

Final Status Survey Final Report Phase VI

**Appendix A11
Survey Unit Release Record
9522-0006, Southeast Site Grounds
(Non-Protected Area)**

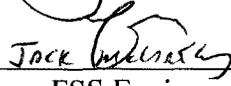
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CYAPCO
FINAL STATUS SURVEY RELEASE RECORD
SOUTHEAST SITE GROUNDS (NON-PROTECTED AREA)
SURVEY UNIT 9522-0006

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1. SURVEY UNIT DESCRIPTION

Survey Unit 9522-0006 (Southeast Site Grounds (non-protected area) is designated as Final Status Survey (FSS) Class 1 and consists of approximately one thousand, nine hundred and eighty-seven square meters (1,987 m²) of uninhabited land and is located approximately seven hundred and eighty feet (780 ft) from the reference coordinate system benchmark used at Haddam Neck Plant (HNP) (see Attachment 1). The survey unit is bounded as follows: land Survey Unit 9312-0007 and land Survey Unit 9312-0008 to the north (called north as oriented with the north to south flow of the Connecticut River), land Survey Unit 9522-0005 to the west, land Survey Unit 9522-0003 and land Survey Unit 9522-0004 to the south, and land Survey Unit 9522-0007 to the east. The survey unit is located along the north boundary of Survey Area 9522. The majority of the survey unit is flat and de-vegetated. This is a result of soil grading in support of previous remediation. The survey unit has a moderate slope running from east to west.

The reference coordinates associated with this survey unit are E010 through E013 by S072 through S075 (refer to "*HNP License Termination Plan*" (LTP) Section 5.4.4). The reference coordinates provide the maximum dimensions of a rectangle containing this survey unit. Some areas contained in this rectangle may not be part of this survey unit. The boundary of the survey unit was defined using a Global Positioning System (GPS) based on the Connecticut State Plane System North American Datum (NAD) 1927.

2. CLASSIFICATION BASIS

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

The "*Classification Basis Summary*" conducted for Survey Unit 9522-0006 consisted of:

- a) A review of the 10CFR50.75 (g) (1) database,
- b) A review of the "*Initial Characterization Report*" and the "*Historic Site Assessment Supplement*,"
- c) Historic and current survey records review,
- d) Visual inspections and a "walk-down."

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

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The source documents, the "*Connecticut Yankee Haddam Neck Characterization Report*" and "*Initial Classification for Survey Areas at Connecticut Yankee*", were incorporated by reference in LTP, Revision 0. Survey Unit 9522-0006 was created in 2006 under Revision 4 of the LTP and was designated as Class 1.

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

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

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

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Adverse Condition Report (ACR) 95-0250 states that in 1995, several discrete particles were found outside of the RCA, but within the Industrial Area in Survey Area 9522. Based upon a review of the survey map, it appears that one (1) of these particles was located within this survey unit. In addition, two (2) other areas exhibiting elevated activity were identified in 1997 in this survey unit. In all cases, the areas of elevated activity were removed upon discovery.

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

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

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

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

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

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

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

3. DATA QUALITY OBJECTIVES (DQO)

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

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

The primary objective of the FSS plan was to demonstrate that the level of residual radioactivity in Survey Unit 9522-0006 did not exceed the release criteria specified in the LTP and that the potential dose from residual radioactivity is As Low As Reasonably Achievable (ALARA).

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

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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

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

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

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

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

Equation 2

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

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

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

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

- (1) Bold indicates those radionuclides considered Hard to Detect (HTD)
- (2) The Base Case Soil DCGL(s) are specified by the LTP in Chapter 6 and are equivalent to twenty-five (25) mrem/yr TEDE
- (3) The Operational DCGL is equivalent to achieving fifteen (15) mrem/yr TEDE
- (4) The required MDC is equivalent to achieving one (1) mrem/yr TEDE
- (5) Americium-241 can be analyzed by gamma and alpha spectroscopy and is considered to be Easy to Detect (ETD). The preferred result is the alpha spectroscopy's when both analyses are performed

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

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

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

4. SURVEY DESIGN

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

The DQO process determined that both Cs-137 and Co-60 would be the radionuclides of concern in Survey Unit 9522-0006 (refer to Section 3). The characterization survey did not include any HTD radionuclides of concern for this survey unit. Based on other survey data, surrogate DCGLs were not required as part of the survey design for this survey unit via screening under LTP Section 5.4.7.2, "*Gross Activity DCGLs*". Other radionuclides that were positively identified in concentrations greater than the screening criteria during the performance of this FSS would be evaluated to ensure adequate survey design.

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

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

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

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

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

Table 3 - Sample Measurement Locations with Associated GPS Coordinates

Designation	Northing	Easting
9522-0006-001F	236476.51	668987.07
9522-0006-002F	236443.48	668968.00
9522-0006-003F	236443.48	669006.14
9522-0006-004F	236443.48	669044.28
9522-0006-005F	236410.44	668948.92
9522-0006-006F	236410.44	668987.07
9522-0006-007F	236410.44	669025.21
9522-0006-008F	236410.44	669063.36

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Table 3 - Sample Measurement Locations with Associated GPS Coordinates

Designation	Northing	Easting
9522-0006-009F	236377.41	668968.00
9522-0006-010F	236377.41	669006.14
9522-0006-011F	236377.41	669044.28
9522-0006-012F	236377.41	669082.43
9522-0006-013F	236377.41	669120.57
9520-0003-014F	236344.37	668987.07
9522-0006-015F	236344.37	669025.21
9522-0006-016F	236344.37	669063.36
9522-0006-017F	236311.34	669044.28

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

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

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

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

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Table 4 – Synopsis of the Survey Design

Feature	Design Criteria	Basis
Survey Unit Land Area	1,987 m ²	Based on AutoCAD-LT
Number of Measurements	17 (17 systematic grid)	Type 1 and Type 2 errors were 0.05, sigma was 0.31 ρCi/g, the LBGR was set at 0.5 to maintain Relative Shift in the range of 1 and 3
Grid Spacing	11.63 m	Based on triangular grid
Operational DCGL	4.75 ρCi/g Cs-137 2.29 ρCi/g Co-60	Administratively set to achieve fifteen (15) mrem/yr TEDE ⁽¹⁾
Soil Investigation Level	4.75 ρCi/g Cs-137 2.29 ρCi/g Co-60	The Operational DCGL meets the LTP criteria for a Class 1 survey unit
Scan Survey Area Coverage	Approximately 100% of the area	The LTP requires 100% area coverage for Class 1 survey units
Scan Investigation Level	An instrument response greater than the Scan MDC(DCGL _{EMC}) of 2,744 cpm	Based upon a Minimum Detectable Count Rate (MDCR) of 1,597 cpm and a corresponding MDC _{scan} of 7 ρCi/g Cs-137 and 1.83 ρCi/g Co-60

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

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5. SURVEY IMPLEMENTATION

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

A single scan area was established that constituted approximately 100% of the surface area of Survey Unit 9522-0006. Grid lines, one (1) meter wide, were painted on the ground of the scan area. A background survey was performed around the survey unit and it was determined that, using an Eberline E-600 with a SPA-3 sodium iodide detector, background ranged from 6,340 counts per minute (cpm) up to 11,300 cpm.

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

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

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

Two (2) samples (9522-0006-013F and 9522-0006-015F) were randomly selected for HTD radionuclide analysis.

The implementation of survey specific quality control measures included the collection of one (1) sample (9522-0006-008F) for "split sample" analysis.

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6. SURVEY RESULTS

All field survey activities were conducted between November 17, 2006 and December 06, 2006.

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

Table 5 – Scan Results for Sample Measurement Locations

Sample Measurement Location	Highest Logged Reading (kcpm)	Action Level ⁽¹⁾ (kcpm)	> Action Level ⁽²⁾
1	13.60	13.03	YES
2	8.96	10.63	NO
3	9.82	10.39	NO
4	10.80	10.41	YES
5	7.98	10.41	NO
6	8.90	9.84	NO
7	9.18	10.47	NO
8	12.30	10.27	YES
9	9.28	10.88	NO
10	8.03	8.28	NO
11	10.50	12.50	NO
12	11.60	11.75	NO
13	9.58	10.77	NO
14	8.75	10.81	NO
15	9.14	9.22	NO
16	9.48	11.43	NO
17	6.50	8.08	NO

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

(2) The FSS plan requires movement of the sample measurement location to the area within the 1 meter radius yielding the response above the action level. Sample locations 9522-0006-001F, 9522-0006-004F and 9522-0006-008F were moved accordingly.

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The scan areas, that comprised approximately 100% of the total surface area for the survey unit, were scanned for elevated radiation levels. The areas were scanned in accordance with the FSS plan on December 05, 2006 through December 06, 2006. Several elevated measurement locations were identified during scanning. Table 6 provides an overview of the scan area survey. Complete scan results are provided in Attachment 2.

Table 6 - Scan Area Results

Scan Strips	Highest Logged Reading (kepm)	Action Level ⁽¹⁾ (kepm)	Elevated Reading Identification ⁽²⁾	Investigation Sample
1 thru 10	9.22	10.03	NONE	NONE
11 thru 20	11.10	9.97	9522-06-ER-00-13-1	9522-0006-018I
21 thru 30	8.87	9.46	NONE	NONE
31 thru 40	8.58	7.48	9522-06-ER-00-36-1	9522-0006-019I
			9522-06-ER-00-36-2	9522-0006-020I
41 thru 50	8.38	10.20	NONE	NONE
51 thru 60	13.70	10.67	9522-06-ER-00-54-1	9522-0006-021I
61 thru 70	11.20	9.81	9522-06-ER-00-66-1	9522-0006-022I
			9522-06-ER-00-67-2	9522-0006-023I
			9522-06-ER-00-69-1	9522-0006-024I
			9522-06-ER-00-69-2	9522-0006-025I
71 thru 80	9.17	9.67	NONE	NONE
81 thru 90	9.34	9.54	NONE	NONE
91 thru 100	11.50	10.93	9522-06-ER-00-96-1	9522-0006-026I
101 thru 110	13.50	12.82	9522-06-ER-00-104-1	9522-0006-027I
			9522-06-ER-00-108-1	9522-0006-028I
111 thru 115	11.60	12.39	NONE	NONE

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

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

The off-site laboratory employed for the radiological analyses of samples was General Engineering Laboratories, LLC. The laboratory analyzed the seventeen (17) samples collected for non-parametric statistical testing, the associated field split and the eleven (11) confirmatory samples using gamma spectroscopy. Gamma spectroscopy analysis was performed to the required MDCs.

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Gamma spectroscopy results identified some radionuclides meeting the accepted criteria for detection (i.e., a result greater than two standard deviations uncertainty). However, Cs-137 and Co-60 were the only gamma-emitting radionuclides reported in concentrations exceeding the de-selection criteria.

Cs-137 was identified in ten (10) and Co-60 was identified in two (2) of the seventeen (17) samples collected for non-parametric statistical testing. The mean of the gamma spectroscopic analysis results for the sample population indicated that Cs-137 was present at levels lower than the concentrations of Cs-137 found in soil at off-site locations within the vicinity of the HNP as presented in the Health Physics TSD BCY-HP-0063. A summary of the seventeen (17) samples collected for non-parametric statistical testing results is provided in Table 7.

Table 7 - Summary of Gamma Spectroscopy Results for Surface Soil Samples Comprising the Statistical Sample Population

Sample Number	Cs-137 pCi/g	Co-60 pCi/g
9522-0006-001F	1.62E-01	7.65E-02
9522-0006-002F	4.82E-02	-2.14E-03
9522-0006-003F	8.24E-02	2.23E-02
9522-0006-004F	4.20E-02	4.86E-03
9522-0006-005F	2.13E-02	4.22E-03
9522-0006-006F	2.19E-02	1.83E-03
9522-0006-007F	0.00E+00	-1.73E-03
9522-0006-008F	5.53E-02	4.91E-02
9522-0006-009F	4.80E-02	-2.88E-03
9522-0006-010F	1.85E-02	-4.90E-04
9522-0006-011F	-1.37E-02	7.78E-03
9522-0006-012F	-1.13E-03	-4.69E-04
9522-0006-013F	1.02E-01	2.12E-03
9522-0006-014F	3.16E-03	3.03E-04
9522-0006-015F	6.20E-02	2.19E-02
9522-0006-016F	2.10E-02	-6.35E-03
9522-0006-017F	5.29E-02	1.69E-02

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

Sr-90 was positively identified (i.e., a result greater than two standard deviations uncertainty) in both of the two samples analyzed for HTD radionuclides. As previously stated in Section 4 of this report, the criteria for de-selection of a radionuclide is a concentration that is less than 5% of the Operational DCGL for individual radionuclides and less than 10% of the Operational DCGLs for aggregates. For Sr-90, the Operational DCGL is 0.93 $\mu\text{Ci/g}$ to achieve a TEDE of fifteen (15) mrem/yr. The analytical results for Sr-90 in the two samples selected for HTD analysis respectively equated to 6% and 8% of the Operational DCGL. Subsequently, Sr-90 was added as a radionuclide of concern for this survey unit. In response, all samples that comprised the statistical sample population for this survey unit was subjected to additional analysis for the presence of Sr-90. The results are provided below in Table 8.

**Table 8 - Summary of Sr-90 Analysis Results for Surface Soil Samples
Comprising the Statistical Sample Population**

Sample Number	Sr-90 $\mu\text{Ci/g}$
9522-0006-001F	8.64E-03
9522-0006-002F	3.51E-02
9522-0006-003F	1.69E-02
9522-0006-004F	4.54E-02
9522-0006-005F	2.08E-03
9522-0006-006F	3.86E-02
9522-0006-007F	3.07E-02
9522-0006-008F	5.06E-02
9522-0006-009F	2.79E-02
9522-0006-010F	2.90E-02
9522-0006-011F	9.65E-02
9522-0006-012F	6.27E-02
9522-0006-013F	5.28E-02

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Table 8 - (continued)

Sample Number	Sr-90 pCi/g
9522-0006-014F	1.40E-02
9522-0006-015F	7.18E-02
9522-0006-016F	9.01E-03
9522-0006-017F	3.03E-02

The “sum-of-fractions” or “unity rule” is the mathematical test used to evaluate compliance with radiological criteria for license termination when more than one radionuclide has been determined to be potentially present. The combination of the fractions of each detected radionuclide against their respective Operational DCGL must be less than or equal to one (1). The unity rule is:

Equation 3

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

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

The results of the unity rule calculation for the radionuclides of concern in the statistical sample population for Survey Unit 9522-0006 are provided in Table 9 below.

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

Sample Number	Fraction of the Operational DCGL ⁽¹⁾⁽²⁾			Unity
	Cs-137	Co-60	Sr-90	
9522-0006-001F	0.03	0.03	-	0.07
9522-0006-002F	0.01	-	0.04	0.05
9522-0006-003F	0.02	-	-	0.02
9522-0006-004F	0.01	-	0.05	0.06
9522-0006-005F	-	-	-	0.00
9522-0006-006F	0.00	-	0.04	0.05
9522-0006-007F	-	-	0.03	0.03
9522-0006-008F	0.01	0.02	0.05	0.09

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Table 9 – (continued)

Sample Number	Fraction of the Operational DCGL ⁽¹⁾⁽²⁾			Unity
	Cs-137	Co-60	Sr-90	
9522-0006-009F	0.01	-	0.03	0.04
9522-0006-010F	-	-	0.03	0.03
9522-0006-011F	-	-	0.10	0.10
9522-0006-012F	-	-	0.07	0.07
9522-0006-013F	0.02	-	0.06	0.08
9522-0006-014F	-	-	-	0.00
9522-0006-015F	0.01	-	0.08	0.09
9522-0006-016F	-	-	-	0.00
9522-0006-017F	0.01	-	0.03	0.04

(1) The Operational DCGL from Table 2 is 4.75 pCi/g for Cs-137, 2.29 pCi/g for Co-60 and 0.93 pCi/g for Sr-90 to achieve fifteen (15) mrem/yr TEDE respectively.

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

7. QUALITY CONTROL

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

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

8. INVESTIGATIONS AND RESULTS

Eleven (11) confirmatory surface soil samples were collected from scan areas exhibiting elevated scan readings. The confirmatory soil samples were analyzed for Cs-137 and Co-60 in accordance with the DQOs used during the survey design.

As previously stated, Sr-90 was positively identified (i.e. a result greater than two (2) standard deviations uncertainty) in the two (2) surface soil samples selected for HTD analysis. Consequently, Sr-90 was added as a radionuclide of concern for this survey unit. All surface soil samples comprising the statistical sample

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population were subjected to additional analysis for the presence of Sr-90. Subsequently, the statistical sample population as a whole was evaluated to assess the distribution of the detected radionuclides of concern. The radionuclide distribution percentage for each sample in the population was calculated by dividing the concentration of each detected (i.e. a result greater than two (2) standard deviations uncertainty) radionuclide by the total activity concentration in the sample, expressing the abundance of the specific nuclide in the sample compared against the total activity. The mean radionuclide distribution was then calculated by taking the average of the individual sample distribution fractions. The resultant distribution fractions are presented in Table 10 below.

Table 10 – Radionuclide Distribution Fraction for the Radionuclides of Concern in the Statistical Soil Sample Population

Detected Radionuclide	Distribution Fraction
Cs-137	0.4177
Co-60	0.0455
Sr-90	0.5368

The distribution fractions stated above shows an unusually high abundance of Sr-90 in relation to the other detected radionuclides in the sample population. This is due to the fact that the average concentration of Cs-137 in the samples was present at concentrations much lower than normally observed environmental levels.

The potential presence of Sr-90 in the investigative samples taken that were not subjected to direct analysis for Sr-90 was addressed by using a surrogate relationship to another detectable radionuclide as recommended in NUREG-1575 (MARSSIM), in this case Cs-137. To demonstrate compliance with the release criteria by directly comparing the individual investigative sample results with the DCGL(s) as required by MARSSIM, the DCGL for the surrogate radionuclide, in this case Cs-137 was scaled to account for the fact that it was being used as an indicator for additional radionuclides, in this case Sr-90. This result is referred to as the surrogate DCGL.

The surrogate DCGL was computed based on the distribution ratio between the difficult-to-detect radionuclides and the easy-to-detect radionuclides. In this case, the radionuclide distribution fraction for the statistical soil sample population was used. While it is acknowledged that the radionuclide fraction from the statistical population does not establish a clear relationship between Sr-90 and Cs-137, the resultant ratio is conservative and was used in this calculation. The surrogate DCGL is computed as follows:

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Equation 4

$$Surrogate_{DCGL} = \frac{1}{\left[\left(\frac{1}{DCGL_{Sur}} \right) + \left(\frac{R_2}{DCGL_2} \right) + \left(\frac{R_3}{DCGL_3} \right) + \dots + \left(\frac{R_n}{DCGL_n} \right) \right]}$$

Where: DCGL_{Sur} = Surrogate radionuclide DCGL
 DCGL_{2,3,...n} = DCGL for radionuclides to be represented by the surrogate
 R_n = Ratio of concentration (or nuclide mixture fraction) of radionuclide “n” to surrogate radionuclide

Using the DCGLs presented in Table 2 and the soil nuclide distribution presented in Table 10, the following surrogate calculation was deduced;

Equation 5

$$Surrogate_{DCGL(Cs-137)} = \frac{1}{\left[\left(\frac{1}{4.75_{(Cs-137)}} \right) + \left(\frac{.540/.420}{0.93_{(Sr-90)}} \right) \right]} = 0.628 \text{ pCi/g}$$

Subsequently, the surrogate DCGL that was used for Cs-137 in this survey unit for direct comparison of investigative sample results to demonstrate compliance with the operational dose limit of fifteen (15) mrem per year is 0.628 pCi/g.

The samples are denoted as shown in Table 6, with the sample results shown in Table 11 below.

Table 11 - Confirmatory Sample Results

Sample Number	Cs-137 pCi/g	Co-60 pCi/g	Unity Fraction (1) (2)
9522-0006-018I	9.18E-03	2.41E-03	0.016
9522-0006-019I	3.53E-02	1.17E-02	0.061
9522-0006-020I	1.23E-02	6.55E-03	-
9522-0006-021I	4.59E-02	-1.13E-02	0.068
9522-0006-022I	4.40E-02	-5.02E-03	0.068
9522-0006-023I	5.38E-02	4.20E-02	0.104
9522-0006-024I	9.64E-03	5.95E-03	-
9522-0006-025I	-5.83E-03	9.88E-04	-

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Table 11 – (continued)

Sample Number	Cs-137 pCi/g	Co-60 pCi/g	Unity Fraction (1) (2)
9522-0006-026I	1.45E-01	3.55E-01	0.386
9522-0006-027I	1.10E-01	1.32E-01	0.233
9522-0006-028I	2.50E-02	2.82E-02	-

(1) The Operational DCGL from Table 2 is 4.75 pCi/g for Cs-137 and 2.29 pCi/g for Co-60 to achieve fifteen (15) mrem/yr TEDE respectively. The Operational DCGL for Cs-137 has been adjusted to 0.628 pCi/g as a surrogate to account for the potential presence of HTD radionuclide Sr-90.

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

9. REMEDIATION AND RESULTS

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

10. CHANGES FROM THE FINAL STATUS SURVEY PLAN

Additional analysis for the presence of Sr-90 was performed on the statistical survey population as a consequence of the results from the initial samples selected for HTD analysis. This was to ensure that the dose consequence from the possible presence of Sr-90 in the surface soils in this survey unit was adequately addressed.

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11. DATA QUALITY ASSESSMENT (DQA)

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

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

The preliminary data review consisted of calculating basic statistical quantities (e.g., mean, median, standard deviation). The mean and median values are well below the Operational DCGL. Also, the retrospective power curve shows that a sufficient number of samples were collected to achieve the desired power. Therefore, the survey unit meets the unrestricted release criteria with adequate power as required by the DQOs. The basic statistical quantities for the statistical sample population are provided below in Table 12.

Table 12 – Basic Statistical Quantities for Cs-137, Co-60 and Sr-90 from the Final Status Survey

	Cs-137 pCi/g	Co-60 pCi/g	Sr-90 pCi/g
DCGL _{op} :	4.75E+00	2.29E+00	9.30E-01
Minimum Value:	-1.37E-02	-6.35E-03	2.08E-03
Maximum Value:	1.62E-01	7.65E-02	9.65E-02
Mean:	4.27E-02	1.14E-02	3.66E-02
Median:	4.20E-02	2.12E-03	3.07E-02
Standard Deviation:	4.36E-02	2.16E-02	2.49E-02

For Cs-137 and Sr-90, the range of the data, about four (4) standard deviations, was not a particularly large variation considering that the levels were essentially at existing environmental levels where such variation is to be expected. For Cs-137, the difference between the mean and median was about 2% of the standard deviation which indicates some slight skewness in the data. The data was represented graphically through posting plots, a frequency plot, and a quantile plot. The frequency plot indicates positive skewness as confirmed by the calculated skew of 1.31 for Cs-137 and 0.83 for Sr-90.

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Co-60, although included in the FSS plan for compliance purposes, was positively identified in only two (2) of the seventeen (17) samples collected for non-parametric statistical testing. Assessment of the basic statistical quantities and graphical representation of Co-60 was not considered useful given the limited number of data points to represent the distribution.

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

12. ANOMALIES

Eberline E-600 #1105 using a SPA-3 sodium iodide detector #1009 was used on 12/05/06 to perform surface area scanning in Survey Unit 9522-0006, specifically in scan areas designated as #25 through #40, #49 through #60, #77 through #80 and #85 through #92. The instrument was properly issued, response checked and returned in accordance with HNP Procedure RPM 5.1-4, "*Control of Survey Instruments*". The results of the pre and post-use response checks performed for this instrument on 12/05/06 were satisfactory. While assessing the data, it was discovered that the electronic file for this instrument representing the survey results for the scans cited were not present in the computer folder designated for the storage of instrument download data.

All survey scan data for FSS is also logged by hand in the "Daily Survey Journal" for the survey unit. The redundant written scan survey log was reviewed and deemed sufficient to re-create the scan data for assessment. The documentation for instrument issue and operation was also reviewed to ensure data validity.

Condition Report #06-0258 was generated to document this occurrence. It is believed that a loose cable connection on the instrument may have prevented the uploading of the data while erroneously giving the technician user indication that the instrument was uploading properly.

Also in this survey unit, Condition Report #07-0006 was generated to document that several Chain-of-Custody (COC) forms that were included in the final report from General Engineering Laboratories, LLC. were not properly signed in the space designated as "relinquished by" in accordance with Procedure RPM 5.1-5, "*Chain of Custody for Final Status Survey Samples.*" The FSS Engineer supervising the shipment of the samples checked all labels and seals during the sample packaging. The technician failed to sign the COC form denoting this. The FSS Engineer, having witnessed the packaging and shipment has signed the COC form for the technician. There is no indication that this incident impacted the quality of the data for this survey unit.

13. CONCLUSION

Survey Unit 9522-0006 has met the final DQOs of the FSS plan. The ALARA criteria for soils as specified in Chapter 4 of the LTP were achieved. Elevated Measurement Comparison was not required.

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All identified radionuclides of concern were used for statistical testing to determine the adequacy of the survey unit for FSS.

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

The dose contribution from soil is 0.800 mrem/yr TEDE based on the average radionuclide concentrations in the samples used for non-parametric statistical sampling.

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

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

The average total dose from residual radioactivity in this survey unit, including exposures from the three (3) components as described in Section 3, that is, residual radioactivity in soil, existing groundwater radioactivity, and future groundwater radioactivity from the burial of concrete foundations or footings from site buildings containing residual radioactivity, will not exceed 4.800 mrem/yr TEDE. Therefore, Survey Unit 9522-0006 is acceptable for unrestricted release.

14. ATTACHMENTS

14.1 Attachment 1 – Figures

14.2 Attachment 2 – Scan Results

14.3 Attachment 3 – Laboratory Data

14.4 Attachment 4 – DQA Results

SOUTHEAST SITE GROUNDS (NON-PROTECTED AREA)
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ATTACHMENT 1 (FIGURES)

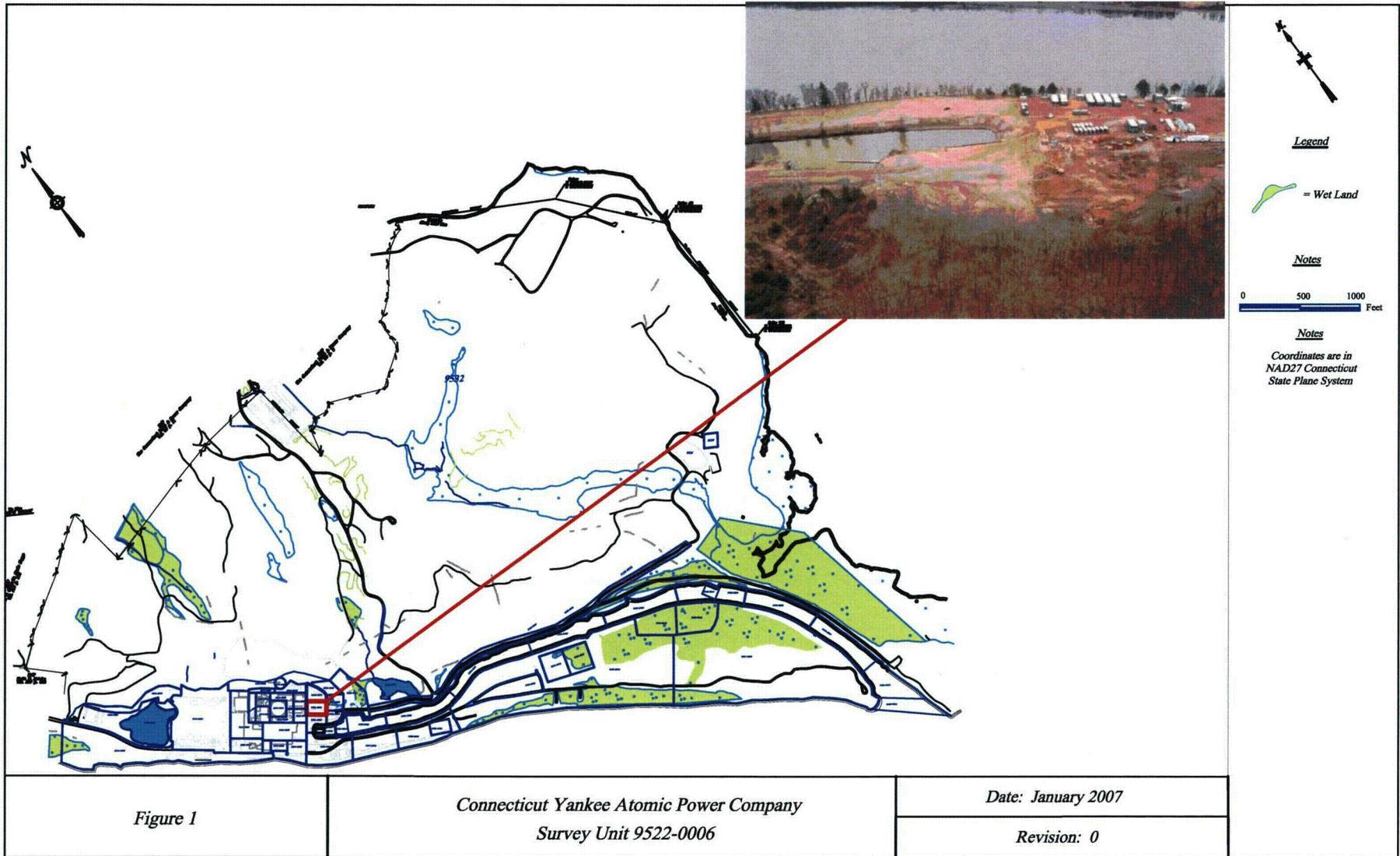


Figure 1

Connecticut Yankee Atomic Power Company
Survey Unit 9522-0006

Date: January 2007

Revision: 0

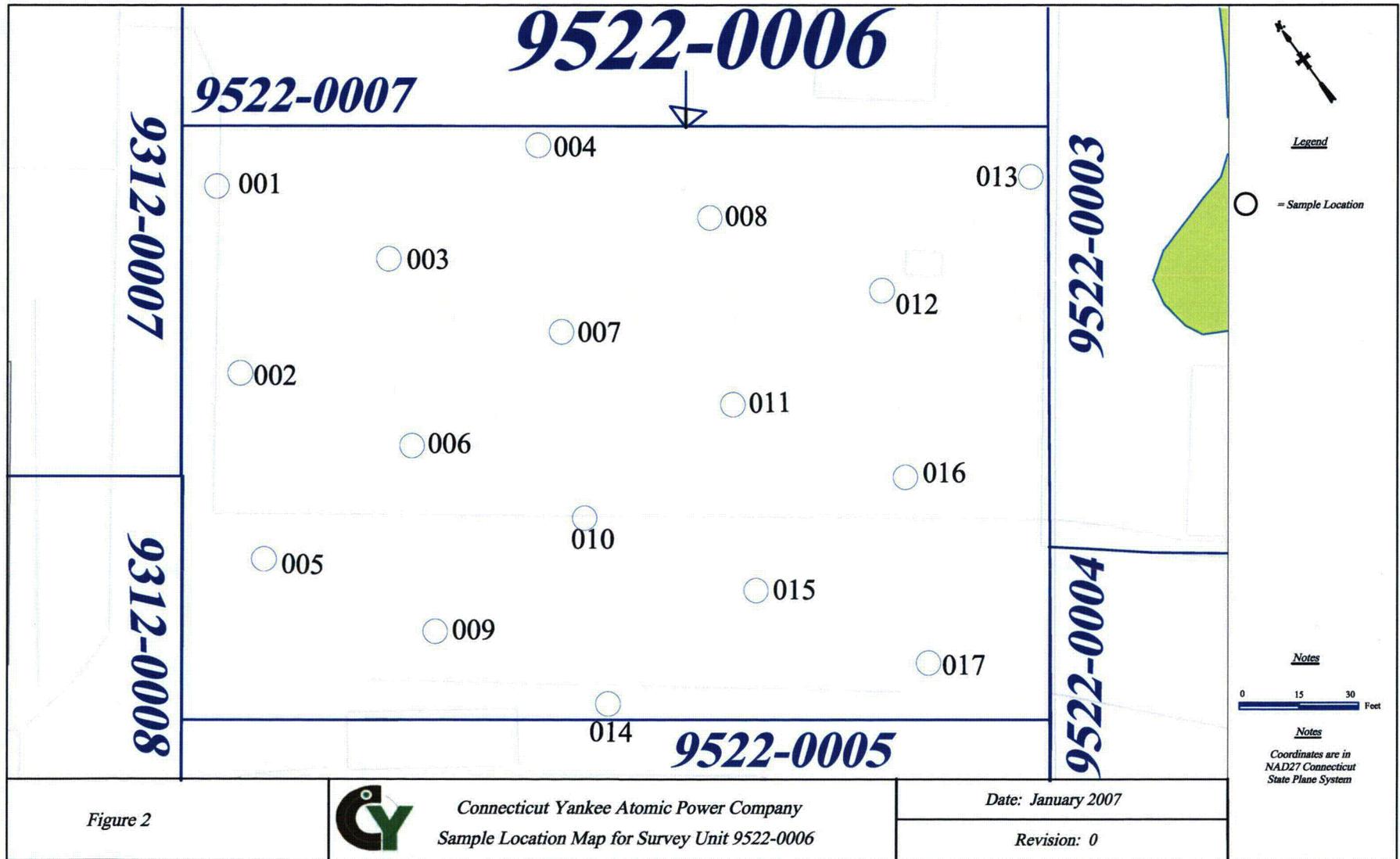


Figure 2



Connecticut Yankee Atomic Power Company
Sample Location Map for Survey Unit 9522-0006

Date: January 2007

Revision: 0

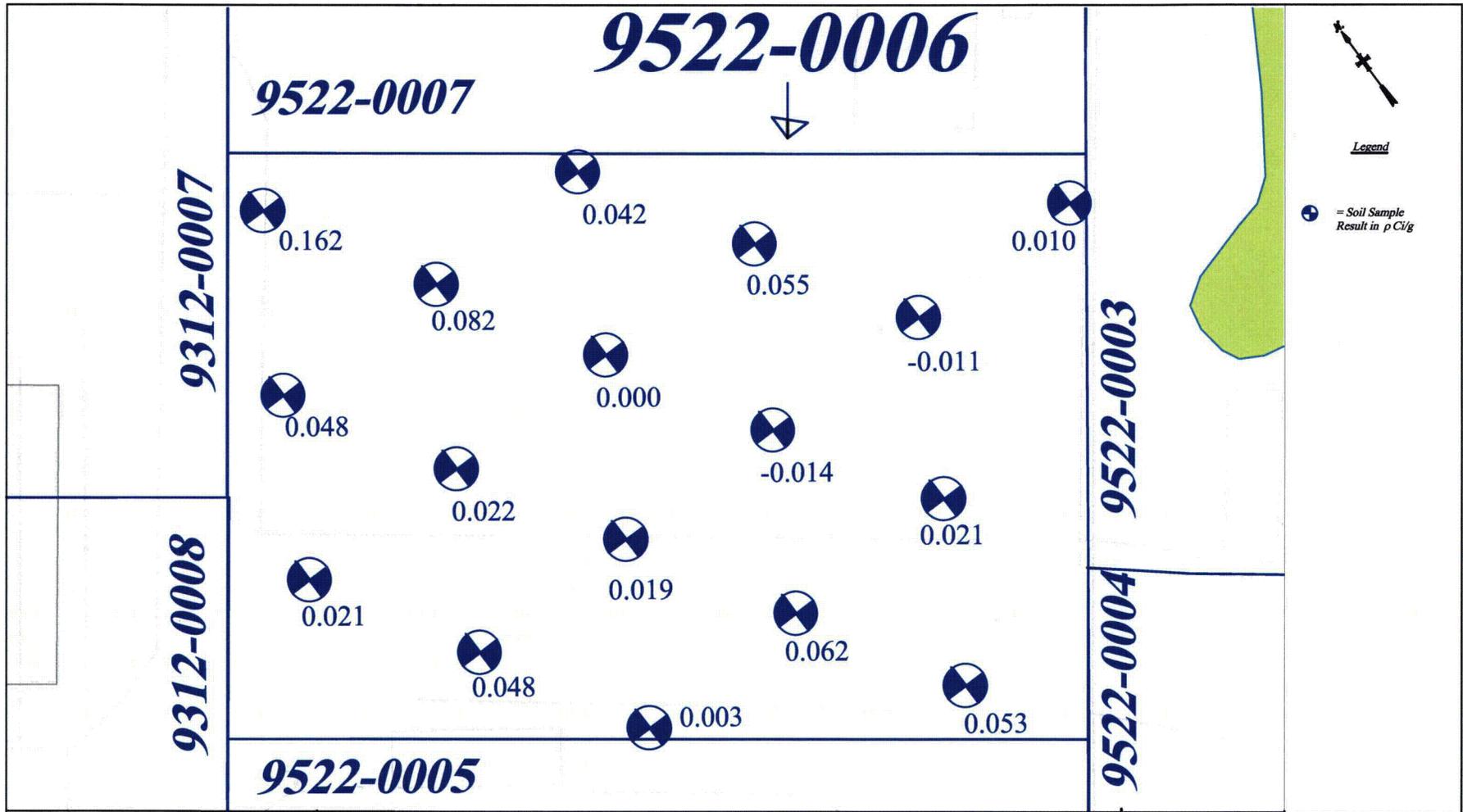


Figure 3



Connecticut Yankee Atomic Power Company
 9522-0006 Final Status Survey Design
 Cesium-137 Posting Plot

Date	By
January 2007	R. Massengill

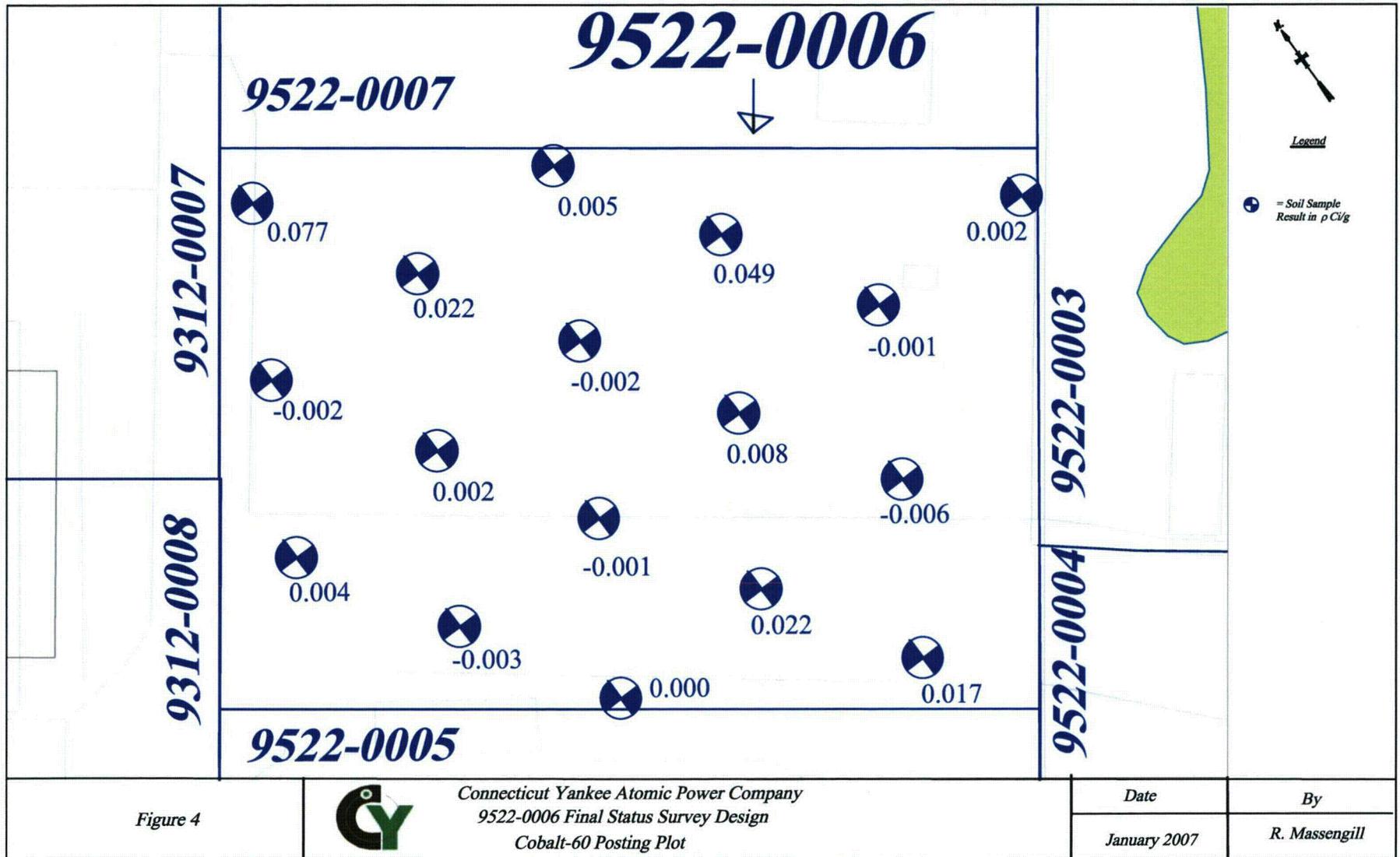


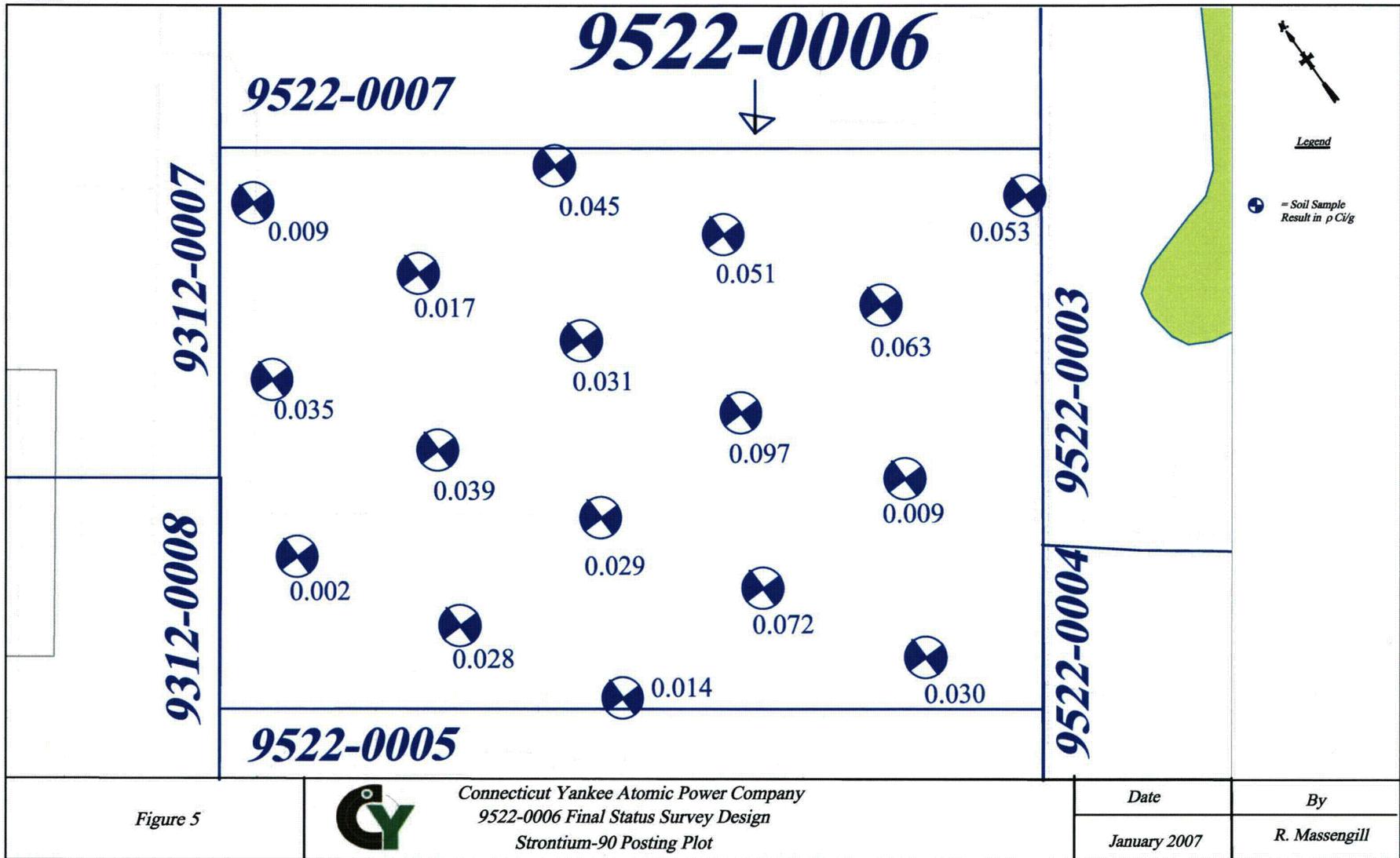
Figure 4



Connecticut Yankee Atomic Power Company
 9522-0006 Final Status Survey Design
 Cobalt-60 Posting Plot

Date
January 2007

By
R. Massengill



9522-0007

9522-0006

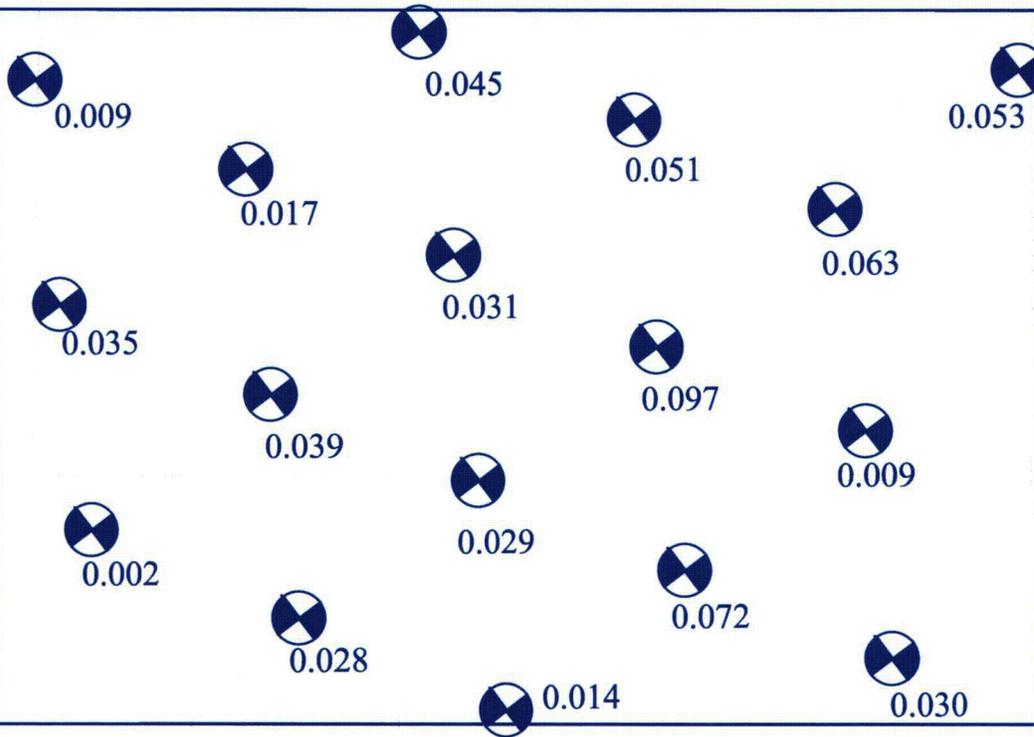


Figure 5



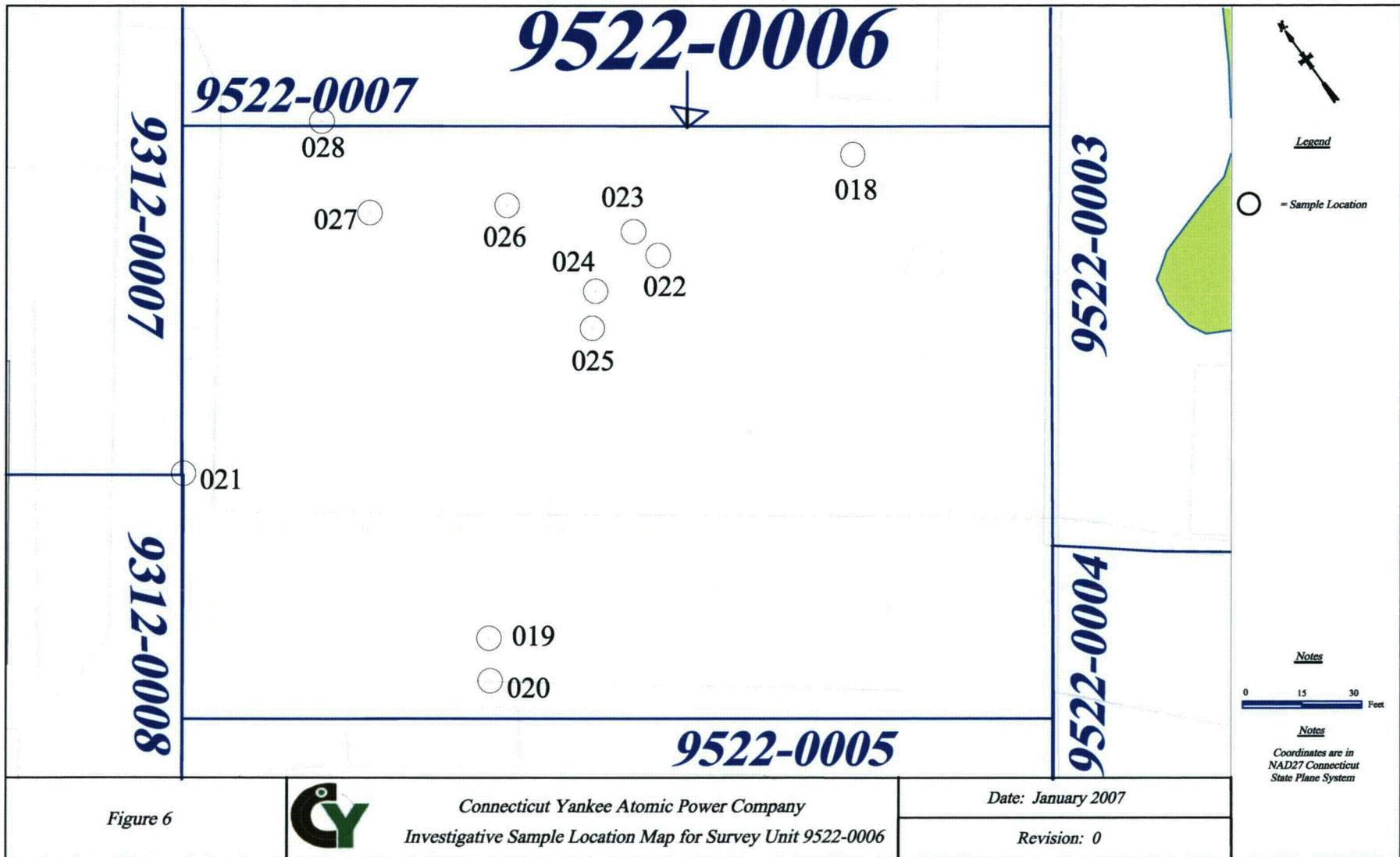
Connecticut Yankee Atomic Power Company
 9522-0006 Final Status Survey Design
 Strontium-90 Posting Plot

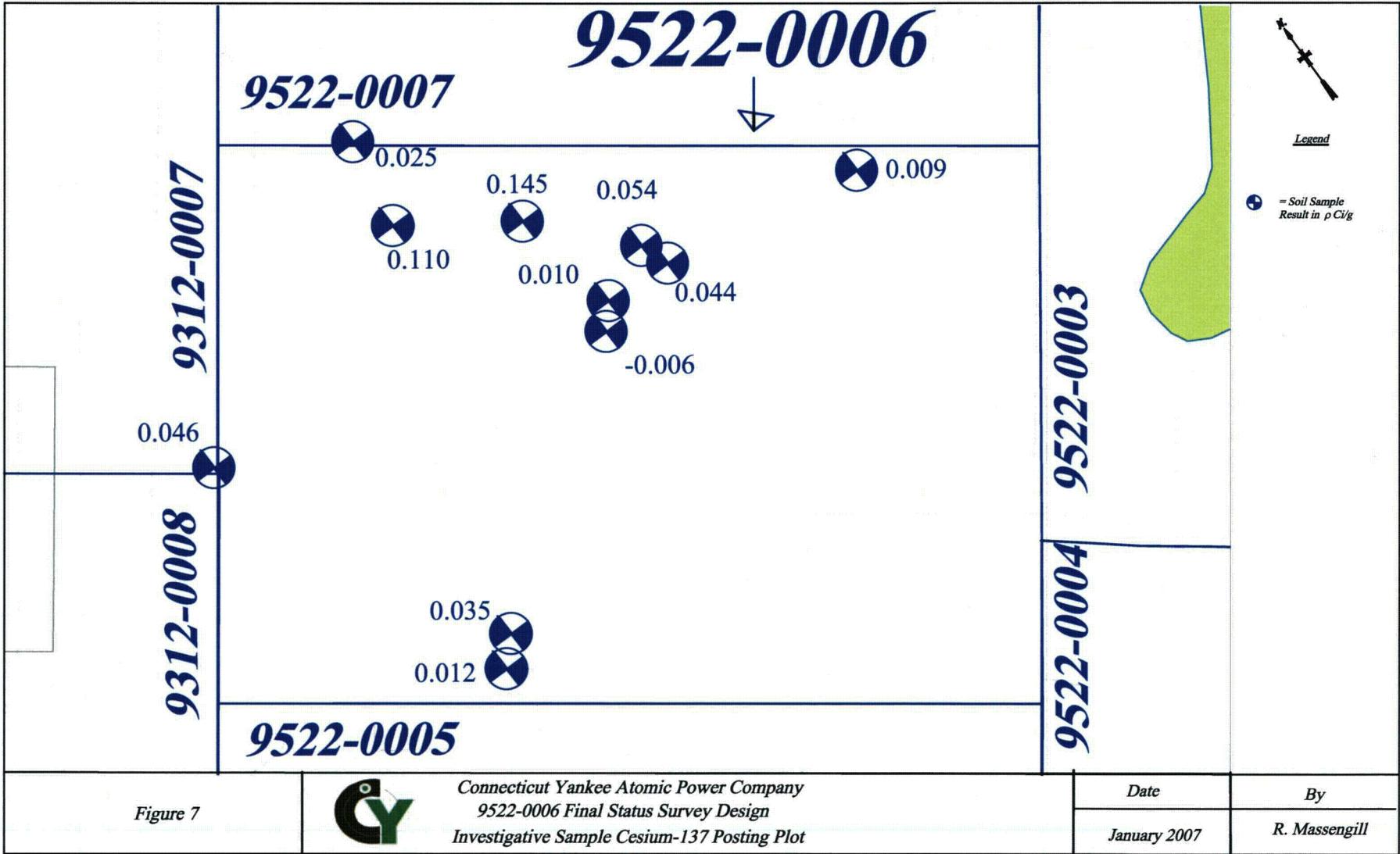
Date

By

January 2007

R. Massengill





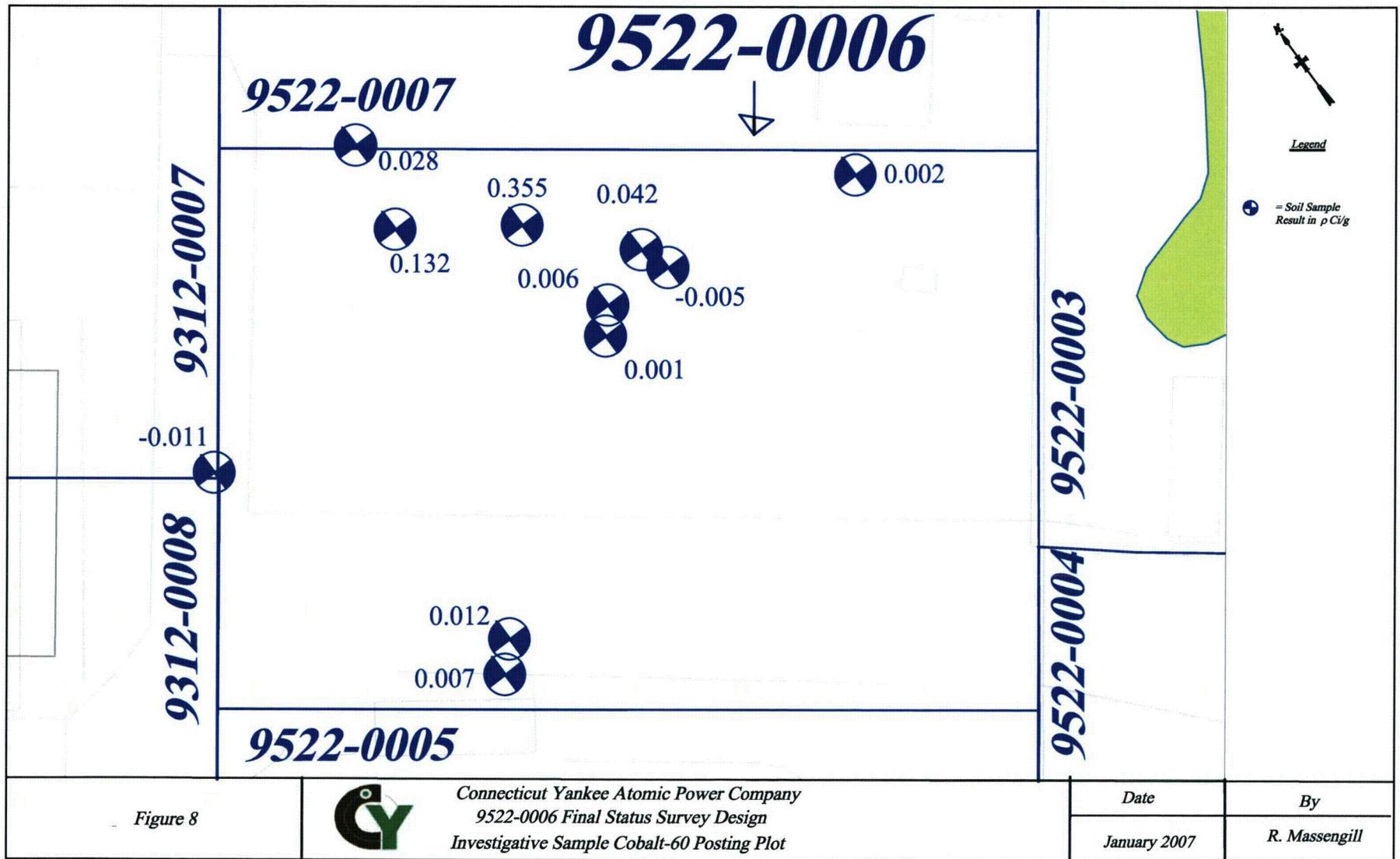


Figure 8



Connecticut Yankee Atomic Power Company
 9522-0006 Final Status Survey Design
 Investigative Sample Cobalt-60 Posting Plot

Date
 January 2007

By
 R. Massengill

SOUTHEAST SITE GROUNDS (NON-PROTECTED AREA)
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RELEASE RECORD

ATTACHMENT 2 (SCAN RESULTS)

Revision 0

SOUTHEAST SITE GROUNDS (NON-PROTECTED AREA)
SURVEY UNIT 9522-0006

RELEASE RECORD
Attachment 2

SCAN RESULTS @ SAMPLE LOCATIONS

Survey Location	Log Date	Log Time	Reading	Alarm Level	>Alarm Level	E-600 S/N	Probe S/N
9522-06-BL-00-01-0	11/17/2006	9:41:00	1.15E+04			1114	1014
9522-06-SL-00-01-0	11/17/2006	9:42:00	1.36E+04	1.30E+04	+	1114	1014
9522-06-BL-00-02-0	11/17/2006	9:43:00	9.26E+03			1114	1014
9522-06-SL-00-02-0	11/17/2006	9:44:00	8.96E+03	1.06E+04		1114	1014
9522-06-BL-00-03-0	11/17/2006	9:45:00	9.03E+03			1114	1014
9522-06-SL-00-03-0	11/17/2006	9:46:00	9.82E+03	1.04E+04		1114	1014
9522-06-BL-00-04-0	11/17/2006	9:57:00	9.05E+03			1114	1014
9522-06-SL-00-04-0	11/17/2006	9:58:00	1.08E+04	1.04E+04	+	1114	1014
9522-06-BL-00-05-0	11/17/2006	10:01:00	9.05E+03			1114	1014
9522-06-SL-00-05-0	11/17/2006	10:02:00	7.98E+03	1.04E+04		1114	1014
9522-06-BL-00-06-0	11/17/2006	10:03:00	8.52E+03			1114	1014
9522-06-SL-00-06-0	11/17/2006	10:04:00	8.90E+03	9.84E+03		1114	1014
9522-06-BL-00-07-0	11/17/2006	10:13:00	9.11E+03			1114	1014
9522-06-SL-00-07-0	11/17/2006	10:13:00	9.18E+03	1.05E+04		1114	1014
9522-06-BL-00-08-0	11/17/2006	10:30:00	8.92E+03			1114	1014
9522-06-SL-00-08-0	11/17/2006	10:31:00	1.23E+04	1.03E+04	+	1114	1014
9522-06-BL-00-09-0	11/17/2006	10:32:00	9.49E+03			1114	1014
9522-06-SL-00-09-0	11/17/2006	10:33:00	9.28E+03	1.09E+04		1114	1014
9522-06-BL-00-10-0	11/17/2006	10:34:00	7.08E+03			1114	1014
9522-06-SL-00-10-0	11/17/2006	10:35:00	8.03E+03	8.28E+03		1114	1014
9522-06-BL-00-11-0	11/17/2006	10:55:00	1.10E+04			1114	1014
9522-06-SL-00-11-0	11/17/2006	10:56:00	1.05E+04	1.25E+04		1114	1014
9522-06-BL-00-12-0	11/17/2006	10:56:00	1.03E+04			1114	1014
9522-06-SL-00-12-0	11/17/2006	10:57:00	1.16E+04	1.17E+04		1114	1014
9522-06-BL-00-13-0	11/17/2006	10:58:00	9.39E+03			1114	1014
9522-06-SL-00-13-0	11/17/2006	10:59:00	9.58E+03	1.08E+04		1114	1014
9522-06-BL-00-14-0	11/17/2006	12:54:00	9.42E+03			1114	1014
9522-06-SL-00-14-0	11/17/2006	12:55:00	8.75E+03	1.08E+04		1114	1014
9522-06-BL-00-15-0	11/17/2006	12:55:00	7.95E+03			1114	1014
9522-06-SL-00-15-0	11/17/2006	12:56:00	9.14E+03	9.22E+03		1114	1014
9522-06-BL-00-16-0	11/17/2006	12:57:00	1.00E+04			1114	1014
9522-06-SL-00-16-0	11/17/2006	12:58:00	9.48E+03	1.14E+04		1114	1014
9522-06-BL-00-17-0	11/17/2006	12:59:00	6.89E+03			1114	1014
9522-06-SL-00-17-0	11/17/2006	12:59:00	6.50E+03	8.08E+03		1114	1014

SOUTHEAST SITE GROUNDS (NON-PROTECTED AREA)
SURVEY UNIT 9522-0006

RELEASE RECORD
Attachment 2

SCAN RESULTS FOR SCAN STRIPS

Survey Location	Log Date	Log Time	Reading	Alarm Level	>Alarm Level	E-600 S/N	Probe S/N
9522-06-BC-00-01-0	12/5/2006	7:50:00	8.70E+03			1117	1008
9522-06-SC-00-01-0	12/5/2006	7:54:00	9.22E+03	1.00E+04		1117	1008
9522-06-BC-00-02-0	12/5/2006	7:55:00	8.90E+03			1117	1008
9522-06-SC-00-02-0	12/5/2006	7:59:00	8.47E+03	1.02E+04		1117	1008
9522-06-BC-00-03-0	12/5/2006	7:59:00	8.41E+03			1117	1008
9522-06-SC-00-03-0	12/5/2006	8:03:00	8.47E+03	9.72E+03		1117	1008
9522-06-BC-00-04-0	12/5/2006	8:04:00	8.48E+03			1117	1008
9522-06-SC-00-04-0	12/5/2006	8:08:00	9.21E+03	9.80E+03		1117	1008
9522-06-BC-00-05-0	12/5/2006	8:09:00	8.52E+03			1117	1008
9522-06-SC-00-05-0	12/5/2006	8:14:00	7.52E+03	9.84E+03		1117	1008
9522-06-BC-00-06-0	12/5/2006	8:15:00	8.43E+03			1117	1008
9522-06-SC-00-06-0	12/5/2006	8:20:00	7.52E+03	9.74E+03		1117	1008
9522-06-BC-00-07-0	12/5/2006	8:20:00	8.85E+03			1117	1008
9522-06-SC-00-07-0	12/5/2006	8:24:00	7.79E+03	1.02E+04		1117	1008
9522-06-BC-00-08-0	12/5/2006	8:25:00	8.38E+03			1117	1008
9522-06-SC-00-08-0	12/5/2006	8:29:00	8.20E+03	9.69E+03		1117	1008
9522-06-BC-00-09-0	12/5/2006	8:30:00	8.01E+03			1117	1008
9522-06-SC-00-09-0	12/5/2006	8:33:00	8.36E+03	9.29E+03		1117	1008
9522-06-BC-00-10-0	12/5/2006	8:34:00	8.64E+03			1117	1008
9522-06-SC-00-10-0	12/5/2006	8:37:00	7.06E+03	9.97E+03		1117	1008
9522-06-BC-00-11-0	12/5/2006	9:41:00	8.17E+03			1117	1008
9522-06-SC-00-11-0	12/5/2006	9:44:00	9.30E+03	9.46E+03		1117	1008
9522-06-BC-00-12-0	12/5/2006	9:44:00	9.44E+03			1117	1008
9522-06-SC-00-12-0	12/5/2006	9:47:00	7.64E+03	1.08E+04		1117	1008
9522-06-BC-00-13-0	12/5/2006	9:49:00	8.64E+03			1117	1008
9522-06-SC-00-13-0	12/5/2006	9:55:00	9.26E+03	9.97E+03		1117	1008
9522-06-ER-00-13-1	12/6/2006	9:55:00	1.11E+04	9.97E+03	+	1117	1008
9522-06-BC-00-14-0	12/5/2006	9:56:00	1.02E+04			1117	1008
9522-06-SC-00-14-0	12/5/2006	9:58:00	7.65E+03	1.16E+04		1117	1008
9522-06-BC-00-15-0	12/5/2006	9:59:00	8.17E+03			1117	1008
9522-06-SC-00-15-0	12/5/2006	10:07:00	9.13E+03	9.46E+03		1117	1008
9522-06-BC-00-16-0	12/5/2006	10:08:00	1.03E+04			1117	1008
9522-06-SC-00-16-0	12/5/2006	10:10:00	8.39E+03	1.17E+04		1117	1008
9522-06-BC-00-17-0	12/5/2006	10:12:00	8.33E+03			1117	1008
9522-06-SC-00-17-0	12/5/2006	10:16:00	8.48E+03	9.63E+03		1117	1008
9522-06-BC-00-18-0	12/5/2006	10:19:00	9.39E+03			1117	1008
9522-06-SC-00-18-0	12/5/2006	10:21:00	8.33E+03	1.08E+04		1117	1008

SOUTHEAST SITE GROUNDS (NON-PROTECTED AREA)
SURVEY UNIT 9522-0006

RELEASE RECORD
Attachment 2

Survey Location	Log Date	Log Time	Reading	Alarm Level	>Alarm Level	E-600 S/N	Probe S/N
9522-06-BC-00-19-0	12/5/2006	10:22:00	8.12E+03			1117	1008
9522-06-SC-00-19-0	12/5/2006	10:23:00	8.54E+03	9.41E+03		1117	1008
9522-06-BC-00-20-0	12/5/2006	10:24:00	8.88E+03			1117	1008
9522-06-SC-00-20-0	12/5/2006	10:26:00	7.82E+03	1.02E+04		1117	1008
9522-06-BC-00-21-0	12/5/2006	10:28:00	7.99E+03			1117	1008
9522-06-SC-00-21-0	12/5/2006	10:30:00	8.50E+03	9.27E+03		1117	1008
9522-06-BC-00-22-0	12/5/2006	10:30:00	9.29E+03			1117	1008
9522-06-SC-00-22-0	12/5/2006	10:31:00	7.90E+03	1.07E+04		1117	1008
9522-06-BC-00-23-0	12/5/2006	10:32:00	8.17E+03			1117	1008
9522-06-SC-00-23-0	12/5/2006	10:35:00	8.87E+03	9.46E+03		1117	1008
9522-06-BC-00-24-0	12/5/2006	10:35:00	8.64E+03			1117	1008
9522-06-SC-00-24-0	12/5/2006	10:37:00	8.27E+03	9.97E+03		1117	1008
9522-06-BC-00-25-0	12/5/2006	10:24:00	7.45E+03			1105	1009
9522-06-SC-00-25-0	12/5/2006	10:25:00	8.36E+03	8.68E+03		1105	1009
9522-06-BC-00-26-0	12/5/2006	10:26:00	8.96E+03			1105	1009
9522-06-SC-00-26-0	12/5/2006	10:27:00	7.70E+03	1.03E+04		1105	1009
9522-06-BC-00-27-0	12/5/2006	10:28:00	8.29E+03			1105	1009
9522-06-SC-00-27-0	12/5/2006	10:29:00	8.52E+03	9.59E+03		1105	1009
9522-06-BC-00-28-0	12/5/2006	10:31:00	8.86E+03			1105	1009
9522-06-SC-00-28-0	12/5/2006	10:32:00	8.20E+03	1.02E+04		1105	1009
9522-06-BC-00-29-0	12/5/2006	10:37:00	8.79E+03			1105	1009
9522-06-SC-00-29-0	12/5/2006	10:38:00	8.50E+03	1.01E+04		1105	1009
9522-06-BC-00-30-0	12/5/2006	10:39:00	7.48E+03			1105	1009
9522-06-SC-00-30-0	12/5/2006	10:40:00	7.10E+03	8.72E+03		1105	1009
9522-06-BC-00-31-0	12/5/2006	10:42:00	8.01E+03			1105	1009
9522-06-SC-00-31-0	12/5/2006	10:43:00	7.40E+03	9.29E+03		1105	1009
9522-06-BC-00-32-0	12/5/2006	10:46:00	7.47E+03			1105	1009
9522-06-SC-00-32-0	12/5/2006	10:47:00	8.00E+03	8.70E+03		1105	1009
9522-06-BC-00-33-0	12/5/2006	10:50:00	8.06E+03			1105	1009
9522-06-SC-00-33-0	12/5/2006	10:52:00	6.34E+03	9.34E+03		1105	1009
9522-06-BC-00-34-0	12/5/2006	10:53:00	6.93E+03			1105	1009
9522-06-SC-00-34-0	12/5/2006	10:55:00	7.80E+03	8.12E+03		1105	1009
9522-06-BC-00-35-0	12/5/2006	10:56:00	7.48E+03			1105	1009
9522-06-SC-00-35-0	12/5/2006	10:57:00	5.36E+03	8.72E+03		1105	1009
9522-06-BC-00-36-0	12/5/2006	10:57:00	6.34E+03			1105	1009
9522-06-SC-00-36-0	12/5/2006	11:02:00	6.93E+03	7.48E+03		1105	1009
9522-06-ER-00-36-1	12/6/2006	9:43:00	8.58E+03	7.48E+03	+	1117	1008
9522-06-ER-00-36-2	12/6/2006	9:45:00	8.33E+03	7.48E+03	+	1117	1008
9522-06-BC-00-37-0	12/5/2006	11:04:00	8.03E+03			1105	1009
9522-06-SC-00-37-0	12/5/2006	11:06:00	6.01E+03	9.31E+03		1105	1009

SOUTHEAST SITE GROUNDS (NON-PROTECTED AREA)
SURVEY UNIT 9522-0006

RELEASE RECORD
Attachment 2

Survey Location	Log Date	Log Time	Reading	Alarm Level	>Alarm Level	E-600 S/N	Probe S/N
9522-06-BC-00-38-0	12/5/2006	10:53:00	7.37E+03			1105	1009
9522-06-SC-00-38-0	12/5/2006	11:08:00	7.43E+03	8.60E+03		1105	1009
9522-06-BC-00-39-0	12/5/2006	11:08:00	7.76E+03			1105	1009
9522-06-SC-00-39-0	12/5/2006	11:11:00	7.29E+03	9.02E+03		1105	1009
9522-06-BC-00-40-0	12/5/2006	11:12:00	8.19E+03			1105	1009
9522-06-SC-00-40-0	12/5/2006	11:12:00	8.25E+03	9.48E+03		1105	1009
9522-06-BC-00-41-0	12/5/2006	11:03:00	8.42E+03			1117	1008
9522-06-SC-00-41-0	12/5/2006	11:05:00	6.42E+03	9.73E+03		1117	1008
9522-06-BC-00-42-0	12/5/2006	11:06:00	7.99E+03			1117	1008
9522-06-SC-00-42-0	12/5/2006	11:08:00	7.58E+03	9.27E+03		1117	1008
9522-06-BC-00-43-0	12/5/2006	11:09:00	7.80E+03			1117	1008
9522-06-SC-00-43-0	12/5/2006	11:11:00	7.65E+03	9.06E+03		1117	1008
9522-06-BC-00-44-0	12/5/2006	11:12:00	8.31E+03			1117	1008
9522-06-SC-00-44-0	12/5/2006	11:14:00	7.94E+03	9.61E+03		1117	1008
9522-06-BC-00-45-0	12/5/2006	11:16:00	8.86E+03			1117	1008
9522-06-SC-00-45-0	12/5/2006	11:18:00	8.38E+03	1.02E+04		1117	1008
9522-06-BC-00-46-0	12/5/2006	11:19:00	7.16E+03			1117	1008
9522-06-SC-00-46-0	12/5/2006	11:21:00	7.88E+03	8.37E+03		1117	1008
9522-06-BC-00-47-0	12/5/2006	11:22:00	7.91E+03			1117	1008
9522-06-SC-00-47-0	12/5/2006	11:23:00	5.92E+03	9.18E+03		1117	1008
9522-06-BC-00-48-0	12/5/2006	11:24:00	6.60E+03			1117	1008
9522-06-SC-00-48-0	12/5/2006	11:27:00	6.82E+03	7.76E+03		1117	1008
9522-06-BC-00-49-0	12/5/2006	11:17:00	8.40E+03			1105	1009
9522-06-SC-00-49-0	12/5/2006	11:18:00	5.69E+03	9.71E+03		1105	1009
9522-06-BC-00-50-0	12/5/2006	11:20:00	7.03E+03			1105	1009
9522-06-SC-00-50-0	12/5/2006	11:25:00	7.04E+03	8.23E+03		1105	1009
9522-06-BC-00-51-0	12/5/2006	11:25:00	8.18E+03			1105	1009
9522-06-SC-00-51-0	12/5/2006	11:28:00	8.60E+03	9.47E+03		1105	1009
9522-06-BC-00-52-0	12/5/2006	11:29:00	8.93E+03			1105	1009
9522-06-SC-00-52-0	12/5/2006	11:30:00	8.62E+03	1.03E+04		1105	1009
9522-06-BC-00-53-0	12/5/2006	11:31:00	8.01E+03			1105	1009
9522-06-SC-00-53-0	12/5/2006	11:37:00	8.04E+03	9.29E+03		1105	1009
9522-06-BC-00-54-0	12/5/2006	11:40:00	9.29E+03			1105	1009
9522-06-SC-00-54-0	12/5/2006	11:43:00	9.03E+03	1.07E+04		1105	1009
9522-06-ER-00-54-1	12/6/2006	9:47:00	1.37E+04	1.07E+04	+	1117	1008
9522-06-BC-00-55-0	12/5/2006	13:20:00	9.57E+03			1105	1009
9522-06-SC-00-55-0	12/5/2006	13:30:00	1.01E+04	1.10E+04		1105	1009
9522-06-BC-00-56-0	12/5/2006	13:31:00	1.07E+04			1105	1009
9522-06-SC-00-56-0	12/5/2006	13:34:00	1.06E+04	1.21E+04		1105	1009

SOUTHEAST SITE GROUNDS (NON-PROTECTED AREA)
SURVEY UNIT 9522-0006

RELEASE RECORD
Attachment 2

Survey Location	Log Date	Log Time	Reading	Alarm Level	>Alarm Level	E-600 S/N	Probe S/N
9522-06-BC-00-57-0	12/5/2006	13:35:00	9.23E+03			1105	1009
9522-06-SC-00-57-0	12/5/2006	13:37:00	8.20E+03	1.06E+04		1105	1009
9522-06-BC-00-58-0	12/5/2006	13:44:00	1.05E+04			1105	1009
9522-06-SC-00-58-0	12/5/2006	13:45:00	1.02E+04	1.20E+04		1105	1009
9522-06-BC-00-58-0	12/5/2006	13:48:00	9.46E+03			1105	1009
9522-06-SC-00-58-0	12/5/2006	13:52:00	9.34E+03	1.08E+04		1105	1009
9522-06-BC-00-60-0	12/5/2006	13:53:00	8.05E+03			1105	1009
9522-06-SC-00-60-0	12/5/2006	13:54:00	9.31E+03	9.33E+03		1105	1009
9522-06-BC-00-61-0	12/5/2006	13:26:00	8.43E+03			1117	1008
9522-06-SC-00-61-0	12/5/2006	13:28:00	9.37E+03	9.74E+03		1117	1008
9522-06-BC-00-62-0	12/5/2006	13:28:00	9.15E+03			1117	1008
9522-06-SC-00-62-0	12/5/2006	13:30:00	8.62E+03	1.05E+04		1117	1008
9522-06-BC-00-63-0	12/5/2006	13:31:00	9.24E+03			1117	1008
9522-06-SC-00-63-0	12/5/2006	13:32:00	9.40E+03	1.06E+04		1117	1008
9522-06-BC-00-64-0	12/5/2006	13:33:00	9.01E+03			1117	1008
9522-06-SC-00-64-0	12/5/2006	13:35:00	8.28E+03	1.04E+04		1117	1008
9522-06-BC-00-65-0	12/5/2006	13:37:00	9.49E+03			1117	1008
9522-06-SC-00-65-0	12/5/2006	13:39:00	8.50E+03	1.09E+04		1117	1008
9522-06-BC-00-66-0	12/5/2006	13:39:00	8.49E+03			1117	1008
9522-06-SC-00-66-0	12/5/2006	13:40:00	9.24E+03	9.81E+03		1117	1008
9522-06-ER-00-66-1	12/6/2006	9:59:00	1.12E+04	9.81E+03	+	1117	1008
9522-06-ER-00-66-1	12/6/2006	9:59:00	1.05E+04	9.81E+03	+	1117	1008
9522-06-BC-00-67-0	12/5/2006	13:43:00	7.70E+03			1117	1008
9522-06-SC-00-67-0	12/5/2006	13:46:00	8.82E+03	8.95E+03		1117	1008
9522-06-ER-00-67-2	12/6/2006	10:01:00	1.01E+04	8.95E+03	+	1117	1008
9522-06-BC-00-68-0	12/5/2006	13:46:00	1.07E+04			1117	1008
9522-06-SC-00-68-0	12/5/2006	13:48:00	7.86E+03	1.22E+04		1117	1008
9522-06-BC-00-69-0	12/5/2006	13:51:00	8.09E+03			1117	1008
9522-06-SC-00-69-0	12/5/2006	13:54:00	8.94E+03	9.37E+03		1117	1008
9522-06-ER-00-69-1	12/6/2006	10:02:00	1.11E+04	9.37E+03	+	1117	1008
9522-06-ER-00-69-2	12/6/2006	10:03:00	1.01E+04	9.37E+03	+	1117	1008
9522-06-BC-00-70-0	12/5/2006	13:54:00	9.38E+03			1117	1008
9522-06-SC-00-70-0	12/5/2006	13:56:00	7.92E+03	1.08E+04		1117	1008
9522-06-BC-00-71-0	12/5/2006	13:58:00	9.34E+03			1117	1008
9522-06-SC-00-71-0	12/5/2006	13:59:00	9.09E+03	1.07E+04		1117	1008
9522-06-BC-00-72-0	12/5/2006	14:02:00	9.36E+03			1117	1008
9522-06-SC-00-72-0	12/5/2006	14:03:00	7.68E+03	1.07E+04		1117	1008
9522-06-BC-00-73-0	12/5/2006	14:04:00	8.58E+03			1117	1008
9522-06-SC-00-73-0	12/5/2006	14:06:00	8.68E+03	9.90E+03		1117	1008

SOUTHEAST SITE GROUNDS (NON-PROTECTED AREA)
SURVEY UNIT 9522-0006

RELEASE RECORD
Attachment 2

Survey Location	Log Date	Log Time	Reading	Alarm Level	>Alarm Level	E-600 S/N	Probe S/N
9522-06-BC-00-74-0	12/5/2006	14:07:00	8.81E+03			1117	1008
9522-06-SC-00-74-0	12/5/2006	14:09:00	7.48E+03	1.02E+04		1117	1008
9522-06-BC-00-75-0	12/5/2006	14:11:00	8.36E+03			1117	1008
9522-06-SC-00-75-0	12/5/2006	14:17:00	9.17E+03	9.67E+03		1117	1008
9522-06-BC-00-76-0	12/5/2006	14:18:00	9.64E+03			1117	1008
9522-06-SC-00-76-0	12/5/2006	14:19:00	6.95E+03	1.10E+04		1117	1008
9522-06-BC-00-77-0	12/5/2006	14:04:00	7.72E+03			1105	1009
9522-06-SC-00-77-0	12/5/2006	14:07:00	8.37E+03	8.97E+03		1105	1009
9522-06-BC-00-78-0	12/5/2006	14:07:00	9.03E+03			1105	1009
9522-06-SC-00-78-0	12/5/2006	14:10:00	6.24E+03	1.04E+04		1105	1009
9522-06-BC-00-79-0	12/5/2006	14:11:00	8.10E+03			1105	1009
9522-06-SC-00-79-0	12/5/2006	14:16:00	8.12E+03	9.39E+03		1105	1009
9522-06-BC-00-80-0	12/5/2006	14:18:00	7.93E+03			1105	1009
9522-06-SC-00-80-0	12/5/2006	14:23:00	7.99E+03	9.20E+03		1105	1009
9522-06-BC-00-81-0	12/5/2006	14:26:00	7.76E+03			1117	1008
9522-06-SC-00-81-0	12/5/2006	14:32:00	8.62E+03	9.02E+03		1117	1008
9522-06-BC-00-82-0	12/5/2006	14:33:00	1.03E+04			1117	1008
9522-06-SC-00-82-0	12/5/2006	14:41:00	8.68E+03	1.17E+04		1117	1008
9522-06-BC-00-83-0	12/5/2006	14:42:00	8.24E+03			1117	1008
9522-06-SC-00-83-0	12/5/2006	14:43:00	9.34E+03	9.54E+03		1117	1008
9522-06-BC-00-84-0	12/5/2006	14:45:00	8.75E+03			1117	1008
9522-06-SC-00-84-0	12/5/2006	14:46:00	8.96E+03	1.01E+04		1117	1008
9522-06-BC-00-85-0	12/5/2006	14:28:00	7.31E+03			1105	1009
9522-06-SC-00-85-0	12/5/2006	14:31:00	7.75E+03	8.53E+03		1105	1009
9522-06-BC-00-86-0	12/5/2006	14:34:00	9.87E+03			1105	1009
9522-06-SC-00-86-0	12/5/2006	14:35:00	8.24E+03	1.13E+04		1105	1009
9522-06-BC-00-87-0	12/5/2006	14:37:00	8.42E+03			1105	1009
9522-06-SC-00-87-0	12/5/2006	14:40:00	8.82E+03	9.73E+03		1105	1009
9522-06-BC-00-88-0	12/5/2006	14:44:00	8.20E+03			1105	1009
9522-06-SC-00-88-0	12/5/2006	14:46:00	6.50E+03	9.49E+03		1105	1009
9522-06-BC-00-89-0	12/5/2006	14:52:00	8.31E+03			1105	1009
9522-06-SC-00-89-0	12/5/2006	14:54:00	8.53E+03	9.61E+03		1105	1009
9522-06-BC-00-90-0	12/5/2006	14:53:00	9.37E+03			1105	1009
9522-06-SC-00-90-0	12/5/2006	14:56:00	7.69E+03	1.08E+04		1105	1009
9522-06-BC-00-91-0	12/5/2006	14:57:00	8.36E+03			1105	1009
9522-06-SC-00-91-0	12/5/2006	14:59:00	8.54E+03	9.67E+03		1105	1009
9522-06-BC-00-92-0	12/5/2006	15:00:00	9.46E+03			1105	1009
9522-06-SC-00-92-0	12/5/2006	15:01:00	9.22E+02	1.08E+04		1105	1009

SOUTHEAST SITE GROUNDS (NON-PROTECTED AREA)
SURVEY UNIT 9522-0006

RELEASE RECORD
Attachment 2

Survey Location	Log Date	Log Time	Reading	Alarm Level	>Alarm Level	E-600 S/N	Probe S/N
9522-06-BC-00-93-0	12/5/2006	14:52:00	9.12E+03			1117	1008
9522-06-SC-00-93-0	12/5/2006	14:53:00	1.01E+04	1.05E+04		1117	1008
9522-06-BC-00-94-0	12/5/2006	14:54:00	1.09E+04			1117	1008
9522-06-SC-00-94-0	12/5/2006	14:54:00	9.18E+03	1.24E+04		1117	1008
9522-06-BC-00-95-0	12/5/2006	14:55:00	9.72E+03			1117	1008
9522-06-SC-00-95-0	12/5/2006	14:56:00	1.09E+04	1.11E+04		1117	1008
9522-06-BC-00-96-0	12/6/2006	7:55:00	9.54E+03			1117	1008
9522-06-SC-00-96-0	12/6/2006	7:58:00	9.08E+03	1.09E+04		1117	1008
9522-06-ER-00-96-1	12/6/2006	10:05:00	1.15E+04	1.09E+04	+	1117	1008
9522-06-BC-00-97-0	12/6/2006	8:00:00	9.96E+03			1117	1008
9522-06-SC-00-97-0	12/6/2006	8:01:00	1.02E+04	1.14E+04		1117	1008
9522-06-BC-00-98-0	12/6/2006	8:01:00	9.11E+03			1117	1008
9522-06-SC-00-98-0	12/6/2006	8:03:00	9.33E+03	1.05E+04		1117	1008
9522-06-BC-00-99-0	12/6/2006	8:04:00	1.00E+04			1117	1008
9522-06-SC-00-99-0	12/6/2006	8:04:00	1.05E+04	1.14E+04		1117	1008
9522-06-BC-00-100-0	12/6/2006	8:05:00	9.99E+03			1117	1008
9522-06-SC-00-100-0	12/6/2006	8:05:00	1.02E+04	1.14E+04		1117	1008
9522-06-BC-00-101-0	12/6/2006	8:06:00	9.51E+03			1117	1008
9522-06-SC-00-101-0	12/6/2006	8:08:00	9.52E+03	1.09E+04		1117	1008
9522-06-BC-00-102-0	12/6/2006	8:08:00	1.03E+04			1117	1008
9522-06-SC-00-102-0	12/6/2006	8:09:00	9.95E+03	1.17E+04		1117	1008
9522-06-BC-00-103-0	12/6/2006	8:10:00	9.83E+03			1117	1008
9522-06-SC-00-103-0	12/6/2006	8:11:00	1.02E+04	1.12E+04		1117	1008
9522-06-BC-00-104-0	12/6/2006	8:12:00	9.33E+03			1117	1008
9522-06-SC-00-104-0	12/6/2006	8:14:00	9.76E+03	1.07E+04		1117	1008
9522-06-ER-00-104-1	12/6/2006	10:05:00	1.01E+04	1.07E+04		1117	1008
9522-06-BC-00-105-0	12/6/2006	8:17:00	1.04E+04			1117	1008
9522-06-SC-00-105-0	12/6/2006	8:18:00	1.11E+04	1.19E+04		1117	1008
9522-06-BC-00-106-0	12/6/2006	8:19:00	1.00E+04			1117	1008
9522-06-SC-00-106-0	12/6/2006	8:20:00	1.02E+04	1.14E+04		1117	1008
9522-06-BC-00-107-0	12/6/2006	8:21:00	1.10E+04			1117	1008
9522-06-SC-00-107-0	12/6/2006	8:23:00	1.02E+04	1.25E+04		1117	1008
9522-06-BC-00-108-0	12/6/2006	8:23:00	1.13E+04			1117	1008
9522-06-SC-00-108-0	12/6/2006	8:27:00	1.21E+04	1.28E+04		1117	1008
9522-06-ER-00-108-1	12/6/2006	10:09:00	1.35E+04	1.28E+04	+	1117	1008
9522-06-BC-00-109-0	12/6/2006	8:28:00	1.18E+04			1117	1008
9522-06-SC-00-109-0	12/6/2006	8:31:00	9.42E+03	1.34E+04		1117	1008
9522-06-BC-00-110-0	12/6/2006	8:32:00	1.25E+04			1117	1008
9522-06-SC-00-110-0	12/6/2006	8:33:00	1.29E+04	1.41E+04		1117	1008

SOUTHEAST SITE GROUNDS (NON-PROTECTED AREA)
SURVEY UNIT 9522-0006

RELEASE RECORD
Attachment 2

Survey Location	Log Date	Log Time	Reading	Alarm Level	>Alarm Level	E-600 S/N	Probe S/N
9522-06-BC-00-111-0	12/6/2006	8:33:00	1.24E+04			1117	1008
9522-06-SC-00-111-0	12/6/2006	8:35:00	1.02E+04	1.40E+04		1117	1008
9522-06-BC-00-112-0	12/6/2006	8:36:00	1.09E+04			1117	1008
9522-06-SC-00-112-0	12/6/2006	8:39:00	1.16E+04	1.24E+04		1117	1008
9522-06-BC-00-113-0	12/6/2006	8:39:00	1.24E+04			1117	1008
9522-06-SC-00-113-0	12/6/2006	8:40:00	1.23E+04	1.40E+04		1117	1008
9522-06-BC-00-114-0	12/6/2006	8:41:00	1.14E+04			1117	1008
9522-06-SC-00-114-0	12/6/2006	8:42:00	1.02E+04	1.29E+04		1117	1008
9522-06-BC-00-115-0	12/6/2006	8:43:00	1.15E+04			1117	1008
9522-06-SC-00-115-0	12/6/2006	8:46:00	1.09E+04	1.30E+04		1117	1008

SOUTHEAST SITE GROUNDS (NON-PROTECTED AREA)
SURVEY UNIT 9522-0006

RELEASE RECORD

ATTACHMENT 3 (LABORATORY DATA)

Revision 0

General Narrative

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

December 18, 2006

Laboratory Identification:

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

Summary

Sample receipt

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

Sample Identification The laboratory received the following samples:

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

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

Items of Note

There are no items to note.

Case Narrative

Sample analyses were conducted using methodology as outlined in General Engineering Laboratories (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

Analytical Request

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

Data Package

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

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


Cheryl Jones
Project Manager

List of current GEL Certifications as of 18 December 2006

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

**Chain of Custody
and
Supporting
Documentation**

Connecticut Yankee Atomic Power Company 362 Injun Hollow Road, East Hampton, CT 06424 860-267-2556						Chain of Custody Form					No. 2006-00679		
Project Name: Haddam Neck Decommissioning						Analyses Requested					Lab Use Only		
						FSSGAM	FSSALL	Sr-90					Comments: <div style="text-align: right; font-size: 24px; font-family: cursive;">1777137</div>
Contact Name & Phone: Jack McCarthy 860-267-3924													
Analytical Lab (Name, City, State) General Engineering Laboratories 2040 Savage Road, Charleston SC. 29407 843 556 8171. Attn. Cheryl Jones													
Priority: <input type="checkbox"/> 30 D. <input checked="" type="checkbox"/> 14 D. <input type="checkbox"/> 7 D. <input type="checkbox"/> 3 D.													
Sample Designation	Date	Time	Media Code	Sample Type Code	Container Size- & Type Code						Comment, Preservation	Lab Sample ID	
9522-0006-011F	11/17/06	1055	TS	G	BP	X		X					
9522-0006-012F	11/17/06	1057	TS	G	BP	X		X					
9522-0006-013F	11/17/06	1058	TS	G	BP		X						
9522-0006-014F	11/17/06	1255	TS	G	BP	X		X					
9522-0006-015F	11/17/06	1257	TS	G	BP		X						
9522-0006-016F	11/17/06	1259	TS	G	BP	X		X					
9522-0006-017F	11/17/06	1303	TS	G	BP	X		X					
NOTES: PO #: 002332 MSR #: 06-1557 SSWP# NA <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>16</u> Deg. C Custody Sealed? Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Custody Seal Intact? Y <input type="checkbox"/> N <input type="checkbox"/>	
1) Relinquished By 			Date/Time 12/13/06 0910			2) Received By 			Date/Time 12/14/06 0930			7901-3611-5164 Bill of Lading #	
3) Relinquished By			Date/Time			4) Received By			Date/Time				

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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. 2006-00701

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						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. <input type="checkbox"/> 3 D.													1777131	
Sample Designation	Date	Time								Comment, Preservation	Lab Sample ID			
9522-0005-018-I	12/08/06	0947	TS	G	BP	X								
9522-0005-019-I	12/08/06	0948	TS	G	BP	X								
9522-0005-020-I	12/08/06	0949	TS	G	BP	X								
9522-0005-021-I	12/08/06	0950	TS	G	BP	X								
9522-0005-022-I	12/08/06	0951	TS	G	BP	X								
9522-0005-023-I	12/08/06	0953	TS	G	BP	X								
9522-0005-024-I	12/08/06	0954	TS	G	BP	X								
9522-0005-025-I	12/08/06	0955	TS	G	BP	X								
9522-0005-026-I	12/08/06	0956	TS	G	BP	X								
9522-0005-027-I	12/08/06	0957	TS	G	BP	X								
9522-0005-028-I	12/08/06	1012	TS	G	BP	X								
NOTES: PO #: 002332 MSR #: 06-1557 SSWP# NA <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 <u>3611-8197</u> <u>7901-00701</u> Bill of Lading #		Internal Container Temp.: <u>14</u> Deg. C Custody Sealed? Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Custody Seal Intact? Y <input type="checkbox"/> N <input type="checkbox"/>		
1) Relinquished By _____ Date/Time _____			2) Received By <u>R. L. [Signature]</u> Date/Time <u>12/14/06 0930</u>											
3) Relinquished By _____ Date/Time _____			4) Received By _____ Date/Time _____											

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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. 2006-00702

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						Comments:							
Analytical Lab (Name, City, State) General Engineering Laboratories 2040 Savage Road. Charleston SC. 29407 843 556 8171. Attn. Cheryl Jones																			177713!	
Priority: <input type="checkbox"/> 30 D. <input checked="" type="checkbox"/> 14 D. <input type="checkbox"/> 7 D. <input type="checkbox"/> 3 D.																				
Sample Designation	Date	Time								Comment, Preservation	Lab Sample ID									
9522-0005-029-I	12/08/06	1009	TS	G	BP	X														
NOTES: PO #: 002332 MSR #: 06-1557 SSWP# NA <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>14</u> Deg. C Custody Sealed? Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Custody Seal Intact? Y <input type="checkbox"/> N <input type="checkbox"/>								
1) Relinquished By _____ Date/Time _____			2) Received By <u>K. W. [Signature]</u> Date/Time <u>12/14/06 09:30</u>			Bill of Lading # <u>7901-3611-2097</u>														
3) Relinquished By _____ Date/Time _____			4) Received By _____ Date/Time _____																	

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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. 2006-00731

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						Comments:							
Analytical Lab (Name, City, State) General Engineering Laboratories 2040 Savage Road, Charleston SC. 29407 843 556 8171. Attn. Cheryl Jones																			1777131	
Priority: <input type="checkbox"/> 30 D. <input checked="" type="checkbox"/> 14 D. <input type="checkbox"/> 7 D. <input type="checkbox"/> 3 D.																				
Sample Designation	Date	Time								Comment, Preservation	Lab Sample ID									
9522-0005-030-I	12/11/06	0730	TS	G	BP	X														
9522-0005-031-I	12/11/06	0731	TS	G	BP	X														
9522-0005-032-I	12/11/06	0732	TS	G	BP	X														
9522-0005-033-I	12/11/06	0733	TS	G	BP	X														
9522-0005-034-I	12/11/06	0734	TS	G	BP	X														
9522-0005-035-I	12/11/06	0747	TS	G	BP	X														
9522-0005-036-I	12/11/06	0750	TS	G	BP	X														
9522-0005-037-I	12/11/06	0751	TS	G	BP	X														
9522-0005-038-I	12/11/06	0752	TS	G	BP	X														
9522-0005-039-I	12/11/06	0752	TS	G	BP	X														
9522-0005-040-I	12/11/06	0806	TS	G	BP	X														
NOTES: PO #: 002332 MSR #: 06-1557 SSWP# NA <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>16</u> Deg. C Custody Sealed? Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Custody Seal Intact? Y <input type="checkbox"/> N <input type="checkbox"/>								
1) Relinquished By <u>[Signature]</u> Date/Time <u>12/22/06 0830</u>			2) Received By <u>[Signature]</u> Date/Time <u>12/14/06 0930</u>			7901-3611-8142 Bill of Lading #														
3) Relinquished By _____ Date/Time _____			4) Received By _____ Date/Time _____																	

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Figure 1. Sample Check-in List

Date/Time Received: 12/14/06 0930

SDG#: MSR#06-1557

Work Order Number: 1777131

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

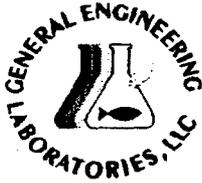
- 1. Custody Seals on shipping container intact? Yes No NA
- 2. Custody Seals dated and signed? Yes No NA
- 3. Chain-of-Custody record present? Yes No
- 4. Cooler temperature See Cont. Sheet
- 5. Vermiculite/packing materials is: 02/14/06 Wet Dry
- 6. Number of samples in shipping container: 54 total soils 60 total soils
- 7. Sample holding times exceeded? Yes No

8. Samples have:	<u>60 cpm background</u>
<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): See Cont. Sheet

Sample Custodian/Laboratory: K. W. [Signature] Date: 12/14/06

Telephoned to: _____ On _____ By _____



SAMPLE RECEIPT & REVIEW FORM CONTINUATION FORM

Client: YANK

Date Received: 12/14/06

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

Fedex @ temp

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

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



SAMPLE RECEIPT & REVIEW FORM

PM use only

Client: <u>Conn. Genlc</u>	SDG/ARCOC/Work Order: <u>177713</u>
Date Received: <u>12/14/06</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 none other describe
3	Chain of custody documents included with shipment?				
4	Sample containers intact and sealed?				Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?				Sample ID's, containers affected and observed pH:
6	VOA vials free of headspace (defined as < 6mm bubble)?				Sample ID's and containers affected:
7	Are Encore containers present? (If yes, immediately deliver to VOA laboratory)				
8	Samples received within holding time?				Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?				Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?				Sample ID's affected:
11	Number of containers received match number indicated on COC?				Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?				
14	Air Bill, Tracking #'s, & Additional Comments				

Suspected Hazard Information	Non-Regulated	Regulated	High Level	RSO RAD Receipt # _____ *If > x2 area background is observed on samples identified as "non-regulated/non-radioactive", contact the Radiation Safety group for further investigation.
A Radiological Classification?	/			Maximum Counts Observed*: <u>cpm 60</u>
B PCB Regulated?	/			
C Shipped as DOT Hazardous Material? If yes, contact Waste Manager or ESH Manager.	/			Hazard Class Shipped: UN#:
D Regulated as a Foreign Soil?	/			

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

Data Review Qualifier Definitions

Data Review Qualifier Definitions

Qualifier Explanation

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

RADIOLOGICAL ANALYSIS

**Radiochemistry Case Narrative
Connecticut Yankee Atomic Power Co. (YANK)
Work Order 177713**

Method/Analysis Information

Product: Alphaspec Am241, Cm, Solid ALL FSS
Analytical Method: DOE EML HASL-300, Am-05-RC Modified
Prep Method: Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method: Dry Soil Prep
Analytical Batch Number: 596347
Prep Batch Number: 595903
Dry Soil Prep GL-RAD-A-021 Batch Number: 595900

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

SOP Reference

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

Calibration Information:

Calibration Information

All initial and continuing calibration requirements have been met.

Standards Information

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

Sample Geometry

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

Quality Control (QC) Information:

Blank Information

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

Designated QC

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

QC Information

All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time

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

Preparation Information

All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis

None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation

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

Manual Integration

No manual integrations were performed on data in this batch.

Additional Comments

Additional comments were not required for this sample set.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

Product:	Alphaspec Pu, Solid-ALL FSS
Analytical Method:	DOE EML HASL-300, Pu-11-RC Modified
Prep Method:	Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method:	Dry Soil Prep
Analytical Batch Number:	596348
Prep Batch Number:	595903
Dry Soil Prep GL-RAD-A-021 Batch Number:	595900

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

SOP Reference

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

Calibration Information:

Calibration Information

All initial and continuing calibration requirements have been met.

Standards Information

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

Sample Geometry

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

Quality Control (QC) Information:

Blank Information

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

Designated QC

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

QC Information

All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time

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

Preparation Information

All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis

None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation

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

Manual Integration

No manual integrations were performed on data in this batch.

Additional Comments

Additional comments were not required for this sample set.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

Product:	Liquid Scint Pu241, Solid-ALL FSS
Analytical Method:	DOE EML HASL-300, Pu-11-RC Modified
Prep Method:	Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method:	Dry Soil Prep
Analytical Batch Number:	596349
Prep Batch Number:	595903
Dry Soil Prep GL-RAD-A-021 Batch Number:	595900

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

SOP Reference

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

Calibration Information:

Calibration Information

All initial and continuing calibration requirements have been met.

Standards Information

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

Sample Geometry

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

Quality Control (QC) Information:

Blank Information

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

Designated QC

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

QC Information

All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time

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

Preparation Information

All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis

None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation

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

referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Manual Integration

No manual integrations were performed on data in this batch.

Additional Comments

Additional comments were not required for this sample set.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

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

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

SOP Reference

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

Calibration Information:

Calibration Information

All initial and continuing calibration requirements have been met.

Standards Information

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

Sample Geometry

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

Quality Control (QC) Information:

Blank Information

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

Designated QC

The following sample was used for QC: 177713010 (9522-0006-009F).

QC Information

All of the QC samples met the required acceptance limits.

Technical Information:**Holding Time**

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

Preparation Information

All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis

None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:**NCR Documentation**

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

Additional Comments

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

Qualifier information

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

Method/Analysis Information

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

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

SOP Reference

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

Calibration Information:

Calibration Information

All initial and continuing calibration requirements have been met.

Standards Information

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

Sample Geometry

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

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

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

Designated QC

The following sample was used for QC: 177713021 (9522-0005-020-I).

QC Information

All of the QC samples met the required acceptance limits.

Technical Information:**Holding Time**

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

Preparation Information

All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis

None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:**NCR Documentation**

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

Additional Comments

Additional comments were not required for this sample set.

Qualifier information

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

Method/Analysis Information

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

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

SOP Reference

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

Calibration Information:

Calibration Information

All initial and continuing calibration requirements have been met.

Standards Information

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

Sample Geometry

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

Quality Control (QC) Information:

Blank Information

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

Designated QC

The following sample was used for QC: 177713041 (9522-0005-040-I).

QC Information

All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time

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

Preparation Information

All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis

None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation

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

Additional Comments

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

Qualifier information

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

Method/Analysis Information

Product: GFPC, Sr90, solid-ALL FSS
Analytical Method: EPA 905.0 Modified
Prep Method: Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method: Dry Soil Prep
Analytical Batch Number: 595975
Prep Batch Number: 595903
Dry Soil Prep GL-RAD-A-021 Batch Number: 595900

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

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-004 REV# 10.

Calibration Information:

Calibration Information

All initial and continuing calibration requirements have been met.

Standards Information

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

Sample Geometry

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

Quality Control (QC) Information:

Blank Information

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

Designated QC

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

QC Information

All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time

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

Preparation Information

All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis

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

Chemical Recoveries

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

Miscellaneous Information:

NCR Documentation

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

Additional Comments

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

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

Product: Liquid Scint Tc99, Solid-ALL FSS
Analytical Method: DOE EML HASL-300, Tc-02-RC Modified
Analytical Batch Number: 595937

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

SOP Reference

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

Calibration Information:

Calibration Information

All initial and continuing calibration requirements have been met.

Standards Information

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

Sample Geometry

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

Quality Control (QC) Information:

Blank Information

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

Designated QC

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

QC Information

All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time

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

Preparation Information

All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis

None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation

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

Additional Comments

Additional comments were not required for this sample set.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

Product:	Liquid Scint Fe55, Solid-ALL FSS
Analytical Method:	DOE RESL Fe-1, Modified
Prep Method:	Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method:	Dry Soil Prep
Analytical Batch Number:	595939
Prep Batch Number:	595903
Dry Soil Prep GL-RAD-A-021 Batch Number:	595900

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

SOP Reference

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

Calibration Information:**Calibration Information**

All initial and continuing calibration requirements have been met.

Standards Information

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

Sample Geometry

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

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

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

Designated QC

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

QC Information

All of the QC samples met the required acceptance limits.

Technical Information:**Holding Time**

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

Preparation Information

All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis

None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:**NCR Documentation**

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

Additional Comments

Additional comments were not required for this sample set.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

Product:	Liquid Scint Ni63, Solid-ALL FSS
Analytical Method:	DOE RESL Ni-1, Modified
Prep Method:	Ash Soil Prep
Dry Soil Prep GL-RAD-A-021 Method:	Dry Soil Prep
Analytical Batch Number:	595938
Prep Batch Number:	595903
Dry Soil Prep GL-RAD-A-021 Batch Number:	595900

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

SOP Reference

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

Calibration Information:

Calibration Information

All initial and continuing calibration requirements have been met.

Standards Information

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

Sample Geometry

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

Quality Control (QC) Information:

Blank Information

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

Designated QC

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

QC Information

All of the QC samples met the required acceptance limits.

Technical Information:**Holding Time**

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

Preparation Information

All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis

None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:**NCR Documentation**

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

Additional Comments

Additional comments were not required for this sample set.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

Product: LSC, Tritium Dist, Solid - 3 pCi/g

Analytical Method: EPA 906.0 Modified

Analytical Batch Number: 595904

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

SOP Reference

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

Calibration Information:**Calibration Information**

All initial and continuing calibration requirements have been met.

Standards Information

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

Sample Geometry

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

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

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

Designated QC

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

QC Information

All of the QC samples met the required acceptance limits.

Technical Information:**Holding Time**

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

Preparation Information

All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis

Samples were recounted due to low/high recovery.

Miscellaneous Information:**NCR Documentation**

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

Additional Comments

Additional comments were not required for this sample set.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

Product: Liquid Scint C14, Solid All,FSS
Analytical Method: EPA EERF C-01 Modified
Analytical Batch Number: 595936

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

SOP Reference

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

Calibration Information:

Calibration Information

All initial and continuing calibration requirements have been met.

Standards Information

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

Sample Geometry

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

Quality Control (QC) Information:

Blank Information

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

Designated QC

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

QC Information

All of the QC samples met the required acceptance limits.

SAMPLE DATA SUMMARY

GEL LABORATORIES LLC

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

Certificate of Analysis Report for

YANK001 Connecticut Yankee Atomic Power Co.

Client SDG: MSR#06-1557 GEL Work Order: 177713

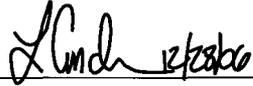
The Qualifiers in this report are defined as follows:

- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a surrogate compound
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- UI Gamma Spectroscopy--Uncertain identification
- ND The analyte concentration is not detected above the detection limit.

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

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

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



Reviewed by _____

GEL LABORATORIES LLC

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

Certificate of Analysis

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

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

Report Date: December 28, 2006

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

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

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

Actinium-228		1.13	+/-0.127	0.0451	+/-0.127	0.0941	pCi/g		MJH1	12/15/06	1727	595950
Americium-241	U	-0.0706	+/-0.0796	0.0619	+/-0.0796	0.126	pCi/g					
Bismuth-212		0.818	+/-0.223	0.0954	+/-0.223	0.198	pCi/g					
Bismuth-214		1.09	+/-0.0722	0.0221	+/-0.0722	0.0458	pCi/g					
Cesium-134	UI	0.00	+/-0.0256	0.0164	+/-0.0256	0.0339	pCi/g					
Cesium-137		0.162	+/-0.0238	0.0118	+/-0.0238	0.0246	pCi/g					
Cobalt-60		0.0765	+/-0.0292	0.0117	+/-0.0292	0.025	pCi/g					
Europium-152	U	-0.00134	+/-0.0367	0.031	+/-0.0367	0.0638	pCi/g					
Europium-154	U	-0.0342	+/-0.0499	0.0405	+/-0.0499	0.0851	pCi/g					
Europium-155	U	0.0649	+/-0.0615	0.0363	+/-0.0615	0.074	pCi/g					
Lead-212		1.15	+/-0.0466	0.0189	+/-0.0466	0.0387	pCi/g					
Lead-214		1.20	+/-0.0684	0.0233	+/-0.0684	0.0479	pCi/g					
Manganese-54	U	0.00683	+/-0.0182	0.0137	+/-0.0182	0.0285	pCi/g					
Niobium-94	U	-0.00166	+/-0.0131	0.0111	+/-0.0131	0.023	pCi/g					
Potassium-40		18.6	+/-0.721	0.113	+/-0.721	0.242	pCi/g					
Radium-226		1.09	+/-0.0722	0.0221	+/-0.0722	0.0458	pCi/g					
Silver-108m	U	-0.0054	+/-0.0121	0.0106	+/-0.0121	0.022	pCi/g					
Thallium-208		0.396	+/-0.0316	0.0113	+/-0.0316	0.0235	pCi/g					

Rad Gas Flow Proportional Counting

GFPC, Sr90, solid-ALL FSS

Strontium-90	U	0.00864	+/-0.0232	0.0186	+/-0.0232	0.0415	pCi/g		KSD1	12/22/06	1141	595975
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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	JMB1	12/14/06	1140	595900

The following Analytical Methods were performed

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

GEL LABORATORIES LLC

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

Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0006-001F
Sample ID: 177713001

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N
Surrogate/Tracer recovery	Test				Recovery%	Acceptable Limits							
Strontium-90		GFPC, Sr90, solid-ALL FSS			73	(25%-125%)							
Carrier/Tracer Recovery		GFPC, Sr90, solid-ALL FSS			73	(25%-125%)							

Notes:

The Qualifiers in this report are defined as follows :

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

The above sample is reported on a dry weight basis.

GEL LABORATORIES LLC

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0006-002F
Sample ID: 177713002
Matrix: TS
Collect Date: 17-NOV-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 7.54%

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

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

The following Prep Methods were performed

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

The following Analytical Methods were performed

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

GEL LABORATORIES LLC

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

Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0006-002F
Sample ID: 177713002

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits						
Strontium-90		GFPC, Sr90, solid-ALL FSS			84		(25%-125%)						
Carrier/Tracer Recovery		GFPC, Sr90, solid-ALL FSS			84		(25%-125%)						

Notes:

The Qualifiers in this report are defined as follows :

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

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

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

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

The following Prep Methods were performed

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

The following Analytical Methods were performed

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

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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: December 28, 2006

Client Sample ID: 9522-0006-003F
Sample ID: 177713003

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits						
Strontium-90		GFPC, Sr90, solid-ALL FSS			89		(25%-125%)						
Carrier/Tracer Recovery		GFPC, Sr90, solid-ALL FSS			89		(25%-125%)						

Notes:

The Qualifiers in this report are defined as follows :

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

GEL LABORATORIES LLC

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

Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522–0006–004F
Sample ID: 177713004
Matrix: TS
Collect Date: 17–NOV–06
Receive Date: 14–DEC–06
Collector: Client
Moisture: 8.02%

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

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

The following Prep Methods were performed

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

The following Analytical Methods were performed

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

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

Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0006-004F
Sample ID: 177713004

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits						
Strontium-90		GFPC, Sr90, solid-ALL FSS			96		(25%-125%)						
Carrier/Tracer Recovery		GFPC, Sr90, solid-ALL FSS			96		(25%-125%)						

Notes:

The Qualifiers in this report are defined as follows :

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

The above sample is reported on a dry weight basis.

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0006-005F
Sample ID: 177713005
Matrix: TS
Collect Date: 17-NOV-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 7.4%

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

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

The following Prep Methods were performed

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

The following Analytical Methods were performed

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0006-005F
 Sample ID: 177713005

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Surrogate/Tracer recovery	Test				Recovery%	Acceptable Limits							
Strontium-90		GFPC, Sr90, solid-ALL FSS			75	(25%-125%)							
Carrier/Tracer Recovery		GFPC, Sr90, solid-ALL FSS			75	(25%-125%)							

Notes:

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

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

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

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

The following Prep Methods were performed

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

The following Analytical Methods were performed

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0006-006F
Sample ID: 177713006

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits						
Strontium-90		GFPC, Sr90, solid-ALL FSS			79		(25%-125%)						
Carrier/Tracer Recovery		GFPC, Sr90, solid-ALL FSS			79		(25%-125%)						

Notes:

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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: December 28, 2006

Client Sample ID: 9522-0006-007F
Sample ID: 177713007
Matrix: TS
Collect Date: 17-NOV-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 9.59%

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

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

The following Prep Methods were performed

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

The following Analytical Methods were performed

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

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Certificate of Analysis

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

Report Date: December 28, 2006

Client Sample ID: 9522-0006-007F
Sample ID: 177713007

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits						
Strontium-90		GFPC, Sr90, solid-ALL FSS			82		(25%-125%)						
Carrier/Tracer Recovery		GFPC, Sr90, solid-ALL FSS			82		(25%-125%)						

Notes:

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

The above sample is reported on a dry weight basis.

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0006-008F
Sample ID: 177713008
Matrix: TS
Collect Date: 17-NOV-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 10%

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

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

The following Prep Methods were performed

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

The following Analytical Methods were performed

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0006-008F
Sample ID: 177713008

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits						
Strontium--90		GFPC, Sr90, solid--ALL FSS			76		(25%--125%)						
Carrier/Tracer Recovery		GFPC, Sr90, solid--ALL FSS			76		(25%--125%)						

Notes:

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: December 28, 2006

Client Sample ID: 9522-0006-008FS
Sample ID: 177713009
Matrix: TS
Collect Date: 17-NOV-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 10.1%

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

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

Rad Gas Flow Proportional Counting

GFPC, Sr90, solid-ALL FSS

Strontium-90		0.0414	+/-0.0193	0.0118	+/-0.0194	0.0268	pCi/g		KSD1	12/22/06	1140	595975
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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	JMB1	12/14/06	1140	595900

The following Analytical Methods were performed

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0006-008FS
Sample ID: 177713009

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N
Surrogate/Tracer recovery		Test			Recovery%		Acceptable Limits						
Strontium-90		GFPC, Sr90, solid-ALL FSS			125		(25%-125%)						
Carrier/Tracer Recovery		GFPC, Sr90, solid-ALL FSS			125		(25%-125%)						

Notes:

The Qualifiers in this report are defined as follows :

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0006-009F
Sample ID: 177713010
Matrix: TS
Collect Date: 17-NOV-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 9.03%

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

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

The following Prep Methods were performed

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

The following Analytical Methods were performed

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0006-009F
Sample ID: 177713010

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits						
Strontium-90		GFPC, Sr90, solid-ALL FSS			87		(25%-125%)						
Carrier/Tracer Recovery		GFPC, Sr90, solid-ALL FSS			87		(25%-125%)						

Notes:

The Qualifiers in this report are defined as follows :

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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: December 28, 2006

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

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

The following Prep Methods were performed

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

The following Analytical Methods were performed

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

GEL 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: December 28, 2006

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

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

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

The following Prep Methods were performed

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

The following Analytical Methods were performed

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0006-011F
Sample ID: 177713012

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time Batch	M
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits					
Strontium-90	GFPC, Sr90, solid-ALL FSS				92		(25%-125%)					
Carrier/Tracer Recovery	GFPC, Sr90, solid-ALL FSS				92		(25%-125%)					

Notes:

The Qualifiers in this report are defined as follows :

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

The above sample is reported on a dry weight basis.

GEL LABORATORIES LLC

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

Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0006-012F
Sample ID: 177713013
Matrix: TS
Collect Date: 17-NOV-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 6.28%

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

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

The following Prep Methods were performed

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

The following Analytical Methods were performed

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

GEL LABORATORIES LLC

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

Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0006-012F
Sample ID: 177713013

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits						
Strontium-90		GFPC, Sr90, solid-ALL FSS			79		(25%-125%)						
Carrier/Tracer Recovery		GFPC, Sr90, solid-ALL FSS			79		(25%-125%)						

Notes:

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: December 28, 2006

Client Sample ID: 9522-0006-013F
Sample ID: 177713014
Matrix: TS
Collect Date: 17-NOV-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 10.6%

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

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0006-013F
Sample ID: 177713014

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

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

The following Prep Methods were performed

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

The following Analytical Methods were performed

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

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0006-013F
Sample ID: 177713014

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

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

Notes:

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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.

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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: December 28, 2006

Client Sample ID: 9522-0006-014F
Sample ID: 177713015
Matrix: TS
Collect Date: 17-NOV-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 9.34%

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

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

The following Prep Methods were performed

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

The following Analytical Methods were performed

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0006-014F
Sample ID: 177713015

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits						
Strontium-90		GFPC, Sr90, solid-ALL FSS			89		(25%-125%)						
Carrier/Tracer Recovery		GFPC, Sr90, solid-ALL FSS			89		(25%-125%)						

Notes:

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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: December 28, 2006

Client Sample ID: 9522-0006-015F
Sample ID: 177713016
Matrix: TS
Collect Date: 17-NOV-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 8.04%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
Rad Alpha Spec Analysis													
<i>Alphaspec Am241, Cm, Solid ALL FSS</i>													
Americium-241	U	0.0663	+/-0.129	0.0653	+/-0.130	0.244	pCi/g		PXH2	12/18/06	0912	596347	
Curium-242	U	0.0729	+/-0.137	0.0609	+/-0.137	0.252	pCi/g						
Curium-243/244	U	-0.16	+/-0.121	0.169	+/-0.123	0.452	pCi/g						
<i>Alphaspec Pu, Solid-ALL FSS</i>													
Plutonium-238	U	-0.00772	+/-0.0648	0.0289	+/-0.0649	0.145	pCi/g		PXH2	12/18/06	0912	596348	
Plutonium-239/240	U	0.0424	+/-0.116	0.0763	+/-0.116	0.240	pCi/g						
<i>Liquid Scint Pu241, Solid-ALL FSS</i>													
Plutonium-241	U	7.30	+/-7.20	5.72	+/-7.23	12.0	pCi/g		PXH2	12/20/06	0835	596349	
Rad Gamma Spec Analysis													
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>													
<i>Waived</i>													
Actinium-228		0.659	+/-0.211	0.0793	+/-0.211	0.158	pCi/g		MJH1	12/16/06	0935	595950	
Americium-241	U	0.0375	+/-0.0349	0.0291	+/-0.0349	0.0581	pCi/g						
Bismuth-212	UI	0.00	+/-0.352	0.158	+/-0.352	0.315	pCi/g						
Bismuth-214		0.348	+/-0.0995	0.0419	+/-0.0995	0.0838	pCi/g						
Cesium-134	U	0.0485	+/-0.0331	0.0319	+/-0.0331	0.0637	pCi/g						
Cesium-137		0.062	+/-0.0334	0.0217	+/-0.0334	0.0434	pCi/g						
Cobalt-60	U	0.0219	+/-0.0294	0.024	+/-0.0294	0.0479	pCi/g						
Europium-152	U	-0.0831	+/-0.0791	0.0457	+/-0.0791	0.0913	pCi/g						
Europium-154	U	-0.0927	+/-0.0895	0.0641	+/-0.0895	0.128	pCi/g						
Europium-155	U	-0.00247	+/-0.0555	0.049	+/-0.0555	0.0979	pCi/g						
Lead-212		0.618	+/-0.0832	0.0299	+/-0.0832	0.0597	pCi/g						
Lead-214		0.539	+/-0.105	0.0377	+/-0.105	0.0754	pCi/g						
Manganese-54	U	-0.0208	+/-0.0317	0.0213	+/-0.0317	0.0426	pCi/g						
Niobium-94	U	-0.00754	+/-0.0237	0.0202	+/-0.0237	0.0403	pCi/g						
Potassium-40		9.21	+/-1.02	0.191	+/-1.02	0.381	pCi/g						
Radium-226		0.348	+/-0.0995	0.0419	+/-0.0995	0.0838	pCi/g						
Silver-108m	U	-0.00586	+/-0.0223	0.0189	+/-0.0223	0.0379	pCi/g						
Thallium-208		0.222	+/-0.0518	0.024	+/-0.0518	0.048	pCi/g						
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid-ALL FSS</i>													
Strontium-90		0.0718	+/-0.0232	0.0131	+/-0.0233	0.0293	pCi/g		KSD1	12/22/06	1623	595975	
Rad Liquid Scintillation Analysis													
<i>LSC, Tritium Dist, Solid - 3 pCi/g</i>													
Tritium	U	0.877	+/-1.41	1.15	+/-1.41	2.41	pCi/g		DFA1	12/19/06	2124	595904	

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

Report Date: December 28, 2006

Client Sample ID: 9522-0006-015F
Sample ID: 177713016

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Liquid Scintillation Analysis												
<i>Liquid Scint C14, Solid ALL, FSS</i>												
Carbon-14	U	0.00	+/-0.0777	0.0652	+/-0.0777	0.137	pCi/g		AXD2	12/15/06	1653	595936
<i>Liquid Scint Fe55, Solid-ALL FSS</i>												
Iron-55	U	3.18	+/-26.3	19.8	+/-26.3	42.1	pCi/g		MXP1	12/19/06	1244	595939
<i>Liquid Scint Ni63, Solid-ALL FSS</i>												
Nickel-63	U	4.59	+/-9.85	8.18	+/-9.85	16.7	pCi/g		MXP1	12/18/06	2055	595938
<i>Liquid Scint Tc99, Solid-ALL FSS</i>												
Technetium-99	U	0.227	+/-0.234	0.190	+/-0.234	0.391	pCi/g		KXR1	12/19/06	0930	595937

The following Prep Methods were performed

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

The following Analytical Methods were performed

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243	Alphaspec Am241, Cm, Solid ALL	69	(15%-125%)
Plutonium-242	Alphaspec Pu, Solid-ALL FSS	87	(15%-125%)
Strontium-90	GFPC, Sr90, solid-ALL FSS	90	(25%-125%)
Carrier/Tracer Recovery	GFPC, Sr90, solid-ALL FSS	90	(25%-125%)
Nickel-63	Liquid Scint Ni63, Solid-ALL FS	56	(25%-125%)

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

Report Date: December 28, 2006

Client Sample ID: 9522–0006–015F
Sample ID: 177713016

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M	
Carrier/Tracer Recovery		Liquid Scint Ni63, Solid–ALL FS			56		(25%–125%)							
Technetium–99		Liquid Scint Tc99, Solid–ALL FS			88		(15%–125%)							
Carrier/Tracer Recovery		Liquid Scint Tc99, Solid–ALL FS			88		(15%–125%)							

Notes:

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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.

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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: December 28, 2006

Client Sample ID: 9522-0006-016F
Sample ID: 177713017
Matrix: TS
Collect Date: 17-NOV-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 12.2%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		0.240	+/-0.186	0.0793	+/-0.186	0.169	pCi/g		MJH1	12/16/06	1027	595950
Americium-241	U	0.0064	+/-0.0291	0.025	+/-0.0291	0.0515	pCi/g					
Bismuth-212		0.533	+/-0.270	0.132	+/-0.270	0.285	pCi/g					
Bismuth-214		0.533	+/-0.0907	0.0284	+/-0.0907	0.0612	pCi/g					
Cesium-134	UI	0.00	+/-0.0326	0.024	+/-0.0326	0.0511	pCi/g					
Cesium-137	U	0.021	+/-0.0286	0.0162	+/-0.0286	0.035	pCi/g					
Cobalt-60	U	-0.00635	+/-0.0227	0.0187	+/-0.0227	0.0414	pCi/g					
Europium-152	U	-0.0227	+/-0.0539	0.0417	+/-0.0539	0.0881	pCi/g					
Europium-154	U	0.0268	+/-0.0669	0.0598	+/-0.0669	0.131	pCi/g					
Europium-155	U	0.0722	+/-0.0583	0.0415	+/-0.0583	0.0859	pCi/g					
Lead-212		0.670	+/-0.0597	0.0249	+/-0.0597	0.0519	pCi/g					
Lead-214		0.690	+/-0.0855	0.0309	+/-0.0855	0.0652	pCi/g					
Manganese-54	U	-0.00363	+/-0.0269	0.0194	+/-0.0269	0.0418	pCi/g					
Niobium-94	U	-0.00744	+/-0.0189	0.0156	+/-0.0189	0.0336	pCi/g					
Potassium-40		10.6	+/-0.862	0.162	+/-0.862	0.364	pCi/g					
Radium-226		0.533	+/-0.0907	0.0284	+/-0.0907	0.0612	pCi/g					
Silver-108m	U	-0.0031	+/-0.0169	0.0149	+/-0.0169	0.0316	pCi/g					
Thallium-208		0.238	+/-0.0435	0.0174	+/-0.0435	0.0372	pCi/g					
Rad Gas Flow Proportional Counting												
<i>GFPC, Sr90, solid-ALL FSS</i>												
Strontium-90	U	0.00901	+/-0.0179	0.0142	+/-0.0179	0.0315	pCi/g		KSD1	12/22/06	1623	595975

The following Prep Methods were performed

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

The following Analytical Methods were performed

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0006-016F
Sample ID: 177713017

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	NA
Surrogate/Tracer recovery	Test				Recovery%		Acceptable Limits						
Strontium-90		GFPC, Sr90, solid-ALL FSS			84		(25%-125%)						
Carrier/Tracer Recovery		GFPC, Sr90, solid-ALL FSS			84		(25%-125%)						

Notes:

The Qualifiers in this report are defined as follows :

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

The above sample is reported on a dry weight basis.

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0006-017F
Sample ID: 177713018
Matrix: TS
Collect Date: 17-NOV-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 7.01%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		0.494	+/-0.115	0.0359	+/-0.115	0.0718	pCi/g		MJH1	12/16/06	1317	595950
Americium-241	U	0.0337	+/-0.0575	0.0473	+/-0.0575	0.0946	pCi/g					
Bismuth-212		0.403	+/-0.166	0.0794	+/-0.166	0.159	pCi/g					
Bismuth-214		0.359	+/-0.0626	0.019	+/-0.0626	0.038	pCi/g					
Cesium-134	UI	0.00	+/-0.0281	0.0133	+/-0.0281	0.0266	pCi/g					
Cesium-137		0.0529	+/-0.0243	0.0123	+/-0.0243	0.0246	pCi/g					
Cobalt-60	U	0.0169	+/-0.0205	0.012	+/-0.0205	0.024	pCi/g					
Europium-152	U	-0.0572	+/-0.0447	0.0261	+/-0.0447	0.0522	pCi/g					
Europium-154	U	-0.0532	+/-0.0434	0.033	+/-0.0434	0.066	pCi/g					
Europium-155	U	0.0157	+/-0.0376	0.034	+/-0.0376	0.0679	pCi/g					
Lead-212		0.507	+/-0.0537	0.0165	+/-0.0537	0.033	pCi/g					
Lead-214		0.416	+/-0.0611	0.0211	+/-0.0611	0.0422	pCi/g					
Manganese-54	U	0.00961	+/-0.0128	0.0115	+/-0.0128	0.023	pCi/g					
Niobium-94	U	0.00854	+/-0.0116	0.0101	+/-0.0116	0.0201	pCi/g					
Potassium-40		9.09	+/-0.755	0.0952	+/-0.755	0.190	pCi/g					
Radium-226		0.359	+/-0.0626	0.019	+/-0.0626	0.038	pCi/g					
Silver-108m	U	-0.00155	+/-0.0113	0.00974	+/-0.0113	0.0195	pCi/g					
Thallium-208		0.143	+/-0.0276	0.010	+/-0.0276	0.020	pCi/g					
Rad Gas Flow Proportional Counting												
<i>GFPC, Sr90, solid-ALL FSS</i>												
Strontium-90	U	0.0303	+/-0.0197	0.0137	+/-0.0197	0.0305	pCi/g		KSD1	12/22/06	1623	595975

The following Prep Methods were performed

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

The following Analytical Methods were performed

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0006-017F
Sample ID: 177713018

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N
Surrogate/Tracer recovery		Test			Recovery%		Acceptable Limits						
Strontium-90		GFPC, Sr90, solid-ALL FSS			87		(25%-125%)						
Carrier/Tracer Recovery		GFPC, Sr90, solid-ALL FSS			87		(25%-125%)						

Notes:

The Qualifiers in this report are defined as follows :

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

The above sample is reported on a dry weight basis.

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-018-I
Sample ID: 177713019
Matrix: TS
Collect Date: 08-DEC-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 7.26%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		1.10	+/-0.125	0.0431	+/-0.125	0.090	pCi/g		MJH1	12/16/06	1314	595950
Americium-241	U	-0.0336	+/-0.0902	0.0697	+/-0.0902	0.142	pCi/g					
Bismuth-212		0.835	+/-0.203	0.0889	+/-0.203	0.185	pCi/g					
Bismuth-214		0.844	+/-0.072	0.021	+/-0.072	0.0435	pCi/g					
Cesium-134	UI	0.00	+/-0.0291	0.0155	+/-0.0291	0.0321	pCi/g					
Cesium-137		0.0394	+/-0.0256	0.0126	+/-0.0256	0.0262	pCi/g					
Cobalt-60	U	0.0144	+/-0.0152	0.0136	+/-0.0152	0.0287	pCi/g					
Europium-152	U	0.018	+/-0.0365	0.0312	+/-0.0365	0.0641	pCi/g					
Europium-154	U	-0.0305	+/-0.0411	0.0327	+/-0.0411	0.0696	pCi/g					
Europium-155	U	0.0459	+/-0.0405	0.0359	+/-0.0405	0.0733	pCi/g					
Lead-212		1.16	+/-0.0478	0.0208	+/-0.0478	0.0425	pCi/g					
Lead-214		1.02	+/-0.0662	0.0205	+/-0.0662	0.0423	pCi/g					
Manganese-54	U	0.0103	+/-0.0177	0.0113	+/-0.0177	0.0235	pCi/g					
Niobium-94	U	-0.00246	+/-0.0123	0.0103	+/-0.0123	0.0215	pCi/g					
Potassium-40		16.2	+/-0.681	0.111	+/-0.681	0.237	pCi/g					
Radium-226		0.844	+/-0.072	0.021	+/-0.072	0.0435	pCi/g					
Silver-108m	U	-0.00106	+/-0.012	0.0105	+/-0.012	0.0217	pCi/g					
Thallium-208		0.340	+/-0.0381	0.0111	+/-0.0381	0.023	pCi/g					

The following Prep Methods were performed

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

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-018-I
Sample ID: 177713019

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

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-019-I
Sample ID: 177713020
Matrix: TS
Collect Date: 08-DEC-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 8.22%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch #
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		1.31	+/-0.195	0.0418	+/-0.195	0.0871	pCi/g		MJH1	12/16/06	1315	595950
Americium-241	U	0.00487	+/-0.0665	0.0552	+/-0.0665	0.112	pCi/g					
Bismuth-212		0.740	+/-0.244	0.0895	+/-0.244	0.186	pCi/g					
Bismuth-214		0.978	+/-0.110	0.0217	+/-0.110	0.0449	pCi/g					
Cesium-134	UI	0.00	+/-0.0303	0.0161	+/-0.0303	0.0333	pCi/g					
Cesium-137	U	0.0212	+/-0.0208	0.0137	+/-0.0208	0.0282	pCi/g					
Cobalt-60	U	0.0076	+/-0.0141	0.0122	+/-0.0141	0.0258	pCi/g					
Europium-152	U	-0.00828	+/-0.0388	0.0301	+/-0.0388	0.0618	pCi/g					
Europium-154	U	-0.00634	+/-0.0456	0.038	+/-0.0456	0.0796	pCi/g					
Europium-155	U	0.0574	+/-0.0563	0.0348	+/-0.0563	0.0708	pCi/g					
Lead-212		1.28	+/-0.105	0.0185	+/-0.105	0.0377	pCi/g					
Lead-214		1.16	+/-0.118	0.0221	+/-0.118	0.0454	pCi/g					
Manganese-54	UI	0.00	+/-0.0168	0.0117	+/-0.0168	0.0244	pCi/g					
Niobium-94	U	0.00116	+/-0.0135	0.0114	+/-0.0135	0.0235	pCi/g					
Potassium-40		18.5	+/-1.40	0.116	+/-1.40	0.246	pCi/g					
Radium-226		0.978	+/-0.110	0.0217	+/-0.110	0.0449	pCi/g					
Silver-108m	U	-0.0105	+/-0.0119	0.010	+/-0.0119	0.0207	pCi/g					
Thallium-208		0.433	+/-0.0462	0.0116	+/-0.0462	0.024	pCi/g					

The following Prep Methods were performed

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

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-019-I
Sample ID: 177713020

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

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID:	9522-0005-020-I	Project:	YANK01204
Sample ID:	177713021	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	08-DEC-06		
Receive Date:	14-DEC-06		
Collector:	Client		
Moisture:	9.8%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		0.663	+/-0.138	0.0482	+/-0.138	0.100	pCi/g		MJH1	12/16/06	1241	595951
Americium-241	U	0.00957	+/-0.0259	0.0183	+/-0.0259	0.0373	pCi/g					
Bismuth-212		0.336	+/-0.205	0.112	+/-0.205	0.231	pCi/g					
Bismuth-214		0.678	+/-0.0799	0.0241	+/-0.0799	0.0498	pCi/g					
Cesium-134	U	0.0222	+/-0.0213	0.0167	+/-0.0213	0.0344	pCi/g					
Cesium-137	UI	0.00	+/-0.0372	0.0131	+/-0.0372	0.0271	pCi/g					
Cobalt-60	U	0.00162	+/-0.0172	0.0145	+/-0.0172	0.0304	pCi/g					
Europium-152	U	-0.00529	+/-0.037	0.0315	+/-0.037	0.0647	pCi/g					
Europium-154	U	-0.0139	+/-0.0491	0.0407	+/-0.0491	0.0854	pCi/g					
Europium-155	U	0.0242	+/-0.0573	0.028	+/-0.0573	0.0571	pCi/g					
Lead-212		0.652	+/-0.0437	0.025	+/-0.0437	0.0507	pCi/g					
Lead-214		0.627	+/-0.0599	0.0237	+/-0.0599	0.0487	pCi/g					
Manganese-54	U	0.0188	+/-0.0188	0.0135	+/-0.0188	0.028	pCi/g					
Niobium-94	U	0.00839	+/-0.0142	0.0124	+/-0.0142	0.0257	pCi/g					
Potassium-40		11.1	+/-0.581	0.130	+/-0.581	0.273	pCi/g					
Radium-226		0.678	+/-0.0799	0.0241	+/-0.0799	0.0498	pCi/g					
Silver-108m	U	0.00341	+/-0.0128	0.0116	+/-0.0128	0.024	pCi/g					
Thallium-208		0.245	+/-0.0382	0.0119	+/-0.0382	0.0247	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1129	595901

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

GEL LABORATORIES LLC

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

Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-020-1
Sample ID: 177713021

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N
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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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2040 Savage Road Charleston SC 29407 – (843) 556-8171 – www.gel.com

Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-021-I
Sample ID: 177713022
Matrix: TS
Collect Date: 08-DEC-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 6.23%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		0.719	+/-0.124	0.0358	+/-0.124	0.0716	pCi/g		MJH1	12/16/06	1245	595951
Americium-241	U	0.0395	+/-0.0452	0.0371	+/-0.0452	0.0742	pCi/g					
Bismuth-212		0.503	+/-0.139	0.0851	+/-0.139	0.170	pCi/g					
Bismuth-214		0.609	+/-0.0739	0.0201	+/-0.0739	0.0402	pCi/g					
Cesium-134	UI	0.00	+/-0.0242	0.0131	+/-0.0242	0.0263	pCi/g					
Cesium-137	U	0.0111	+/-0.0167	0.0112	+/-0.0167	0.0223	pCi/g					
Cobalt-60	U	0.00369	+/-0.0134	0.0114	+/-0.0134	0.0228	pCi/g					
Europium-152	U	-0.0145	+/-0.0399	0.0281	+/-0.0399	0.0561	pCi/g					
Europium-154	U	-0.0317	+/-0.0414	0.0329	+/-0.0414	0.0657	pCi/g					
Europium-155	U	0.0301	+/-0.0433	0.0277	+/-0.0433	0.0553	pCi/g					
Lead-212		0.680	+/-0.0639	0.0162	+/-0.0639	0.0323	pCi/g					
Lead-214		0.680	+/-0.0784	0.0201	+/-0.0784	0.0402	pCi/g					
Manganese-54	U	-0.00435	+/-0.0145	0.0111	+/-0.0145	0.0221	pCi/g					
Niobium-94	U	-0.0103	+/-0.0111	0.00927	+/-0.0111	0.0185	pCi/g					
Potassium-40		11.7	+/-0.880	0.0882	+/-0.880	0.176	pCi/g					
Radium-226		0.609	+/-0.0739	0.0201	+/-0.0739	0.0402	pCi/g					
Silver-108m	U	-0.0151	+/-0.013	0.00905	+/-0.013	0.0181	pCi/g					
Thallium-208		0.228	+/-0.0327	0.00997	+/-0.0327	0.0199	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1129	595901

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-021-I
Sample ID: 177713022

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

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-022-I
Sample ID: 177713023
Matrix: TS
Collect Date: 08-DEC-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 5.82%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch #
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		0.801	+/-0.104	0.0325	+/-0.104	0.0682	pCi/g		MJH1	12/16/06	1242	595951
Americium-241	U	-0.00379	+/-0.0138	0.0123	+/-0.0138	0.0252	pCi/g					
Bismuth-212		0.378	+/-0.163	0.0713	+/-0.163	0.149	pCi/g					
Bismuth-214		0.554	+/-0.0595	0.0158	+/-0.0595	0.0328	pCi/g					
Cesium-134	UI	0.00	+/-0.0241	0.0122	+/-0.0241	0.0254	pCi/g					
Cesium-137		0.0231	+/-0.013	0.00941	+/-0.013	0.0196	pCi/g					
Cobalt-60	U	0.00897	+/-0.0113	0.0104	+/-0.0113	0.022	pCi/g					
Europium-152	U	-0.0121	+/-0.027	0.0227	+/-0.027	0.0469	pCi/g					
Europium-154	U	0.0203	+/-0.0243	0.0301	+/-0.0243	0.0636	pCi/g					
Europium-155	U	0.030	+/-0.0295	0.020	+/-0.0295	0.0408	pCi/g					
Lead-212		0.690	+/-0.0308	0.0123	+/-0.0308	0.0252	pCi/g					
Lead-214		0.617	+/-0.0475	0.0164	+/-0.0475	0.0339	pCi/g					
Manganese-54	U	0.0171	+/-0.0177	0.00945	+/-0.0177	0.0197	pCi/g					
Niobium-94	U	0.00417	+/-0.0105	0.00914	+/-0.0105	0.019	pCi/g					
Potassium-40		11.1	+/-0.490	0.0698	+/-0.490	0.152	pCi/g					
Radium-226		0.554	+/-0.0595	0.0158	+/-0.0595	0.0328	pCi/g					
Silver-108m	U	-0.00523	+/-0.00987	0.00762	+/-0.00987	0.0158	pCi/g					
Thallium-208		0.212	+/-0.0241	0.00867	+/-0.0241	0.0181	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1129	595901

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-022-1
Sample ID: 177713023

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

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-023-I
Sample ID: 177713024
Matrix: TS
Collect Date: 08-DEC-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 7.55%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		1.12	+/-0.161	0.0347	+/-0.161	0.0727	pCi/g		MJH1	12/16/06	1242	595951
Americium-241	U	-0.0293	+/-0.0392	0.0334	+/-0.0392	0.068	pCi/g					
Bismuth-212		0.540	+/-0.184	0.0752	+/-0.184	0.157	pCi/g					
Bismuth-214		0.916	+/-0.106	0.0181	+/-0.106	0.0375	pCi/g					
Cesium-134	UI	0.00	+/-0.0246	0.0142	+/-0.0246	0.0294	pCi/g					
Cesium-137	U	0.0167	+/-0.0158	0.0116	+/-0.0158	0.024	pCi/g					
Cobalt-60	U	0.0013	+/-0.0126	0.0108	+/-0.0126	0.0229	pCi/g					
Europium-152	U	0.0123	+/-0.0296	0.0257	+/-0.0296	0.0529	pCi/g					
Europium-154	U	-0.00393	+/-0.042	0.0311	+/-0.042	0.0656	pCi/g					
Europium-155	UI	0.00	+/-0.0469	0.0274	+/-0.0469	0.0559	pCi/g					
Lead-212		1.05	+/-0.0873	0.0148	+/-0.0873	0.0303	pCi/g					
Lead-214		0.988	+/-0.0962	0.0188	+/-0.0962	0.0387	pCi/g					
Manganese-54	U	0.0144	+/-0.0156	0.00975	+/-0.0156	0.0204	pCi/g					
Niobium-94	U	0.0113	+/-0.011	0.00986	+/-0.011	0.0205	pCi/g					
Potassium-40		13.6	+/-1.00	0.0916	+/-1.00	0.196	pCi/g					
Radium-226		0.916	+/-0.106	0.0181	+/-0.106	0.0375	pCi/g					
Silver-108m	U	0.0044	+/-0.0106	0.00899	+/-0.0106	0.0186	pCi/g					
Thallium-208		0.342	+/-0.0431	0.00937	+/-0.0431	0.0195	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1129	595901

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-023-I
Sample ID: 177713024

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

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-024-I
Sample ID: 177713025
Matrix: TS
Collect Date: 08-DEC-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 8.14%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		1.25	+/-0.162	0.0499	+/-0.162	0.105	pCi/g		MJH1	12/16/06	1243	595951
Americium-241	U	0.0223	+/-0.0351	0.0223	+/-0.0351	0.0454	pCi/g					
Bismuth-212		0.938	+/-0.211	0.113	+/-0.211	0.235	pCi/g					
Bismuth-214		1.33	+/-0.0877	0.026	+/-0.0877	0.0539	pCi/g					
Cesium-134	UI	0.00	+/-0.0267	0.0193	+/-0.0267	0.0399	pCi/g					
Cesium-137	U	0.0107	+/-0.0197	0.0174	+/-0.0197	0.036	pCi/g					
Cobalt-60	U	0.0171	+/-0.0182	0.016	+/-0.0182	0.0339	pCi/g					
Europium-152	U	-0.0224	+/-0.0393	0.0336	+/-0.0393	0.0692	pCi/g					
Europium-154	U	0.0225	+/-0.0588	0.0497	+/-0.0588	0.104	pCi/g					
Europium-155	UI	0.00	+/-0.0613	0.0322	+/-0.0613	0.0656	pCi/g					
Lead-212		1.26	+/-0.0488	0.0203	+/-0.0488	0.0415	pCi/g					
Lead-214		1.45	+/-0.076	0.0255	+/-0.076	0.0525	pCi/g					
Manganese-54	U	0.0131	+/-0.0198	0.0157	+/-0.0198	0.0326	pCi/g					
Niobium-94	U	0.0169	+/-0.0155	0.0142	+/-0.0155	0.0295	pCi/g					
Potassium-40		21.2	+/-0.825	0.130	+/-0.825	0.278	pCi/g					
Radium-226		1.33	+/-0.0877	0.026	+/-0.0877	0.0539	pCi/g					
Silver-108m	U	0.00349	+/-0.0138	0.0119	+/-0.0138	0.0246	pCi/g					
Thallium-208		0.423	+/-0.0404	0.016	+/-0.0404	0.033	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1129	595901

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-024-I
Sample ID: 177713025

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

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-025-I
Sample ID: 177713026
Matrix: TS
Collect Date: 08-DEC-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 8.18%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		1.43	+/-0.198	0.038	+/-0.198	0.0759	pCi/g		MJH1	12/16/06	1247	595951
Americium-241	U	-0.0214	+/-0.0962	0.0768	+/-0.0962	0.154	pCi/g					
Bismuth-212		0.915	+/-0.229	0.0808	+/-0.229	0.162	pCi/g					
Bismuth-214		1.12	+/-0.124	0.0215	+/-0.124	0.043	pCi/g					
Cesium-134	UI	0.00	+/-0.0229	0.0153	+/-0.0229	0.0306	pCi/g					
Cesium-137	U	0.0186	+/-0.0185	0.0107	+/-0.0185	0.0214	pCi/g					
Cobalt-60	U	0.000811	+/-0.0159	0.0114	+/-0.0159	0.0227	pCi/g					
Europium-152	U	-0.0263	+/-0.0416	0.0311	+/-0.0416	0.0622	pCi/g					
Europium-154	U	-0.0224	+/-0.0417	0.034	+/-0.0417	0.068	pCi/g					
Europium-155	U	0.0687	+/-0.0533	0.0418	+/-0.0533	0.0836	pCi/g					
Lead-212		1.33	+/-0.112	0.0186	+/-0.112	0.0372	pCi/g					
Lead-214		1.32	+/-0.126	0.0211	+/-0.126	0.0422	pCi/g					
Manganese-54	UI	0.00	+/-0.0181	0.00994	+/-0.0181	0.0199	pCi/g					
Niobium-94	U	0.00857	+/-0.0123	0.0105	+/-0.0123	0.021	pCi/g					
Potassium-40		20.1	+/-1.31	0.0948	+/-1.31	0.190	pCi/g					
Radium-226		1.12	+/-0.124	0.0215	+/-0.124	0.043	pCi/g					
Silver-108m	U	-0.0018	+/-0.0119	0.0103	+/-0.0119	0.0205	pCi/g					
Thallium-208		0.395	+/-0.0446	0.011	+/-0.0446	0.0221	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1129	595901

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-025-I
Sample ID: 177713026

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

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-026-I
Sample ID: 177713027
Matrix: TS
Collect Date: 08-DEC-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 6.64%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		1.01	+/-0.157	0.045	+/-0.157	0.090	pCi/g		MJH1	12/16/06	1248	595951
Americium-241	U	0.0471	+/-0.0636	0.0518	+/-0.0636	0.104	pCi/g					
Bismuth-212		0.438	+/-0.209	0.0957	+/-0.209	0.191	pCi/g					
Bismuth-214		1.03	+/-0.109	0.0237	+/-0.109	0.0473	pCi/g					
Cesium-134	UI	0.00	+/-0.022	0.0153	+/-0.022	0.0306	pCi/g					
Cesium-137	U	0.0216	+/-0.0144	0.0123	+/-0.0144	0.0246	pCi/g					
Cobalt-60	U	0.00493	+/-0.0177	0.0131	+/-0.0177	0.0262	pCi/g					
Europium-152	U	-0.0563	+/-0.0482	0.033	+/-0.0482	0.0659	pCi/g					
Europium-154	U	-0.0174	+/-0.0494	0.041	+/-0.0494	0.0819	pCi/g					
Europium-155	U	0.0274	+/-0.051	0.0382	+/-0.051	0.0764	pCi/g					
Lead-212		1.05	+/-0.0971	0.0193	+/-0.0971	0.0385	pCi/g					
Lead-214		1.11	+/-0.115	0.0238	+/-0.115	0.0477	pCi/g					
Manganese-54	U	0.00609	+/-0.0238	0.0128	+/-0.0238	0.0256	pCi/g					
Niobium-94	U	0.00151	+/-0.0139	0.0118	+/-0.0139	0.0236	pCi/g					
Potassium-40		17.2	+/-1.21	0.103	+/-1.21	0.206	pCi/g					
Radium-226		1.03	+/-0.109	0.0237	+/-0.109	0.0473	pCi/g					
Silver-108m	U	0.00156	+/-0.0147	0.0116	+/-0.0147	0.0232	pCi/g					
Thallium-208		0.346	+/-0.0412	0.0114	+/-0.0412	0.0228	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1129	595901

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

GEL LABORATORIES LLC

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

Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-026-I
Sample ID: 177713027

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

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-027-I
Sample ID: 177713028
Matrix: TS
Collect Date: 08-DEC-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 5.18%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		0.600	+/-0.120	0.0306	+/-0.120	0.0643	pCi/g		MJH1	12/16/06	1249	595951
Americium-241	U	-0.0118	+/-0.0333	0.0266	+/-0.0333	0.0543	pCi/g					
Bismuth-212		0.397	+/-0.157	0.0751	+/-0.157	0.156	pCi/g					
Bismuth-214		0.682	+/-0.0826	0.0177	+/-0.0826	0.0367	pCi/g					
Cesium-134	UI	0.00	+/-0.0212	0.0128	+/-0.0212	0.0265	pCi/g					
Cesium-137	U	0.0087	+/-0.0118	0.00961	+/-0.0118	0.020	pCi/g					
Cobalt-60	U	0.0105	+/-0.00989	0.00892	+/-0.00989	0.019	pCi/g					
Europium-152	U	-0.0216	+/-0.0285	0.024	+/-0.0285	0.0495	pCi/g					
Europium-154	U	-0.00561	+/-0.0333	0.0272	+/-0.0333	0.0577	pCi/g					
Europium-155	U	0.0497	+/-0.0412	0.0251	+/-0.0412	0.0512	pCi/g					
Lead-212		0.618	+/-0.0584	0.0142	+/-0.0584	0.0292	pCi/g					
Lead-214		0.614	+/-0.0723	0.018	+/-0.0723	0.0372	pCi/g					
Manganese-54	U	0.0161	+/-0.00867	0.00768	+/-0.00867	0.0162	pCi/g					
Niobium-94	U	0.00375	+/-0.00958	0.00855	+/-0.00958	0.0178	pCi/g					
Potassium-40		12.8	+/-0.936	0.0795	+/-0.936	0.171	pCi/g					
Radium-226		0.682	+/-0.0826	0.0177	+/-0.0826	0.0367	pCi/g					
Silver-108m	U	-0.00391	+/-0.00987	0.00825	+/-0.00987	0.0171	pCi/g					
Thallium-208		0.195	+/-0.0325	0.00816	+/-0.0325	0.017	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1129	595901

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-027-I
Sample ID: 177713028

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

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-028-I
Sample ID: 177713029
Matrix: TS
Collect Date: 08-DEC-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 7.68%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		0.816	+/-0.163	0.0576	+/-0.163	0.115	pCi/g		MJH1	12/16/06	1249	595951
Americium-241	U	0.0372	+/-0.031	0.0237	+/-0.031	0.0474	pCi/g					
Bismuth-212		0.515	+/-0.290	0.123	+/-0.290	0.246	pCi/g					
Bismuth-214		1.33	+/-0.160	0.0278	+/-0.160	0.0556	pCi/g					
Cesium-134	UI	0.00	+/-0.0284	0.0195	+/-0.0284	0.039	pCi/g					
Cesium-137	U	0.00532	+/-0.0213	0.0165	+/-0.0213	0.033	pCi/g					
Cobalt-60	U	0.00445	+/-0.0215	0.0183	+/-0.0215	0.0365	pCi/g					
Europium-152	U	-0.00646	+/-0.0508	0.0364	+/-0.0508	0.0728	pCi/g					
Europium-154	U	0.0093	+/-0.0674	0.0571	+/-0.0674	0.114	pCi/g					
Europium-155	U	0.00987	+/-0.0415	0.035	+/-0.0415	0.070	pCi/g					
Lead-212		0.859	+/-0.0867	0.0206	+/-0.0867	0.0412	pCi/g					
Lead-214		1.47	+/-0.149	0.0262	+/-0.149	0.0523	pCi/g					
Manganese-54	U	-0.00159	+/-0.0194	0.0168	+/-0.0194	0.0336	pCi/g					
Niobium-94	U	0.0275	+/-0.0173	0.016	+/-0.0173	0.032	pCi/g					
Potassium-40		15.3	+/-0.871	0.143	+/-0.871	0.286	pCi/g					
Radium-226		1.33	+/-0.160	0.0278	+/-0.160	0.0556	pCi/g					
Silver-108m	U	-0.00763	+/-0.0181	0.0133	+/-0.0181	0.0266	pCi/g					
Thallium-208		0.296	+/-0.0482	0.015	+/-0.0482	0.0299	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1129	595901

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-028-1
Sample ID: 177713029

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

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-029-1
Sample ID: 177713030
Matrix: TS
Collect Date: 08-DEC-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 6.48%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N
Rad Gamma Spec Analysis													
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>													
<i>Waived</i>													
Actinium-228		0.704	+/-0.140	0.0401	+/-0.140	0.0802	pCi/g		MJH1	12/18/06	1538	595951	
Americium-241	U	0.0855	+/-0.102	0.0858	+/-0.102	0.171	pCi/g						
Bismuth-212		0.480	+/-0.215	0.0931	+/-0.215	0.186	pCi/g						
Bismuth-214		0.647	+/-0.0951	0.024	+/-0.0951	0.0479	pCi/g						
Cesium-134	UI	0.00	+/-0.0219	0.0153	+/-0.0219	0.0305	pCi/g						
Cesium-137	U	-0.00718	+/-0.0151	0.0124	+/-0.0151	0.0248	pCi/g						
Cobalt-60	U	0.00757	+/-0.0156	0.0136	+/-0.0156	0.0272	pCi/g						
Europium-152	U	-0.00526	+/-0.0537	0.0361	+/-0.0537	0.0722	pCi/g						
Europium-154	U	-0.0406	+/-0.0499	0.0393	+/-0.0499	0.0786	pCi/g						
Europium-155	U	0.0215	+/-0.0538	0.0491	+/-0.0538	0.0982	pCi/g						
Lead-212		0.596	+/-0.0629	0.0213	+/-0.0629	0.0426	pCi/g						
Lead-214		0.745	+/-0.0934	0.0251	+/-0.0934	0.0503	pCi/g						
Manganese-54	UI	0.00	+/-0.0207	0.0108	+/-0.0207	0.0215	pCi/g						
Niobium-94	U	0.00699	+/-0.0138	0.012	+/-0.0138	0.0239	pCi/g						
Potassium-40		12.7	+/-1.00	0.126	+/-1.00	0.252	pCi/g						
Radium-226		0.647	+/-0.0951	0.024	+/-0.0951	0.0479	pCi/g						
Silver-108m	U	-0.00358	+/-0.0129	0.0112	+/-0.0129	0.0223	pCi/g						
Thallium-208		0.175	+/-0.0281	0.0113	+/-0.0281	0.0226	pCi/g						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1129	595901

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-029-I
Sample ID: 177713030

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

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID:	9522-0005-030-I	Project:	YANK01204
Sample ID:	177713031	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	11-DEC-06		
Receive Date:	14-DEC-06		
Collector:	Client		
Moisture:	7.66%		

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

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

Actinium-228		1.42	+/-0.258	0.0838	+/-0.258	0.167	pCi/g		MJH1	12/18/06	1539	595951
Americium-241	U	0.0411	+/-0.0488	0.0397	+/-0.0488	0.0793	pCi/g					
Bismuth-212		0.793	+/-0.397	0.197	+/-0.397	0.393	pCi/g					
Bismuth-214		1.10	+/-0.172	0.0511	+/-0.172	0.102	pCi/g					
Cesium-134	U	0.0501	+/-0.0394	0.0369	+/-0.0394	0.0737	pCi/g					
Cesium-137	U	0.0259	+/-0.039	0.0302	+/-0.039	0.0604	pCi/g					
Cobalt-60	U	0.0355	+/-0.0385	0.0353	+/-0.0385	0.0705	pCi/g					
Europium-152	U	-0.0118	+/-0.108	0.0633	+/-0.108	0.127	pCi/g					
Europium-154	U	-0.0944	+/-0.115	0.0872	+/-0.115	0.174	pCi/g					
Europium-155	U	0.0944	+/-0.0687	0.0604	+/-0.0687	0.121	pCi/g					
Lead-212		1.14	+/-0.126	0.0367	+/-0.126	0.0733	pCi/g					
Lead-214		1.24	+/-0.169	0.0461	+/-0.169	0.0921	pCi/g					
Manganese-54	U	0.0195	+/-0.0374	0.0294	+/-0.0374	0.0588	pCi/g					
Niobium-94	U	0.0202	+/-0.0287	0.0262	+/-0.0287	0.0524	pCi/g					
Potassium-40		16.0	+/-1.36	0.225	+/-1.36	0.450	pCi/g					
Radium-226		1.10	+/-0.172	0.0511	+/-0.172	0.102	pCi/g					
Silver-108m	U	-0.0195	+/-0.027	0.0223	+/-0.027	0.0445	pCi/g					
Thallium-208		0.386	+/-0.0756	0.0274	+/-0.0756	0.0548	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1129	595901

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-030-I
Sample ID: 177713031

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
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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: December 28, 2006

Client Sample ID: 9522-0005-031-I
Sample ID: 177713032
Matrix: TS
Collect Date: 11-DEC-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 7.57%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		1.07	+/-0.221	0.0672	+/-0.221	0.144	pCi/g		MJH1	12/18/06	1646	595951
Americium-241	U	0.0139	+/-0.103	0.0864	+/-0.103	0.178	pCi/g					
Bismuth-212		0.734	+/-0.287	0.133	+/-0.287	0.285	pCi/g					
Bismuth-214		0.968	+/-0.129	0.0357	+/-0.129	0.0754	pCi/g					
Cesium-134	UI	0.00	+/-0.0728	0.0248	+/-0.0728	0.0523	pCi/g					
Cesium-137	U	0.0434	+/-0.0253	0.0218	+/-0.0253	0.0459	pCi/g					
Cobalt-60	U	0.00406	+/-0.0222	0.019	+/-0.0222	0.0416	pCi/g					
Europium-152	U	0.00475	+/-0.052	0.0467	+/-0.052	0.0979	pCi/g					
Europium-154	U	0.00825	+/-0.0714	0.0607	+/-0.0714	0.131	pCi/g					
Europium-155	U	0.00841	+/-0.0612	0.0554	+/-0.0612	0.114	pCi/g					
Lead-212		0.989	+/-0.102	0.0275	+/-0.102	0.057	pCi/g					
Lead-214		1.08	+/-0.134	0.0324	+/-0.134	0.068	pCi/g					
Manganese-54	U	0.00931	+/-0.021	0.019	+/-0.021	0.0404	pCi/g					
Niobium-94	U	-0.00031	+/-0.0193	0.0162	+/-0.0193	0.0345	pCi/g					
Potassium-40		16.5	+/-1.47	0.146	+/-1.47	0.329	pCi/g					
Radium-226		0.968	+/-0.129	0.0357	+/-0.129	0.0754	pCi/g					
Silver-108m	U	-0.0102	+/-0.0182	0.0154	+/-0.0182	0.0325	pCi/g					
Thallium-208		0.330	+/-0.0597	0.0168	+/-0.0597	0.0357	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1129	595901

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

GEL LABORATORIES LLC

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

Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-031-I
Sample ID: 177713032

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

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-032-I
Sample ID: 177713033
Matrix: TS
Collect Date: 11-DEC-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 8.27%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		1.38	+/-0.261	0.073	+/-0.261	0.156	pCi/g		MJH1	12/18/06	1646	595951
Americium-241	U	-0.0312	+/-0.0992	0.0866	+/-0.0992	0.177	pCi/g					
Bismuth-212		0.829	+/-0.313	0.172	+/-0.313	0.363	pCi/g					
Bismuth-214		1.46	+/-0.172	0.0404	+/-0.172	0.085	pCi/g					
Cesium-134	UI	0.00	+/-0.0356	0.0305	+/-0.0356	0.064	pCi/g					
Cesium-137	U	0.00842	+/-0.0344	0.0256	+/-0.0344	0.0536	pCi/g					
Cobalt-60	U	-0.00745	+/-0.0286	0.0235	+/-0.0286	0.051	pCi/g					
Europium-152	U	-0.0152	+/-0.0829	0.062	+/-0.0829	0.129	pCi/g					
Europium-154	U	0.0377	+/-0.106	0.0806	+/-0.106	0.172	pCi/g					
Europium-155	U	0.0658	+/-0.0696	0.0667	+/-0.0696	0.137	pCi/g					
Lead-212		1.30	+/-0.128	0.0358	+/-0.128	0.0739	pCi/g					
Lead-214		1.58	+/-0.183	0.0444	+/-0.183	0.0922	pCi/g					
Manganese-54	U	0.00297	+/-0.0336	0.0243	+/-0.0336	0.0512	pCi/g					
Niobium-94	U	0.0198	+/-0.0258	0.0226	+/-0.0258	0.0475	pCi/g					
Potassium-40		23.4	+/-1.82	0.171	+/-1.82	0.381	pCi/g					
Radium-226		1.46	+/-0.172	0.0404	+/-0.172	0.085	pCi/g					
Silver-108m	U	-0.00683	+/-0.0241	0.0205	+/-0.0241	0.0428	pCi/g					
Thallium-208		0.412	+/-0.0688	0.0213	+/-0.0688	0.0448	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1129	595901

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-032-I
Sample ID: 177713033

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

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-033-I
Sample ID: 177713034
Matrix: TS
Collect Date: 11-DEC-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 7.91%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid - FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		1.38	+/-0.199	0.0662	+/-0.199	0.140	pCi/g		MJH1	12/18/06	1647	595951
Americium-241	U	0.0309	+/-0.164	0.0978	+/-0.164	0.199	pCi/g					
Bismuth-212		0.940	+/-0.289	0.139	+/-0.289	0.293	pCi/g					
Bismuth-214		1.58	+/-0.120	0.0357	+/-0.120	0.0747	pCi/g					
Cesium-134	UI	0.00	+/-0.0495	0.0281	+/-0.0495	0.0584	pCi/g					
Cesium-137		0.0639	+/-0.0333	0.0186	+/-0.0333	0.0391	pCi/g					
Cobalt-60	U	-0.00225	+/-0.0257	0.021	+/-0.0257	0.0449	pCi/g					
Europium-152	U	-0.0416	+/-0.0653	0.054	+/-0.0653	0.112	pCi/g					
Europium-154	U	-0.0329	+/-0.069	0.0545	+/-0.069	0.117	pCi/g					
Europium-155	U	0.102	+/-0.0865	0.0634	+/-0.0865	0.130	pCi/g					
Lead-212		1.49	+/-0.073	0.0305	+/-0.073	0.0626	pCi/g					
Lead-214		1.66	+/-0.116	0.0396	+/-0.116	0.0819	pCi/g					
Manganese-54	U	-0.0113	+/-0.0254	0.0211	+/-0.0254	0.0443	pCi/g					
Niobium-94	U	0.0161	+/-0.0212	0.019	+/-0.0212	0.0397	pCi/g					
Potassium-40		21.8	+/-0.998	0.158	+/-0.998	0.346	pCi/g					
Radium-226		1.58	+/-0.120	0.0357	+/-0.120	0.0747	pCi/g					
Silver-108m	U	0.004	+/-0.0218	0.0185	+/-0.0218	0.0384	pCi/g					
Thallium-208		0.443	+/-0.0492	0.0212	+/-0.0492	0.0441	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1129	595901

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-033-I
Sample ID: 177713034

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

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-034-I
Sample ID: 177713035
Matrix: TS
Collect Date: 11-DEC-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 8.72%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		1.25	+/-0.339	0.153	+/-0.339	0.325	pCi/g		MJH1	12/18/06	1647	595951
Americium-241	U	0.012	+/-0.0658	0.0522	+/-0.0658	0.108	pCi/g					
Bismuth-212		1.16	+/-0.453	0.269	+/-0.453	0.577	pCi/g					
Bismuth-214		1.49	+/-0.195	0.0675	+/-0.195	0.143	pCi/g					
Cesium-134	U	0.0539	+/-0.0657	0.0483	+/-0.0657	0.102	pCi/g					
Cesium-137	U	0.00583	+/-0.0476	0.0404	+/-0.0476	0.0857	pCi/g					
Cobalt-60	U	0.0253	+/-0.0463	0.0409	+/-0.0463	0.0892	pCi/g					
Europium-152	U	-0.00505	+/-0.101	0.0836	+/-0.101	0.176	pCi/g					
Europium-154	U	-0.0599	+/-0.150	0.120	+/-0.150	0.261	pCi/g					
Europium-155	U	0.124	+/-0.112	0.0845	+/-0.112	0.175	pCi/g					
Lead-212		1.39	+/-0.116	0.0481	+/-0.116	0.100	pCi/g					
Lead-214		1.65	+/-0.192	0.0609	+/-0.192	0.128	pCi/g					
Manganese-54	U	-0.00443	+/-0.0473	0.0386	+/-0.0473	0.0823	pCi/g					
Niobium-94	U	-0.00728	+/-0.0416	0.0344	+/-0.0416	0.0731	pCi/g					
Potassium-40		24.9	+/-1.83	0.354	+/-1.83	0.783	pCi/g					
Radium-226		1.49	+/-0.195	0.0675	+/-0.195	0.143	pCi/g					
Silver-108m	U	-0.0277	+/-0.0382	0.0274	+/-0.0382	0.0584	pCi/g					
Thallium-208		0.480	+/-0.0881	0.0343	+/-0.0881	0.073	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1129	595901

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-034-I
Sample ID: 177713035

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

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-035-I
Sample ID: 177713036
Matrix: TS
Collect Date: 11-DEC-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 7.76%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		1.98	+/-0.311	0.107	+/-0.311	0.230	pCi/g		MJH1	12/18/06	1647	595951
Americium-241	U	0.0557	+/-0.0622	0.0406	+/-0.0622	0.0834	pCi/g					
Bismuth-212		1.16	+/-0.385	0.234	+/-0.385	0.498	pCi/g					
Bismuth-214		1.94	+/-0.180	0.0519	+/-0.180	0.110	pCi/g					
Cesium-134	UI	0.00	+/-0.0488	0.0376	+/-0.0488	0.0796	pCi/g					
Cesium-137	U	-0.0167	+/-0.0396	0.0281	+/-0.0396	0.0599	pCi/g					
Cobalt-60	U	-0.00137	+/-0.0369	0.0307	+/-0.0369	0.0674	pCi/g					
Europium-152	U	0.0122	+/-0.0857	0.0727	+/-0.0857	0.152	pCi/g					
Europium-154	U	-0.0366	+/-0.110	0.0892	+/-0.110	0.195	pCi/g					
Europium-155	UI	0.00	+/-0.102	0.0621	+/-0.102	0.128	pCi/g					
Lead-212		1.83	+/-0.103	0.039	+/-0.103	0.0811	pCi/g					
Lead-214		2.23	+/-0.160	0.0476	+/-0.160	0.100	pCi/g					
Manganese-54	U	0.0304	+/-0.0396	0.0313	+/-0.0396	0.0666	pCi/g					
Niobium-94	U	0.011	+/-0.0312	0.0271	+/-0.0312	0.0576	pCi/g					
Potassium-40		23.5	+/-1.58	0.283	+/-1.58	0.627	pCi/g					
Radium-226		1.94	+/-0.180	0.0519	+/-0.180	0.110	pCi/g					
Silver-108m	U	0.00785	+/-0.026	0.0235	+/-0.026	0.0496	pCi/g					
Thallium-208		0.517	+/-0.0791	0.0257	+/-0.0791	0.0547	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1129	595901

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522–0005–035–I
Sample ID: 177713036

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

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-036-I
Sample ID: 177713037
Matrix: TS
Collect Date: 11-DEC-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 9.91%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		1.07	+/-0.242	0.0562	+/-0.242	0.122	pCi/g		MJH1	12/18/06	1648	595951
Americium-241	U	0.0149	+/-0.0698	0.0566	+/-0.0698	0.117	pCi/g					
Bismuth-212		0.775	+/-0.248	0.102	+/-0.248	0.222	pCi/g					
Bismuth-214		0.825	+/-0.120	0.0311	+/-0.120	0.066	pCi/g					
Cesium-134	UI	0.00	+/-0.0276	0.0227	+/-0.0276	0.048	pCi/g					
Cesium-137	U	0.0216	+/-0.0261	0.0193	+/-0.0261	0.0409	pCi/g					
Cobalt-60	U	0.00594	+/-0.0202	0.0179	+/-0.0202	0.0392	pCi/g					
Europium-152	U	0.0201	+/-0.050	0.0438	+/-0.050	0.0919	pCi/g					
Europium-154	U	-0.0805	+/-0.0678	0.051	+/-0.0678	0.112	pCi/g					
Europium-155	U	-0.00374	+/-0.0553	0.0463	+/-0.0553	0.0957	pCi/g					
Lead-212		1.06	+/-0.102	0.025	+/-0.102	0.052	pCi/g					
Lead-214		0.948	+/-0.121	0.0318	+/-0.121	0.0667	pCi/g					
Manganese-54	UI	0.00	+/-0.0338	0.017	+/-0.0338	0.0363	pCi/g					
Niobium-94	U	0.00364	+/-0.0186	0.0163	+/-0.0186	0.0346	pCi/g					
Potassium-40		16.6	+/-1.42	0.137	+/-1.42	0.310	pCi/g					
Radium-226		0.825	+/-0.120	0.0311	+/-0.120	0.066	pCi/g					
Silver-108m	U	0.00524	+/-0.0171	0.0146	+/-0.0171	0.0309	pCi/g					
Thallium-208		0.335	+/-0.0582	0.0166	+/-0.0582	0.0352	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1129	595901

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

GEL LABORATORIES LLC

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

Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-036-I
Sample ID: 177713037

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

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-037-I
Sample ID: 177713038
Matrix: TS
Collect Date: 11-DEC-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 8.95%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		0.855	+/-0.205	0.0661	+/-0.205	0.132	pCi/g		MJH1	12/18/06	1652	595951
Americium-241	U	-0.00831	+/-0.0938	0.0754	+/-0.0938	0.151	pCi/g					
Bismuth-212		0.584	+/-0.294	0.157	+/-0.294	0.314	pCi/g					
Bismuth-214		0.788	+/-0.123	0.0364	+/-0.123	0.0728	pCi/g					
Cesium-134	UI	0.00	+/-0.0368	0.0242	+/-0.0368	0.0484	pCi/g					
Cesium-137		0.0534	+/-0.0402	0.0203	+/-0.0402	0.0405	pCi/g					
Cobalt-60	U	0.00558	+/-0.0233	0.0202	+/-0.0233	0.0403	pCi/g					
Europium-152	U	-0.014	+/-0.0744	0.0535	+/-0.0744	0.107	pCi/g					
Europium-154	U	-0.0137	+/-0.0808	0.0653	+/-0.0808	0.131	pCi/g					
Europium-155	U	0.014	+/-0.0702	0.0612	+/-0.0702	0.122	pCi/g					
Lead-212		0.969	+/-0.104	0.0299	+/-0.104	0.0598	pCi/g					
Lead-214		0.889	+/-0.120	0.0403	+/-0.120	0.0806	pCi/g					
Manganese-54	U	0.0114	+/-0.0233	0.0211	+/-0.0233	0.0421	pCi/g					
Niobium-94	U	0.0137	+/-0.0259	0.0199	+/-0.0259	0.0397	pCi/g					
Potassium-40		14.7	+/-1.26	0.159	+/-1.26	0.318	pCi/g					
Radium-226		0.788	+/-0.123	0.0364	+/-0.123	0.0728	pCi/g					
Silver-108m	U	-0.00664	+/-0.0202	0.0174	+/-0.0202	0.0347	pCi/g					
Thallium-208		0.349	+/-0.0572	0.0188	+/-0.0572	0.0375	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1129	595901

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-037-I
Sample ID: 177713038

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

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID:	9522-0005-038-I	Project:	YANK01204
Sample ID:	177713039	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	11-DEC-06		
Receive Date:	14-DEC-06		
Collector:	Client		
Moisture:	8.27%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		1.04	+/-0.216	0.0841	+/-0.216	0.185	pCi/g		MJH1	12/18/06	1705	595951
Americium-241	U	0.0025	+/-0.0391	0.0368	+/-0.0391	0.076	pCi/g					
Bismuth-212		0.784	+/-0.356	0.194	+/-0.356	0.419	pCi/g					
Bismuth-214		0.833	+/-0.150	0.047	+/-0.150	0.101	pCi/g					
Cesium-134	UI	0.00	+/-0.0607	0.035	+/-0.0607	0.0747	pCi/g					
Cesium-137	U	0.0208	+/-0.0372	0.029	+/-0.0372	0.0621	pCi/g					
Cobalt-60	U	-0.0015	+/-0.030	0.0253	+/-0.030	0.0568	pCi/g					
Europium-152	U	0.0227	+/-0.070	0.0646	+/-0.070	0.136	pCi/g					
Europium-154	U	0.0298	+/-0.0818	0.0734	+/-0.0818	0.164	pCi/g					
Europium-155	U	0.0784	+/-0.0885	0.0589	+/-0.0885	0.122	pCi/g					
Lead-212		0.852	+/-0.0938	0.0482	+/-0.0938	0.0997	pCi/g					
Lead-214		0.931	+/-0.140	0.0437	+/-0.140	0.0926	pCi/g					
Manganese-54	U	0.0181	+/-0.0285	0.0257	+/-0.0285	0.0556	pCi/g					
Niobium-94	U	0.00678	+/-0.0276	0.0241	+/-0.0276	0.0518	pCi/g					
Potassium-40		15.3	+/-1.25	0.238	+/-1.25	0.539	pCi/g					
Radium-226		0.833	+/-0.150	0.047	+/-0.150	0.101	pCi/g					
Silver-108m	U	-0.0208	+/-0.0238	0.0197	+/-0.0238	0.0422	pCi/g					
Thallium-208		0.364	+/-0.0759	0.0241	+/-0.0759	0.0518	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1129	595901

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522–0005–038–I
Sample ID: 177713039

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

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-039-I
Sample ID: 177713040
Matrix: TS
Collect Date: 11-DEC-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 7.87%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		1.75	+/-0.284	0.101	+/-0.284	0.222	pCi/g		MJH1	12/18/06	1754	595951
Americium-241	U	0.0203	+/-0.0502	0.0424	+/-0.0502	0.0878	pCi/g					
Bismuth-212		0.725	+/-0.528	0.204	+/-0.528	0.447	pCi/g					
Bismuth-214		0.935	+/-0.162	0.0569	+/-0.162	0.122	pCi/g					
Cesium-134	UI	0.00	+/-0.0516	0.0379	+/-0.0516	0.0816	pCi/g					
Cesium-137	U	0.0237	+/-0.0448	0.0321	+/-0.0448	0.0692	pCi/g					
Cobalt-60	U	0.0136	+/-0.0359	0.0313	+/-0.0359	0.0705	pCi/g					
Europium-152	U	-0.00628	+/-0.0761	0.066	+/-0.0761	0.141	pCi/g					
Europium-154	U	0.0252	+/-0.128	0.109	+/-0.128	0.238	pCi/g					
Europium-155	U	0.0611	+/-0.0773	0.0694	+/-0.0773	0.144	pCi/g					
Lead-212		1.36	+/-0.0997	0.0357	+/-0.0997	0.0752	pCi/g					
Lead-214		1.16	+/-0.143	0.0492	+/-0.143	0.105	pCi/g					
Manganese-54	U	0.0206	+/-0.032	0.0295	+/-0.032	0.0644	pCi/g					
Niobium-94	U	-0.0145	+/-0.0333	0.0281	+/-0.0333	0.0607	pCi/g					
Potassium-40		19.2	+/-1.53	0.254	+/-1.53	0.586	pCi/g					
Radium-226		0.935	+/-0.162	0.0569	+/-0.162	0.122	pCi/g					
Silver-108m	U	0.0165	+/-0.0297	0.0266	+/-0.0297	0.0566	pCi/g					
Thallium-208		0.456	+/-0.0853	0.0243	+/-0.0853	0.0532	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1129	595901

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-039-I
Sample ID: 177713040

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

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID:	9522-0005-040-I	Project:	YANK01204
Sample ID:	177713041	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	11-DEC-06		
Receive Date:	14-DEC-06		
Collector:	Client		
Moisture:	8.79%		

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

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

Actinium-228		1.34	+/-0.183	0.0347	+/-0.183	0.0693	pCi/g		MJH1	12/18/06	2001	595952
Americium-241	U	0.0119	+/-0.0834	0.069	+/-0.0834	0.138	pCi/g					
Bismuth-212		0.782	+/-0.184	0.074	+/-0.184	0.148	pCi/g					
Bismuth-214		1.08	+/-0.117	0.0184	+/-0.117	0.0368	pCi/g					
Cesium-134	UI	0.00	+/-0.0211	0.0137	+/-0.0211	0.0274	pCi/g					
Cesium-137	UI	0.00	+/-0.0126	0.0101	+/-0.0126	0.0202	pCi/g					
Cobalt-60	U-0.000914		+/-0.0114	0.00955	+/-0.0114	0.0191	pCi/g					
Europium-152	U	-0.0529	+/-0.0401	0.0279	+/-0.0401	0.0558	pCi/g					
Europium-154	U-0.000264		+/-0.0453	0.0292	+/-0.0453	0.0583	pCi/g					
Europium-155	U	0.0587	+/-0.0479	0.040	+/-0.0479	0.0799	pCi/g					
Lead-212		1.27	+/-0.107	0.0172	+/-0.107	0.0344	pCi/g					
Lead-214		1.34	+/-0.125	0.0195	+/-0.125	0.0389	pCi/g					
Manganese-54	U	0.0151	+/-0.0136	0.0107	+/-0.0136	0.0214	pCi/g					
Niobium-94	U	0.00036	+/-0.0108	0.00919	+/-0.0108	0.0184	pCi/g					
Potassium-40		19.3	+/-1.22	0.0851	+/-1.22	0.170	pCi/g					
Radium-226		1.08	+/-0.117	0.0184	+/-0.117	0.0368	pCi/g					
Silver-108m	U	-0.00337	+/-0.0106	0.00923	+/-0.0106	0.0184	pCi/g					
Thallium-208		0.383	+/-0.0421	0.00933	+/-0.0421	0.0187	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1214	595902

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-040-I
Sample ID: 177713041

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	NA
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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: December 28, 2006

Client Sample ID: 9522-0005-041-I
Sample ID: 177713042
Matrix: TS
Collect Date: 11-DEC-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 5.79%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		0.597	+/-0.110	0.0301	+/-0.110	0.0602	pCi/g		MJH1	12/19/06	1925	595952
Americium-241	U	0.0461	+/-0.0542	0.0468	+/-0.0542	0.0935	pCi/g					
Bismuth-212		0.399	+/-0.138	0.0703	+/-0.138	0.141	pCi/g					
Bismuth-214		0.524	+/-0.068	0.0185	+/-0.068	0.0369	pCi/g					
Cesium-134	UI	0.00	+/-0.0177	0.0114	+/-0.0177	0.0227	pCi/g					
Cesium-137	U	0.00641	+/-0.0115	0.0102	+/-0.0115	0.0204	pCi/g					
Cobalt-60	U	-0.00387	+/-0.0121	0.00998	+/-0.0121	0.0199	pCi/g					
Europium-152	U	-0.0317	+/-0.0372	0.0265	+/-0.0372	0.0531	pCi/g					
Europium-154	U	-0.0108	+/-0.0369	0.0307	+/-0.0369	0.0614	pCi/g					
Europium-155	U	0.0306	+/-0.0407	0.0306	+/-0.0407	0.0611	pCi/g					
Lead-212		0.626	+/-0.0588	0.0151	+/-0.0588	0.0301	pCi/g					
Lead-214		0.557	+/-0.0649	0.0187	+/-0.0649	0.0374	pCi/g					
Manganese-54	U	0.0119	+/-0.0121	0.00943	+/-0.0121	0.0188	pCi/g					
Niobium-94	U	0.00363	+/-0.0104	0.00902	+/-0.0104	0.018	pCi/g					
Potassium-40		9.60	+/-0.738	0.0841	+/-0.738	0.168	pCi/g					
Radium-226		0.524	+/-0.068	0.0185	+/-0.068	0.0369	pCi/g					
Silver-108m	U	0.00786	+/-0.00993	0.00911	+/-0.00993	0.0182	pCi/g					
Thallium-208		0.210	+/-0.0293	0.00933	+/-0.0293	0.0186	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1214	595902

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

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

Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-041-I
Sample ID: 177713042

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

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-042-I
Sample ID: 177713043
Matrix: TS
Collect Date: 11-DEC-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 7.24%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		1.23	+/-0.153	0.0536	+/-0.153	0.111	pCi/g		MJH1	12/19/06	1922	595952
Americium-241	U	-0.01	+/-0.0296	0.0213	+/-0.0296	0.0433	pCi/g					
Bismuth-212		0.837	+/-0.203	0.111	+/-0.203	0.230	pCi/g					
Bismuth-214		1.20	+/-0.0842	0.0277	+/-0.0842	0.0569	pCi/g					
Cesium-134	UI	0.00	+/-0.0304	0.0204	+/-0.0304	0.042	pCi/g					
Cesium-137	UI	0.00	+/-0.0393	0.0143	+/-0.0393	0.0295	pCi/g					
Cobalt-60	U	0.00596	+/-0.0185	0.0158	+/-0.0185	0.0331	pCi/g					
Europium-152	U	-0.0109	+/-0.0426	0.0362	+/-0.0426	0.0741	pCi/g					
Europium-154	U	-0.0629	+/-0.0539	0.0427	+/-0.0539	0.0892	pCi/g					
Europium-155	UI	0.00	+/-0.0547	0.0334	+/-0.0547	0.0679	pCi/g					
Lead-212		1.24	+/-0.0488	0.0199	+/-0.0488	0.0406	pCi/g					
Lead-214		1.25	+/-0.0755	0.0257	+/-0.0755	0.0527	pCi/g					
Manganese-54	U	0.00809	+/-0.0202	0.0151	+/-0.0202	0.0313	pCi/g					
Niobium-94	U	0.0111	+/-0.0159	0.014	+/-0.0159	0.0288	pCi/g					
Potassium-40		17.7	+/-0.696	0.136	+/-0.696	0.286	pCi/g					
Radium-226		1.20	+/-0.0842	0.0277	+/-0.0842	0.0569	pCi/g					
Silver-108m	U	-0.000646	+/-0.0138	0.0124	+/-0.0138	0.0254	pCi/g					
Thallium-208		0.392	+/-0.0375	0.0148	+/-0.0375	0.0304	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1214	595902

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-042-I
Sample ID: 177713043

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

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-043-I
Sample ID: 177713044
Matrix: TS
Collect Date: 11-DEC-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 5.16%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		0.660	+/-0.173	0.0649	+/-0.173	0.142	pCi/g		MJH1	12/20/06	0627	595952
Americium-241	U	0.0171	+/-0.0267	0.0255	+/-0.0267	0.0527	pCi/g					
Bismuth-212		0.475	+/-0.351	0.154	+/-0.351	0.330	pCi/g					
Bismuth-214		0.445	+/-0.103	0.0349	+/-0.103	0.0747	pCi/g					
Cesium-134	UI	0.00	+/-0.0439	0.0256	+/-0.0439	0.0547	pCi/g					
Cesium-137	U	0.0177	+/-0.0223	0.0212	+/-0.0223	0.0453	pCi/g					
Cobalt-60	U	0.00665	+/-0.0226	0.0196	+/-0.0226	0.0436	pCi/g					
Europium-152	U	-0.0195	+/-0.0466	0.0402	+/-0.0466	0.0856	pCi/g					
Europium-154	U	-0.0591	+/-0.0744	0.0554	+/-0.0744	0.123	pCi/g					
Europium-155	U	0.0324	+/-0.0678	0.0386	+/-0.0678	0.0803	pCi/g					
Lead-212		0.605	+/-0.0554	0.0231	+/-0.0554	0.0485	pCi/g					
Lead-214		0.603	+/-0.0798	0.030	+/-0.0798	0.0636	pCi/g					
Manganese-54	U	0.0212	+/-0.0209	0.020	+/-0.0209	0.0431	pCi/g					
Niobium-94	U	-0.00323	+/-0.0212	0.0186	+/-0.0212	0.0399	pCi/g					
Potassium-40		9.63	+/-0.924	0.151	+/-0.924	0.347	pCi/g					
Radium-226		0.445	+/-0.103	0.0349	+/-0.103	0.0747	pCi/g					
Silver-108m	U	-0.00465	+/-0.0173	0.0148	+/-0.0173	0.0316	pCi/g					
Thallium-208		0.254	+/-0.0493	0.0154	+/-0.0493	0.0333	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1214	595902

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-043-I
Sample ID: 177713044

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

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-044-I
Sample ID: 177713045
Matrix: TS
Collect Date: 11-DEC-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 7.1%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		1.26	+/-0.245	0.0628	+/-0.245	0.134	pCi/g		MJH1	12/20/06	0628	595952
Americium-241	U	-0.0388	+/-0.0636	0.0545	+/-0.0636	0.112	pCi/g					
Bismuth-212		0.752	+/-0.321	0.151	+/-0.321	0.318	pCi/g					
Bismuth-214		1.05	+/-0.135	0.0309	+/-0.135	0.0654	pCi/g					
Cesium-134	UI	0.00	+/-0.0427	0.026	+/-0.0427	0.0545	pCi/g					
Cesium-137	U	0.0206	+/-0.0261	0.0188	+/-0.0261	0.0397	pCi/g					
Cobalt-60	U	0.00442	+/-0.0218	0.0184	+/-0.0218	0.040	pCi/g					
Europium-152	U	-0.0119	+/-0.0567	0.0486	+/-0.0567	0.101	pCi/g					
Europium-154	U	0.00191	+/-0.0683	0.0566	+/-0.0683	0.122	pCi/g					
Europium-155	U	0.0484	+/-0.0549	0.0529	+/-0.0549	0.109	pCi/g					
Lead-212		1.23	+/-0.117	0.0277	+/-0.117	0.0573	pCi/g					
Lead-214		1.11	+/-0.138	0.0353	+/-0.138	0.0735	pCi/g					
Manganese-54	U	0.0134	+/-0.0203	0.0184	+/-0.0203	0.039	pCi/g					
Niobium-94	U	-0.00171	+/-0.0192	0.0167	+/-0.0192	0.0354	pCi/g					
Potassium-40		17.5	+/-1.47	0.159	+/-1.47	0.352	pCi/g					
Radium-226		1.05	+/-0.135	0.0309	+/-0.135	0.0654	pCi/g					
Silver-108m	U	0.0118	+/-0.0191	0.0168	+/-0.0191	0.0353	pCi/g					
Thallium-208		0.383	+/-0.0551	0.0196	+/-0.0551	0.0411	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1214	595902

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-044-I
Sample ID: 177713045

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

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID:	9522-0005-045-I	Project:	YANK01204
Sample ID:	177713046	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	11-DEC-06		
Receive Date:	14-DEC-06		
Collector:	Client		
Moisture:	9.1%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		1.46	+/-0.259	0.0733	+/-0.259	0.147	pCi/g		MJH1	12/20/06	0815	595952
Americium-241	U	-0.0558	+/-0.121	0.097	+/-0.121	0.194	pCi/g					
Bismuth-212		1.10	+/-0.328	0.155	+/-0.328	0.309	pCi/g					
Bismuth-214		1.54	+/-0.175	0.0372	+/-0.175	0.0743	pCi/g					
Cesium-134	UI	0.00	+/-0.0467	0.0255	+/-0.0467	0.051	pCi/g					
Cesium-137	U	0.00207	+/-0.026	0.0221	+/-0.026	0.0442	pCi/g					
Cobalt-60	U	-0.00299	+/-0.0283	0.0229	+/-0.0283	0.0459	pCi/g					
Europium-152	U	0.0962	+/-0.0875	0.0579	+/-0.0875	0.116	pCi/g					
Europium-154	U	0.0103	+/-0.0856	0.0724	+/-0.0856	0.145	pCi/g					
Europium-155	U	0.0426	+/-0.100	0.0663	+/-0.100	0.133	pCi/g					
Lead-212		1.63	+/-0.147	0.0328	+/-0.147	0.0655	pCi/g					
Lead-214		1.85	+/-0.194	0.0385	+/-0.194	0.0769	pCi/g					
Manganese-54	U	0.00133	+/-0.0254	0.0222	+/-0.0254	0.0443	pCi/g					
Niobium-94	U	-0.0188	+/-0.0234	0.0188	+/-0.0234	0.0376	pCi/g					
Potassium-40		25.6	+/-1.86	0.167	+/-1.86	0.334	pCi/g					
Radium-226		1.54	+/-0.175	0.0372	+/-0.175	0.0743	pCi/g					
Silver-108m	U	-0.0127	+/-0.0217	0.0184	+/-0.0217	0.0368	pCi/g					
Thallium-208		0.487	+/-0.0641	0.0222	+/-0.0641	0.0443	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1214	595902

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-045-I
Sample ID: 177713046

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

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-046-I
Sample ID: 177713047
Matrix: TS
Collect Date: 11-DEC-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 7.06%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		2.52	+/-0.372	0.0924	+/-0.372	0.185	pCi/g		MJH1	12/20/06	0816	595952
Americium-241	U	0.110	+/-0.120	0.095	+/-0.120	0.190	pCi/g					
Bismuth-212		1.58	+/-0.481	0.201	+/-0.481	0.402	pCi/g					
Bismuth-214		1.95	+/-0.225	0.045	+/-0.225	0.0898	pCi/g					
Cesium-134	UI	0.00	+/-0.0635	0.036	+/-0.0635	0.072	pCi/g					
Cesium-137	U	-0.0416	+/-0.0397	0.0259	+/-0.0397	0.0518	pCi/g					
Cobalt-60	U	-0.00126	+/-0.0342	0.0283	+/-0.0342	0.0566	pCi/g					
Europium-152	U	-0.116	+/-0.105	0.069	+/-0.105	0.138	pCi/g					
Europium-154	U	-0.0534	+/-0.0993	0.079	+/-0.0993	0.158	pCi/g					
Europium-155	UI	0.00	+/-0.147	0.0782	+/-0.147	0.156	pCi/g					
Lead-212		2.39	+/-0.213	0.0419	+/-0.213	0.0837	pCi/g					
Lead-214		1.93	+/-0.207	0.0511	+/-0.207	0.102	pCi/g					
Manganese-54	U	0.000521	+/-0.0333	0.0285	+/-0.0333	0.057	pCi/g					
Niobium-94	U	-0.000226	+/-0.028	0.0243	+/-0.028	0.0487	pCi/g					
Potassium-40		28.2	+/-2.11	0.216	+/-2.11	0.432	pCi/g					
Radium-226		1.95	+/-0.225	0.045	+/-0.225	0.0898	pCi/g					
Silver-108m	U	0.00672	+/-0.0268	0.0232	+/-0.0268	0.0463	pCi/g					
Thallium-208		0.742	+/-0.0886	0.0239	+/-0.0886	0.0477	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1214	595902

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

GEL LABORATORIES LLC

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

Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-046-I
Sample ID: 177713047

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

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID:	9522-0005-047-I	Project:	YANK01204
Sample ID:	177713048	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	11-DEC-06		
Receive Date:	14-DEC-06		
Collector:	Client		
Moisture:	14.9%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		1.45	+/-0.245	0.0757	+/-0.245	0.151	pCi/g		MJH1	12/20/06	0816	595952
Americium-241	U	0.152	+/-0.109	0.0917	+/-0.109	0.183	pCi/g					
Bismuth-212		0.799	+/-0.348	0.158	+/-0.348	0.316	pCi/g					
Bismuth-214		1.27	+/-0.145	0.0383	+/-0.145	0.0766	pCi/g					
Cesium-134	UI	0.00	+/-0.0564	0.029	+/-0.0564	0.058	pCi/g					
Cesium-137	U	-0.0113	+/-0.0279	0.0231	+/-0.0279	0.0461	pCi/g					
Cobalt-60	U	-0.0233	+/-0.0328	0.0213	+/-0.0328	0.0426	pCi/g					
Europium-152	U	-0.0354	+/-0.0923	0.0602	+/-0.0923	0.120	pCi/g					
Europium-154	U	-0.0712	+/-0.0916	0.0705	+/-0.0916	0.141	pCi/g					
Europium-155	U	0.0315	+/-0.0906	0.0679	+/-0.0906	0.136	pCi/g					
Lead-212		1.40	+/-0.139	0.0347	+/-0.139	0.0694	pCi/g					
Lead-214		1.40	+/-0.165	0.0425	+/-0.165	0.0849	pCi/g					
Manganese-54	U	0.017	+/-0.028	0.0223	+/-0.028	0.0446	pCi/g					
Niobium-94	U	0.0278	+/-0.0235	0.0213	+/-0.0235	0.0426	pCi/g					
Potassium-40		20.6	+/-1.66	0.159	+/-1.66	0.318	pCi/g					
Radium-226		1.27	+/-0.145	0.0383	+/-0.145	0.0766	pCi/g					
Silver-108m	U	-0.0189	+/-0.0234	0.0195	+/-0.0234	0.039	pCi/g					
Thallium-208		0.439	+/-0.0638	0.0213	+/-0.0638	0.0426	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1214	595902

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

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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: December 28, 2006

Client Sample ID: 9522-0005-047-I
Sample ID: 177713048

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

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-048-I
Sample ID: 177713049
Matrix: TS
Collect Date: 11-DEC-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 9.15%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		1.70	+/-0.332	0.102	+/-0.332	0.217	pCi/g		MJH1	12/20/06	0815	595952
Americium-241	U	0.0288	+/-0.052	0.0424	+/-0.052	0.0867	pCi/g					
Bismuth-212		1.88	+/-0.476	0.238	+/-0.476	0.499	pCi/g					
Bismuth-214		1.73	+/-0.155	0.0542	+/-0.155	0.114	pCi/g					
Cesium-134	UI	0.00	+/-0.0513	0.0438	+/-0.0513	0.0912	pCi/g					
Cesium-137	U	-0.0265	+/-0.0374	0.0303	+/-0.0374	0.0637	pCi/g					
Cobalt-60	U	-0.0154	+/-0.0394	0.0317	+/-0.0394	0.068	pCi/g					
Europium-152	U	0.136	+/-0.090	0.0698	+/-0.090	0.145	pCi/g					
Europium-154	U	-0.0597	+/-0.115	0.0924	+/-0.115	0.197	pCi/g					
Europium-155	U	0.0902	+/-0.119	0.0716	+/-0.119	0.147	pCi/g					
Lead-212		1.69	+/-0.100	0.0399	+/-0.100	0.0822	pCi/g					
Lead-214		1.87	+/-0.158	0.0547	+/-0.158	0.113	pCi/g					
Manganese-54	U	0.00968	+/-0.0373	0.0314	+/-0.0373	0.0661	pCi/g					
Niobium-94	U	-0.00355	+/-0.0338	0.0283	+/-0.0338	0.0592	pCi/g					
Potassium-40		24.6	+/-1.48	0.279	+/-1.48	0.604	pCi/g					
Radium-226		1.73	+/-0.155	0.0542	+/-0.155	0.114	pCi/g					
Silver-108m	U	-0.00548	+/-0.0275	0.024	+/-0.0275	0.0502	pCi/g					
Thallium-208		0.595	+/-0.0699	0.0264	+/-0.0699	0.0556	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1214	595902

The following Analytical Methods were performed

Method	Description
I	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-048-I
Sample ID: 177713049

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

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-049-I
Sample ID: 177713050
Matrix: TS
Collect Date: 11-DEC-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 7.27%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		2.51	+/-0.389	0.0669	+/-0.389	0.142	pCi/g		MJH1	12/20/06	0928	595952
Americium-241	U	-0.0244	+/-0.102	0.0946	+/-0.102	0.193	pCi/g					
Bismuth-212		1.57	+/-0.366	0.159	+/-0.366	0.335	pCi/g					
Bismuth-214		1.71	+/-0.186	0.0401	+/-0.186	0.0837	pCi/g					
Cesium-134	UI	0.00	+/-0.051	0.0325	+/-0.051	0.0673	pCi/g					
Cesium-137	U	0.0364	+/-0.0284	0.0216	+/-0.0284	0.0451	pCi/g					
Cobalt-60	U	0.0108	+/-0.0262	0.0232	+/-0.0262	0.0496	pCi/g					
Europium-152	U	0.00641	+/-0.064	0.054	+/-0.064	0.112	pCi/g					
Europium-154	U	0.0124	+/-0.0753	0.0656	+/-0.0753	0.140	pCi/g					
Europium-155	U	0.113	+/-0.101	0.0629	+/-0.101	0.129	pCi/g					
Lead-212		2.57	+/-0.227	0.0324	+/-0.227	0.0666	pCi/g					
Lead-214		1.88	+/-0.194	0.0407	+/-0.194	0.0842	pCi/g					
Manganese-54	UI	0.00	+/-0.0333	0.0203	+/-0.0333	0.0427	pCi/g					
Niobium-94	U	0.00905	+/-0.0227	0.0199	+/-0.0227	0.0415	pCi/g					
Potassium-40		23.3	+/-1.93	0.177	+/-1.93	0.387	pCi/g					
Radium-226		1.71	+/-0.186	0.0401	+/-0.186	0.0837	pCi/g					
Silver-108m	U	-0.0105	+/-0.0205	0.0178	+/-0.0205	0.037	pCi/g					
Thallium-208		0.762	+/-0.085	0.023	+/-0.085	0.0478	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1214	595902

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-049-I
Sample ID: 177713050

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

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID:	9522-0005-050-I	Project:	YANK01204
Sample ID:	177713051	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	11-DEC-06		
Receive Date:	14-DEC-06		
Collector:	Client		
Moisture:	10%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		1.58	+/-0.216	0.0979	+/-0.216	0.208	pCi/g		MJH1	12/20/06	0929	595952
Americium-241	U	0.0175	+/-0.0407	0.0378	+/-0.0407	0.0774	pCi/g					
Bismuth-212		1.04	+/-0.428	0.207	+/-0.428	0.437	pCi/g					
Bismuth-214		1.74	+/-0.150	0.0481	+/-0.150	0.101	pCi/g					
Cesium-134	UI	0.00	+/-0.0588	0.0347	+/-0.0588	0.0727	pCi/g					
Cesium-137	U	0.0173	+/-0.0348	0.0271	+/-0.0348	0.0571	pCi/g					
Cobalt-60	U	0.0135	+/-0.0324	0.0285	+/-0.0324	0.0615	pCi/g					
Europium-152	U	-0.0638	+/-0.070	0.0598	+/-0.070	0.125	pCi/g					
Europium-154	U	-0.0198	+/-0.0997	0.0833	+/-0.0997	0.179	pCi/g					
Europium-155	UI	0.00	+/-0.126	0.0597	+/-0.126	0.123	pCi/g					
Lead-212		1.78	+/-0.0934	0.0363	+/-0.0934	0.0749	pCi/g					
Lead-214		2.02	+/-0.145	0.0434	+/-0.145	0.0906	pCi/g					
Manganese-54	U	0.0243	+/-0.035	0.0243	+/-0.035	0.0517	pCi/g					
Niobium-94	U	0.00913	+/-0.029	0.025	+/-0.029	0.0526	pCi/g					
Potassium-40		24.9	+/-1.39	0.178	+/-1.39	0.403	pCi/g					
Radium-226		1.74	+/-0.150	0.0481	+/-0.150	0.101	pCi/g					
Silver-108m	U	-0.00431	+/-0.0242	0.0211	+/-0.0242	0.0442	pCi/g					
Thallium-208		0.578	+/-0.0641	0.0244	+/-0.0641	0.0514	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1214	595902

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-050-I
Sample ID: 177713051

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N
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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: December 28, 2006

Client Sample ID:	9522-0005-051-I	Project:	YANK01204
Sample ID:	177713052	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	11-DEC-06		
Receive Date:	14-DEC-06		
Collector:	Client		
Moisture:	9.01%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		1.83	+/-0.281	0.0661	+/-0.281	0.139	pCi/g		MJH1	12/20/06	0930	595952
Americium-241	U	-0.0849	+/-0.114	0.0887	+/-0.114	0.181	pCi/g					
Bismuth-212		1.16	+/-0.359	0.155	+/-0.359	0.322	pCi/g					
Bismuth-214		1.72	+/-0.187	0.0383	+/-0.187	0.0795	pCi/g					
Cesium-134	UI	0.00	+/-0.0521	0.0266	+/-0.0521	0.0551	pCi/g					
Cesium-137	U	0.0171	+/-0.0245	0.0222	+/-0.0245	0.0461	pCi/g					
Cobalt-60	U	0.0322	+/-0.0242	0.0221	+/-0.0242	0.0468	pCi/g					
Europium-152	U	0.0267	+/-0.0578	0.049	+/-0.0578	0.101	pCi/g					
Europium-154	U	-0.0147	+/-0.0753	0.0618	+/-0.0753	0.131	pCi/g					
Europium-155	UI	0.00	+/-0.0955	0.0547	+/-0.0955	0.112	pCi/g					
Lead-212		1.83	+/-0.156	0.0292	+/-0.156	0.0599	pCi/g					
Lead-214		1.94	+/-0.186	0.0362	+/-0.186	0.0748	pCi/g					
Manganese-54	U	0.0155	+/-0.0246	0.0218	+/-0.0246	0.0454	pCi/g					
Niobium-94	U	0.0172	+/-0.0223	0.0191	+/-0.0223	0.0397	pCi/g					
Potassium-40		25.7	+/-2.05	0.158	+/-2.05	0.342	pCi/g					
Radium-226		1.72	+/-0.187	0.0383	+/-0.187	0.0795	pCi/g					
Silver-108m	U	0.00893	+/-0.0206	0.018	+/-0.0206	0.0372	pCi/g					
Thallium-208		0.573	+/-0.066	0.0197	+/-0.066	0.0409	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1214	595902

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-051-I
Sample ID: 177713052

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

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-052-I
Sample ID: 177713053
Matrix: TS
Collect Date: 11-DEC-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 8.64%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		1.73	+/-0.262	0.0586	+/-0.262	0.127	pCi/g		MJH1	12/20/06	0930	595952
Americium-241	U	-0.0479	+/-0.0857	0.066	+/-0.0857	0.136	pCi/g					
Bismuth-212		1.20	+/-0.374	0.144	+/-0.374	0.306	pCi/g					
Bismuth-214		1.38	+/-0.182	0.0359	+/-0.182	0.076	pCi/g					
Cesium-134	UI	0.00	+/-0.046	0.0272	+/-0.046	0.0572	pCi/g					
Cesium-137	U	0.0357	+/-0.0338	0.0192	+/-0.0338	0.0407	pCi/g					
Cobalt-60	U	0.0151	+/-0.0247	0.0223	+/-0.0247	0.0483	pCi/g					
Europium-152	U	0.015	+/-0.0586	0.0504	+/-0.0586	0.105	pCi/g					
Europium-154	U	-0.0378	+/-0.0695	0.0562	+/-0.0695	0.123	pCi/g					
Europium-155	U	0.077	+/-0.0842	0.0536	+/-0.0842	0.111	pCi/g					
Lead-212		1.56	+/-0.141	0.0321	+/-0.141	0.0664	pCi/g					
Lead-214		1.45	+/-0.154	0.0361	+/-0.154	0.0755	pCi/g					
Manganese-54	U	-0.00549	+/-0.0245	0.0203	+/-0.0245	0.0432	pCi/g					
Niobium-94	U	-0.00478	+/-0.0194	0.0163	+/-0.0194	0.0347	pCi/g					
Potassium-40		21.1	+/-1.76	0.160	+/-1.76	0.357	pCi/g					
Radium-226		1.38	+/-0.182	0.0359	+/-0.182	0.076	pCi/g					
Silver-108m	U	-0.0118	+/-0.020	0.0159	+/-0.020	0.0336	pCi/g					
Thallium-208		0.530	+/-0.0729	0.0193	+/-0.0729	0.0408	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1214	595902

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-052-I
Sample ID: 177713053

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

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID:	9522-0005-053-I	Project:	YANK01204
Sample ID:	177713054	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	11-DEC-06		
Receive Date:	14-DEC-06		
Collector:	Client		
Moisture:	8.38%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		2.00	+/-0.360	0.141	+/-0.360	0.301	pCi/g		MJH1	12/28/06	1401	595952
Americium-241	U	-0.0282	+/-0.054	0.0485	+/-0.054	0.0996	pCi/g					
Bismuth-212		1.12	+/-0.571	0.266	+/-0.571	0.568	pCi/g					
Bismuth-214		1.90	+/-0.187	0.0555	+/-0.187	0.119	pCi/g					
Cesium-134	UI	0.00	+/-0.0654	0.0485	+/-0.0654	0.102	pCi/g					
Cesium-137	U	0.0193	+/-0.0452	0.0352	+/-0.0452	0.0749	pCi/g					
Cobalt-60	U	-0.00334	+/-0.0414	0.0346	+/-0.0414	0.0764	pCi/g					
Europium-152	U	0.0519	+/-0.0926	0.0848	+/-0.0926	0.178	pCi/g					
Europium-154	U	0.00511	+/-0.121	0.103	+/-0.121	0.225	pCi/g					
Europium-155	UI	0.00	+/-0.136	0.0777	+/-0.136	0.160	pCi/g					
Lead-212		2.23	+/-0.126	0.0451	+/-0.126	0.0939	pCi/g					
Lead-214		1.91	+/-0.175	0.0566	+/-0.175	0.119	pCi/g					
Manganese-54	U	-0.0166	+/-0.0423	0.0339	+/-0.0423	0.0728	pCi/g					
Niobium-94	U	0.00824	+/-0.0378	0.0324	+/-0.0378	0.0689	pCi/g					
Potassium-40		25.8	+/-1.79	0.283	+/-1.79	0.636	pCi/g					
Radium-226		1.90	+/-0.187	0.0555	+/-0.187	0.119	pCi/g					
Silver-108m	U	0.000386	+/-0.0319	0.0279	+/-0.0319	0.059	pCi/g					
Thallium-208		0.700	+/-0.0875	0.0314	+/-0.0875	0.0668	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1214	595902

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522–0005–053–I
Sample ID: 177713054

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

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-054-I
Sample ID: 177713055
Matrix: TS
Collect Date: 11-DEC-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 8.83%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		1.61	+/-0.203	0.0634	+/-0.203	0.134	pCi/g		MJH1	12/20/06	0945	595952
Americium-241	U	-0.0188	+/-0.0294	0.0263	+/-0.0294	0.0536	pCi/g					
Bismuth-212		0.727	+/-0.322	0.142	+/-0.322	0.298	pCi/g					
Bismuth-214		1.31	+/-0.110	0.0339	+/-0.110	0.071	pCi/g					
Cesium-134	U	0.0471	+/-0.0397	0.0271	+/-0.0397	0.0564	pCi/g					
Cesium-137	U	0.0305	+/-0.0337	0.0189	+/-0.0337	0.0397	pCi/g					
Cobalt-60	U	0.00324	+/-0.0234	0.0195	+/-0.0234	0.0419	pCi/g					
Europium-152	U	-0.00973	+/-0.0506	0.0394	+/-0.0506	0.082	pCi/g					
Europium-154	U	0.0343	+/-0.0703	0.0607	+/-0.0703	0.129	pCi/g					
Europium-155	UI	0.00	+/-0.0643	0.0397	+/-0.0643	0.0814	pCi/g					
Lead-212		1.34	+/-0.0611	0.025	+/-0.0611	0.0514	pCi/g					
Lead-214		1.40	+/-0.0899	0.0325	+/-0.0899	0.0673	pCi/g					
Manganese-54	U	0.034	+/-0.0228	0.0179	+/-0.0228	0.0377	pCi/g					
Niobium-94	U	0.0238	+/-0.0201	0.0188	+/-0.0201	0.0392	pCi/g					
Potassium-40		19.3	+/-0.964	0.152	+/-0.964	0.334	pCi/g					
Radium-226		1.31	+/-0.110	0.0339	+/-0.110	0.071	pCi/g					
Silver-108m	U	-0.00558	+/-0.0182	0.0154	+/-0.0182	0.0321	pCi/g					
Thallium-208		0.477	+/-0.055	0.0173	+/-0.055	0.0364	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1214	595902

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-054-I
Sample ID: 177713055

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

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-055-I
Sample ID: 177713056
Matrix: TS
Collect Date: 11-DEC-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 8.87%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		1.24	+/-0.211	0.0626	+/-0.211	0.134	pCi/g		MJH1	12/20/06	0946	595952
Americium-241	U	0.0717	+/-0.0372	0.0517	+/-0.0372	0.107	pCi/g					
Bismuth-212	U	0.304	+/-0.380	0.159	+/-0.380	0.335	pCi/g					
Bismuth-214		0.978	+/-0.141	0.0375	+/-0.141	0.0789	pCi/g					
Cesium-134	UI	0.00	+/-0.0362	0.0261	+/-0.0362	0.0548	pCi/g					
Cesium-137	U	-0.00168	+/-0.0221	0.0193	+/-0.0221	0.0407	pCi/g					
Cobalt-60	U	-0.0128	+/-0.0208	0.0156	+/-0.0208	0.0347	pCi/g					
Europium-152	U	-0.0096	+/-0.0567	0.0484	+/-0.0567	0.101	pCi/g					
Europium-154	U	0.0321	+/-0.069	0.0596	+/-0.069	0.129	pCi/g					
Europium-155	U	0.0551	+/-0.0567	0.0542	+/-0.0567	0.112	pCi/g					
Lead-212		1.30	+/-0.123	0.028	+/-0.123	0.058	pCi/g					
Lead-214		1.22	+/-0.146	0.032	+/-0.146	0.0671	pCi/g					
Manganese-54	U	0.0161	+/-0.0221	0.0199	+/-0.0221	0.0422	pCi/g					
Niobium-94	U	-0.00115	+/-0.0192	0.0167	+/-0.0192	0.0354	pCi/g					
Potassium-40		18.6	+/-1.55	0.145	+/-1.55	0.324	pCi/g					
Radium-226		0.978	+/-0.141	0.0375	+/-0.141	0.0789	pCi/g					
Silver-108m	U	0.0213	+/-0.0202	0.0181	+/-0.0202	0.0379	pCi/g					
Thallium-208		0.407	+/-0.0627	0.0184	+/-0.0627	0.0389	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1214	595902

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-055-I
Sample ID: 177713056

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

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-056-I
Sample ID: 177713057
Matrix: TS
Collect Date: 11-DEC-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 5.48%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		0.440	+/-0.155	0.0689	+/-0.155	0.148	pCi/g		MJH1	12/20/06	1116	595952
Americium-241	U	-0.00322	+/-0.0303	0.0277	+/-0.0303	0.0571	pCi/g					
Bismuth-212		0.371	+/-0.216	0.163	+/-0.216	0.345	pCi/g					
Bismuth-214		0.589	+/-0.105	0.0379	+/-0.105	0.0798	pCi/g					
Cesium-134	U	0.0405	+/-0.0396	0.026	+/-0.0396	0.0548	pCi/g					
Cesium-137	U	0.00564	+/-0.0254	0.0224	+/-0.0254	0.0472	pCi/g					
Cobalt-60	U	0.0261	+/-0.0234	0.0221	+/-0.0234	0.0477	pCi/g					
Europium-152	U	-0.0382	+/-0.0532	0.0441	+/-0.0532	0.0927	pCi/g					
Europium-154	U	-0.0243	+/-0.0749	0.0616	+/-0.0749	0.133	pCi/g					
Europium-155	U	0.0318	+/-0.0518	0.0467	+/-0.0518	0.0962	pCi/g					
Lead-212		0.520	+/-0.0621	0.0376	+/-0.0621	0.0773	pCi/g					
Lead-214		0.538	+/-0.0953	0.0343	+/-0.0953	0.0718	pCi/g					
Manganese-54	U	0.00407	+/-0.0253	0.019	+/-0.0253	0.0405	pCi/g					
Niobium-94	U	0.00369	+/-0.0223	0.0195	+/-0.0223	0.0411	pCi/g					
Potassium-40		9.06	+/-0.864	0.208	+/-0.864	0.451	pCi/g					
Radium-226		0.589	+/-0.105	0.0379	+/-0.105	0.0798	pCi/g					
Silver-108m	U	0.0188	+/-0.0178	0.0172	+/-0.0178	0.0362	pCi/g					
Thallium-208		0.208	+/-0.0555	0.0196	+/-0.0555	0.0413	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1214	595902

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-056-I
Sample ID: 177713057

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

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID:	9522-0005-057-I	Project:	YANK01204
Sample ID:	177713058	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	11-DEC-06		
Receive Date:	14-DEC-06		
Collector:	Client		
Moisture:	6.73%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		0.903	+/-0.209	0.061	+/-0.209	0.122	pCi/g		MJH1	12/20/06	1117	595952
Americium-241	U	0.0325	+/-0.115	0.0955	+/-0.115	0.191	pCi/g					
Bismuth-212		0.631	+/-0.250	0.150	+/-0.250	0.300	pCi/g					
Bismuth-214		0.851	+/-0.149	0.0373	+/-0.149	0.0746	pCi/g					
Cesium-134	UI	0.00	+/-0.0412	0.0257	+/-0.0412	0.0514	pCi/g					
Cesium-137	U	0.0231	+/-0.0255	0.0206	+/-0.0255	0.0412	pCi/g					
Cobalt-60	U	0.00332	+/-0.0223	0.019	+/-0.0223	0.038	pCi/g					
Europium-152	U	-0.0498	+/-0.0809	0.0519	+/-0.0809	0.104	pCi/g					
Europium-154	U	-0.0431	+/-0.0946	0.064	+/-0.0946	0.128	pCi/g					
Europium-155	U	0.0527	+/-0.0814	0.0666	+/-0.0814	0.133	pCi/g					
Lead-212		1.06	+/-0.107	0.0326	+/-0.107	0.0651	pCi/g					
Lead-214		1.04	+/-0.145	0.038	+/-0.145	0.076	pCi/g					
Manganese-54	U	0.0194	+/-0.0243	0.0222	+/-0.0243	0.0445	pCi/g					
Niobium-94	U	-0.00211	+/-0.0228	0.0192	+/-0.0228	0.0383	pCi/g					
Potassium-40		15.1	+/-1.33	0.192	+/-1.33	0.384	pCi/g					
Radium-226		0.851	+/-0.149	0.0373	+/-0.149	0.0746	pCi/g					
Silver-108m	U	0.0118	+/-0.0204	0.0185	+/-0.0204	0.0369	pCi/g					
Thallium-208		0.351	+/-0.058	0.0196	+/-0.058	0.0393	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1214	595902

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

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

Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-057-I
Sample ID: 177713058

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

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-058-I
Sample ID: 177713059
Matrix: TS
Collect Date: 11-DEC-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 6.47%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		0.843	+/-0.191	0.0587	+/-0.191	0.117	pCi/g		MJH1	12/20/06	1118	595952
Americium-241	U	0.0824	+/-0.0748	0.0628	+/-0.0748	0.125	pCi/g					
Bismuth-212		0.376	+/-0.282	0.133	+/-0.282	0.265	pCi/g					
Bismuth-214		0.733	+/-0.108	0.0338	+/-0.108	0.0675	pCi/g					
Cesium-134	UI	0.00	+/-0.0282	0.0231	+/-0.0282	0.0461	pCi/g					
Cesium-137	U	0.0374	+/-0.0293	0.0197	+/-0.0293	0.0394	pCi/g					
Cobalt-60	U	-0.0185	+/-0.0247	0.0191	+/-0.0247	0.0381	pCi/g					
Europium-152	U	-0.017	+/-0.0626	0.0471	+/-0.0626	0.0941	pCi/g					
Europium-154	U	-0.0114	+/-0.0679	0.0561	+/-0.0679	0.112	pCi/g					
Europium-155	U	0.0549	+/-0.0711	0.0498	+/-0.0711	0.0996	pCi/g					
Lead-212		0.835	+/-0.0876	0.0277	+/-0.0876	0.0553	pCi/g					
Lead-214		0.834	+/-0.104	0.0349	+/-0.104	0.0698	pCi/g					
Manganese-54	U	0.000747	+/-0.024	0.0181	+/-0.024	0.0361	pCi/g					
Niobium-94	U	0.00653	+/-0.0205	0.0161	+/-0.0205	0.0322	pCi/g					
Potassium-40		12.3	+/-1.13	0.147	+/-1.13	0.293	pCi/g					
Radium-226		0.733	+/-0.108	0.0338	+/-0.108	0.0675	pCi/g					
Silver-108m	U	0.00197	+/-0.0182	0.0159	+/-0.0182	0.0319	pCi/g					
Thallium-208		0.248	+/-0.048	0.0166	+/-0.048	0.0332	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1214	595902

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-058-I
Sample ID: 177713059

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

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

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-059-I
Sample ID: 177713060
Matrix: TS
Collect Date: 11-DEC-06
Receive Date: 14-DEC-06
Collector: Client
Moisture: 10.5%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		0.781	+/-0.159	0.0593	+/-0.159	0.118	pCi/g		MJH1	12/20/06	1118	595952
Americium-241	U	0.0217	+/-0.0912	0.076	+/-0.0912	0.152	pCi/g					
Bismuth-212		0.547	+/-0.207	0.132	+/-0.207	0.265	pCi/g					
Bismuth-214		0.775	+/-0.110	0.0336	+/-0.110	0.0671	pCi/g					
Cesium-134	U	0.030	+/-0.0258	0.0212	+/-0.0258	0.0423	pCi/g					
Cesium-137	UI	0.00	+/-0.0303	0.0171	+/-0.0303	0.0342	pCi/g					
Cobalt-60	U	0.0196	+/-0.0202	0.019	+/-0.0202	0.0379	pCi/g					
Europium-152	U	-0.0349	+/-0.0641	0.0482	+/-0.0641	0.0963	pCi/g					
Europium-154	U	-0.0738	+/-0.0705	0.0517	+/-0.0705	0.103	pCi/g					
Europium-155	U	0.0652	+/-0.0708	0.0567	+/-0.0708	0.113	pCi/g					
Lead-212		0.920	+/-0.0986	0.0279	+/-0.0986	0.0558	pCi/g					
Lead-214		0.887	+/-0.117	0.0337	+/-0.117	0.0673	pCi/g					
Manganese-54	U	0.0186	+/-0.022	0.0204	+/-0.022	0.0407	pCi/g					
Niobium-94	U	0.013	+/-0.020	0.0178	+/-0.020	0.0356	pCi/g					
Potassium-40		13.3	+/-1.16	0.151	+/-1.16	0.302	pCi/g					
Radium-226		0.775	+/-0.110	0.0336	+/-0.110	0.0671	pCi/g					
Silver-108m	U	-0.00136	+/-0.0194	0.0171	+/-0.0194	0.0342	pCi/g					
Thallium-208		0.281	+/-0.044	0.0166	+/-0.044	0.0331	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	JMB1	12/14/06	1214	595902

The following Analytical Methods were performed

Method	Description
I	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

GEL LABORATORIES LLC

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Certificate of Analysis

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

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

Report Date: December 28, 2006

Client Sample ID: 9522-0005-059-I
Sample ID: 177713060

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

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

QUALITY CONTROL DATA

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QC Summary

Report Date: December 28, 2006
Page 1 of 16

Client : Connecticut Yankee Atomic Power
362 Injun Hollow Rd

Contact: East Hampton, Connecticut
Mr. Jack McCarthy

Workorder: 177713

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Alpha Spec											
Batch	596347										
QC1201247791	177713014 DUP										
Americium-241	U	0.040	U	-0.0279	pCi/g	1120		(0% - 100%)	PXH2	12/18/06	09:12
	Uncert:	+/-0.102		+/-0.0502							
	TPU:	+/-0.102		+/-0.0503							
Curium-242	U	0.0293	U	0.0867	pCi/g	99		(0% - 100%)			
	Uncert:	+/-0.0777		+/-0.120							
	TPU:	+/-0.0778		+/-0.121							
Curium-243/244	U	-0.0771	U	0.0898	pCi/g	2630		(0% - 100%)			
	Uncert:	+/-0.137		+/-0.177							
	TPU:	+/-0.137		+/-0.177							
QC1201247793	LCS										
Americium-241		13.2		11.6	pCi/g		88	(75%-125%)			
	Uncert:			+/-1.42							
	TPU:			+/-2.11							
Curium-242			U	-0.022	pCi/g						
	Uncert:			+/-0.0306							
	TPU:			+/-0.0307							
Curium-243/244		11.4		11.5	pCi/g		101	(75%-125%)			
	Uncert:			+/-1.43							
	TPU:			+/-2.10							
QC1201247790	MB										
Americium-241			U	-0.0743	pCi/g						
	Uncert:			+/-0.121							
	TPU:			+/-0.121							
Curium-242			U	-0.0168	pCi/g						
	Uncert:			+/-0.0232							
	TPU:			+/-0.0233							
Curium-243/244			U	-0.138	pCi/g						
	Uncert:			+/-0.125							
	TPU:			+/-0.126							
QC1201247792	177713014 MS										
Americium-241	U	0.040		16.3	pCi/g		119	(75%-125%)			
	Uncert:	+/-0.102		+/-1.59							
	TPU:	+/-0.102		+/-2.62							
Curium-242	U	0.0293	U	-0.02	pCi/g						
	Uncert:	+/-0.0777		+/-0.103							
	TPU:	+/-0.0778		+/-0.103							
Curium-243/244	U	-0.0771		11.9	pCi/g		101	(75%-125%)			
	Uncert:	+/-0.137		+/-1.37							
	TPU:	+/-0.137		+/-2.04							
Batch	596348										
QC1201247795	177713014 DUP										
Plutonium-238	U	-0.00725	U	0.0328	pCi/g	314		(0% - 100%)	PXH2	12/18/06	09:12

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QC Summary

Workorder: 177713

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Alpha Spec											
Batch	596348										
Plutonium-239/240		Uncert:	+/-0.0609	+/-0.0644							
		TPU:	+/-0.0609	+/-0.0644							
	U		0.00966	U 0.0499	pCi/g	135		(0% - 100%)			
		Uncert:	+/-0.0917	+/-0.0935							
		TPU:	+/-0.0917	+/-0.0937							
QC1201247797	LCS										
Plutonium-238				U 0.0227	pCi/g			(75%-125%)			
		Uncert:		+/-0.0601							
		TPU:		+/-0.0602							
Plutonium-239/240	12.2			12.1	pCi/g		99	(75%-125%)			
		Uncert:		+/-1.18							
		TPU:		+/-1.70							
QC1201247794	MB										
Plutonium-238				U -0.0271	pCi/g						
		Uncert:		+/-0.0614							
		TPU:		+/-0.0614							
Plutonium-239/240				U -0.00565	pCi/g						
		Uncert:		+/-0.0629							
		TPU:		+/-0.0629							
QC1201247796	177713014	MS									
Plutonium-238		U	-0.00725	U 0.0289	pCi/g			(75%-125%)			
		Uncert:	+/-0.0609	+/-0.0567							
		TPU:	+/-0.0609	+/-0.0568							
Plutonium-239/240	12.6	U	0.00966	12.4	pCi/g		98	(75%-125%)			
		Uncert:	+/-0.0917	+/-1.18							
		TPU:	+/-0.0917	+/-1.70							
Batch	596349										
QC1201247799	177713014	DUP									
Plutonium-241		U	3.34	U 4.31	pCi/g	0		(0% - 100%)	PXH2	12/20/06	09:08
		Uncert:	+/-7.15	+/-8.30							
		TPU:	+/-7.16	+/-8.31							
QC1201247801	LCS										
Plutonium-241			136	120	pCi/g		88	(75%-125%)		12/20/06	09:40
		Uncert:		+/-11.8							
		TPU:		+/-16.8							
QC1201247798	MB										
Plutonium-241				U 7.60	pCi/g					12/20/06	08:52
		Uncert:		+/-7.14							
		TPU:		+/-7.18							
QC1201247800	177713014	MS									
Plutonium-241		142	U 3.34	147	pCi/g		103	(75%-125%)		12/20/06	09:24
		Uncert:	+/-7.15	+/-14.2							
		TPU:	+/-7.16	+/-20.7							
Rad Gamma Spec											
Batch	595950										
QC1201246865	177713010	DUP									
Actinium-228			0.565	0.615	pCi/g	8		(0% - 100%)	MJH1	12/16/06	12:54
		Uncert:	+/-0.204	+/-0.0901							
				+/-0.0901							

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QC Summary

Workorder: 177713

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Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec										
Batch 595950										
Americium-241		TPU: +/-0.204 U 0.0074	U	-0.127	pCi/g	225	(0% - 100%)			
		Uncert: +/-0.0316		+/-0.0602						
Bismuth-212		TPU: +/-0.0316 U 0.309		0.376	pCi/g	20	(0% - 100%)			
		Uncert: +/-0.412		+/-0.149						
Bismuth-214		TPU: +/-0.412 0.522		0.419	pCi/g	22	(0% - 100%)			
		Uncert: +/-0.117		+/-0.0507						
Cesium-134		TPU: +/-0.117 U 0.00353	UI	0.00	pCi/g	170	(0% - 100%)			
		Uncert: +/-0.0304		+/-0.0201						
Cesium-137		TPU: +/-0.0304 0.048	U	0.020	pCi/g	82	(0% - 100%)			
		Uncert: +/-0.0323		+/-0.0218						
Cobalt-60		TPU: +/-0.0323 U -0.00288	U	0.0152	pCi/g	293	(0% - 100%)			
		Uncert: +/-0.028		+/-0.0156						
Europium-152		TPU: +/-0.028 U -0.0218	U	0.00312	pCi/g	267	(0% - 100%)			
		Uncert: +/-0.0579		+/-0.033						
Europium-154		TPU: +/-0.0579 U 0.0269	U	0.0303	pCi/g	12	(0% - 100%)			
		Uncert: +/-0.0774		+/-0.0384						
Europium-155		TPU: +/-0.0774 U 0.0239	UI	0.00	pCi/g	100	(0% - 100%)			
		Uncert: +/-0.0549		+/-0.0515						
Lead-212		TPU: +/-0.0549 0.525		0.588	pCi/g	11	(0% - 20%)			
		Uncert: +/-0.0749		+/-0.0352						
Lead-214		TPU: +/-0.0749 0.596		0.518	pCi/g	14	(0% - 20%)			
		Uncert: +/-0.0908		+/-0.0563						
Manganese-54		TPU: +/-0.0908 U 0.00912	U	-0.0048	pCi/g	644	(0% - 100%)			
		Uncert: +/-0.0303		+/-0.0128						
Niobium-94		TPU: +/-0.0303 U 0.00956	U	-0.000632	pCi/g	228	(0% - 100%)			
		Uncert: +/-0.0234		+/-0.0107						
Potassium-40		TPU: +/-0.0234 9.69		10.3	pCi/g	6	(0% - 20%)			
		Uncert: +/-0.960		+/-0.505						
Radium-226		TPU: +/-0.960 0.522		0.419	pCi/g	22	(0% - 100%)			
		Uncert: +/-0.117		+/-0.0507						
Silver-108m		TPU: +/-0.117 U 0.0109	U	-0.0117	pCi/g	5440	(0% - 100%)			
		Uncert: +/-0.0217		+/-0.0112						

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QC Summary

Workorder: 177713

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Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec									
Batch	595950								
Thallium-208	TPU:	+/-0.0217	+/-0.0112						
		0.187	0.176	pCi/g	6		(0% - 100%)		
	Uncert:	+/-0.0514	+/-0.0228						
	TPU:	+/-0.0514	+/-0.0228						
QC1201246866	LCS								
Actinium-228			U	0.203	pCi/g				12/16/06 11:08
	Uncert:			+/-0.541					
Americium-241	TPU:			+/-0.541					
	23.4			25.8	pCi/g	110	(75%-125%)		
	Uncert:			+/-2.85					
	TPU:			+/-2.85					
Bismuth-212			U	-0.684	pCi/g				
	Uncert:			+/-0.906					
	TPU:			+/-0.906					
Bismuth-214			U	0.265	pCi/g				
	Uncert:			+/-0.214					
	TPU:			+/-0.214					
Cesium-134			U	0.0265	pCi/g				
	Uncert:			+/-0.169					
	TPU:			+/-0.169					
Cesium-137	9.51			10.2	pCi/g	107	(75%-125%)		
	Uncert:			+/-0.891					
	TPU:			+/-0.891					
Cobalt-60	13.9			14.6	pCi/g	105	(75%-125%)		
	Uncert:			+/-1.09					
	TPU:			+/-1.09					
Europium-152			U	-0.335	pCi/g				
	Uncert:			+/-0.297					
	TPU:			+/-0.297					
Europium-154			U	0.0602	pCi/g				
	Uncert:			+/-0.248					
	TPU:			+/-0.248					
Europium-155			U	0.322	pCi/g				
	Uncert:			+/-0.303					
	TPU:			+/-0.303					
Lead-212			U	-0.00758	pCi/g				
	Uncert:			+/-0.146					
	TPU:			+/-0.146					
Lead-214			U	-0.0446	pCi/g				
	Uncert:			+/-0.214					
	TPU:			+/-0.214					
Manganese-54			U	-0.0203	pCi/g				
	Uncert:			+/-0.124					
	TPU:			+/-0.124					
Niobium-94			U	0.0714	pCi/g				
	Uncert:			+/-0.0989					
	TPU:			+/-0.0989					
Potassium-40			U	0.257	pCi/g				

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Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec									
Batch	595950								
	Uncert:		+/-0.937						
	TPU:		+/-0.937						
Radium-226		U	0.265	pCi/g			(75%-125%)		
	Uncert:		+/-0.214						
	TPU:		+/-0.214						
Silver-108m		U	0.0715	pCi/g					
	Uncert:		+/-0.115						
	TPU:		+/-0.115						
Thallium-208		U	0.114	pCi/g					
	Uncert:		+/-0.111						
	TPU:		+/-0.111						
QC1201246864	MB								
Actinium-228		U	0.0285	pCi/g					12/16/06 12:53
	Uncert:		+/-0.0258						
	TPU:		+/-0.0258						
Americium-241		U	0.0299	pCi/g					
	Uncert:		+/-0.0262						
	TPU:		+/-0.0262						
Bismuth-212		UI	0.00	pCi/g					
	Uncert:		+/-0.0759						
	TPU:		+/-0.0759						
Bismuth-214		U	0.0205	pCi/g					
	Uncert:		+/-0.014						
	TPU:		+/-0.014						
Cesium-134		U	0.00626	pCi/g					
	Uncert:		+/-0.00695						
	TPU:		+/-0.00695						
Cesium-137		U	0.000568	pCi/g					
	Uncert:		+/-0.00658						
	TPU:		+/-0.00658						
Cobalt-60		U	0.00625	pCi/g					
	Uncert:		+/-0.0076						
	TPU:		+/-0.0076						
Europium-152		U	-0.0124	pCi/g					
	Uncert:		+/-0.0179						
	TPU:		+/-0.0179						
Europium-154		U	-0.00107	pCi/g					
	Uncert:		+/-0.0224						
	TPU:		+/-0.0224						
Europium-155		U	0.000693	pCi/g					
	Uncert:		+/-0.0186						
	TPU:		+/-0.0186						
Lead-212		UI	0.00	pCi/g					
	Uncert:		+/-0.0117						
	TPU:		+/-0.0117						
Lead-214		U	0.0123	pCi/g					
	Uncert:		+/-0.0209						
	TPU:		+/-0.0209						

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Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec										
Batch	595950									
Manganese-54		U	-0.000414	pCi/g						
	Uncert:		+/-0.00651							
	TPU:		+/-0.00651							
Niobium-94		U	0.000173	pCi/g						
	Uncert:		+/-0.00659							
	TPU:		+/-0.00659							
Potassium-40		U	0.0121	pCi/g						
	Uncert:		+/-0.117							
	TPU:		+/-0.117							
Radium-226		U	0.0205	pCi/g						
	Uncert:		+/-0.014							
	TPU:		+/-0.014							
Silver-108m		U	-0.00185	pCi/g						
	Uncert:		+/-0.00619							
	TPU:		+/-0.00619							
Thallium-208		U	0.000709	pCi/g						
	Uncert:		+/-0.0104							
	TPU:		+/-0.0104							
Batch	595951									
	QC1201246868 177713021 DUP									
Actinium-228			0.663	pCi/g	14		(0% - 100%)	MJH1	12/18/06	19:08
	Uncert:		+/-0.138							
	TPU:		+/-0.138							
Americium-241	U	U	0.00957	pCi/g	681		(0% - 100%)			
	Uncert:		+/-0.0259							
	TPU:		+/-0.0259							
Bismuth-212			0.336	pCi/g	53		(0% - 100%)			
	Uncert:		+/-0.205							
	TPU:		+/-0.205							
Bismuth-214			0.678	pCi/g	12		(0% - 100%)			
	Uncert:		+/-0.0799							
	TPU:		+/-0.0799							
Cesium-134	U	UI	0.0222	pCi/g	64		(0% - 100%)			
	Uncert:		+/-0.0213							
	TPU:		+/-0.0213							
Cesium-137	UI		0.00	pCi/g	39		(0% - 100%)			
	Uncert:		+/-0.0372							
	TPU:		+/-0.0372							
Cobalt-60	U	U	0.00162	pCi/g	123		(0% - 100%)			
	Uncert:		+/-0.0172							
	TPU:		+/-0.0172							
Europium-152	U	U	-0.00529	pCi/g	115		(0% - 100%)			
	Uncert:		+/-0.037							
	TPU:		+/-0.037							
Europium-154	U	U	-0.0139	pCi/g	1190		(0% - 100%)			
	Uncert:		+/-0.0491							
	TPU:		+/-0.0491							
Europium-155	U	U	0.0242	pCi/g	45		(0% - 100%)			

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch	595951										
Lead-212		Uncert:	+/-0.0573	+/-0.0415							
		TPU:	+/-0.0573	+/-0.0415							
			0.652	0.621	pCi/g	5		(0% - 20%)			
		Uncert:	+/-0.0437	+/-0.0467							
		TPU:	+/-0.0437	+/-0.0467							
Lead-214			0.627	0.660	pCi/g	5		(0% - 20%)			
		Uncert:	+/-0.0599	+/-0.0522							
		TPU:	+/-0.0599	+/-0.0522							
Manganese-54		U	0.0188	U -0.0164	pCi/g	2930		(0% - 100%)			
		Uncert:	+/-0.0188	+/-0.0162							
		TPU:	+/-0.0188	+/-0.0162							
Niobium-94		U	0.00839	U 0.0103	pCi/g	21		(0% - 100%)			
		Uncert:	+/-0.0142	+/-0.0172							
		TPU:	+/-0.0142	+/-0.0172							
Potassium-40			11.1	10.8	pCi/g	3		(0% - 20%)			
		Uncert:	+/-0.581	+/-0.553							
		TPU:	+/-0.581	+/-0.553							
Radium-226			0.678	0.601	pCi/g	12		(0% - 100%)			
		Uncert:	+/-0.0799	+/-0.0684							
		TPU:	+/-0.0799	+/-0.0684							
Silver-108m		U	0.00341	U -0.00247	pCi/g	1240		(0% - 100%)			
		Uncert:	+/-0.0128	+/-0.0121							
		TPU:	+/-0.0128	+/-0.0121							
Thallium-208			0.245	0.250	pCi/g	2		(0% - 100%)			
		Uncert:	+/-0.0382	+/-0.0343							
		TPU:	+/-0.0382	+/-0.0343							
QC1201246869	LCS										
Actinium-228				U 0.135	pCi/g					12/18/06	08:02
		Uncert:		+/-0.382							
		TPU:		+/-0.382							
Americium-241		23.4		24.4	pCi/g		104	(75%-125%)			
		Uncert:		+/-0.847							
		TPU:		+/-0.847							
Bismuth-212				U -0.537	pCi/g						
		Uncert:		+/-0.682							
		TPU:		+/-0.682							
Bismuth-214				U 0.0565	pCi/g						
		Uncert:		+/-0.161							
		TPU:		+/-0.161							
Cesium-134				U 0.0153	pCi/g						
		Uncert:		+/-0.0983							
		TPU:		+/-0.0983							
Cesium-137		9.51		10.3	pCi/g		108	(75%-125%)			
		Uncert:		+/-0.364							
		TPU:		+/-0.364							
Cobalt-60		14.0		14.9	pCi/g		107	(75%-125%)			
		Uncert:		+/-0.490							
		TPU:		+/-0.490							

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Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec										
Batch	595951									
Europium-152		U	-0.0468	pCi/g						
	Uncert:		+/-0.219							
	TPU:		+/-0.219							
Europium-154		U	0.0344	pCi/g						
	Uncert:		+/-0.200							
	TPU:		+/-0.200							
Europium-155		U	0.0525	pCi/g						
	Uncert:		+/-0.232							
	TPU:		+/-0.232							
Lead-212		U	0.040	pCi/g						
	Uncert:		+/-0.154							
	TPU:		+/-0.154							
Lead-214		U	-0.0528	pCi/g						
	Uncert:		+/-0.154							
	TPU:		+/-0.154							
Manganese-54		U	0.0141	pCi/g						
	Uncert:		+/-0.0899							
	TPU:		+/-0.0899							
Niobium-94		U	-0.0248	pCi/g						
	Uncert:		+/-0.0753							
	TPU:		+/-0.0753							
Potassium-40		U	-0.0614	pCi/g						
	Uncert:		+/-0.697							
	TPU:		+/-0.697							
Radium-226		U	0.0565	pCi/g			(75%-125%)			
	Uncert:		+/-0.161							
	TPU:		+/-0.161							
Silver-108m		U	-0.0219	pCi/g						
	Uncert:		+/-0.0795							
	TPU:		+/-0.0795							
Thallium-208		U	0.00579	pCi/g						
	Uncert:		+/-0.0832							
	TPU:		+/-0.0832							
QC1201246867	MB									
Actinium-228		U	0.00223	pCi/g					12/18/06	19:08
	Uncert:		+/-0.0255							
	TPU:		+/-0.0255							
Americium-241		U	0.00281	pCi/g						
	Uncert:		+/-0.0357							
	TPU:		+/-0.0357							
Bismuth-212		U	-0.00926	pCi/g						
	Uncert:		+/-0.055							
	TPU:		+/-0.055							
Bismuth-214		UI	0.00	pCi/g						
	Uncert:		+/-0.0247							
	TPU:		+/-0.0247							
Cesium-134		U	-0.00101	pCi/g						
	Uncert:		+/-0.00748							

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Parnname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec										
Batch	595951									
Cesium-137	TPU:		+/-0.00748							
		U	-0.00013	pCi/g						
	Uncert:		+/-0.00721							
Cobalt-60	TPU:		+/-0.00721							
		U	0.00333	pCi/g						
	Uncert:		+/-0.0115							
Europium-152	TPU:		+/-0.0115							
		U	0.00655	pCi/g						
	Uncert:		+/-0.0192							
Europium-154	TPU:		+/-0.0192							
		U	0.00574	pCi/g						
	Uncert:		+/-0.0199							
Europium-155	TPU:		+/-0.0199							
		U	0.00323	pCi/g						
	Uncert:		+/-0.0182							
Lead-212	TPU:		+/-0.0182							
		UI	0.00	pCi/g						
	Uncert:		+/-0.0121							
Lead-214	TPU:		+/-0.0121							
		U	0.015	pCi/g						
	Uncert:		+/-0.015							
Manganese-54	TPU:		+/-0.015							
		U	0.000728	pCi/g						
	Uncert:		+/-0.00707							
Niobium-94	TPU:		+/-0.00707							
		U	0.00116	pCi/g						
	Uncert:		+/-0.00687							
Potassium-40	TPU:		+/-0.00687							
		U	0.183	pCi/g						
	Uncert:		+/-0.0961							
Radium-226	TPU:		+/-0.0961							
		UI	0.00	pCi/g						
	Uncert:		+/-0.0247							
Silver-108m	TPU:		+/-0.0247							
		U	-0.00308	pCi/g						
	Uncert:		+/-0.00596							
Thallium-208	TPU:		+/-0.00596							
		U	0.0042	pCi/g						
	Uncert:		+/-0.00784							
Batch	595952		TPU:							
			+/-0.00784							
QC1201246871	177713041	DUP								
Actinium-228			1.34	1.40	pCi/g	4	(0% - 100%)	MJH1	12/20/06	12:27
			Uncert:	+/-0.183						
			TPU:	+/-0.183						
Americium-241		U	0.0119	U	0.00394	pCi/g	101	(0% - 100%)		
			Uncert:	+/-0.0834						
			TPU:	+/-0.0834						

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch	595952										
Bismuth-212		0.782		1.00	pCi/g	25		(0% - 100%)			
	Uncert:	+/-0.184		+/-0.315							
	TPU:	+/-0.184		+/-0.315							
Bismuth-214		1.08		1.16	pCi/g	7		(0% - 20%)			
	Uncert:	+/-0.117		+/-0.107							
	TPU:	+/-0.117		+/-0.107							
Cesium-134	UI	0.00	UI	0.00	pCi/g	26		(0% - 100%)			
	Uncert:	+/-0.0211		+/-0.0443							
	TPU:	+/-0.0211		+/-0.0443							
Cesium-137	UI	0.00	U	0.0313	pCi/g	28		(0% - 100%)			
	Uncert:	+/-0.0126		+/-0.0336							
	TPU:	+/-0.0126		+/-0.0336							
Cobalt-60	U	-0.000914	U	0.0215	pCi/g	218		(0% - 100%)			
	Uncert:	+/-0.0114		+/-0.0241							
	TPU:	+/-0.0114		+/-0.0241							
Europium-152	U	-0.0529	U	-0.00406	pCi/g	172		(0% - 100%)			
	Uncert:	+/-0.0401		+/-0.0592							
	TPU:	+/-0.0401		+/-0.0592							
Europium-154	U	-0.000264	U	0.0108	pCi/g	210		(0% - 100%)			
	Uncert:	+/-0.0453		+/-0.0804							
	TPU:	+/-0.0453		+/-0.0804							
Europium-155	U	0.0587	U	0.0667	pCi/g	13		(0% - 100%)			
	Uncert:	+/-0.0479		+/-0.0556							
	TPU:	+/-0.0479		+/-0.0556							
Lead-212		1.27		1.27	pCi/g	0		(0% - 20%)			
	Uncert:	+/-0.107		+/-0.0646							
	TPU:	+/-0.107		+/-0.0646							
Lead-214		1.34		1.23	pCi/g	9		(0% - 20%)			
	Uncert:	+/-0.125		+/-0.101							
	TPU:	+/-0.125		+/-0.101							
Manganese-54	U	0.0151	U	0.0216	pCi/g	35		(0% - 100%)			
	Uncert:	+/-0.0136		+/-0.0268							
	TPU:	+/-0.0136		+/-0.0268							
Niobium-94	U	0.00036	U	0.0176	pCi/g	192		(0% - 100%)			
	Uncert:	+/-0.0108		+/-0.022							
	TPU:	+/-0.0108		+/-0.022							
Potassium-40		19.3		17.2	pCi/g	12		(0% - 20%)			
	Uncert:	+/-1.22		+/-1.05							
	TPU:	+/-1.22		+/-1.05							
Radium-226		1.08		1.16	pCi/g	7		(0% - 100%)			
	Uncert:	+/-0.117		+/-0.107							
	TPU:	+/-0.117		+/-0.107							
Silver-108m	U	-0.00337	U	0.00806	pCi/g	487		(0% - 100%)			
	Uncert:	+/-0.0106		+/-0.0191							
	TPU:	+/-0.0106		+/-0.0191							
Thallium-208		0.383		0.404	pCi/g	5		(0%-20%)			
	Uncert:	+/-0.0421		+/-0.0491							
	TPU:	+/-0.0421		+/-0.0491							

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch 595952											
QC1201246872 LCS											
Actinium-228			U	-0.526	pCi/g					12/20/06	12:39
	Uncert:			+/-0.429							
	TPU:			+/-0.429							
Americium-241	23.4			25.6	pCi/g		109	(75%-125%)			
	Uncert:			+/-2.90							
	TPU:			+/-2.90							
Bismuth-212			U	-0.346	pCi/g						
	Uncert:			+/-0.741							
	TPU:			+/-0.741							
Bismuth-214			U	0.107	pCi/g						
	Uncert:			+/-0.188							
	TPU:			+/-0.188							
Cesium-134			U	-0.00467	pCi/g						
	Uncert:			+/-0.103							
	TPU:			+/-0.103							
Cesium-137	9.51			10.3	pCi/g		109	(75%-125%)			
	Uncert:			+/-0.965							
	TPU:			+/-0.965							
Cobalt-60	13.9			14.8	pCi/g		106	(75%-125%)			
	Uncert:			+/-0.936							
	TPU:			+/-0.936							
Europium-152			U	-0.066	pCi/g						
	Uncert:			+/-0.231							
	TPU:			+/-0.231							
Europium-154			U	0.190	pCi/g						
	Uncert:			+/-0.199							
	TPU:			+/-0.199							
Europium-155			U	0.00208	pCi/g						
	Uncert:			+/-0.293							
	TPU:			+/-0.293							
Lead-212			U	0.149	pCi/g						
	Uncert:			+/-0.187							
	TPU:			+/-0.187							
Lead-214			U	0.0691	pCi/g						
	Uncert:			+/-0.211							
	TPU:			+/-0.211							
Manganese-54			U	-0.0358	pCi/g						
	Uncert:			+/-0.101							
	TPU:			+/-0.101							
Niobium-94			U	-0.00176	pCi/g						
	Uncert:			+/-0.0865							
	TPU:			+/-0.0865							
Potassium-40			U	-0.0278	pCi/g						
	Uncert:			+/-0.715							
	TPU:			+/-0.715							
Radium-226			U	0.107	pCi/g			(75%-125%)			
	Uncert:			+/-0.188							
	TPU:			+/-0.188							

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Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec										
Batch	595952									
Silver-108m		U	-0.0281	pCi/g						
	Uncert:		+/-0.0881							
	TPU:		+/-0.0881							
Thallium-208		U	-0.0357	pCi/g						
	Uncert:		+/-0.0876							
	TPU:		+/-0.0876							
QC1201246870 MB										
Actinium-228		U	0.0318	pCi/g					12/20/06	12:26
	Uncert:		+/-0.0445							
	TPU:		+/-0.0445							
Americium-241		U	-0.00955	pCi/g						
	Uncert:		+/-0.0642							
	TPU:		+/-0.0642							
Bismuth-212		U	-0.0171	pCi/g						
	Uncert:		+/-0.0886							
	TPU:		+/-0.0886							
Bismuth-214		U	0.0221	pCi/g						
	Uncert:		+/-0.0277							
	TPU:		+/-0.0277							
Cesium-134		U	0.00544	pCi/g						
	Uncert:		+/-0.0113							
	TPU:		+/-0.0113							
Cesium-137		U	0.00152	pCi/g						
	Uncert:		+/-0.0108							
	TPU:		+/-0.0108							
Cobalt-60		U	0.00666	pCi/g						
	Uncert:		+/-0.00974							
	TPU:		+/-0.00974							
Europium-152		U	-0.0115	pCi/g						
	Uncert:		+/-0.0337							
	TPU:		+/-0.0337							
Europium-154		U	-0.0134	pCi/g						
	Uncert:		+/-0.0342							
	TPU:		+/-0.0342							
Europium-155		U	0.0115	pCi/g						
	Uncert:		+/-0.0273							
	TPU:		+/-0.0273							
Lead-212		U	0.011	pCi/g						
	Uncert:		+/-0.0276							
	TPU:		+/-0.0276							
Lead-214		U	0.0273	pCi/g						
	Uncert:		+/-0.0225							
	TPU:		+/-0.0225							
Manganese-54		U	-0.00718	pCi/g						
	Uncert:		+/-0.0104							
	TPU:		+/-0.0104							
Niobium-94		U	-0.00772	pCi/g						
	Uncert:		+/-0.0109							

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QC Summary

Workorder: 177713

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Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec										
Batch	595952									
Potassium-40	TPU:		+/-0.0109							
		U	0.0729	pCi/g						
	Uncert:		+/-0.114							
Radium-226	TPU:		+/-0.114							
		U	0.0221	pCi/g						
	Uncert:		+/-0.0277							
Silver-108m	TPU:		+/-0.0277							
		U	-0.0039	pCi/g						
	Uncert:		+/-0.0102							
Thallium-208	TPU:		+/-0.0102							
		U	0.00516	pCi/g						
	Uncert:		+/-0.0189							
	TPU:		+/-0.0189							
Rad Gas Flow										
Batch	595975									
QC1201246938	177713001	DUP								
Strontium-90		U	0.00864	0.0299	pCi/g	33	(0% - 100%)	KSD1	12/22/06	16:33
			Uncert: +/-0.0232	+/-0.0184						
			TPU: +/-0.0232	+/-0.0185						
QC1201246940	LCS									
Strontium-90		1.46		1.38	pCi/g	94	(75%-125%)		12/22/06	14:28
			Uncert: +/-0.0771							
			TPU: +/-0.228							
QC1201246937	MB									
Strontium-90		U	-0.014		pCi/g				12/22/06	16:33
			Uncert: +/-0.0135							
			TPU: +/-0.0136							
QC1201246939	177713001	MS								
Strontium-90		5.16 U	0.00864	4.08	pCi/g	79	(75%-125%)			
			Uncert: +/-0.0232	+/-0.199						
			TPU: +/-0.0232	+/-0.844						
Rad Liquid Scintillation										
Batch	595904									
QC1201246733	177713014	DUP								
Tritium		U	-0.253	0.310	pCi/g	0	(0% - 100%)	DFA1	12/19/06	22:12
			Uncert: +/-1.34	+/-1.42						
			TPU: +/-1.34	+/-1.42						
QC1201246735	LCS									
Tritium		10.4		9.08	pCi/g	88	(75%-125%)		12/19/06	23:33
			Uncert: +/-1.63							
			TPU: +/-1.64							
QC1201246732	MB									
Tritium		U	-0.0787		pCi/g				12/19/06	22:59
			Uncert: +/-0.912							
			TPU: +/-0.912							
QC1201246734	177713014	MS								
Tritium		10.7 U	-0.253	10.6	pCi/g	99	(75%-125%)		12/19/06	23:16
			Uncert: +/-1.34	+/-2.81						
				+/-2.81						

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QC Summary

Workorder: 177713

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Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Liquid Scintillation									
Batch	595904								
		TPU:	+/-1.34						
Batch	595936								
QC1201246827	177713014	DUP							
Carbon-14			U	-0.0292	U	-0.0149	pCi/g	0	(0% - 100%) AXD2 12/15/06 18:58
		Uncert:	+/-0.0719			+/-0.0743			
		TPU:	+/-0.0719			+/-0.0743			
QC1201246829	LCS								
Carbon-14				7.14		7.00	pCi/g	98	(75%-125%) 12/15/06 20:18
		Uncert:				+/-0.475			
		TPU:				+/-0.488			
QC1201246826	MB								
Carbon-14					U	-0.0393	pCi/g		12/15/06 17:55
		Uncert:				+/-0.0745			
		TPU:				+/-0.0745			
QC1201246828	177713014	MS							
Carbon-14				7.24	U	-0.0292	pCi/g	99	(75%-125%) 12/15/06 20:00
		Uncert:				+/-0.0719			
		TPU:				+/-0.0719			
Batch	595937								
QC1201246831	177713014	DUP							
Technetium-99					U	0.204	pCi/g	0	(0% - 100%) KXR1 12/19/06 10:03
		Uncert:				+/-0.236			
		TPU:				+/-0.236			
QC1201246833	LCS								
Technetium-99				13.0		13.2	pCi/g	101	(75%-125%) 12/19/06 10:37
		Uncert:				+/-0.487			
		TPU:				+/-0.588			
QC1201246830	MB								
Technetium-99					U	0.107	pCi/g		12/19/06 09:47
		Uncert:				+/-0.206			
		TPU:				+/-0.206			
QC1201246832	177713014	MS							
Technetium-99				13.0	U	0.204	pCi/g	93	(75%-125%) 12/19/06 10:20
		Uncert:				+/-0.236			
		TPU:				+/-0.236			
Batch	595938								
QC1201246835	177713014	DUP							
Nickel-63					U	-1.04	pCi/g	0	(0% - 100%) MXP1 12/18/06 22:29
		Uncert:				+/-11.9			
		TPU:				+/-11.9			
QC1201246837	LCS								
Nickel-63				576		558	pCi/g	97	(75%-125%) 12/19/06 00:03
		Uncert:				+/-13.8			
		TPU:				+/-24.5			
QC1201246834	MB								
Nickel-63					U	7.58	pCi/g		12/18/06 21:42
		Uncert:				+/-9.00			
		TPU:				+/-9.00			
QC1201246836	177713014	MS							

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QC Summary

Workorder: 177713

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Liquid Scintillation											
Batch	595938										
Nickel-63	577	U	-1.04	588	pCi/g		102	(75%-125%)			
	Uncert:		+/-11.9	+/-15.0							
	TPU:		+/-11.9	+/-26.1							
Batch	595939										
QC1201246839	177713014 DUP										
Iron-55		U	0.502	U	13.4	pCi/g	0	(0% - 100%)	MXP1	12/19/06	13:17
	Uncert:		+/-21.5	+/-30.8							
	TPU:		+/-21.5	+/-30.9							
QC1201246841	LCS										
Iron-55	640			521	pCi/g		81	(75%-125%)		12/19/06	13:49
	Uncert:			+/-45.5							
	TPU:			+/-83.5							
QC1201246838	MB										
Iron-55				U	4.79	pCi/g				12/19/06	13:01
	Uncert:				+/-23.7						
	TPU:				+/-23.7						
QC1201246840	177713014 MS										
Iron-55	681	U	0.502	589	pCi/g		87	(75%-125%)		12/19/06	13:33
	Uncert:		+/-21.5	+/-52.4							
	TPU:		+/-21.5	+/-100							

Notes:

The Qualifiers in this report are defined as follows:

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

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QC Summary

Workorder: 177713

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<u>Parmname</u>	<u>NOM</u>	<u>Sample Qual</u>	<u>QC</u>	<u>Units</u>	<u>RPD%</u>	<u>REC%</u>	<u>Range</u>	<u>Anlst</u>	<u>Date</u>	<u>Time</u>
-----------------	------------	--------------------	-----------	--------------	-------------	-------------	--------------	--------------	-------------	-------------

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.

General Narrative

**General Narrative
for
Connecticut Yankee Atomic Power Co.
Work Order: 177383
SDG: MSR#06-1544**

December 12, 2006

Laboratory Identification:

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

Summary

Sample receipt

The samples arrived at General Engineering Laboratories, LLC, Charleston, South Carolina on December 08, 2006 for analysis. Shipping container temperatures were checked, documented, and within specifications. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage.

Sample Identification The laboratory received the following samples:

<u>Laboratory Identification</u>	<u>Sample Description</u>
177383001	9522-0006-018-I
177383002	9522-0006-019-I
177383003	9522-0006-020-I
177383004	9522-0006-021-I
177383005	9522-0006-022-I
177383006	9522-0006-023-I
177383007	9522-0006-024-I
177383008	9522-0006-025-I
177383009	9522-0006-026-I
177383010	9522-0006-027-I
177383011	9522-0006-028-I

Items of Note

There are no items to note.

Case Narrative

Sample analyses were conducted using methodology as outlined in General Engineering Laboratories (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

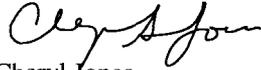
Analytical Request

Eleven soil samples were analyzed for FSSGAM.

Data Package

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

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



Cheryl Jones
Project Manager

List of current GEL Certifications as of 12 December 2006

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

**Chain of Custody
and
Supporting
Documentation**

Figure 1. Sample Check-in List

Date/Time Received: 12/8/06 1000

SDG#: MSR#06-1538, MSR#06-1544

Work Order Number: 177381, 177383
798558973155

Shipping Container ID: 79013203 7724 Chain of Custody # 2006-00700/00699

1. Custody Seals on shipping container intact? Yes [] No [x] NA
2. Custody Seals dated and signed? Yes [] No [] NA
3. Chain-of-Custody record present? Yes [x] No []
4. Cooler temperature 12/12
5. Vermiculite/packing materials is: Wet [] Dry [x] NA
6. Number of samples in shipping container: 21 total
7. Sample holding times exceeded? Yes [] No [x]

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 [x]

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

Sample Custodian/Laboratory: K. Wright Date: 12/8/06 1000

Telephoned to: _____ On _____ By _____



SAMPLE RECEIPT & REVIEW FORM

PM use only

Client: <u>Connyank</u>	SDG/ARCOC/Work Order: <u>177381, 177383</u>
Date Received: <u>12/8/06</u>	PM(A) Review (ensure non-conforming items are resolved prior to signing): <i>[Signature]</i>
Received By: <u>KW</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)				
8 Samples received within holding time?				ID's and tests affected:
9 Sample ID's on COC match ID's on bottles?				Sample ID's and containers affected:
10 Date & time on COC match date & time on bottles?				Sample ID's affected:
11 Number of containers received match number indicated on COC?				Sample ID's affected:
12 COC form is properly signed in relinquished/received sections?				
14 Air Bill, Tracking #'s, & Additional Comments				

Suspected Hazard Information	Non-Regulated	Regulated	High Level	RSO RAD Receipt #
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>cpm 20</u>
C Shipped as DOT Hazardous Material? If yes, contact Waste Manager or ESH Manager.	/			Hazard Class Shipped: UN#:
D Regulated as a Foreign Soil?	/			

PM (or PMA) review of Hazard classification: Initials [Signature] Date: 12/8/06

Data Review Qualifier Definitions

Data Review Qualifier Definitions

Qualifier Explanation

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

RADIOLOGICAL ANALYSIS

**Radiochemistry Case Narrative
Connecticut Yankee Atomic Power Co. (YANK)
Work Order 177383**

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: 594412
Prep Batch Number: 594331

Sample ID	Client ID
177383011	9522-0006-028-I
1201243208	Method Blank (MB)
1201243209	177164021(9522-0007-022-I) Sample Duplicate (DUP)
1201243210	Laboratory Control Sample (LCS)

SOP Reference

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

Calibration Information:

Calibration Information

All initial and continuing calibration requirements have been met.

Standards Information

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

Sample Geometry

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

Quality Control (QC) Information:

Blank Information

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

Designated QC

The following sample was used for QC: 177164021 (9522-0007-022-I).

QC Information

All of the QC samples met the required acceptance limits.

Technical Information:**Holding Time**

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

Preparation Information

All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis

None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:**NCR Documentation**

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

Additional Comments

Additional comments were not required for this sample set.

Qualifier information

Qualifier	Reason	Analyte	Sample
UI	Data rejected due to interference.	Europium-155	177383011
UI	Data rejected due to low abundance.	Cesium-134	1201243209

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:	594414
Prep Batch Number:	594331

Sample ID	Client ID
177383001	9522-0006-018-I
177383002	9522-0006-019-I
177383003	9522-0006-020-I
177383004	9522-0006-021-I
177383005	9522-0006-022-I
177383006	9522-0006-023-I
177383007	9522-0006-024-I
177383008	9522-0006-025-I
177383009	9522-0006-026-I
177383010	9522-0006-027-I
1201243214	Method Blank (MB)
1201243215	177381001(9312-0004-001C) Sample Duplicate (DUP)
1201243216	Laboratory Control Sample (LCS)

SOP Reference

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

Calibration Information:

Calibration Information

All initial and continuing calibration requirements have been met.

Standards Information

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

Sample Geometry

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

Quality Control (QC) Information:

Blank Information

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

Designated QC

The following sample was used for QC: 177381001 (9312-0004-001C).

QC Information

All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time

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

Preparation Information

All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis

None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:**NCR Documentation**

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

Additional Comments

The sample and the duplicate 1201243215 (9312-0004-001C) did not meet the relative percent difference requirement for Bi-212 and Ac-228, however they do meet the relative error ratio requirement with a value of 1.98 for Bi-212 and 1.92 for Ac-228..

Qualifier information

Qualifier	Reason	Analyte	Sample
UI	Data rejected due to high peak-width.	Thallium-208	1201243214
UI	Data rejected due to interference.	Europium-155	177383008
UI	Data rejected due to low abundance.	Actinium-228	177383003
		Bismuth-214	177383003
		Cesium-134	177383001
			177383002
			177383003
			177383004
			177383006
			1201243215
		Potassium-40	177383003

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

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#06-1544 GEL Work Order: 177383

The Qualifiers in this report are defined as follows:

- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a surrogate compound
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- UI Gamma Spectroscopy--Uncertain identification
- ND The analyte concentration is not detected above the detection limit.

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

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

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



Reviewed by _____

GENERAL ENGINEERING LABORATORIES, LLC

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

Certificate of Analysis

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

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

Report Date: December 15, 2006

Client Sample ID:	9522-0006-018-I	Project:	YANK01204
Sample ID:	177383001	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	06-DEC-06		
Receive Date:	08-DEC-06		
Collector:	Client		
Moisture:	7.72%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS</i>												
Actinium-228		0.864	+/-0.187	0.044	+/-0.187	0.0933	pCi/g		MJH1	12/13/06	1337	594414
Americium-241	U	0.00203	+/-0.0485	0.039	+/-0.0485	0.0797	pCi/g					
Bismuth-212		0.531	+/-0.190	0.111	+/-0.190	0.232	pCi/g					
Bismuth-214		0.681	+/-0.0894	0.025	+/-0.0894	0.0522	pCi/g					
Cesium-134	UI	0.00	+/-0.0378	0.0193	+/-0.0378	0.0401	pCi/g					
Cesium-137	U	0.00918	+/-0.0161	0.0146	+/-0.0161	0.0304	pCi/g					
Cobalt-60	U	0.00241	+/-0.0159	0.0133	+/-0.0159	0.0286	pCi/g					
Europium-152	U	0.00701	+/-0.0414	0.036	+/-0.0414	0.0746	pCi/g					
Europium-154	U	0.044	+/-0.0491	0.0435	+/-0.0491	0.0925	pCi/g					
Europium-155	U	0.0428	+/-0.0632	0.0383	+/-0.0632	0.0784	pCi/g					
Lead-212		1.04	+/-0.095	0.0202	+/-0.095	0.0415	pCi/g					
Lead-214		0.817	+/-0.101	0.0235	+/-0.101	0.0488	pCi/g					
Manganese-54	U	0.00901	+/-0.0167	0.0148	+/-0.0167	0.0309	pCi/g					
Niobium-94	U	-0.008	+/-0.0148	0.0125	+/-0.0148	0.0262	pCi/g					
Potassium-40		17.4	+/-1.32	0.104	+/-1.32	0.229	pCi/g					
Radium-226		0.681	+/-0.0894	0.025	+/-0.0894	0.0522	pCi/g					
Silver-108m	U	0.00328	+/-0.0141	0.012	+/-0.0141	0.0251	pCi/g					
Thallium-208		0.321	+/-0.0471	0.0128	+/-0.0471	0.0268	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	MXP2	12/08/06	1157	594331

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

GENERAL ENGINEERING LABORATORIES, LLC

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

Certificate of Analysis

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

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

Report Date: December 15, 2006

Client Sample ID: 9522-0006-018-I
Sample ID: 177383001

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time Batch	NA
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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: December 15, 2006

Client Sample ID: 9522-0006-019-I
Sample ID: 177383002
Matrix: TS
Collect Date: 06-DEC-06
Receive Date: 08-DEC-06
Collector: Client
Moisture: 8.35%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch #
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS</i>												
Actinium-228		0.604	+/-0.146	0.0656	+/-0.146	0.131	pCi/g		MJH1	12/13/06	1343	594414
Americium-241	U	0.0111	+/-0.0299	0.0244	+/-0.0299	0.0487	pCi/g					
Bismuth-212		0.464	+/-0.266	0.130	+/-0.266	0.259	pCi/g					
Bismuth-214		0.632	+/-0.108	0.0298	+/-0.108	0.0595	pCi/g					
Cesium-134	UI	0.00	+/-0.0338	0.0222	+/-0.0338	0.0443	pCi/g					
Cesium-137	U	0.0353	+/-0.025	0.019	+/-0.025	0.038	pCi/g					
Cobalt-60	U	0.0117	+/-0.0234	0.0206	+/-0.0234	0.0411	pCi/g					
Europium-152	U	0.0332	+/-0.0748	0.0406	+/-0.0748	0.0811	pCi/g					
Europium-154	U	-0.0101	+/-0.0718	0.0596	+/-0.0718	0.119	pCi/g					
Europium-155	U	0.0226	+/-0.0422	0.0383	+/-0.0422	0.0765	pCi/g					
Lead-212		0.687	+/-0.0766	0.0222	+/-0.0766	0.0444	pCi/g					
Lead-214		0.613	+/-0.0952	0.029	+/-0.0952	0.058	pCi/g					
Manganese-54	U	-0.00353	+/-0.0199	0.0171	+/-0.0199	0.0341	pCi/g					
Niobium-94	U	0.0153	+/-0.0185	0.017	+/-0.0185	0.034	pCi/g					
Potassium-40		10.4	+/-0.853	0.187	+/-0.853	0.373	pCi/g					
Radium-226		0.632	+/-0.108	0.0298	+/-0.108	0.0595	pCi/g					
Silver-108m	U	0.0105	+/-0.017	0.0153	+/-0.017	0.0305	pCi/g					
Thallium-208		0.275	+/-0.0439	0.0151	+/-0.0439	0.0301	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	MPX2	12/08/06	1157	594331

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

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Certificate of Analysis

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

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

Report Date: December 15, 2006

Client Sample ID: 9522-0006-019-I
Sample ID: 177383002

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time Batch	N
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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: December 15, 2006

Client Sample ID: 9522-0006-020-I
Sample ID: 177383003
Matrix: TS
Collect Date: 06-DEC-06
Receive Date: 08-DEC-06
Collector: Client
Moisture: 8.06%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS</i>												
Actinium-228	UI	0.00	+/-0.0963	0.073	+/-0.0963	0.149	pCi/g		MJH1	12/13/06	1338	594414
Americium-241	U	0.00226	+/-0.0465	0.0398	+/-0.0465	0.0814	pCi/g					
Bismuth-212		0.380	+/-0.156	0.0735	+/-0.156	0.153	pCi/g					
Bismuth-214	UI	0.00	+/-0.0514	0.0463	+/-0.0514	0.094	pCi/g					
Cesium-134	UI	0.00	+/-0.0251	0.0122	+/-0.0251	0.0253	pCi/g					
Cesium-137	U	0.0123	+/-0.0139	0.0109	+/-0.0139	0.0227	pCi/g					
Cobalt-60	U	0.00655	+/-0.0119	0.0106	+/-0.0119	0.0223	pCi/g					
Europium-152	U	0.0228	+/-0.0345	0.0273	+/-0.0345	0.0562	pCi/g					
Europium-154	U	-0.0234	+/-0.0368	0.0306	+/-0.0368	0.0644	pCi/g					
Europium-155	U	0.0109	+/-0.0353	0.0323	+/-0.0353	0.0661	pCi/g					
Lead-212		0.645	+/-0.0372	0.0164	+/-0.0372	0.0336	pCi/g					
Lead-214		0.691	+/-0.0542	0.0192	+/-0.0542	0.0395	pCi/g					
Manganese-54	U	0.0049	+/-0.0108	0.00964	+/-0.0108	0.0201	pCi/g					
Niobium-94	U	0.00437	+/-0.011	0.0096	+/-0.011	0.0199	pCi/g					
Potassium-40	UI	0.00	+/-0.310	0.358	+/-0.310	0.727	pCi/g					
Radium-226		0.580	+/-0.0514	0.0208	+/-0.0514	0.043	pCi/g					
Silver-108m	U	0.00126	+/-0.00992	0.00898	+/-0.00992	0.0186	pCi/g					
Thallium-208		0.199	+/-0.0261	0.0102	+/-0.0261	0.0211	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	MXP2	12/08/06	1157	594331

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

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Certificate of Analysis

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

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

Report Date: December 15, 2006

Client Sample ID: 9522-0006-020-I
Sample ID: 177383003

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time Batch	N
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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: December 15, 2006

Client Sample ID: 9522-0006-021-I
Sample ID: 177383004
Matrix: TS
Collect Date: 06-DEC-06
Receive Date: 08-DEC-06
Collector: Client
Moisture: 8.02%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS</i>												
Actinium-228		1.80	+/-0.262	0.0861	+/-0.262	0.180	pCi/g		MJH1	12/13/06	1429	594414
Americium-241	U	0.0104	+/-0.0414	0.0356	+/-0.0414	0.0725	pCi/g					
Bismuth-212		1.01	+/-0.389	0.189	+/-0.389	0.392	pCi/g					
Bismuth-214		2.24	+/-0.138	0.0404	+/-0.138	0.0841	pCi/g					
Cesium-134	UI	0.00	+/-0.0589	0.0327	+/-0.0589	0.0675	pCi/g					
Cesium-137	U	0.0459	+/-0.0322	0.026	+/-0.0322	0.0539	pCi/g					
Cobalt-60	U	-0.0113	+/-0.0312	0.0253	+/-0.0312	0.0534	pCi/g					
Europium-152	U	0.0489	+/-0.0725	0.062	+/-0.0725	0.127	pCi/g					
Europium-154	U	-0.0201	+/-0.0997	0.0822	+/-0.0997	0.172	pCi/g					
Europium-155	U	0.0807	+/-0.0878	0.0544	+/-0.0878	0.111	pCi/g					
Lead-212		1.73	+/-0.0807	0.0338	+/-0.0807	0.0691	pCi/g					
Lead-214		2.40	+/-0.140	0.0424	+/-0.140	0.0873	pCi/g					
Manganese-54	U	-0.0159	+/-0.0316	0.0254	+/-0.0316	0.0527	pCi/g					
Niobium-94	U	0.00626	+/-0.0273	0.0231	+/-0.0273	0.048	pCi/g					
Potassium-40		28.2	+/-1.29	0.204	+/-1.29	0.438	pCi/g					
Radium-226		2.24	+/-0.138	0.0404	+/-0.138	0.0841	pCi/g					
Silver-108m	U	0.0122	+/-0.0234	0.0209	+/-0.0234	0.0432	pCi/g					
Thallium-208		0.606	+/-0.0724	0.0235	+/-0.0724	0.0487	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	MXP2	12/08/06	1157	594331

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

GENERAL ENGINEERING LABORATORIES, LLC

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

Certificate of Analysis

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

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

Report Date: December 15, 2006

Client Sample ID: 9522-0006-021-1
Sample ID: 177383004

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time Batch	M
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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: December 15, 2006

Client Sample ID: 9522-0006-022-1
Sample ID: 177383005
Matrix: TS
Collect Date: 06-DEC-06
Receive Date: 08-DEC-06
Collector: Client
Moisture: 5.98%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS</i>												
Actinium-228		0.930	+/-0.204	0.0658	+/-0.204	0.140	pCi/g		MJH1	12/13/06	1525	594414
Americium-241	U	-0.0779	+/-0.072	0.0641	+/-0.072	0.131	pCi/g					
Bismuth-212		0.682	+/-0.284	0.139	+/-0.284	0.293	pCi/g					
Bismuth-214		0.702	+/-0.110	0.0329	+/-0.110	0.0693	pCi/g					
Cesium-134	U	0.044	+/-0.0325	0.0218	+/-0.0325	0.0461	pCi/g					
Cesium-137	U	-0.00502	+/-0.0232	0.0196	+/-0.0232	0.0413	pCi/g					
Cobalt-60	U	-0.000573	+/-0.0223	0.019	+/-0.0223	0.0412	pCi/g					
Europium-152	U	-0.0374	+/-0.0543	0.047	+/-0.0543	0.0979	pCi/g					
Europium-154	U	-0.0471	+/-0.061	0.0481	+/-0.061	0.105	pCi/g					
Europium-155	U	0.043	+/-0.0595	0.0548	+/-0.0595	0.112	pCi/g					
Lead-212		1.01	+/-0.0994	0.0269	+/-0.0994	0.0556	pCi/g					
Lead-214		0.753	+/-0.0969	0.0354	+/-0.0969	0.0737	pCi/g					
Manganese-54	U	0.0252	+/-0.0243	0.0142	+/-0.0243	0.0306	pCi/g					
Niobium-94	U	-0.0087	+/-0.0235	0.0168	+/-0.0235	0.0353	pCi/g					
Potassium-40		16.5	+/-1.31	0.131	+/-1.31	0.295	pCi/g					
Radium-226		0.702	+/-0.110	0.0329	+/-0.110	0.0693	pCi/g					
Silver-108m	U	0.00117	+/-0.018	0.0159	+/-0.018	0.0334	pCi/g					
Thallium-208		0.327	+/-0.0592	0.0162	+/-0.0592	0.0342	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	MXP2	12/08/06	1157	594331

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

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Certificate of Analysis

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

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

Report Date: December 15, 2006

Client Sample ID: 9522-0006-022-I
Sample ID: 177383005

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time Batch
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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: December 15, 2006

Client Sample ID: 9522-0006-023-I
Sample ID: 177383006
Matrix: TS
Collect Date: 06-DEC-06
Receive Date: 08-DEC-06
Collector: Client
Moisture: 5.15%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS</i>												
Actinium-228		0.923	+/-0.144	0.055	+/-0.144	0.118	pCi/g		MJH1	12/13/06	1526	594414
Americium-241	U	0.00894	+/-0.0238	0.0225	+/-0.0238	0.0461	pCi/g					
Bismuth-212		0.583	+/-0.239	0.112	+/-0.239	0.239	pCi/g					
Bismuth-214		0.663	+/-0.0824	0.0269	+/-0.0824	0.0571	pCi/g					
Cesium-134	UI	0.00	+/-0.0318	0.0207	+/-0.0318	0.0436	pCi/g					
Cesium-137		0.0538	+/-0.0209	0.0161	+/-0.0209	0.0342	pCi/g					
Cobalt-60		0.042	+/-0.0309	0.0139	+/-0.0309	0.0308	pCi/g					
Europium-152	U	-0.0353	+/-0.0449	0.0375	+/-0.0449	0.0785	pCi/g					
Europium-154	U	-0.0101	+/-0.0653	0.055	+/-0.0653	0.118	pCi/g					
Europium-155	U	0.0575	+/-0.049	0.0358	+/-0.049	0.0738	pCi/g					
Lead-212		0.865	+/-0.0501	0.021	+/-0.0501	0.0435	pCi/g					
Lead-214		0.678	+/-0.0726	0.0274	+/-0.0726	0.0573	pCi/g					
Manganese-54	U	-0.00079	+/-0.0189	0.016	+/-0.0189	0.034	pCi/g					
Niobium-94	U	-0.0101	+/-0.0167	0.0139	+/-0.0167	0.0295	pCi/g					
Potassium-40		14.4	+/-0.857	0.118	+/-0.857	0.267	pCi/g					
Radium-226		0.663	+/-0.0824	0.0269	+/-0.0824	0.0571	pCi/g					
Silver-108m	U	-0.0016	+/-0.0144	0.0132	+/-0.0144	0.0278	pCi/g					
Thallium-208		0.289	+/-0.0429	0.014	+/-0.0429	0.0298	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	MXP2	12/08/06	1157	594331

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

GENERAL ENGINEERING LABORATORIES, LLC

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

Certificate of Analysis

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

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

Report Date: December 15, 2006

Client Sample ID: 9522-0006-023-I
Sample ID: 177383006

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
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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: December 15, 2006

Client Sample ID: 9522-0006-024-I
Sample ID: 177383007
Matrix: TS
Collect Date: 06-DEC-06
Receive Date: 08-DEC-06
Collector: Client
Moisture: 7.13%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS</i>												
Actinium-228		0.819	+/-0.151	0.0628	+/-0.151	0.135	pCi/g		MJH1	12/14/06	0703	594414
Americium-241	U	0.00802	+/-0.120	0.0884	+/-0.120	0.183	pCi/g					
Bismuth-212		0.565	+/-0.295	0.120	+/-0.295	0.257	pCi/g					
Bismuth-214		0.626	+/-0.0774	0.028	+/-0.0774	0.0597	pCi/g					
Cesium-134	U	0.0382	+/-0.0329	0.0219	+/-0.0329	0.0464	pCi/g					
Cesium-137	U	0.00964	+/-0.0207	0.0187	+/-0.0207	0.0395	pCi/g					
Cobalt-60	U	0.00595	+/-0.0202	0.0178	+/-0.0202	0.0391	pCi/g					
Europium-152	U	0.0514	+/-0.0505	0.0468	+/-0.0505	0.0978	pCi/g					
Europium-154	U	-0.00113	+/-0.0622	0.0532	+/-0.0622	0.116	pCi/g					
Europium-155	U	0.0464	+/-0.069	0.0502	+/-0.069	0.104	pCi/g					
Lead-212		0.843	+/-0.0589	0.0289	+/-0.0589	0.0597	pCi/g					
Lead-214		0.681	+/-0.0746	0.0322	+/-0.0746	0.0675	pCi/g					
Manganese-54	U	0.0277	+/-0.0208	0.0166	+/-0.0208	0.0354	pCi/g					
Niobium-94	U	0.00909	+/-0.0174	0.0157	+/-0.0174	0.0334	pCi/g					
Potassium-40		15.1	+/-0.956	0.127	+/-0.956	0.289	pCi/g					
Radium-226		0.626	+/-0.0774	0.028	+/-0.0774	0.0597	pCi/g					
Silver-108m	U	-0.00178	+/-0.0147	0.0133	+/-0.0147	0.0283	pCi/g					
Thallium-208		0.291	+/-0.0493	0.0156	+/-0.0493	0.0333	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	MPX2	12/08/06	1157	594331

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

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Certificate of Analysis

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

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

Report Date: December 15, 2006

Client Sample ID: 9522-0006-024-I
Sample ID: 177383007

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time Batch	N
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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: December 15, 2006

Client Sample ID: 9522-0006-025-I
Sample ID: 177383008
Matrix: TS
Collect Date: 06-DEC-06
Receive Date: 08-DEC-06
Collector: Client
Moisture: 7.16%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS</i>												
Actinium-228		0.957	+/-0.225	0.0712	+/-0.225	0.154	pCi/g		MJH1	12/14/06	0704	594414
Americium-241	U	0.0219	+/-0.037	0.0313	+/-0.037	0.0643	pCi/g					
Bismuth-212		0.448	+/-0.262	0.161	+/-0.262	0.345	pCi/g					
Bismuth-214		0.754	+/-0.107	0.0409	+/-0.107	0.0868	pCi/g					
Cesium-134	U	0.0232	+/-0.0342	0.027	+/-0.0342	0.0574	pCi/g					
Cesium-137	U	-0.00583	+/-0.0288	0.0242	+/-0.0288	0.0512	pCi/g					
Cobalt-60	U	0.000988	+/-0.0255	0.0217	+/-0.0255	0.0479	pCi/g					
Europium-152	U	-0.0575	+/-0.0576	0.0484	+/-0.0576	0.102	pCi/g					
Europium-154	U	-0.0533	+/-0.0823	0.0651	+/-0.0823	0.143	pCi/g					
Europium-155	UI	0.00	+/-0.0705	0.0515	+/-0.0705	0.106	pCi/g					
Lead-212		1.07	+/-0.0717	0.0289	+/-0.0717	0.0601	pCi/g					
Lead-214		0.778	+/-0.101	0.0376	+/-0.101	0.079	pCi/g					
Manganese-54	U	0.0141	+/-0.0257	0.0225	+/-0.0257	0.048	pCi/g					
Niobium-94	U	0.0122	+/-0.0248	0.0218	+/-0.0248	0.0462	pCi/g					
Potassium-40		18.2	+/-1.14	0.196	+/-1.14	0.438	pCi/g					
Radium-226		0.754	+/-0.107	0.0409	+/-0.107	0.0868	pCi/g					
Silver-108m	U	0.0135	+/-0.0221	0.0201	+/-0.0221	0.0423	pCi/g					
Thallium-208		0.367	+/-0.0606	0.0218	+/-0.0606	0.0463	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	MXP2	12/08/06	1157	594331

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

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Certificate of Analysis

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

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

Report Date: December 15, 2006

Client Sample ID: 9522-0006-025-I
Sample ID: 177383008

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N
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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: December 15, 2006

Client Sample ID: 9522–0006–026–I
Sample ID: 177383009
Matrix: TS
Collect Date: 06–DEC–06
Receive Date: 08–DEC–06
Collector: Client
Moisture: 7.79%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid–FSS GAM & ALL FSS</i>												
Actinium–228		0.881	+/-0.201	0.0676	+/-0.201	0.144	pCi/g		MJH1	12/14/06	0704	594414
Americium–241	U	-0.0413	+/-0.0941	0.0779	+/-0.0941	0.161	pCi/g					
Bismuth–212		0.744	+/-0.333	0.144	+/-0.333	0.306	pCi/g					
Bismuth–214		0.668	+/-0.112	0.0327	+/-0.112	0.0692	pCi/g					
Cesium–134	U	0.0474	+/-0.0353	0.0239	+/-0.0353	0.0503	pCi/g					
Cesium–137		0.145	+/-0.038	0.0196	+/-0.038	0.0414	pCi/g					
Cobalt–60		0.355	+/-0.066	0.0148	+/-0.066	0.0331	pCi/g					
Europium–152	U	0.00155	+/-0.052	0.0468	+/-0.052	0.0979	pCi/g					
Europium–154	U	0.00922	+/-0.0674	0.0576	+/-0.0674	0.125	pCi/g					
Europium–155	U	0.0309	+/-0.0565	0.0525	+/-0.0565	0.108	pCi/g					
Lead–212		0.839	+/-0.0896	0.0272	+/-0.0896	0.0565	pCi/g					
Lead–214		0.757	+/-0.114	0.0326	+/-0.114	0.0683	pCi/g					
Manganese–54	U	0.00744	+/-0.0209	0.0189	+/-0.0209	0.0401	pCi/g					
Niobium–94	U	0.00298	+/-0.020	0.0171	+/-0.020	0.0362	pCi/g					
Potassium–40		14.0	+/-1.35	0.190	+/-1.35	0.414	pCi/g					
Radium–226		0.668	+/-0.112	0.0327	+/-0.112	0.0692	pCi/g					
Silver–108m	U	0.00371	+/-0.0183	0.0163	+/-0.0183	0.0343	pCi/g					
Thallium–208		0.267	+/-0.0565	0.0181	+/-0.0565	0.0383	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL–RAD–A–021	MXP2	12/08/06	1157	594331

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

GENERAL ENGINEERING LABORATORIES, LLC

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

Certificate of Analysis

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

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

Report Date: December 15, 2006

Client Sample ID: 9522-0006-026-I
Sample ID: 177383009

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	M
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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: December 15, 2006

Client Sample ID: 9522-0006-027-I
Sample ID: 177383010
Matrix: TS
Collect Date: 06-DEC-06
Receive Date: 08-DEC-06
Collector: Client
Moisture: 7.03%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS</i>												
Actinium-228		0.832	+/-0.159	0.0585	+/-0.159	0.126	pCi/g		MJH1	12/14/06	0705	594414
Americium-241	U	0.0278	+/-0.101	0.0849	+/-0.101	0.174	pCi/g					
Bismuth-212		0.435	+/-0.223	0.152	+/-0.223	0.323	pCi/g					
Bismuth-214		0.644	+/-0.0913	0.0368	+/-0.0913	0.0775	pCi/g					
Cesium-134	U	0.047	+/-0.0363	0.0247	+/-0.0363	0.0521	pCi/g					
Cesium-137		0.110	+/-0.0416	0.0217	+/-0.0416	0.0456	pCi/g					
Cobalt-60		0.132	+/-0.0371	0.023	+/-0.0371	0.0497	pCi/g					
Europium-152	U	-0.0224	+/-0.0693	0.0509	+/-0.0693	0.106	pCi/g					
Europium-154	U	-0.0267	+/-0.0752	0.0506	+/-0.0752	0.111	pCi/g					
Europium-155	U	0.0806	+/-0.0652	0.0623	+/-0.0652	0.128	pCi/g					
Lead-212		0.782	+/-0.0616	0.0297	+/-0.0616	0.0615	pCi/g					
Lead-214		0.644	+/-0.0921	0.0372	+/-0.0921	0.0776	pCi/g					
Manganese-54	U	0.0246	+/-0.0287	0.0175	+/-0.0287	0.0375	pCi/g					
Niobium-94	U	-0.00135	+/-0.0206	0.0179	+/-0.0206	0.0378	pCi/g					
Potassium-40		14.2	+/-0.872	0.138	+/-0.872	0.313	pCi/g					
Radium-226		0.644	+/-0.0913	0.0368	+/-0.0913	0.0775	pCi/g					
Silver-108m	U	-0.00517	+/-0.0208	0.0174	+/-0.0208	0.0365	pCi/g					
Thallium-208		0.304	+/-0.0475	0.018	+/-0.0475	0.0382	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	MXP2	12/08/06	1157	594331

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

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: December 15, 2006

Client Sample ID: 9522-0006-027-I
Sample ID: 177383010

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	NA
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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: December 15, 2006

Client Sample ID:	9522-0006-028-I	Project:	YANK01204
Sample ID:	177383011	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	06-DEC-06		
Receive Date:	08-DEC-06		
Collector:	Client		
Moisture:	7.7%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS</i>												
Actinium-228		1.55	+/-0.247	0.0828	+/-0.247	0.181	pCi/g		MJH1	12/11/06	1550	594412
Americium-241	U	-0.0107	+/-0.0413	0.0358	+/-0.0413	0.0737	pCi/g					
Bismuth-212		1.23	+/-0.478	0.161	+/-0.478	0.351	pCi/g					
Bismuth-214		1.32	+/-0.156	0.0437	+/-0.156	0.0936	pCi/g					
Cesium-134	U	0.0723	+/-0.0507	0.0363	+/-0.0507	0.0769	pCi/g					
Cesium-137	U	0.025	+/-0.0327	0.0295	+/-0.0327	0.0627	pCi/g					
Cobalt-60	U	0.0282	+/-0.0407	0.0364	+/-0.0407	0.0786	pCi/g					
Europium-152	U	-0.0667	+/-0.0742	0.0588	+/-0.0742	0.124	pCi/g					
Europium-154	U	0.0469	+/-0.0999	0.0789	+/-0.0999	0.173	pCi/g					
Europium-155	UI	0.00	+/-0.0857	0.0561	+/-0.0857	0.116	pCi/g					
Lead-212		1.54	+/-0.0899	0.0361	+/-0.0899	0.0751	pCi/g					
Lead-214		1.41	+/-0.142	0.0432	+/-0.142	0.0912	pCi/g					
Manganese-54	U	-0.00611	+/-0.0308	0.0251	+/-0.0308	0.0541	pCi/g					
Niobium-94	U	0.0257	+/-0.0298	0.027	+/-0.0298	0.0572	pCi/g					
Potassium-40		21.0	+/-1.40	0.189	+/-1.40	0.437	pCi/g					
Radium-226		1.32	+/-0.156	0.0437	+/-0.156	0.0936	pCi/g					
Silver-108m	U	-0.00679	+/-0.0233	0.0203	+/-0.0233	0.0433	pCi/g					
Thallium-208		0.464	+/-0.0683	0.0244	+/-0.0683	0.0521	pCi/g					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	MXP2	12/08/06	1157	594331

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3

Notes:

The Qualifiers in this report are defined as follows :

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

GENERAL ENGINEERING LABORATORIES, LLC

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

Certificate of Analysis

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

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

Report Date: December 15, 2006

Client Sample ID: 9522-0006-028-I
Sample ID: 177383011

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

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

QUALITY CONTROL DATA

GENERAL ENGINEERING LABORATORIES, LLC

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

QC Summary

Report Date: December 15, 2006

Page 1 of 8

Client : Connecticut Yankee Atomic Power
362 Injun Hollow Rd

Contact: East Hampton, Connecticut
Mr. Jack McCarthy

Workorder: 177383

Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec										
Batch	594412									
QC1201243209 177164021 DUP										
Actinium-228		1.29	1.08	pCi/g	18		(0% - 100%)	MJH1	12/11/06	15:51
	Uncert:	+/-0.219	+/-0.145							
	TPU:	+/-0.219	+/-0.145							
Americium-241	U	-0.0328	U 0.0508	pCi/g	929		(0% - 100%)			
	Uncert:	+/-0.0341	+/-0.0819							
	TPU:	+/-0.0341	+/-0.0819							
Bismuth-212		0.862	0.561	pCi/g	42		(0% - 100%)			
	Uncert:	+/-0.389	+/-0.239							
	TPU:	+/-0.389	+/-0.239							
Bismuth-214		0.842	0.784	pCi/g	7		(0% - 100%)			
	Uncert:	+/-0.115	+/-0.0899							
	TPU:	+/-0.115	+/-0.0899							
Cesium-134	UI	0.0783	UI 0.0542	pCi/g	36		(0% - 100%)			
	Uncert:	+/-0.0425	+/-0.0298							
	TPU:	+/-0.0425	+/-0.0298							
Cesium-137		0.0855	0.0729	pCi/g	16		(0% - 100%)			
	Uncert:	+/-0.0371	+/-0.0383							
	TPU:	+/-0.0371	+/-0.0383							
Cobalt-60	U	0.0598	U 0.00383	pCi/g	176		(0% - 100%)			
	Uncert:	+/-0.0894	+/-0.0202							
	TPU:	+/-0.0894	+/-0.0202							
Europium-152	U	0.0246	U -0.00725	pCi/g	367		(0% - 100%)			
	Uncert:	+/-0.0608	+/-0.0584							
	TPU:	+/-0.0608	+/-0.0584							
Europium-154	U	0.0232	U -0.0434	pCi/g	658		(0% - 100%)			
	Uncert:	+/-0.0808	+/-0.0672							
	TPU:	+/-0.0808	+/-0.0672							
Europium-155	U	0.097	U 0.0336	pCi/g	97		(0% - 100%)			
	Uncert:	+/-0.0803	+/-0.0603							
	TPU:	+/-0.0803	+/-0.0603							
Lead-212		1.02	1.03	pCi/g	1		(0% - 20%)			
	Uncert:	+/-0.0764	+/-0.0637							
	TPU:	+/-0.0764	+/-0.0637							
Lead-214		0.911	0.902	pCi/g	1		(0% - 20%)			
	Uncert:	+/-0.107	+/-0.0973							
	TPU:	+/-0.107	+/-0.0973							
Manganese-54	U	0.00719	U 0.0237	pCi/g	107		(0% - 100%)			
	Uncert:	+/-0.0283	+/-0.0223							
	TPU:	+/-0.0283	+/-0.0223							
Niobium-94	U	-0.00181	U 0.0192	pCi/g	242		(0% - 100%)			
	Uncert:	+/-0.0259	+/-0.0269							
	TPU:	+/-0.0259	+/-0.0269							

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QC Summary

Workorder: 177383

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch	594412										
Potassium-40		15.8		17.1	pCi/g	8		(0% - 20%)			
	Uncert:	+/-1.12		+/-0.844							
	TPU:	+/-1.12		+/-0.844							
Radium-226		0.842		0.784	pCi/g	7		(0% - 100%)			
	Uncert:	+/-0.115		+/-0.0899							
	TPU:	+/-0.115		+/-0.0899							
Silver-108m	U	-0.00381	U	-0.00176	pCi/g	74		(0% - 100%)			
	Uncert:	+/-0.021		+/-0.0165							
	TPU:	+/-0.021		+/-0.0165							
Thallium-208		0.355		0.355	pCi/g	0		(0% - 100%)			
	Uncert:	+/-0.053		+/-0.0415							
	TPU:	+/-0.053		+/-0.0415							
QC1201243210	LCS										
Actinium-228			U	-0.703	pCi/g					12/11/06	15:55
	Uncert:			+/-0.836							
	TPU:			+/-0.836							
Americium-241	23.4			26.5	pCi/g		113	(75%-125%)			
	Uncert:			+/-2.18							
	TPU:			+/-2.18							
Bismuth-212			U	0.447	pCi/g						
	Uncert:			+/-1.32							
	TPU:			+/-1.32							
Bismuth-214			U	-0.127	pCi/g						
	Uncert:			+/-0.288							
	TPU:			+/-0.288							
Cesium-134			U	-0.155	pCi/g						
	Uncert:			+/-0.193							
	TPU:			+/-0.193							
Cesium-137	9.52			10.4	pCi/g		109	(75%-125%)			
	Uncert:			+/-1.11							
	TPU:			+/-1.11							
Cobalt-60	14.0			14.9	pCi/g		106	(75%-125%)			
	Uncert:			+/-0.821							
	TPU:			+/-0.821							
Europium-152			U	-0.0215	pCi/g						
	Uncert:			+/-0.352							
	TPU:			+/-0.352							
Europium-154			U	0.0788	pCi/g						
	Uncert:			+/-0.422							
	TPU:			+/-0.422							
Europium-155			U	-0.132	pCi/g						
	Uncert:			+/-0.290							
	TPU:			+/-0.290							
Lead-212			U	0.152	pCi/g						
	Uncert:			+/-0.177							
	TPU:			+/-0.177							
Lead-214			U	-0.0504	pCi/g						
	Uncert:			+/-0.238							

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QC Summary

Workorder: 177383

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Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec Batch 594412									
Manganese-54	TPU:		+/-0.238						
		U	0.101	pCi/g					
	Uncert:		+/-0.177						
Niobium-94	TPU:		+/-0.177						
		U	0.00189	pCi/g					
	Uncert:		+/-0.149						
Potassium-40	TPU:		+/-0.149						
		U	0.357	pCi/g					
	Uncert:		+/-1.11						
Radium-226	TPU:		+/-1.11				(75%-125%)		
		U	-0.127	pCi/g					
	Uncert:		+/-0.288						
Silver-108m	TPU:		+/-0.288						
		U	0.0865	pCi/g					
	Uncert:		+/-0.141						
Thallium-208	TPU:		+/-0.141						
		U	0.00999	pCi/g					
	Uncert:		+/-0.146						
	TPU:		+/-0.146						
QC1201243208 MB Actinium-228									12/11/06 15:50
		U	0.0146	pCi/g					
	Uncert:		+/-0.0379						
Americium-241	TPU:		+/-0.0379						
		U	0.000422	pCi/g					
	Uncert:		+/-0.029						
Bismuth-212	TPU:		+/-0.029						
		U	-0.0107	pCi/g					
	Uncert:		+/-0.109						
Bismuth-214	TPU:		+/-0.109						
		U	-0.00457	pCi/g					
	Uncert:		+/-0.0239						
Cesium-134	TPU:		+/-0.0239						
		U	0.00515	pCi/g					
	Uncert:		+/-0.0138						
Cesium-137	TPU:		+/-0.0138						
		U	0.00793	pCi/g					
	Uncert:		+/-0.0107						
Cobalt-60	TPU:		+/-0.0107						
		U	0.0148	pCi/g					
	Uncert:		+/-0.047						
Europium-152	TPU:		+/-0.047						
		U	0.0213	pCi/g					
	Uncert:		+/-0.0312						
Europium-154	TPU:		+/-0.0312						
		U	-0.0302	pCi/g					
	Uncert:		+/-0.0345						
Europium-155	TPU:		+/-0.0345						
		U	-0.0141	pCi/g					

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QC Summary

Workorder: 177383

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch 594414											
Europium-152		TPU:	+/-0.0194								
		U	0.0146	U	0.00279	pCi/g	136	(0% - 100%)			
		Uncert:	+/-0.0447		+/-0.0414						
Europium-154		TPU:	+/-0.0447		+/-0.0414						
		U	0.0441	U	-0.0365	pCi/g	2140	(0% - 100%)			
		Uncert:	+/-0.055		+/-0.0416						
Europium-155		TPU:	+/-0.055		+/-0.0416						
		U	0.0435	U	0.068	pCi/g	44	(0% - 100%)			
		Uncert:	+/-0.0671		+/-0.059						
Lead-212		TPU:	+/-0.0671		+/-0.059						
			1.30		1.36	pCi/g	4	(0% - 20%)			
		Uncert:	+/-0.119		+/-0.113						
Lead-214		TPU:	+/-0.119		+/-0.113						
			1.24		1.33	pCi/g	7	(0% - 20%)			
		Uncert:	+/-0.129		+/-0.123						
Manganese-54		TPU:	+/-0.129		+/-0.123						
		U	0.0163	U	0.0135	pCi/g	19	(0% - 100%)			
		Uncert:	+/-0.0281		+/-0.0125						
Niobium-94		TPU:	+/-0.0281		+/-0.0125						
		U	0.000705	U	0.00456	pCi/g	146	(0% - 100%)			
		Uncert:	+/-0.0154		+/-0.0128						
Potassium-40		TPU:	+/-0.0154		+/-0.0128						
			18.1		18.9	pCi/g	5	(0% - 20%)			
		Uncert:	+/-1.50		+/-1.20						
Radium-226		TPU:	+/-1.50		+/-1.20						
			1.13		1.15	pCi/g	2	(0% - 100%)			
		Uncert:	+/-0.126		+/-0.123						
Silver-108m		TPU:	+/-0.126		+/-0.123						
		U	0.0046	U	0.00336	pCi/g	31	(0% - 100%)			
		Uncert:	+/-0.0142		+/-0.0104						
Thallium-208		TPU:	+/-0.0142		+/-0.0104						
			0.412		0.424	pCi/g	3	(0% - 20%)			
		Uncert:	+/-0.0529		+/-0.0443						
		TPU:	+/-0.0529		+/-0.0443						
QC1201243216	LCS										
Actinium-228				U	0.745	pCi/g				12/14/06	07:11
		Uncert:			+/-1.05						
Americium-241		TPU:			+/-1.05						
		23.4			25.8	pCi/g	110	(75%-125%)			
		Uncert:			+/-2.13						
Bismuth-212		TPU:			+/-2.13						
				U	-1.46	pCi/g					
		Uncert:			+/-1.25						
Bismuth-214		TPU:			+/-1.25						
				U	-0.105	pCi/g					
		Uncert:			+/-0.318						
Cesium-134		TPU:			+/-0.318						
				U	-0.0628	pCi/g					

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QC Summary

Workorder: 177383

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Parname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec										
Batch	594414									
Cesium-137	9.52		Uncert: +/-0.185 TPU: +/-0.185 10.3	pCi/g		109	(75%-125%)			
Cobalt-60	14.0		Uncert: +/-1.12 TPU: +/-1.12 15.1	pCi/g		108	(75%-125%)			
Europium-152		U	Uncert: +/-0.795 TPU: +/-0.795 -0.118	pCi/g						
Europium-154		U	Uncert: +/-0.334 TPU: +/-0.334 0.212	pCi/g						
Europium-155		U	Uncert: +/-0.373 TPU: +/-0.373 0.277	pCi/g						
Lead-212		U	Uncert: +/-0.283 TPU: +/-0.283 -0.0608	pCi/g						
Lead-214		U	Uncert: +/-0.167 TPU: +/-0.167 0.0386	pCi/g						
Manganese-54		U	Uncert: +/-0.247 TPU: +/-0.247 0.167	pCi/g						
Niobium-94		U	Uncert: +/-0.177 TPU: +/-0.177 0.00851	pCi/g						
Potassium-40		U	Uncert: +/-0.168 TPU: +/-0.168 -0.738	pCi/g						
Radium-226		U	Uncert: +/-1.39 TPU: +/-1.39 -0.105	pCi/g			(75%-125%)			
Silver-108m		U	Uncert: +/-0.318 TPU: +/-0.318 0.0487	pCi/g						
Thallium-208		U	Uncert: +/-0.156 TPU: +/-0.156 -0.116	pCi/g						
			Uncert: +/-0.149 TPU: +/-0.149							
QC1201243214 MB										
Actinium-228		U	Uncert: +/-0.101 TPU: +/-0.101 0.101	pCi/g					12/14/06	07:05
Americium-241		U	Uncert: +/-0.066 TPU: +/-0.066 0.0196	pCi/g						
			Uncert: +/-0.0189 TPU: +/-0.0189							

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QC Summary

Workorder: 177383

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Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec										
Batch	594414									
Bismuth-212		U	0.069	pCi/g						
	Uncert:		+/-0.166							
	TPU:		+/-0.166							
Bismuth-214		U	0.014	pCi/g						
	Uncert:		+/-0.0613							
	TPU:		+/-0.0613							
Cesium-134		U	0.0106	pCi/g						
	Uncert:		+/-0.0208							
	TPU:		+/-0.0208							
Cesium-137		U	0.00699	pCi/g						
	Uncert:		+/-0.019							
	TPU:		+/-0.019							
Cobalt-60		U	0.0109	pCi/g						
	Uncert:		+/-0.0234							
	TPU:		+/-0.0234							
Europium-152		U	0.00113	pCi/g						
	Uncert:		+/-0.0428							
	TPU:		+/-0.0428							
Europium-154		U	0.0444	pCi/g						
	Uncert:		+/-0.0499							
	TPU:		+/-0.0499							
Europium-155		U	0.00472	pCi/g						
	Uncert:		+/-0.0337							
	TPU:		+/-0.0337							
Lead-212		U	0.0124	pCi/g						
	Uncert:		+/-0.0389							
	TPU:		+/-0.0389							
Lead-214		U	0.0373	pCi/g						
	Uncert:		+/-0.0308							
	TPU:		+/-0.0308							
Manganese-54		U	-0.0033	pCi/g						
	Uncert:		+/-0.0162							
	TPU:		+/-0.0162							
Niobium-94		U	-0.00465	pCi/g						
	Uncert:		+/-0.0155							
	TPU:		+/-0.0155							
Potassium-40		U	0.139	pCi/g						
	Uncert:		+/-0.169							
	TPU:		+/-0.169							
Radium-226		U	0.014	pCi/g						
	Uncert:		+/-0.0613							
	TPU:		+/-0.0613							
Silver-108m		U	-0.0161	pCi/g						
	Uncert:		+/-0.015							
	TPU:		+/-0.015							
Thallium-208		UI	0.00	pCi/g						
	Uncert:		+/-0.0543							
	TPU:		+/-0.0543							

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QC Summary

Workorder: 177383

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

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.

SOUTHEAST SITE GROUNDS (NON-PROTECTED AREA)
SURVEY UNIT 9522-0006

RELEASE RECORD

ATTACHMENT 4 (DQA RESULTS)

Revision 0

SOUTHEAST SITE GROUNDS (NON-PROTECTED AREA)
SURVEY UNIT 9522-0006

RELEASE RECORD

**ATTACHMENT 4A
(PRELIMINARY DATA REVIEW)**

Revision 0

SOUTHEAST SITE GROUNDS (NON-PROTECTED AREA)
SURVEY UNIT 9522-0006

PRELIMINARY DATA REVIEW

RELEASE RECORD
Attachment 4

Survey Unit: 9522-0006
Area Description Southeast Grounds (non-protected)
Classification 1
Survey Media Surface Soils
Type of Survey Final Status Survey
Number of Measurements 17 Static, 11 Investigative

STATISTICS on TOTAL POPULATION

	Cs-137	Co-60	Sr-90
DCGL_{op} (pCi/g):	4.75E+00	2.29E+00	9.30E-01
Minimum Value:	-1.37E-02	-1.13E-02	2.08E-03
Maximum Value:	1.62E-01	3.55E-01	9.65E-02
Mean:	4.42E-02	2.79E-02	3.69E-02
Median:	4.20E-02	4.86E-03	3.29E-02
Standard Deviation:	4.32E-02	6.96E-02	2.41E-02
DCGL_{sur} (pCi/g):	6.28E-01		

STATISTICS on NON-PARAMETRIC POPULATION

	Cs-137	Co-60	Sr-90
DCGL_{op} (pCi/g):	4.75E+00	2.29E+00	9.30E-01
Minimum Value:	-1.37E-02	-6.35E-03	2.08E-03
Maximum Value:	1.62E-01	7.65E-02	9.65E-02
Mean:	4.27E-02	1.14E-02	3.66E-02
Median:	4.20E-02	2.12E-03	3.07E-02
Standard Deviation:	4.36E-02	2.16E-02	2.49E-02
Nuclide Distribution:	0.420	0.050	0.540

Sample ID	GPS Coordinates		Cs-137				Co-60				Sr-90				Fraction of DCGL
			Result	2σ	MDA	Identified	Result	2σ	MDA	Identified	Result	2σ	MDA	Identified	
	North	East	(pCi/g)		(pCi/g)		(pCi/g)		(pCi/g)		(pCi/g)		(pCi/g)		
9522-0006-001F	236604.06	669074.28	1.62E-01	0.024	2.46E-02	+	7.65E-02	0.029	2.50E-02	+	8.64E-03	0.023	4.15E-02		0.077
9522-0006-002F	236571.19	669055.30	4.82E-02	0.020	2.77E-02	+	-2.14E-03	0.016	2.83E-02		3.51E-02	0.024	3.75E-02	+	0.047
9522-0006-003F	236571.19	669093.26	8.24E-02	0.027	2.86E-02	+	2.23E-02	0.025	3.54E-02		1.69E-02	0.018	3.05E-02		0.045
9522-0006-004F	236538.31	669036.33	4.20E-02	0.017	1.87E-02	+	4.86E-03	0.009	1.75E-02		4.54E-02	0.023	3.46E-02	+	0.060
9522-0006-005F	236538.31	669074.28	2.13E-02	0.022	2.31E-02		4.22E-03	0.012	2.11E-02		2.08E-03	0.020	3.63E-02		0.009
9522-0006-006F	236538.31	669112.24	2.19E-02	0.016	1.74E-02	+	1.83E-03	0.010	1.75E-02		3.86E-02	0.024	3.66E-02	+	0.047
9522-0006-007F	236505.44	669017.35	0.00E+00	0.030	2.81E-02		-1.73E-03	0.018	2.91E-02		3.07E-02	0.021	3.31E-02	+	0.032
9522-0006-008F	236505.44	669055.30	5.53E-02	0.024	3.99E-02	+	4.91E-02	0.030	4.43E-02	+	5.06E-02	0.025	3.56E-02	+	0.087
9522-0006-009F	236505.44	669093.26	4.80E-02	0.032	4.53E-02	+	-2.88E-03	0.028	5.04E-02		2.79E-02	0.024	3.75E-02	+	0.039

SOUTHEAST SITE GROUNDS (NON-PROTECTED AREA)
SURVEY UNIT 9522-0006

PRELIMINARY DATA REVIEW

RELEASE RECORD
Attachment 4

Sample ID	GPS Coordinates		Cs-137				Co-60				Sr-90				Fraction of DCGL
			Result (pCi/g)	2σ	MDA (pCi/g)	Identified	Result (pCi/g)	2σ	MDA (pCi/g)	Identified	Result (pCi/g)	2σ	MDA (pCi/g)	Identified	
9522-0006-0010F	236505.44	669131.22	1.85E-02	0.020	3.64E-02		-4.90E-04	0.056	8.14E-02		2.90E-02	0.025	4.00E-02	+	0.035
9522-0006-0011F	236472.57	669036.33	-1.37E-02	0.022	3.84E-02		7.78E-03	0.024	4.55E-02		9.65E-02	0.024	2.85E-02	+	0.104
9522-0006-0012F	236472.57	669074.28	-1.13E-03	0.017	3.18E-02		-4.69E-04	0.018	3.43E-02		6.27E-02	0.024	3.28E-02	+	0.067
9522-0006-0013F	236472.57	669112.24	1.02E-01	0.048	4.56E-02	+	2.12E-03	0.025	4.73E-02		5.28E-02	0.021	2.86E-02	+	0.079
9522-0006-0014F	236472.57	669150.20	3.16E-03	0.016	2.76E-02		3.03E-04	0.016	2.72E-02		1.40E-02	0.017	2.84E-02		0.016
9522-0006-0015F	236439.69	669093.26	6.20E-02	0.033	4.34E-02	+	2.19E-02	0.029	4.79E-02		7.18E-02	0.023	2.93E-02	+	0.100
9522-0006-0016F	236439.69	669131.22	2.10E-02	0.029	3.50E-02		-6.35E-03	0.023	4.14E-02		9.01E-03	0.018	3.15E-02		0.011
9522-0006-0017F	236406.82	669112.24	5.29E-02	0.024	2.46E-02	+	1.69E-02	0.021	2.40E-02		3.03E-02	0.020	3.05E-02	+	0.051
9522-0006-008FS	236505.44	669055.30	7.12E-02	0.034	4.39E-02	+	4.61E-02	0.048	5.14E-02		4.14E-02	0.019	2.68E-02	+	0.080
9522-0006-0018-I	236403.32	669094.00	9.18E-03	0.016	3.04E-02		2.41E-03	0.016	2.86E-02						0.016 *
9522-0006-0019-I	236369.72	668975.49	3.53E-02	0.025	3.80E-02	+	1.17E-02	0.023	4.11E-02						0.061 *
9522-0006-0020-I	236362.66	668970.45	1.23E-02	0.014	2.27E-02		6.55E-03	0.012	2.23E-02						0.022 *
9522-0006-0021-I	236434.09	668946.25	4.59E-02	0.032	5.39E-02	+	-1.13E-02	0.031	5.34E-02						0.068 *
9522-0006-0022-I	236410.95	669050.11	4.40E-02	0.033	4.61E-02	+	-5.02E-03	0.023	4.13E-02						0.068 *
9522-0006-0023-I	236417.82	669049.03	5.38E-02	0.021	3.42E-02	+	4.20E-02	0.031	3.08E-02	+					0.104 *
9522-0006-0024-I	236412.85	669035.57	9.64E-03	0.021	3.95E-02		5.95E-03	0.020	3.91E-02						0.018 *
9522-0006-0025-I	236407.25	669030.48	-5.83E-03	0.029	5.12E-02		9.88E-04	0.026	4.79E-02						-0.009 *
9522-0006-0026-1	236437.74	669031.68	1.45E-01	0.038	4.14E-02	+	3.55E-01	0.066	3.31E-02	+					0.386 *
9522-0006-0027-I	236453.42	669008.64	1.10E-01	0.042	4.56E-02	+	1.32E-01	0.037	4.97E-02	+					0.233 *
9522-0006-0028-I	236474.12	669012.14	2.50E-02	0.033	6.27E-02		2.82E-02	0.041	7.86E-02						0.052 *

* The Operational DCGL for Cs-137 has been adjusted to 0.628 pCi/g as a surrogate to account for the potential presence of HTD radionuclide Sr-90.

SOUTHEAST SITE GROUNDS (NON-PROTECTED AREA)
SURVEY UNIT 9522-0006

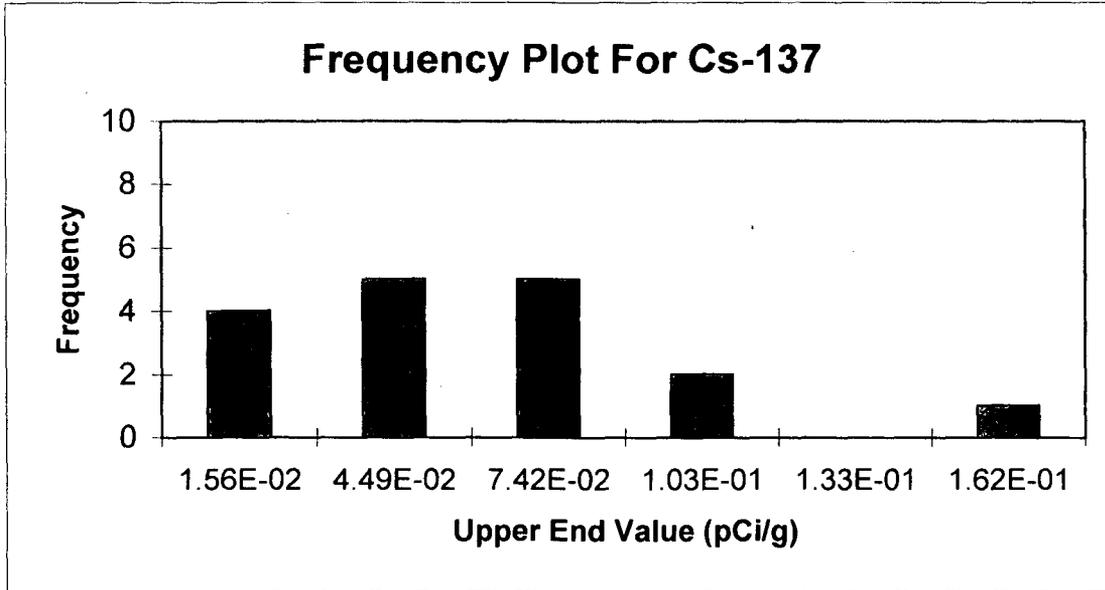
RELEASE RECORD

**ATTACHMENT 4B
(GRAPHICAL REPRESENTATION OF DATA)**

Revision 0

FREQUENCY PLOT FOR CESIUM-137

Survey Unit: 9522-0006
 Survey Unit Name: Southeast Site Grounds (non-protected area)
 Mean: 4.27E-02 pCi/g



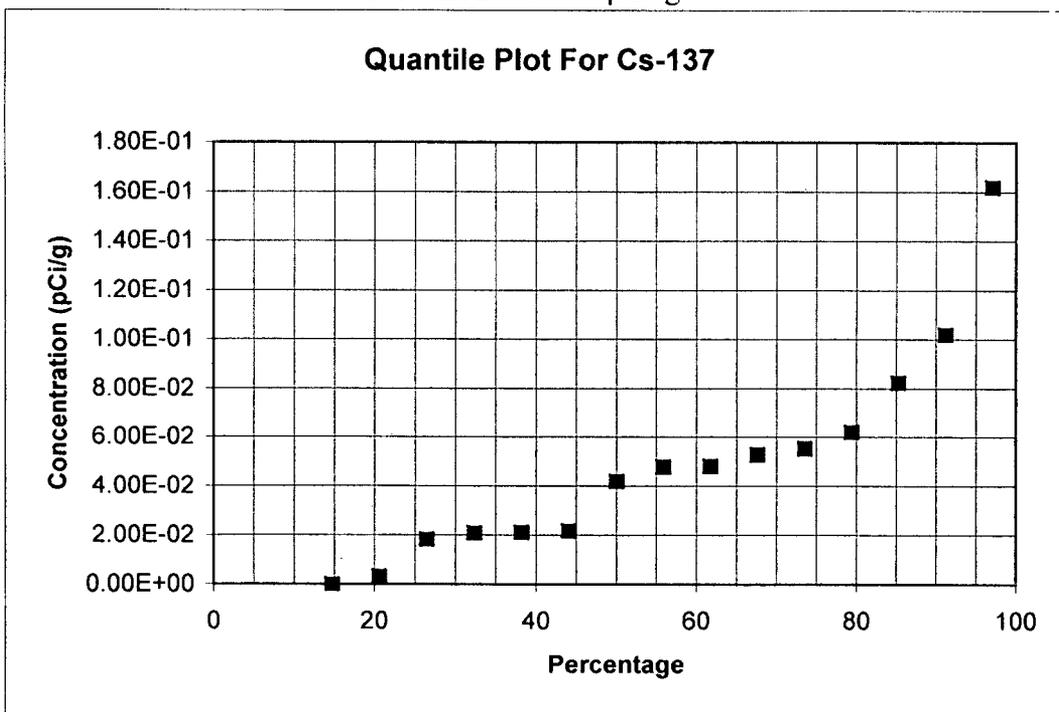
Upper End Value	Observation Frequency	Observation Frequency
1.56E-02	4	24%
4.49E-02	5	29%
7.42E-02	5	29%
1.03E-01	2	12%
1.33E-01	0	0%
1.62E-01	1	6%
Total:	17	100%

[Signature] D. WATKOWIAK 1/4/07
 Submitted by/Date

[Signature] SACK 1/4/07
 Reviewed by/Date

QUANTILE PLOT FOR CESIUM-137

Survey Unit: 9522-0006
 Survey Unit Name: Southeast Site Grounds (non-protected area)
 Mean: 4.27E-02 pCi/g



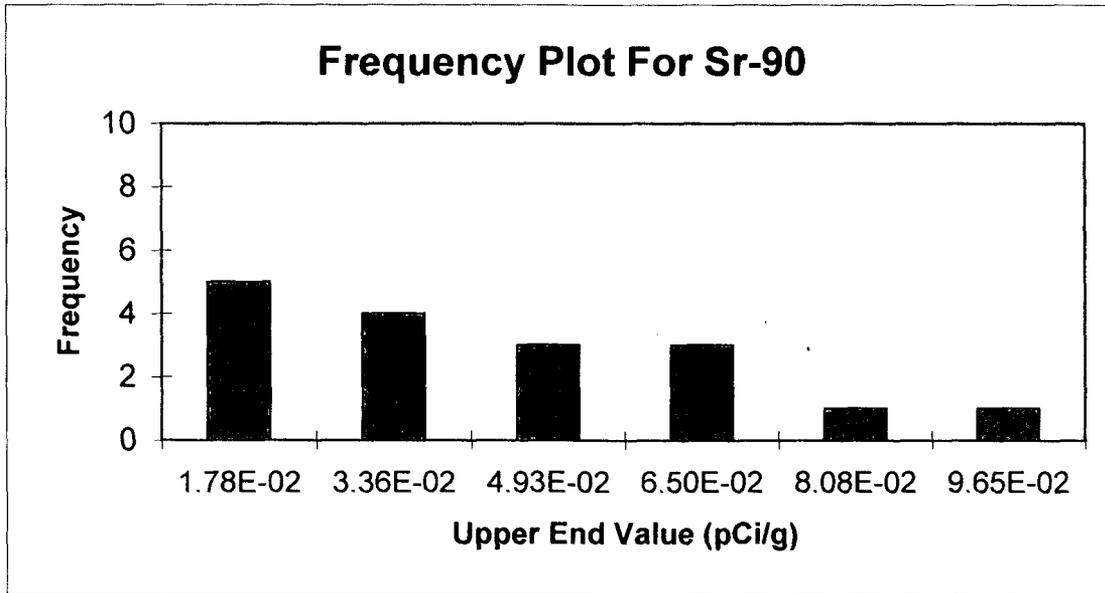
Cs-137	Rank	Percentage
-1.37E-02	1	2.9%
-1.13E-03	2	8.8%
0.00E+00	3	14.7%
3.16E-03	4	20.6%
1.85E-02	5	26.5%
2.10E-02	6	32.4%
2.13E-02	7	38.2%
2.19E-02	8	44.1%
4.20E-02	9	50.0%
4.80E-02	10	55.9%
4.82E-02	11	61.8%
5.29E-02	12	67.6%
5.53E-02	13	73.5%
6.20E-02	14	79.4%
8.24E-02	15	85.3%
1.02E-01	16	91.2%
1.62E-01	17	97.1%

DWOJTKOWIAK 1/4/07
 Submitted by/Date

JAKE MICHAEL 1/11/07
 Reviewed by/Date

FREQUENCY PLOT FOR STRONTIUM-90

Survey Unit: 9522-0006
 Survey Unit Name: Southeast Site Grounds (non-protected area)
 Mean: 3.66E-02 pCi/g



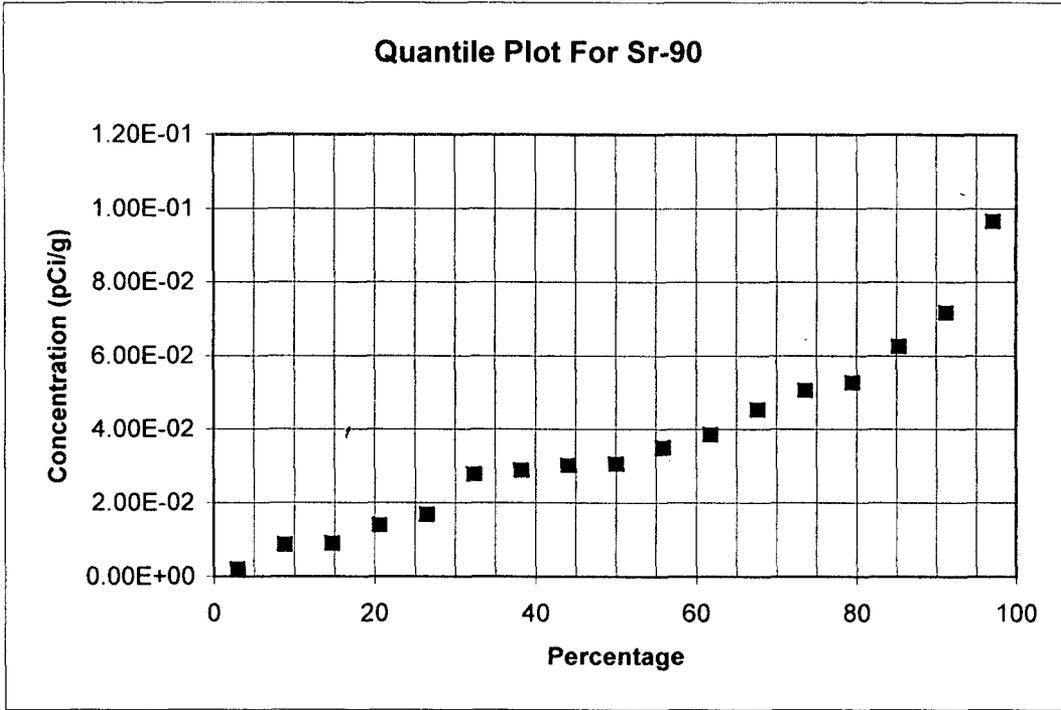
Upper End Value	Observation Frequency	Observation Frequency
1.78E-02	5	29%
3.36E-02	4	24%
4.93E-02	3	18%
6.50E-02	3	18%
8.08E-02	1	6%
9.65E-02	1	6%
Total:	17	100%

D. Wójtkowiak 1/4/07
 Submitted by/Date

JACK WILSON 1/11/07
 Reviewed by/Date

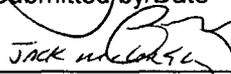
QUANTILE PLOT FOR STRONTIUM-90

Survey Unit: 9522-0006
 Survey Unit Name: Southeast Site Grounds (non-protected area)
 Mean: 3.66E-02 pCi/g



Sr-90	Rank	Percentage
2.08E-03	1	2.9%
8.64E-03	2	8.8%
9.01E-03	3	14.7%
1.40E-02	4	20.6%
1.69E-02	5	26.5%
2.79E-02	6	32.4%
2.90E-02	7	38.2%
3.03E-02	8	44.1%
3.07E-02	9	50.0%
3.51E-02	10	55.9%
3.86E-02	11	61.8%
4.54E-02	12	67.6%
5.06E-02	13	73.5%
5.28E-02	14	79.4%
6.27E-02	15	85.3%
7.18E-02	16	91.2%
9.65E-02	17	97.1%

 D. WASTKOWIAK 1/4/07
 Submitted by/Date

 JACK WASTKOWIAK 1/11/07
 Reviewed by/Date

SOUTHEAST SITE GROUNDS (NON-PROTECTED AREA)
SURVEY UNIT 9522-0006

RELEASE RECORD

ATTACHMENT 4C (SIGN TEST)

Revision 0

Sign Test Calculation Sheet for Multiple Radionuclides

Survey Area Number: 9522		Survey Unit Number: 0006		WPIR #: 2006-0047		
Survey Area Name: Southeast Site Grounds (non-protected area)		Classification: 1	TYPE I (α error): 0.05	N: 17		
Radionuclides:	1 st Radionuclide Cs-137	2 nd Radionuclide Co-60	3 rd Radionuclide Sr-90	4 th Radionuclide		
DCGL:	4.75E+00	2.29E+00	9.30E-01			
Results 1 st Radionuclide (pCi/g)	Results 2 nd Radionuclide (pCi/g)	Results 3 rd Radionuclide (pCi/g)	Results 4 th Radionuclide (pCi/g)	Weighted Sum (W _s)	1-W _s	Sign
1.62E-01	7.65E-02	8.64E-03		0.08	0.92	+1
4.82E-02	-2.14E-03	3.51E-02		0.05	0.95	+1
8.24E-02	2.23E-02	1.69E-02		0.05	0.95	+1
4.20E-02	4.86E-03	4.54E-02		0.06	0.94	+1
2.13E-02	4.22E-03	2.08E-03		0.01	0.99	+1
2.19E-02	1.83E-03	3.86E-02		0.05	0.95	+1
0.00E+00	-1.73E-03	3.07E-02		0.03	0.97	+1
5.53E-02	4.91E-02	5.06E-02		0.09	0.91	+1
4.80E-02	-2.88E-03	2.79E-02		0.04	0.96	+1
1.85E-02	-4.90E-04	2.90E-02		0.03	0.97	+1
-1.37E-02	7.78E-03	9.65E-02		0.10	0.90	+1
-1.13E-03	-4.69E-04	6.27E-02		0.07	0.93	+1
1.02E-01	2.12E-03	5.28E-02		0.08	0.92	+1
3.16E-03	3.03E-04	1.40E-02		0.02	0.98	+1
6.20E-02	2.19E-02	7.18E-02		0.10	0.90	+1
2.10E-02	-6.35E-03	9.01E-03		0.01	0.99	+1
5.29E-02	1.69E-02	3.03E-02		0.05	0.95	+1
Number of positive differences (S+)						17

Critical Value 12 Survey Unit Meets the Acceptance Criteria

Performed by: David Wojtkowiak 

Date: 1/4/2007

Independent Review by: SACK 

Date: 1/11/07

SOUTHEAST SITE GROUNDS (NON-PROTECTED AREA)
SURVEY UNIT 9522-0006

RELEASE RECORD

ATTACHMENT 4D (QC SPLIT RESULTS)

Revision 0

Split Sample Assessment Form

Survey Area #: 9522	Survey Unit #: 0006	Survey Unit Name: Southeast Site Grounds (non-protected area)
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Sample Plan or WPIR#: 2006-0047	SML#: 9522-0006-008
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Sample Description: Comparison of split samples collected from sample measurement location #8 and analyzed using gamma spectroscopy by off-site Vendor Laboratory. The standard sample was 9522-0006-008F, the comparison sample was 9522-0006-008FS.

STANDARD					COMPARISON			
Radionuclide	Activity Value	Standard Error	Resolution	Agreement Range	Activity Value	Standard Error	Comparison Ratio	Acceptable (Y/N)
Cs-137	5.53E-02	0.012	5	0.5 - 2.0	7.12E-02	0.017	1.29	Y

Comments/Corrective Actions: None	Table is provided to show acceptance criteria used to assess split samples. <table style="margin-left: auto; margin-right: auto;"> <tr> <td><u>Resolution</u></td> <td><u>Agreement Range</u></td> </tr> <tr> <td>4 - 7</td> <td>0.5 - 2.0</td> </tr> <tr> <td>8 - 15</td> <td>0.6 - 1.66</td> </tr> <tr> <td>16 - 50</td> <td>0.75 - 1.33</td> </tr> <tr> <td>51 - 200</td> <td>0.80 - 1.25</td> </tr> <tr> <td>>200</td> <td>0.85 - 1.18</td> </tr> </table>	<u>Resolution</u>	<u>Agreement Range</u>	4 - 7	0.5 - 2.0	8 - 15	0.6 - 1.66	16 - 50	0.75 - 1.33	51 - 200	0.80 - 1.25	>200	0.85 - 1.18
<u>Resolution</u>	<u>Agreement Range</u>												
4 - 7	0.5 - 2.0												
8 - 15	0.6 - 1.66												
16 - 50	0.75 - 1.33												
51 - 200	0.80 - 1.25												
>200	0.85 - 1.18												

Performed by: D. Wojtkowiak 	Date: 1/3/2007	Reviwed by: JACK MCINERNEY	Date: 1/11/07
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SOUTHEAST SITE GROUNDS (NON-PROTECTED AREA)
SURVEY UNIT 9522-0006

RELEASE RECORD

**ATTACHMENT 4E
(COMPASS DQA WITH POWER CURVE)**

Revision 0



DQA Surface Soil Report

Assessment Summary

Site: Southeast Grounds (non-protected area)
Planner(s): Wojo
Survey Unit Name: 9522-0006
Report Number: 1
Survey Unit Samples: 17
Reference Area Samples: 0
Test Performed: Sign Test Result: Not Performed
Judgmental Samples: 0 EMC Result: Not Performed
Assessment Conclusion: **Reject Null Hypothesis (Survey Unit PASSES)**

Retrospective Power Curve

