E-02	3.10	N/A			
Co-60	4.19E-02	1.62E-02	3	N/A	0.00E+00	7.25E-02	0.00	N/A			
Sr-90	5.37E-02	7.20E-03	8	0.60- 1.66	4.84E-03	4.30E-03	0.09	N/A			
K-40	1.11E+01	4.20E-01	26	0.75 - 1.33	1.16E+01	4.38E-01	1.05	Y			
Comments/Corrective Actions: In consideration of Cs-137 and Co-60 results, guidance for agreement ranges, obtained from USNRC Inspection Procedure 84750, does not address resolution ratios less than 4, therefore, a determination of acceptability for such ratios is not appropriate. K-40 was found to be present in both samples at an acceptable level of agreement. Regarding Sr-90 results, the guidance is primarily intended for use with gamma spectroscopy (Sr-90 was measured using liquid scintillation). Consequently, a much smaller quantity of media was used for the analyses from the sample and its split (on the order of 1 gram). A much higher level of sample homogenization than is routinely performed would be required to achieve consistent agreement. While the measurement and sample preparation methodology is appropriate for FSS purposes, the cited guidance considers that the sample methodology may not be well suited for sample analyses by means other than gamma spectroscopy. No further action is warranted.				Table is provided to show acceptance criteria used to assess split samples.							
								Resolution		Agreement Range	
								4	7	0.50	2.00
				8	15	0.60	1.66				
16	50	0.75	1.33								
51	200	0.80	1.25								
> 200		0.85	1.18								
Performed By:			Date:		Reviewed By:		Date:				
<i>Ode Randall</i>			10-30-06		<i>[Signature]</i> EG SERGEANT		10/30/06				

WPIR – Work Plan and Inspection Record

SML – Sample Measurement Location designation

DISCHARGE CANAL
SURVEY UNIT 9106-0005
RELEASE RECORD

Attachment 2c
Preliminary Data Forms
(2 Pages)

Preliminary Data Review Form - Samples for the Sign Test

Survey Unit: 9106- 0005
 Survey Unit Name: Discharge Canal

Classification: 2
 Survey Media: Soil
 Type of Survey: Final Status Survey
 Type of Measurement: Radionuclide Specific
 Number of Measurements: 15
 Operational DCGL: 1

BASIC STATISTICAL QUANTITIES

	Cs-137	Co-60	Sr-90
Minimum Value:	-2.55E-02	-7.92E-03	-1.93E-03
Maximum Value:	4.73E-01	1.38E+00	5.37E-02
Mean:	1.33E-01	2.49E-01	9.79E-03
Median:	7.09E-02	4.19E-02	6.68E-03
Standard Deviation:	1.34E-01	4.25E-01	1.33E-02

RADIONUCLIDE CONCENTRATION (pCi/g)

NUMBER	Cs-137	Co-60	Sr-90	Identified?	Identified?	Identified?
9106-0005-001F	2.88E-02	1.91E-02	5.10E-03	Y	N	N
9106-0005-002F	6.60E-02	8.95E-02	8.79E-03	Y	Y	N
9106-0005-003F	3.09E-01	3.15E-01	1.15E-02	Y	Y	Y
9106-0005-004F	1.63E-01	2.10E-01	6.21E-03	Y	Y	N
9106-0005-005F	-2.55E-02	9.87E-03	9.56E-03	N	N	Y
9106-0005-007F	-5.19E-04	-7.92E-03	5.15E-03	N	N	N
9106-0005-008F	1.86E-01	1.69E-01	-1.56E-03	Y	Y	N
9106-0005-009F	1.81E-01	2.14E-02	1.30E-02	Y	N	Y
9106-0005-010F	2.60E-01	1.38E+00	1.34E-02	Y	Y	Y
9106-0005-011F	5.76E-02	0.00E+00	1.49E-02	Y	N	Y
9106-0005-013F	5.31E-02	1.55E-02	-1.93E-03	Y	N	N
9106-0005-014F	4.73E-01	1.12E+00	3.27E-03	Y	Y	N
9106-0005-015F	7.09E-02	2.78E-03	6.68E-03	Y	N	N
9106-0005-017F	1.39E-01	3.43E-01	-8.59E-04	Y	Y	N
9106-0005-018F	3.39E-02	4.19E-02	5.37E-02	Y	Y	Y

Performed By: *Paul Rumball*

Date: 10-26-06

Independent Review: *Robert Massengill*

Date: 10-26-06

Preliminary Data Review Form - Judgemental Samples

Survey Unit: 9106- 0005
 Survey Unit Name: Discharge Canal
 Classification: 2
 Survey Media: Soil
 Type of Survey: Final Status Survey
 Type of Measurement: Radionuclide Specific
 Number of Measurements: 1
 Operational DCGL: 1

BASIC STATISTICAL QUANTITIES

	Cs-137	Co-60	Sr-90
RANGE Minimum Value:	-1.86E-02	2.07E-03	9.07E-04
Maximum Value:	-1.86E-02	2.07E-03	9.07E-04
Mean:	-1.86E-02	2.07E-03	9.07E-04
Median:	-1.86E-02	2.07E-03	9.07E-04
Standard Deviation:	1.36E-01	4.55E-02	3.01E-02

RADIONUCLIDE CONCENTRATION (pCi/g)

NUMBER	Cs-137	Co-60	Sr-90		Identified?	
9106-0005-016F	-1.86E-02	2.07E-03	9.07E-04	N	N	N

Performed By: Dal Russell

Date: 10-26-06

Independent Review: Robert M. Segel

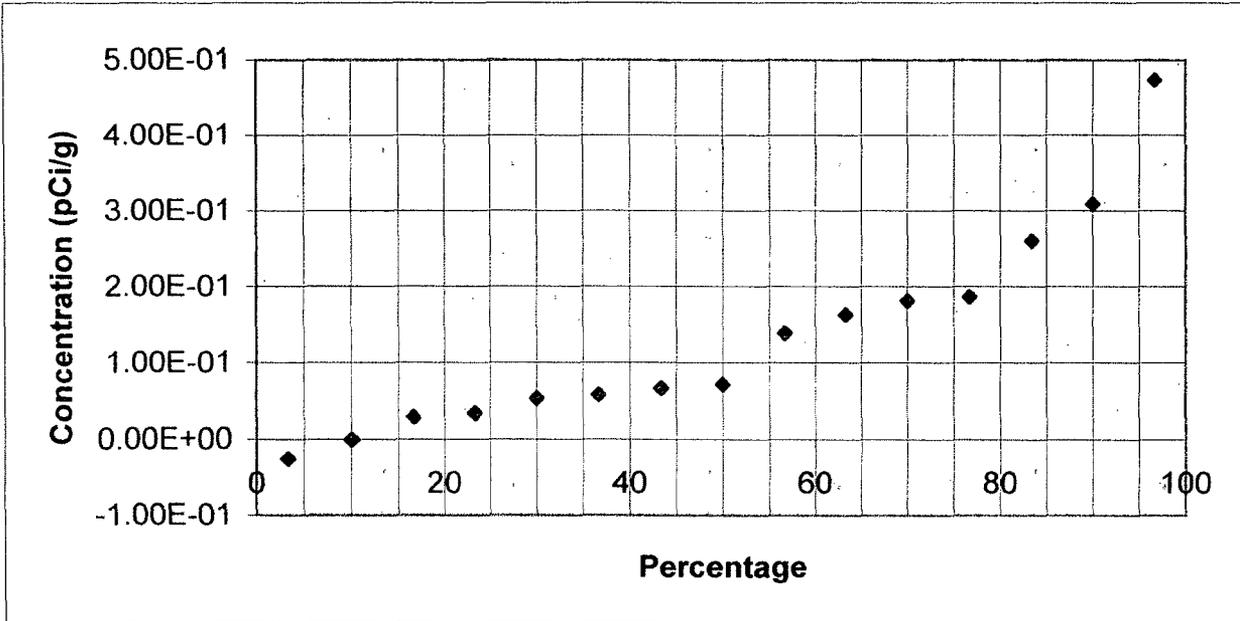
Date: 10-26-06

DISCHARGE CANAL
SURVEY UNIT 9106-0005
RELEASE RECORD

Attachment 2d
Graphical Representation of Data
(6 Pages)

Quantile Plot For Cesium - 137

Survey Unit: 9106-0005
 Survey Unit Name: Discharge Canal
 Mean: 1.33E-01 pCi/g



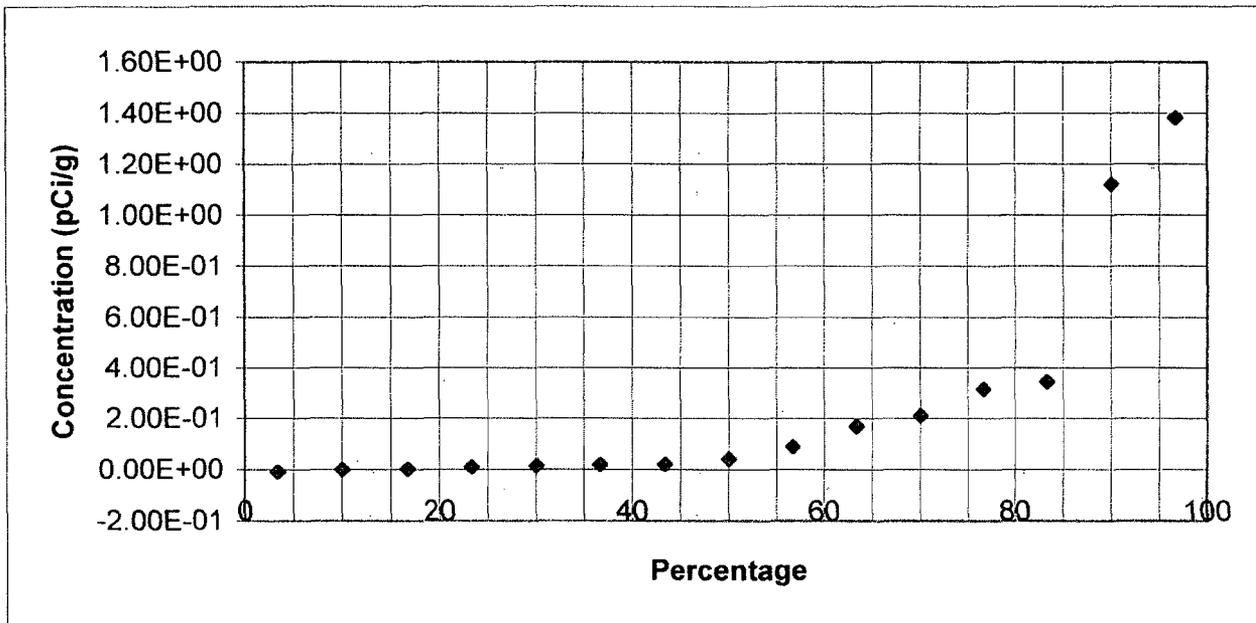
Cs-137	Rank	Percentage
-2.55E-02	1	3 %
-5.19E-04	2	10 %
2.88E-02	3	17 %
3.39E-02	4	23 %
5.31E-02	5	30 %
5.76E-02	6	37 %
6.60E-02	7	43 %
7.09E-02	8	50 %
1.39E-01	9	57 %
1.63E-01	10	63 %
1.81E-01	11	70 %
1.86E-01	12	77 %
2.60E-01	13	83 %
3.09E-01	14	90 %
4.73E-01	15	97 %

Prepared By: Dan Marshall
 Reviewed By: Robert Masserill

Date: 10-26-06
 Date: 102606

Quantile Plot For Cobalt - 60

Survey Unit: 9106-0005
 Survey Unit Name: Discharge Canal
 Mean: 2.49E-01 pCi/g



Co-60	Rank	Percentage
-7.92E-03	1	3 %
0.00E+00	2	10 %
2.78E-03	3	17 %
9.87E-03	4	23 %
1.55E-02	5	30 %
1.91E-02	6	37 %
2.14E-02	7	43 %
4.19E-02	8	50 %
8.95E-02	9	57 %
1.69E-01	10	63 %
2.10E-01	11	70 %
3.15E-01	12	77 %
3.43E-01	13	83 %
1.12E+00	14	90 %
1.38E+00	15	97 %

Prepared By: Paul Kamball
 Reviewed By: Robert Massengill

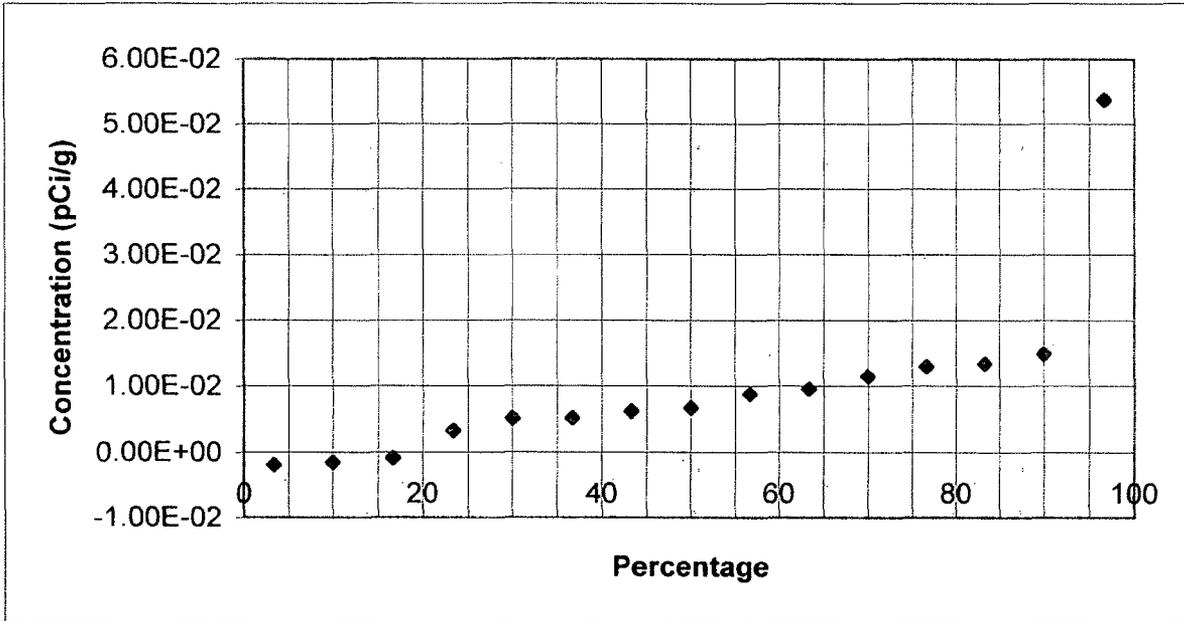
Date: 10-26-06
 Date: 12-28-06

Quantile Plot For Strontium - 90

Survey Unit: 9106-0005

Survey Unit Name: Discharge Canal

Mean: 9.79E-03 pCi/g



Sr-90	Rank	Percentage
-1.93E-03	1	3 %
-1.56E-03	2	10 %
-8.59E-04	3	17 %
3.27E-03	4	23 %
5.10E-03	5	30 %
5.15E-03	6	37 %
6.21E-03	7	43 %
6.68E-03	8	50 %
8.79E-03	9	57 %
9.56E-03	10	63 %
1.15E-02	11	70 %
1.30E-02	12	77 %
1.34E-02	13	83 %
1.49E-02	14	90 %
5.37E-02	15	97 %

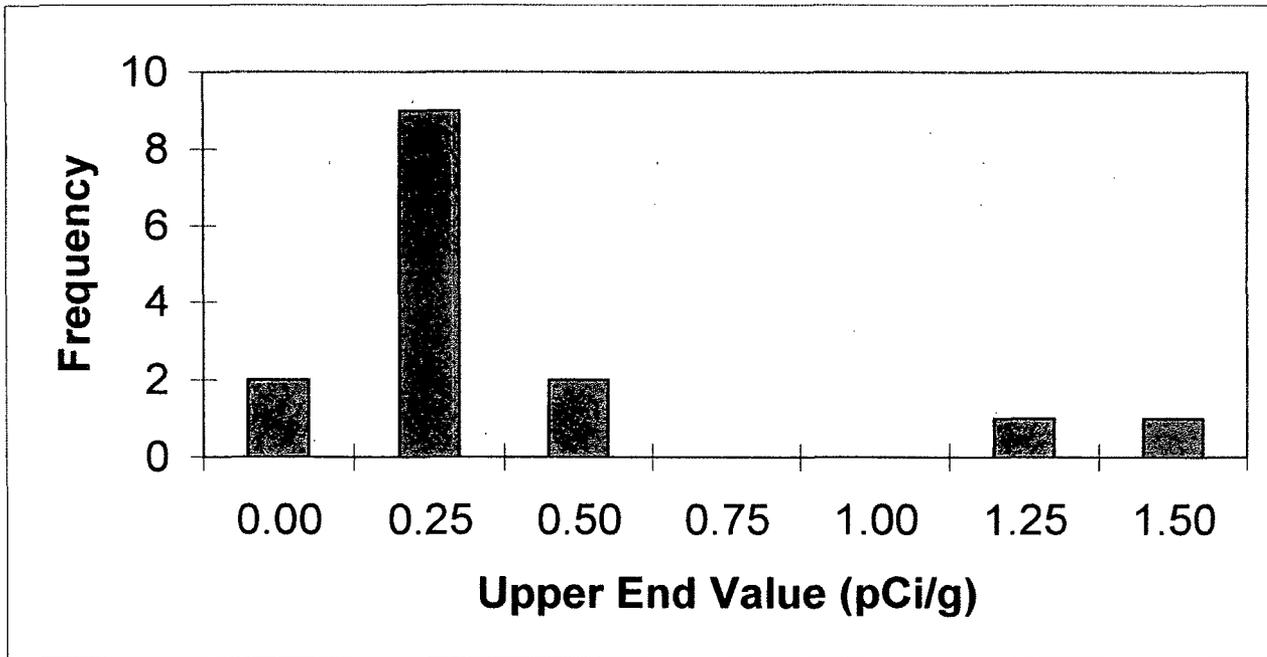
Prepared By: *Paul Knudsen*
 Reviewed By: *Robert Masserelli*

Date: *10-26-06*
 Date: *12-26-06*

Frequency Plot For Cobalt-60

Survey Unit: 9106-0005
 Survey Unit Name: Discharge Canal

Mean: 0.249 pCi/g



Upper End Value	Observation Frequency	Observation % Frequency
0.00	2	13%
0.25	9	60%
0.50	2	13%
0.75	0	0%
1.00	0	0%
1.25	1	7%
1.50	1	7%
Total	15	100%

Prepared By: *Dan Marshall*

Date: 10-30-06

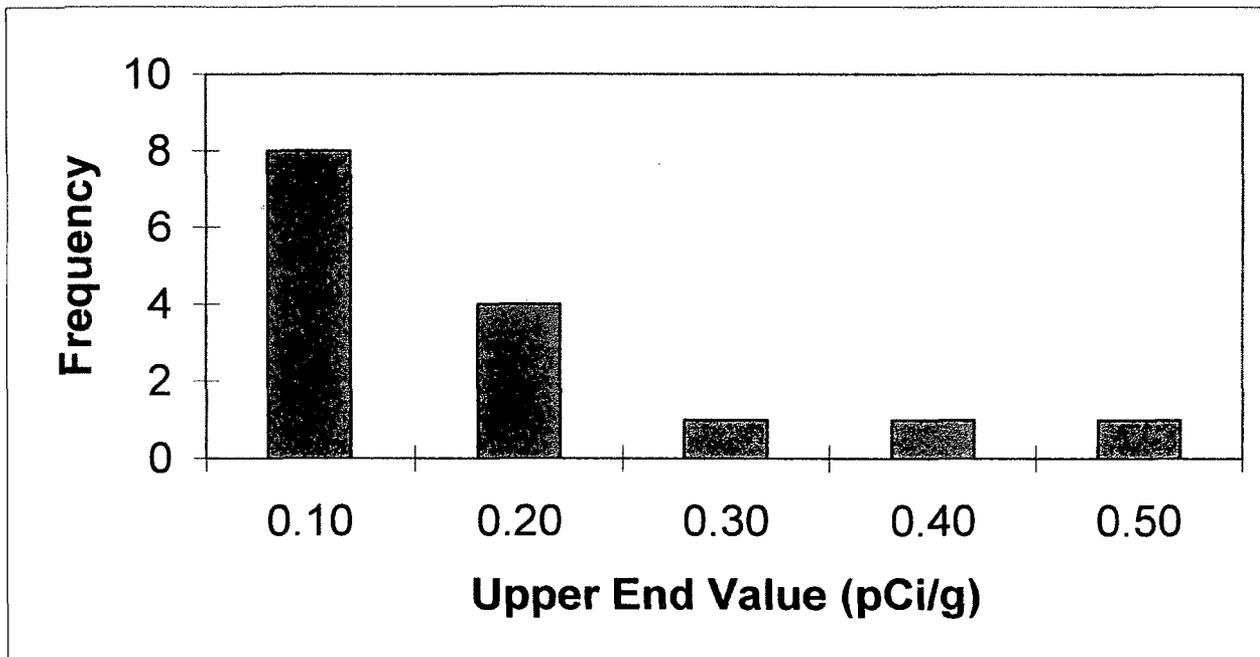
Reviewed By: *Robert Massengill*

Date: 10-30-06

Frequency Plot For Cs - 137

Survey Unit: 9106-0005
 Survey Unit Name: Discharge Canal

Mean: 0.133 pCi/g



Upper End Value	Observation Frequency	Observation % Frequency
0.10	8	53%
0.20	4	27%
0.30	1	7%
0.40	1	7%
0.50	1	7%
Total	15	100%

Prepared By: *Paul Runkall*

Date: 10-30-06

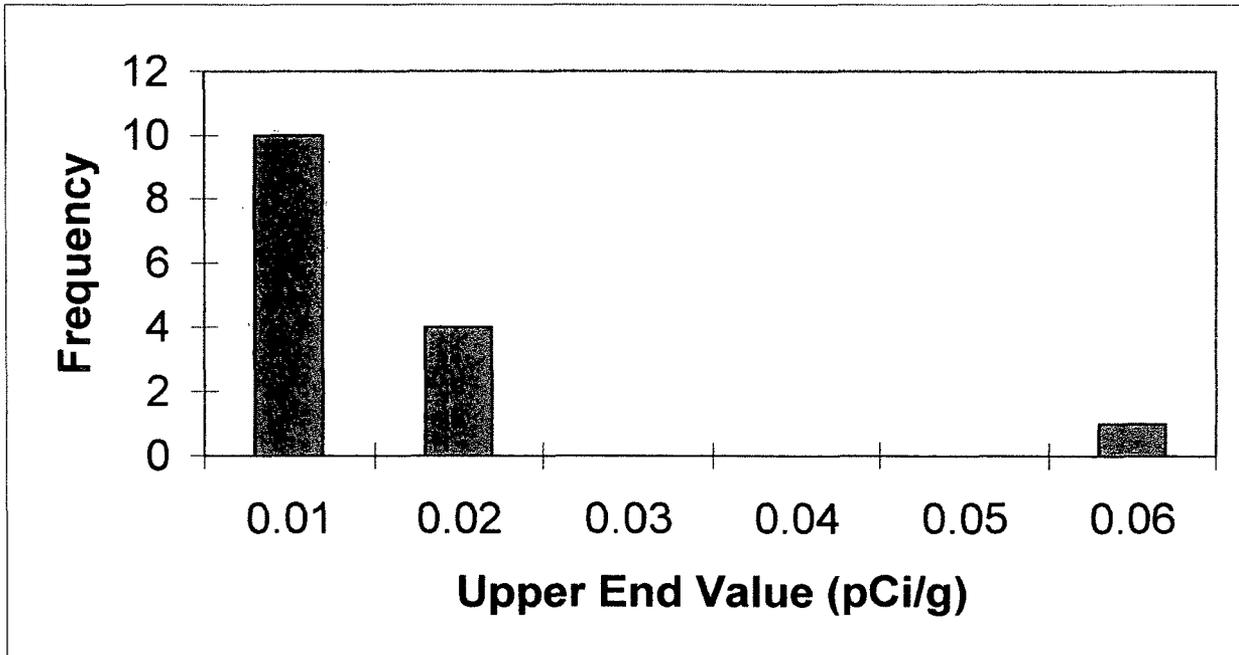
Reviewed By: *Robert Massengill*

Date: 10-30-06

Frequency Plot For Sr -90

Survey Unit: 9106-0005
 Survey Unit Name: Discharge Canal

Mean: 0.010 pCi/g



Upper End Value	Observation Frequency	Observation % Frequency
0.01	10	67%
0.02	4	27%
0.03	0	0%
0.04	0	0%
0.05	0	0%
0.06	1	7%
Total	15	100%

Prepared By: Deal Marshall

Date: 10-30-06

Reviewed By: Robert Massery

Date: 10-30-06

DISCHARGE CANAL
SURVEY UNIT 9106-0005
RELEASE RECORD

Attachment 2e
Sign Test Calculation
(1 Page)

Sign Test Calculation Sheet For Multiple Radionuclides

Survey Unit Number: 9106-0005				
Survey Unit Name: Discharge Canal				
WP&IR#: 2006-021				
Classification : 2		TYPE I (α error):0.05	TYPE I (β error):0.05	
Radionuclides: Cs-137		Co-60		
Survey Design DCGL (pCi/g): 6.0116		2.8956		
Results Cs-137	Results Co-60	Weighted Sum (W_s)	DCGL-Result	Sign
2.88E-02	1.91E-02	1.57E-02	9.84E-01	1
6.60E-02	8.95E-02	4.93E-02	9.51E-01	1
3.09E-01	3.15E-01	1.70E-01	8.30E-01	1
1.63E-01	2.10E-01	1.05E-01	8.95E-01	1
-2.55E-02	9.87E-03	7.28E-03	9.93E-01	1
-5.19E-04	-7.92E-03	1.55E-03	9.98E-01	1
1.86E-01	1.69E-01	8.80E-02	9.12E-01	1
1.81E-01	2.14E-02	4.85E-02	9.51E-01	1
2.60E-01	1.38E+00	5.31E-01	4.69E-01	1
5.76E-02	0.00E+00	2.22E-02	9.78E-01	1
5.31E-02	1.55E-02	1.25E-02	9.87E-01	1
4.73E-01	1.12E+00	4.68E-01	5.32E-01	1
7.09E-02	2.78E-03	1.84E-02	9.82E-01	1
1.39E-01	3.43E-01	1.41E-01	8.59E-01	1
3.39E-02	4.19E-02	6.57E-02	9.34E-01	1
Number of Positive Differences (S+):			15	

Critical Value: 11

Survey Unit: Meets Acceptance Criterion

Performed By: *Paul Marshall*

Date: 10-26-06

Independent Review: *Robert Massengill*

Date: 10-26-06

DISCHARGE CANAL
SURVEY UNIT 9106-0005
RELEASE RECORD

Attachment 2f
COMPASS DQA Surface Soil Report with
Retrospective Power Curve
(3 Pages)

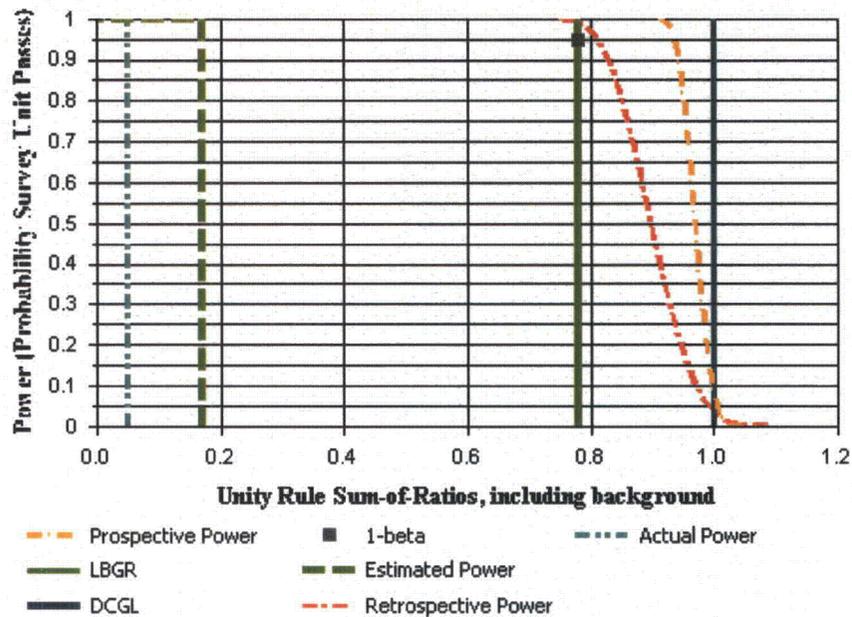


DQA Surface Soil Report

Assessment Summary

Site:	9106-0005 (19 mrem/yr)		
Planner(s):	Dale Randall		
Survey Unit Name:	9106-0005		
Report Number:	1		
Survey Unit Samples:	15		
Reference Area Samples:	0		
Test Performed:	Sign	Test Result:	Not Performed
Judgmental Samples:	0	EMC Result:	Not Performed
Assessment Conclusion:	<i>Reject Null Hypothesis (Survey Unit PASSES)</i>		

Retrospective Power Curve





DQA Surface Soil Report

Survey Unit Data

NOTE: Type = "S" indicates survey unit sample.
Type = "R" indicates reference area sample.

Sample Number	Type	Co-60 (pCi/g)	Cs-137 (pCi/g)	SrY-90 (pCi/g)
9106-0005-001F	S	0.02	0.03	0.01
9106-0005-002F	S	0.09	0.07	0.01
9106-0005-003F	S	0.32	0.31	0.01
9106-0005-004F	S	0.21	0.16	0.01
9106-0005-005F	S	0.01	-0.03	0.01
9106-0005-007F	S	-0.01	0	0.01
9106-0005-008F	S	0.17	0.19	0
9106-0005-009F	S	0.02	0.18	0.01
9106-0005-010F	S	1.38	0.26	0.01
9106-0005-011F	S	0	0.06	0.01
9106-0005-013F	S	0.02	0.05	0
9106-0005-014F	S	1.12	0.47	0
9106-0005-015F	S	0	0.07	0.01
9106-0005-017F	S	0.34	0.14	0
9106-0005-018F	S	0.04	0.03	0.05

Modified Data (Unity Rule SOR)

NOTE: Type = "S" indicates survey unit sample.
Type = "R" indicates reference area sample.

Sample Number	Type	Sum-of-Ratios (SOR)
9106-0005-001F	S	0.02
9106-0005-002F	S	0.05
9106-0005-003F	S	0.17
9106-0005-004F	S	0.1
9106-0005-005F	S	0.01
9106-0005-007F	S	0
9106-0005-008F	S	0.09
9106-0005-009F	S	0.05
9106-0005-010F	S	0.53
9106-0005-011F	S	0.02
9106-0005-013F	S	0.01
9106-0005-014F	S	0.47
9106-0005-015F	S	0.02
9106-0005-017F	S	0.14
9106-0005-018F	S	0.07



DQA Surface Soil Report

Basic Statistical Quantities Summary

Statistic	Survey Unit	Background	DQO Results
Sample Number	15	N/A	N=13
Mean (SOR)	0.12	N/A	0.17
Median (SOR)	0.05	N/A	N/A
Std Dev (SOR)	0.16	N/A	0.06
High Value (SOR)	0.53	N/A	N/A
Low Value (SOR)	0.00	N/A	N/A