



Final Status Survey Final Report Phase VII

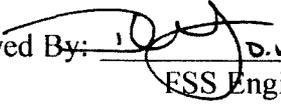
**Appendix A15
Survey Unit Release Record
9514-0001, East Primary Parking Lot**

May 2007



CYAPCO
FINAL STATUS SURVEY RELEASE RECORD
EAST PRIMARY PARKING LOT
SURVEY UNIT 9514-0001

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EAST PRIMARY PARKING LOT

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1. SURVEY UNIT DESCRIPTION

Survey Unit 9514-0001 (East Primary Parking Lot) is designated as a Final Status Survey (FSS) Class 2 survey unit and consists of eight thousand seven hundred thirty-nine square meters (8,739 m²) or 2.159 acres of uninhabited open land located approximately five hundred and eighty-four feet (584 ft) south of the reference coordinate system benchmark used at Haddam Neck Plant (HNP).

This survey unit is bounded by Survey Units 9504-0000, 9506-0000 and 9508-0000 to the north (called north based on the general north to south flow of the Connecticut River), Survey Units 9527-0001 and 9527-0004 to the east, Survey Units 9313-0000 and 9527-0005 to the south and by Survey Unit 9514-0000 to the west.

The survey unit is located outside of the former Radiological Controlled Area (RCA), outside the former Industrial Area but within the Owner Controlled Area.

The survey unit is comprised of predominantly flat disturbed open land that gently slopes from east to west toward the Connecticut River. The eastern portion of the survey unit contains a small stream that collects water from the hillside to the south and east of the survey unit and flows from south to north through the survey unit until it discharges into the onsite retention pond (Survey Unit 9508-0000).

The reference coordinates associated with this survey unit are E004 through E012 by S050 through S058 (refer to 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 historical information, scoping analyses and characterization results provided sufficient data to designate Survey Unit 9514-0001 as Class 2 in February 2007.

The "*Classification Basis Summary*" conducted for Survey Unit 9514-0001 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." of the area were performed.

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Survey Area 9514, which consists of the Primary Parking Lot, is a surface survey area (the corresponding sub-surface Survey Area is 9803) that has historically been used to stockpile soils, asphalt spoils, snow and other materials. Containerized radioactive materials have also been stored here over the past few years. The historical assessment of the survey area indicated that the age of the paved area dates back to the earliest days of plant operation. The scoping report in 1997 had little information on this area, but did note that Plant Incident Report (PIR) 80-37 reported the discovery of several sources of elevated activity in March 1980, along with other areas of the site. The investigation into the incident concluded that the elevated activity was most likely due to radioactive materials ejected from the Primary Vent Stack as a result of operational events in 1979. Isotopic analysis of the particles indicated that the short-lived fission products, Ce-144 and Ru-106, dominated the particulate radioactivity. All elevated areas were removed upon detection according to supplemental reports. A review of the 10 CFR 50.75(g) files identified five (5) additional entries identifying Survey Area 9514 (Survey dated 6/11/79; Contract, drawings and Spec. work logs from 10/11/82; Email from GTS Duratek dated 1/26/99; memo HP-99-111; memo HP-99-113); however, these sources did not provide a significant amount of additional information for characterization of Survey Area 9514. Additionally, Warehouse #2 and the Office Building #3/Primary Access Point were constructed in 1989 and the primary parking lot was re-configured. The primary parking lot was enlarged, re-paved and storm drains installed. Scanning of the parking lot was conducted on September 17-25, 1997 using a floor monitor. No elevated areas of activity were identified. Soil samples were taken of a proposed sanitary sewer sump location just west of the Security Building Primary Access Point (PAP). No plant related radioactivity was identified in these samples. Areas behind the Building Maintenance Equipment Warehouse and the Chemical Storage Warehouse were also used as storage areas for radioactive materials returned to site as a result of the Offsite Materials Recovery Program.

A storm drain system was installed under the parking area. The storm drain system's purpose was to conduct runoff water from the parking lot, including the northern-most side of Survey Area 9313 (adjacent to the office building and warehouses), and the west hillside primarily to the retention pond. Outfalls from the storm drain system discharge to the southeast and southwest banks of the pond (Survey Area 9508). Overflow from the retention pond discharges to the west bank of the Connecticut River (Survey Area 9512).

Recent decommissioning activities included the removal of asphalt, concrete and sub-surface commodities such as storm drain and sewer system piping. Two (2) potential pathways for residual contamination to exist within this survey area are from the mixing of surface soils with paving materials during demolition or from storm drain pipe leakage.

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After remediation was complete in Survey Area 9514, characterization samples were collected and analyzed in accordance with Survey and Sampling Work Plan (SSWP) 06-09-001. Evaluation of soil samples collected for the SSWP provided the information with regard to the radionuclides of concern within Survey Area 9514. These results are summarized in Table 1.

Parameter	Cs-137 ($\mu\text{Ci/g}$)	Co-60 ($\mu\text{Ci/g}$)	Sr-90 ($\mu\text{Ci/g}$)
Operational DCGL:	5.38E+00	2.59E+00	1.05E+00
Minimum Value:	-9.68E-03	-3.21E-02	5.67E-03
Maximum Value:	8.44E-01	9.36E-02	7.39E-02
Mean:	9.22E-02	4.87E-03	3.43E-02
Median:	3.06E-02	3.16E-03	2.95E-02
Standard Deviation:	2.06E-01	2.64E-02	2.18E-02

Characterization sample data indicated that several locations in the eastern portion of Survey Area 9514 contained elevated amounts of Sr-90 at levels up to seven percent (7%) of the Operational Derived Concentration Guideline Level (DCGL) for Sr-90.

Based on the characterization results provided in Table 1, Survey Area 9514 was split into two (2) survey units. Survey Unit 9514-0001 (the survey unit covered by this Release Record) is a Class 2 survey unit which consists of open land and comprises the eastern portion of the former primary parking lot. The western portion of the former primary parking lot is covered by Survey Unit 9514-0000, a Class 3 survey unit.

The characterization results for Survey Unit 9514-0001 indicate that Cs-137 and Co-60 are the primary radionuclides of concern for this survey unit. Additionally, HTD radionuclide analysis indicated that Sr-90 was present in several samples at levels up to seven percent (7%) of the Operational DCGL. Therefore, Sr-90 was selected as a radionuclide of concern. No other HTD radionuclides were present in concentrations above 5% of the Operational DCGL for soil individually or 10% of the Operational DCGL for soil as a composite.

The FSS Engineer performed a visual inspection and walk-down during February 2007 to assess the physical condition of the survey unit, evaluate access points and travel paths and identify potentially hazardous conditions.

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

3. DATA QUALITY OBJECTIVES (DQO)

FSS design and planning 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 does satisfy the primary objective of the Final Status Survey Plan (FSSP). Probabilistic sampling is a preferred method to select a sample so that each item in the population being studied has a known likelihood of being included in the sample. Probabilistic sampling may include simple random sampling where every sample has the same chance of being included, or systematic random sampling where samples are arranged in some order and a random starting point is selected.

The primary objective of the FSSP was to demonstrate that the level of residual radioactivity in Survey Unit 9514-0001 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 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 not considered impacted by future groundwater radioactive contamination, as there are no buried concrete foundations or footings containing residual radioactive material within the groundwater saturated zone in the area (reference CY memo ISC 06-024). The dose contribution from future groundwater, the third dose component is, therefore, zero (0) mrem/yr TEDE.

Equation 2

$$19 \text{ mrem/yr}_{\text{Total}} = 17 \text{ mrem/yr}_{\text{Soil}} + 2 \text{ mrem/yr}_{\text{Existing GW}} + 0 \text{ mrem/yr}_{\text{FutureGW}}$$

The allowable dose for soil in this survey unit is seventeen (17) mrem/yr TEDE as shown by Equation 2 above. The concentration of residual radioactivity resulting in seventeen (17) mrem/yr TEDE is designated as the Operational DCGL, 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 DCGL, Operational DCGLs and Required Minimum Detectable Concentrations			
Radionuclide ⁽¹⁾	Base Case Soil DCGL (pCi/g) ⁽²⁾	Operational DCGL (pCi/g) ⁽³⁾	Required MDC (pCi/g) ⁽⁴⁾
H-3	4.12E+02	2.81E+02	1.65E+01
C-14	5.66E+00	3.84E+00	2.26E-01
Mn-54	1.74E+01	1.18E+01	6.96E-01
Fe-55	2.74E+04	1.87E+04	1.10E+03
Co-60	3.81E+00	2.59E+00	1.52E-01
Ni-63	7.23E+02	4.91E+02	2.89E+01
Sr-90	1.55E+00	1.05E+00	6.20E-02
Nb-94	7.12E+00	4.85E+00	2.85E-01
Tc-99	1.26E+01	8.57E+00	5.04E-01
Ag-108m	7.14E+00	4.86E+00	2.86E-01
Cs-134	4.67E+00	3.18E+00	1.87E-01
Cs-137	7.91E+00	5.38E+00	3.16E-01
Eu-152	1.01E+01	6.87E+00	4.04E-01
Eu-154	9.29E+00	6.32E+00	3.72E-01
Eu-155	3.92E+02	2.67E+02	1.57E+01
Pu-238	2.96E+01	2.01E+01	1.18E+00
Pu-239/240	2.67E+01	1.82E+01	1.07E+00
Pu-241	8.70E+02	5.92E+02	3.48E+01
Am-241 ⁽⁵⁾	2.58E+01	1.75E+01	1.03E+00
Cm-243/244	2.90E+01	1.97E+01	1.16E+00

(1) **Bold** indicates those radionuclides considered to be hard to detect.

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

(3) The Operational DCGL is equivalent to seventeen (17) mrem/yr TEDE.

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

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

Another important facet of the DQO process is to identify the radionuclides of concern and determine the concentration variability. Fifteen (15) samples were collected and analyzed during characterization, as discussed in Section 2.

The mean and variability of Cs-137, Co-60 and Sr-90 in soil in this survey unit was determined during characterization 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

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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 FSSP uses an integrated sample design that combines scanning surveys and sampling which can be either random or biased.

Characterization sampling was used to determine concentration variability.

The DQO process determined that Cs-137, Co-60 and Sr-90 would be the radionuclides of concern in survey unit 9514-0001 (refer to Section 3). The sum of fractions or unity rule was used with the individual Operational DCGLs because multiple radionuclides (Cs-137, Co-60 and Sr-90) are considered in the survey design. Other radionuclides identified during FSS were evaluated to ensure adequate survey design.

Surrogate DCGLs were not required for this survey unit based on process knowledge from FSS of adjacent areas and via screening under LTP Section 5.4.7.2, "Gross Activity DCGLs". 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.

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

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

The number of soil samples for FSS was determined in accordance with Procedure RPM 5.1-12, "Determination of the Number of Surface Samples for Final Status Survey." The Lower Bound of the Gray Region (LBGR) was set in accordance with Procedure RPM 5.1-11 to 0.91 to maintain the relative shift (Δ/σ) in the range of 1 and 3. The resulting Adjusted Relative Shift was 2.0. A Prospective Power Curve was generated using COMPASS, a software package

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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 (10 CFR 20, Subpart E). The result of the COMPASS computer run showed adequate power for the survey design. Survey design specified fifteen (15) surface soil samples for non-parametric statistical testing.

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 2 area.

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

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

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Table 3 -Sample Measurement Locations identified for Non-parametric Statistical Testing with their Associated GPS Coordinates

Designation ⁽¹⁾	Northing	Easting
9514-0001-001F	237249.28	668065.13
9514-0001-002F	237177.80	668023.86
9514-0001-003F	237177.80	668106.40
9514-0001-004F/FS	237177.80	668188.94
9514-0001-005F	237106.31	668065.13
9514-0001-006F	237106.31	668147.67
9514-0001-007F	237106.31	668230.21
9514-0001-008F ⁽²⁾	237106.31	668312.75
9514-0001-009F	237034.83	668188.94
9514-0001-010F/FS	237034.83	668271.48
9514-0001-011F	237034.83	668354.02
9514-0001-012F	236963.35	668312.75
9514-0001-013F	236963.35	668395.29
9514-0001-014F	236963.35	668477.83
9514-0001-015F	236891.87	668354.02
9514-0001-016F ⁽³⁾	237086.27	668140.73

⁽¹⁾ "F" denotes Final Status Survey sample location and "FS" denotes Field-Split sample location.

⁽²⁾ Sample number 9514-0001-008F could not safely be collected so that sample location was abandoned and a new location was randomly selected.

⁽³⁾ Random sample number 9514-0001-016F was selected as a Non-parametric sample location because sample number 9514-0001-008F could not be collected.

Although Procedure RPM 5.1-11 only specified that 5% of the samples are required to be selected for HTD analysis, two (2) soil samples or 13% 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 two (2) soil samples for "split sample" analysis by the off-site laboratory. These locations were selected randomly using the Microsoft Excel "RANDBETWEEN" function. The number of quality control soil samples was determined to be 13% of fifteen (15) samples.

The LTP specifies that scanning will be performed along with a combination of systematic and judgmental measurements (samples) for a Class 2 land area and should cover 10% to 100% of the area. The fraction of scanning coverage was determined during the DQO process with the total amount and location(s) based on the likelihood of finding elevated activity during FSS.

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Based on the historical site assessment and the characterization data available, it was determined that three (3) separate scan grids needed to be established. The total surface area to be scanned was approximately 25% of the survey unit. A map of the scan grid locations is provided in Attachment 1.

For this Class 2 survey unit, the "Investigation Level" for area scanning and soil sample measurement results are those levels specified in LTP, Table 5-8. Table 4 provides a synopsis of the survey design.

Table 4 – Synopsis of the Survey Design⁽¹⁾		
Feature	Design Criteria	Basis
Survey Unit Land Area	8,739 m ²	Based on AutoCAD-LT and Visual Sample Plan calculations
Number of Measurements	15	Type 1 and Type 2 errors were 0.05, sigma was 0.04 pCi/g, and the LBGR was adjusted to 0.91 to maintain Relative Shift in the range of 1 and 3.
Grid Spacing	25.9 m	Based on triangular grid
Operational DCGL	5.38 pCi/g Cs-137 2.59 pCi/g Co-60 1.05 pCi/g Sr-90	Administratively set to achieve seventeen (17) mrem/yr TEDE ⁽²⁾
Soil Investigation Level	5.38 pCi/g Cs-137 2.59 pCi/g Co-60 1.05 pCi/g Sr-90	The Operational DCGL meets the LTP criteria for a Class 2 survey unit
Scan Survey Area Coverage	Approximately 25% of the area	The LTP requires >10% area coverage for Class 2 Survey Units.
Scan Investigation Level	Detectable over background	Administratively set to achieve seventeen (17) mrem/yr TEDE ⁽²⁾

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

(2) The allowable dose for soil in this survey unit is seventeen (17) mrem/yr TEDE as the bounding dose from existing and future groundwater has been established based on field data (reference CY memo ISC 06-024.)

5. SURVEY IMPLEMENTATION

Final status survey field activities were conducted under a detailed FSSP 9514-0001 that included the implementation of a 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.

Three (3) scan areas were established that constituted approximately 25% of the surface area of Survey Unit 9514-0001. Grid lines, one (1) meter wide, were

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painted on the ground of each of the three (3) scan areas. A background survey was performed around the survey unit and it was determined that the range of background measurements, using a Eberline E-600 with a SPA-3 sodium iodide detector, was varied from 4,000 counts per minute (cpm) in the western part of the survey unit up to 9,000 cpm near the southeastern part of the survey unit toward the hillside.

The scan areas were established and each area was 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. Approximately 25% of the survey unit was scanned.

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

One (1) of the original fifteen (15) samples identified, 9514-0001-008F was not collected because the sample location was found to be inaccessible. Additionally, the sample location could not be identified within 3 meters of the original location. As part of the survey design, several additional alternate sample locations were selected randomly, as determined by using Visual Sample Plan (VSP), in accordance with Procedure RPM 5.1-14, "Identifying, and Marking Surface Sample Locations for Final Status Survey." One (1) of the random sample locations was selected and designated as 9514-0001-016F.

Fifteen (15) surface soil samples were collected for non-parametric statistical testing 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 (9514-0001-001F and 9514-0001-010F) were randomly selected for HTD radionuclide analysis.

The implementation of survey specific quality control measures included the collection of two (2) samples (9514-0001-001F and 9514-0001-013F) for "split sample" analysis.

Follow-up sampling was conducted at each of the elevated measurement locations.

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Five (5) judgmental sample locations in the creek bed that runs south to north along the eastern portion of the survey unit, were identified by the FSS Engineer.

A map identifying all of the sample locations is provided in Attachment 1.

6. SURVEY RESULTS

All field survey activities were conducted between February 22 and February 27, 2007.

On February 22, 2007, three (3) scan areas, that comprised approximately 25% of the total surface area for the survey unit, were scanned for elevated radiation levels.

Six (6) elevated measurement locations within scan area three (3) were identified during scanning. Each of the locations was evaluated using the Exploranium, and were determined to be Naturally Occurring Radioactive Material (NORM) based on the presence of loose rock. Table 5 provides an overview of the scan area survey. Attachment 1 contains a map that identifies the locations of the three (3) scan grids. All scan results are provided in Attachment 2.

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Table 5-Scan Area Results

Scan Area	Grid #’s	Range of Logged Readings (kcpm)	Highest Logged Reading (kcpm)	Range of Action Levels (kcpm) ⁽¹⁾	> Action Level ⁽²⁾	Elevated Reading Identification ⁽³⁾	Investigation Sample
1	1	6.04	6.04	8.36	NO		
	2	6.00	6.00	7.66	NO		
	3	6.47	6.47	7.48	NO		
	4	6.09	6.09	7.75	NO		
	5	6.78	6.78	7.88	NO		
	6	7.19	7.19	7.48	NO		
2	1	6.00	6.00	7.24	NO		
	2	5.98	5.98	6.48	NO		
	3	5.55	5.55	7.60	NO		
	4	5.53	5.3	6.77	NO		
	5	5.48	5.48	6.55	NO		
3	1-5	6.05-7.19	7.19	7.46-8.34	NO		
	6-10	5.46-6.49	6.49	6.15-9.14	YES	9514-01-ER-03-09-01	9514-0001-024F
	11-15	4.48-7.54	7.54	6.01-7.44	YES	9514-01-ER-03-13-01	9514-0001-025F
						9514-01-ER-03-13-02	9514-0001-026F
	16-20	4.79-6.22	6.22	6.19-7.07	NO		
	21-25	5.10-13.82	13.82	6.81-8.63	YES	9514-01-ER-03-23-01	9514-0001-027F
						9514-01-ER-03-25-01	9514-0001-028F
	26-30	4.41-17.19	17.19	5.75-8.76	YES	9514-01-ER-03-26-01	9514-0001-029F
31-35	4.28-4.97	4.97	5.48-6.06	NO			
36-40	4.71-5.87	5.87	5.90-6.69	NO			

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

(2) Elevated areas were determined to be Naturally Occurring Radioactive Material, refer to Section 8.

(3) ER nomenclature is associated with the barcodes used in the field where ER stands for Elevated Reading.

On February 23, 2007 the fifteen (15) samples identified for non-parametric statistical testing were collected. One (1) of the original fifteen (15) samples established by VSP using a random start, systematic triangular grid pattern, was deemed not accessible and was therefore replaced by a random sample location that was also identified by VSP. Sample number 9514-0001-008F was replaced by sample number 9514-0001-016F.

Additionally, on February 26, 2007, six (6) investigative samples were collected at the elevated measurement locations identified by the scan surveys and were designated as 9514-0001-024F, 9514-0001-025F, 9514-0001-026F, 9514-0001-027F, 9514-0001-028F and 9514-0001-029F.

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Five (5) judgmental sample locations in the creek bed were collected on February 27, 2007 and were designated as sample numbers 9514-0001-019J, 9514-0001-020J, 9514-0001-021J, 9514-0001-022J and 9514-0001-023J.

Material Service Requisition (MSR) number 07-00100 was generated to cover the analysis of the samples at the approved off-site laboratory.

The fifteen (15) sample locations identified for non-parametric statistical testing along with the five (5) judgmental samples and the six (6) investigative sample locations were scanned over approximately a one (1) meter radius for elevated radiation levels, in accordance with the FSSP. Table 6 provides an overview of the scan results for sample measurement locations.

A map identifying all of the sample locations is provided in Attachment 1.

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Table 6- Scan Results for Sample Measurement Locations

Sample Measurement Location ⁽⁵⁾	Highest Logged Reading (kcpm)	Action Level ⁽¹⁾ (kcpm)	> Action Level ⁽²⁾
9514-0001-001F	3.98	4.08	NO
9514-0001-002F	4.74	4.95	NO
9514-0001-003F	4.64	5.95	NO
9514-0001-004F	5.95	7.22	NO
9514-0001-005F	4.02	5.57	NO
6514-0001-006F	5.38	6.78	NO
9514-0001-007F	6.19	7.10	NO
9514-0001-008F	SAMPLE LOCATION IS INACCESSIBLE		
9514-0001-009F	6.23	6.32	NO
9514-0001-010F	4.47	5.92	NO
9514-0001-011F	5.91	7.83	NO
9514-0001-012F	5.25	6.14	NO
9514-0001-013F ⁽³⁾	6.76	6.19	YES
9514-0001-014F	6.45	6.69	NO
9514-0001-015F	5.45	5.94	NO
9514-0001-016F	4.93	5.69	NO
9514-0001-019J	4.79	6.58	NO
9514-0001-020J	6.06	7.01	NO
9514-0001-021J	7.80	9.49	NO
9514-0001-022J	8.97	10.1	NO
9514-0001-023J	8.60	10.3	NO
9514-0001-024F ⁽⁴⁾	6.24	6.15	YES
9514-0001-025F ⁽⁴⁾	6.07	6.01	YES
9514-0001-026F ⁽⁴⁾	7.53	6.01	YES
9514-0001-027F ⁽⁴⁾	8.43	8.11	YES
9514-0001-028F ⁽⁴⁾	13.82	8.21	YES
9514-0001-029F ⁽⁴⁾	17.19	8.40	YES

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

(2) FSS sample plans require movement of the sample measurement location to the area within the one (1) meter radius yielding the response above the action level

(3) During the one (1) meter radius scanning conducted around sample location 9514-0001-013F an elevated measurement was detected. In accordance with the FSSP, the sample was moved to the location of the elevated measurement.

(4) Denotes the follow-up samples that were collected at elevated scan grid locations identified in Table 6.

(5) "F" denotes Final Status Survey sample location and "J" denotes Judgmental or Biased sample location.

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The off-site laboratory employed for the radiological analyses of samples was General Engineering Laboratories, LLC, Charleston, South Carolina. The laboratory analyzed the fifteen (15) samples collected for non-parametric statistical testing, the associated duplicates, the five (5) biased samples and the six (6) investigative samples using gamma spectroscopy. Gamma spectroscopy analysis was performed to the required MDCs. Gamma spectroscopy results identified some radionuclides meeting the accepted criteria for detection (i.e., a result greater than two (2) standard deviations uncertainty).

Cs-137 was identified in thirteen (13) of the fifteen (15) samples collected for non-parametric statistical testing. Co-60 was not identified in any of the fifteen (15) samples collected for non-parametric statistical testing. Sr-90 was identified in five (5) of the fifteen (15) samples collected for non-parametric statistical testing. The mean of the gamma spectroscopic analysis results for the samples indicated that Cs-137 was present at levels that are similar to 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.

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 9514-0001 are provided in Table 7.

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Table 7- Summary of Soil Sample Results

Sample Number	Cs-137 pCi/g	Co-60 pCi/g	Sr-90 pCi/g	Fraction of the Operational DCGL ⁽¹⁾
9514-0001-001F	2.71E-02	2.88E-03	-8.87E-04	0.005
9514-0001-002F	6.23E-02	7.82E-03	-2.05E-02	-0.005
9514-0001-003F	1.57E-02	7.03E-03	3.52E-03	0.009
9514-0001-004F	1.05E-01	2.06E-02	4.64E-02	0.072
9514-0001-005F	5.04E-02	2.47E-04	9.28E-03	0.018
9514-0001-006F	4.02E-02	7.60E-03	6.81E-01	0.657
9514-0001-007F	6.41E-02	1.66E-03	1.58E-02	0.028
9514-0001-009F	2.49E-02	5.94E-03	2.58E-02	0.031
9514-0001-010F	3.59E-02	-3.76E-03	3.30E-02	0.037
9514-0001-011F	3.70E-01	1.69E-02	3.26E-02	0.106
9514-0001-012F	5.55E-02	5.27E-03	4.59E-02	0.056
9514-0001-013F	1.19E-01	5.90E-03	1.65E-02	0.040
9514-0001-014F	8.44E-01	0.00E+00	-3.44E-03	0.154
9514-0001-015F	-1.62E-03	1.50E-02	-2.01E-02	-0.014
9514-0001-016F	1.91E-02	0.00E+00	6.55E-03	0.010

(1) The Operational DCGLs are 5.38 pCi/g for Cs-137, 2.59 pCi/g for Co-60 and 1.05 pCi/g for Sr-90 from Table 2 and are used in conjunction with the unity rule

The off-site laboratory also processed two (2) samples for HTD analysis (other than Sr-90 which was analyzed for in each sample) 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 met the required MDC. No HTD radionuclides, other than Sr-90, met the accepted criteria for detection (i.e., a result greater than two (2) standard deviations uncertainty). Additionally, all HTD radionuclide, other than Sr-90, met 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.

7. QUALITY CONTROL

The off-site laboratory processed the split samples and performed gamma spectroscopy analysis. Two (2) samples or thirteen percent (13%), of the fifteen (15) total samples collected for non-parametric statistical testing were selected for split sample 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."

Split samples 9514-0001-004F/FS were assessed and it was determined that there were low resolution ratios (<4) for both Cs-137 and Co-60. The agreement

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range could not be established because NRC Inspection Procedure 84750 does not address resolution ratios below 4. Therefore, a determination of the acceptability for such low ratios cannot be made. However, Potassium-40 (K-40) was found to be present at an acceptable level of agreement. Therefore, no further action was warranted.

Split samples 9514-0001-010F/FS were assessed and it was determined that there was an acceptable level of agreement for Cs-137. Therefore, no further action was warranted. Due to the extremely low levels of Co-60 reported the same situation was exhibited as was observed for split sample numbers 9514-0001-004F/FS.

The sample analysis vendor, General Engineering Laboratories, LLC, Charleston, South Carolina, maintains quality control and quality assurance plans as part of normal operation. Refer to Attachment 3 and Attachment 4 for data and data quality analysis results.

8. INVESTIGATIONS AND RESULTS

Five (5) biased samples were collected at locations along the creek bottom that runs south to north along the eastern edge of the survey unit.

Six (6) investigative samples were collected at elevated scan locations throughout the survey unit.

Gamma spectroscopy and Sr-90 analyses was performed by the off-site laboratory to the required MDC. None of the samples exceeded 19% of the Operational DCGL. No further action or investigations were required (see Table 8).

Sample Number ⁽²⁾	Cs-137 pCi/g	Co-60 pCi/g	Sr-90 pCi/g	Fraction of the Operational DCGL ⁽¹⁾
9514-0001-024F	-7.30E-03	-1.11E-02	-1.78E-02	-0.023
9514-0001-025F	-8.96E-04	-6.86E-03	-4.16E-03	-0.007
9514-0001-026F	2.35E-02	-7.36E-03	-2.29E-03	-0.001
9514-0001-027F	1.07E-02	1.13E-02	6.32E-03	0.012
9514-0001-028F	1.96E-02	-2.77E-02	5.62E-03	-0.002
9514-0001-029F	-8.66E-03	1.39E-02	-2.46E-02	-0.020
9514-0001-019J	5.22E-01	5.25E-02	7.39E-02	0.188
9514-0001-020J	4.65E-01	2.32E-02	3.46E-02	0.128
9514-0001-021J	3.05E-01	9.23E-03	5.01E-02	0.108
9514-0001-022J	5.19E-01	1.53E-02	5.46E-02	0.154
9514-0001-023J	3.34E-01	3.06E-02	6.94E-02	0.140

(1) The Operational DCGLs from Table 2 are 5.38 pCi/g for Cs-137, 2.59 pCi/g for Co-60, 1.05 pCi/g for Sr-90 and are used in conjunction with the unity rule

(2) "F" denotes Final Status Survey sample location and "J" denotes Judgmental or Biased sample location.

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9. REMEDIATION AND RESULTS

Historically, no radiological remedial action as described by MARSSIM Section 5.4 was performed in this survey unit prior to or as a result of the FSS. Health Physics TSD BCY-HP-0078, "*ALARA Evaluation of Soil Remediation in Support of Final Status Survey,*" determined that remediation beyond that required to meet the release criteria to be unnecessary and that the remaining residual radioactivity in soil was ALARA.

10. CHANGES FROM THE FINAL STATUS SURVEY PLAN

Sample location number 9514-0001-008F was deemed inaccessible and was replaced by sample location number 9514-0001-016F.

None other changes to the FSSP were made.

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 2.

The preliminary data review consisted of calculating basic statistical quantities (e.g., mean, median, standard deviation). The standard deviation was slightly less than the value used for the survey design. This would indicate that the number of samples collected was sufficient to meet the Operational DCGL. The mean and median values are well below the Operational DCGL when used in conjunction with the unity rule. Also, the retrospective power curve shows that a sufficient number of samples were collected to achieve the desired power. Therefore, the survey unit meets the unrestricted release criteria with adequate power as required by the DQOs.

For Cs-137, the range of the data, about four (4) standard deviations, was not a particularly large variation considering that the levels were essentially at existing environmental levels where such variation is to be expected. The difference between the mean and median was 32% of the standard deviation which indicates some skewness in the data. The data was represented graphically through posting plots, a frequency plot, and a quantile plot. The frequency plot indicates a positive skewness as confirmed by the calculated skew of 3.02.

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Since Co-60 was not identified (i.e., a result greater than two (2) standard deviations uncertainty) in any of the fifteen (15) samples collected for non-parametric statistical testing, the data was not used to determine the adequacy of statistical testing for this survey unit.

For Sr-90, the range of the data, about three (3) standard deviations, was not a particularly large variation considering that the levels were at extremely low levels where such variation is to be expected. The difference between the mean and median was 36.7% of the standard deviation which indicates a small skewness in the data. The data was represented graphically through posting plots, a frequency plot, and a quantile plot. The frequency plot shows a slightly positive skew as confirmed by the calculated skew of 0.367.

All data, assessments, and graphical representations are provided in Attachment 3 and Attachment 4.

12. ANOMALIES

The anomalies associated with the disagreement between the field splits was presented in Section 7. The source of the disagreement for Co-60 is likely due to extremely low levels of activity being reported and the statistical uncertainties associated with the comparison of very small numbers. Standard statistical tests, ratio comparisons and skew, may not provide the same information at extremely low numbers as compared to higher numbers.

No other anomalies were noted.

13. CONCLUSION

Survey Unit 9514-0001 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 and remediation was not required.

Cs-137 and Sr-90 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 2.

The dose contribution from soil is 1.43 mrem/yr TEDE based on the average concentration of 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 two (2) mrem/yr TEDE.

This survey unit is not considered impacted by future groundwater radioactive contamination, as there are no buried concrete foundations and footings containing residual radioactive material within the groundwater saturated zone

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in the area (reference CY memo ISC 06-024); therefore, the dose contribution from future groundwater is zero (0) mrem/yr TEDE.

The average total dose from residual radioactivity in this survey unit, including exposures from the three (3) components as described in Section 3, that is, residual radioactivity in soil, existing groundwater radioactivity, and future groundwater radioactivity from the burial of concrete foundations or footings from site buildings containing residual radioactivity, will not exceed 3.43 mrem/yr Total Effective Dose Equivalent (TEDE). Therefore, Survey Unit 9514-0001 is acceptable for unrestricted release.

14. ATTACHMENTS

14.1 Attachment 1 – Figures

14.2 Attachment 2 – Scan Results

14.3 Attachment 3 – Laboratory Results

14.4 Attachment 4 – DQA Results

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ATTACHMENT 1 (FIGURES)

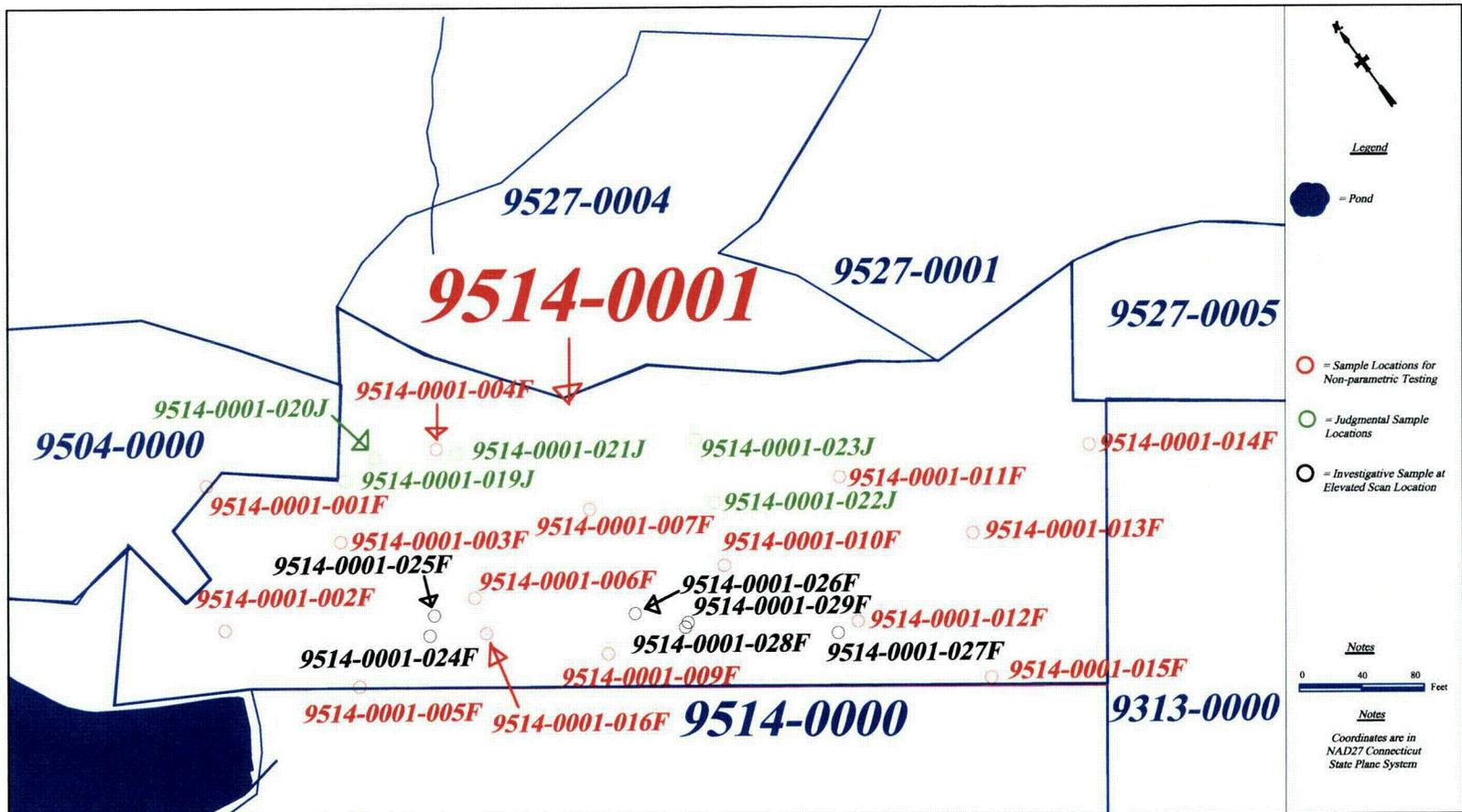


Figure 1	Connecticut Yankee Atomic Power Company Sample Location Map for Survey Unit 9514-0001	March 2007	Created by: R. Massengill
		Revision: 0	

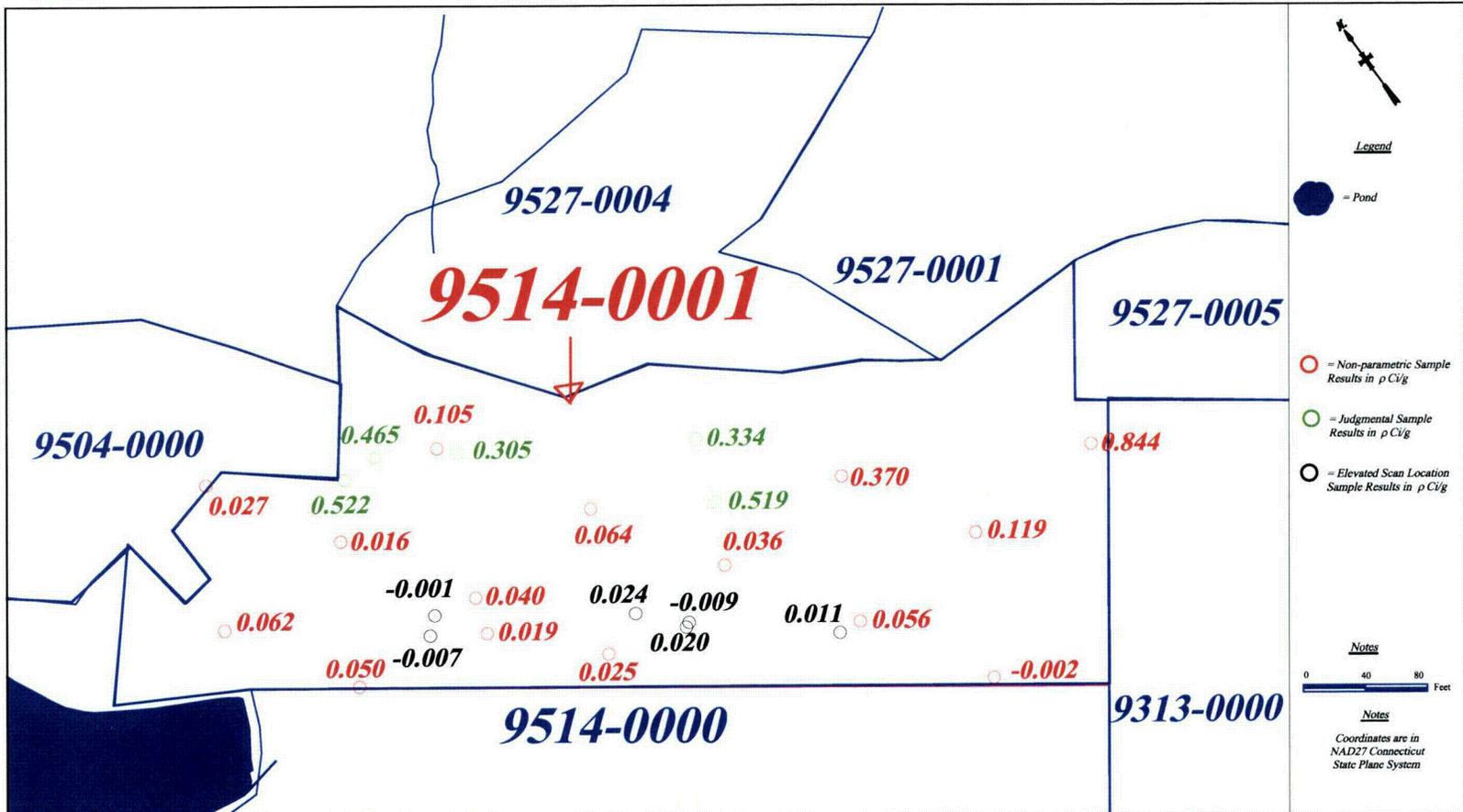


Figure 2	Connecticut Yankee Atomic Power Company Cesium-137 Posting Plot for Surface Soil Samples Survey Unit 9514-0001	March 2007	Created by: R. Massengill
		Revision: 0	

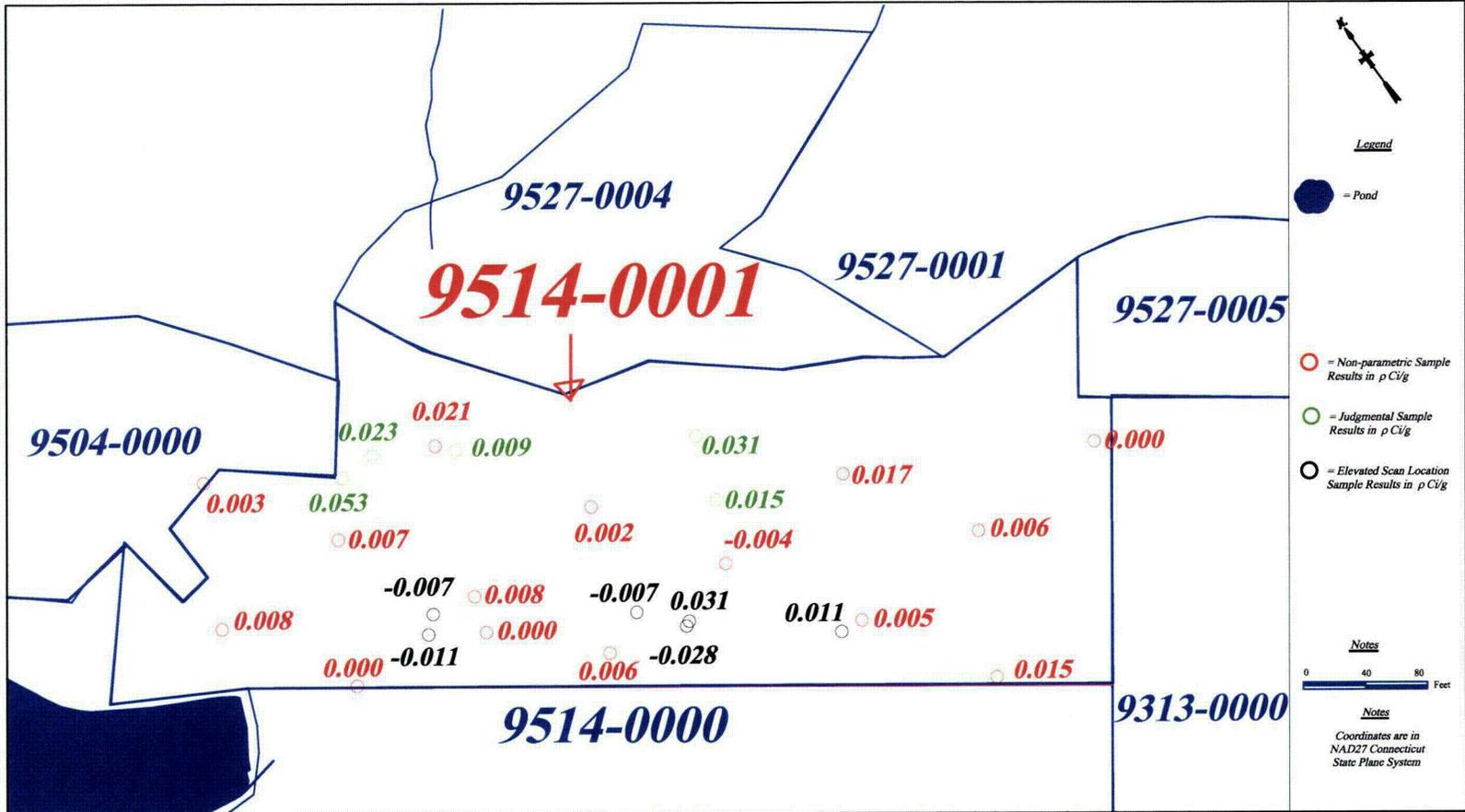
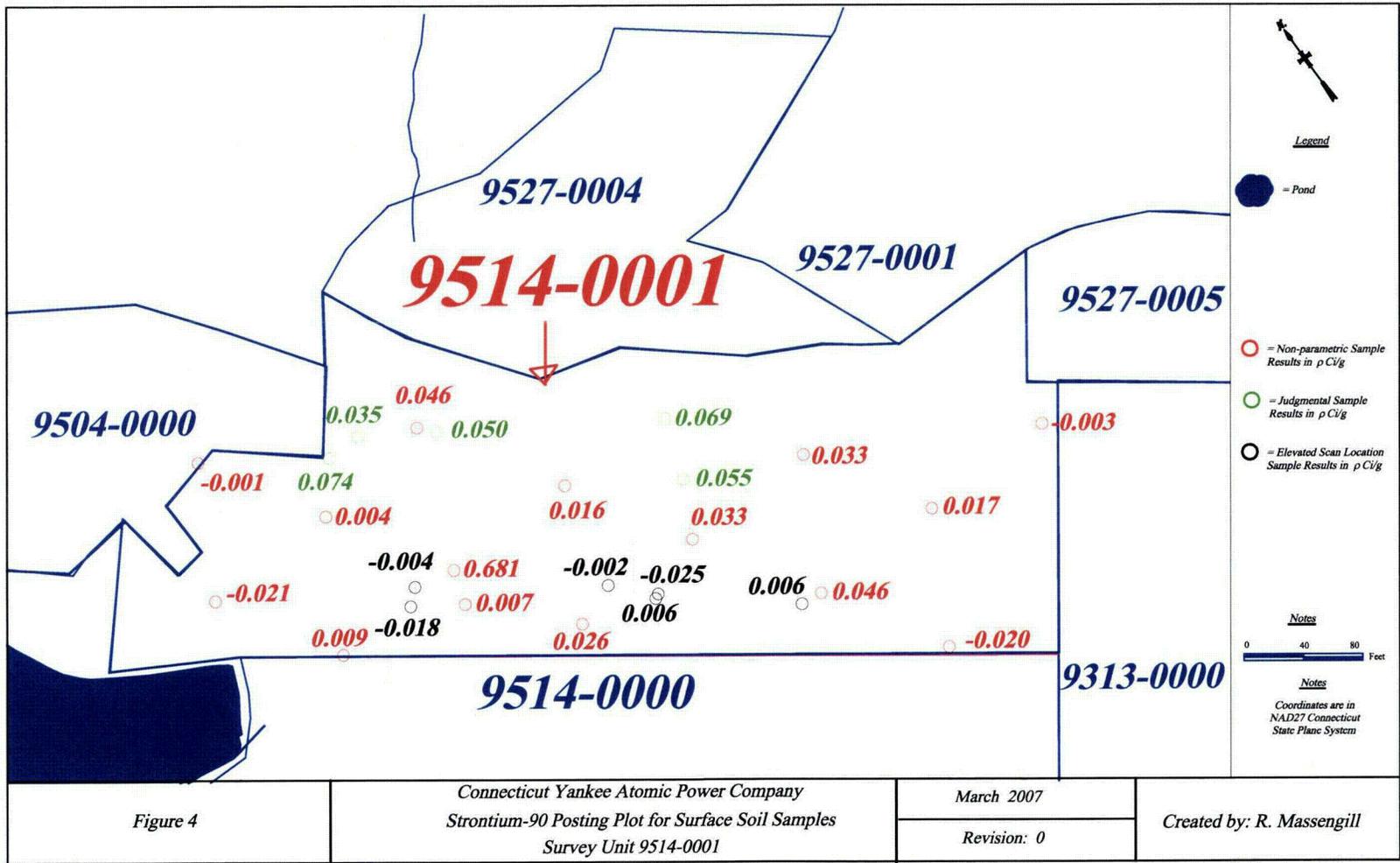


Figure 3	Connecticut Yankee Atomic Power Company Cobalt-60 Posting Plot for Surface Soil Samples Survey Unit 9514-0001	March 2007	Created by: R. Massengill
		Revision: 0	



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ATTACHMENT 2 (SCAN RESULTS)

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SAMPLE LOCATION SCAN RESULTS

Survey Location Number	Log Date	Log Time	Reading (cpm)	MDCR (cpm)	Action L. (cpm)	>AL ("+"=Yes)	E-600 Serial #	Probe Serial #
9514-01-BL-00-01-0	2/23/2007	8:47:00	3.26E+03	8.15E+02	4.08E+03		1110	1010
9514-01-SL-00-01-0	2/23/2007	8:48:00	3.98E+03				1110	1010
9514-01-BL-00-02-0	2/23/2007	8:45:00	4.04E+03	9.08E+02	4.95E+03		1110	1010
9514-01-SL-00-02-0	2/23/2007	8:46:00	4.74E+03				1110	1010
9514-01-BL-00-03-0	2/23/2007	8:49:00	4.95E+03	1.00E+03	5.95E+03		1110	1010
9514-01-SL-00-03-0	2/23/2007	8:50:00	4.64E+03				1110	1010
9514-01-BL-00-04-0	2/23/2007	8:50:00	6.10E+03	1.12E+03	7.22E+03		1110	1010
9514-01-SL-00-04-0	2/23/2007	8:51:00	5.95E+03				1110	1010
9514-01-BL-00-05-0	2/23/2007	8:44:00	4.60E+03	9.69E+02	5.57E+03		1110	1010
9514-01-SL-00-05-0	2/23/2007	8:44:00	4.02E+03				1110	1010
9514-01-BL-00-06-0	2/23/2007	8:42:00	5.70E+03	1.08E+03	6.78E+03		1110	1010
9514-01-SL-00-06-0	2/23/2007	8:43:00	5.38E+03				1110	1010
9514-01-BL-00-07-0	2/23/2007	8:32:00	5.99E+03	1.11E+03	7.10E+03		1110	1010
9514-01-SL-00-07-0	2/23/2007	8:32:00	6.19E+03				1110	1010
9514-01-BL-00-09-0	2/23/2007	8:28:00	5.28E+03	1.04E+03	6.32E+03		1110	1010
9514-01-SL-00-09-0	2/23/2007	8:28:00	6.23E+03				1110	1010
9514-01-BL-00-10-0	2/23/2007	8:16:00	4.92E+03	1.00E+03	5.92E+03		1110	1010
9514-01-SL-00-10-0	2/23/2007	8:17:00	4.47E+03				1110	1010
9514-01-BL-00-11-0	2/23/2007	8:35:00	6.66E+03	1.17E+03	7.83E+03		1110	1010
9514-01-SL-00-11-0	2/23/2007	8:36:00	5.91E+03				1110	1010
9514-01-BL-00-12-0	2/23/2007	8:19:00	5.12E+03	1.02E+03	6.14E+03		1110	1010
9514-01-SL-00-12-0	2/23/2007	8:20:00	5.25E+03				1110	1010
9514-01-BL-00-13-0	2/23/2007	8:23:00	5.16E+03	1.03E+03	6.19E+03		1110	1010
9514-01-SL-00-13-0	2/23/2007	8:24:00	6.76E+03			+	1110	1010
9514-01-BL-00-14-0	2/23/2007	8:25:00	5.62E+03	1.07E+03	6.69E+03		1110	1010
9514-01-SL-00-14-0	2/23/2007	8:26:00	6.45E+03				1110	1010

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SAMPLE LOCATION SCAN RESULTS

Survey Location Number	Log Date	Log Time	Reading (cpm)	MDCR (cpm)	Action L. (cpm)	>AL ("+"=Yes)	E-600 Serial #	Probe Serial #
9514-01-BL-00-15-0	2/23/2007	8:21:00	4.94E+03	1.00E+03	5.94E+03		1110	1010
9514-01-SL-00-15-0	2/23/2007	8:22:00	5.45E+03				1110	1010
9514-01-BL-00-16-0	2/23/2007	8:40:00	4.71E+03	9.80E+02	5.69E+03		1110	1010
9514-01-SL-00-16-0	2/23/2007	8:41:00	4.93E+03				1110	1010
9514-01-BL-00-19-0	2/27/2007	10:00:00	5.52E+03	1.06E+03	6.58E+03		1107	1007
9514-01-SL-00-19-0	2/27/2007	10:01:00	4.79E+03				1107	1007
9514-01-BL-00-20-0	2/27/2007	10:01:00	5.91E+03	1.10E+03	7.01E+03		1107	1007
9514-01-SL-00-20-0	2/27/2007	10:02:00	6.06E+03				1107	1007
9514-01-BL-00-21-0	2/27/2007	10:03:00	8.20E+03	1.29E+03	9.49E+03		1107	1007
9514-01-SL-00-21-0	2/27/2007	10:04:00	7.80E+03				1107	1007
9514-01-BL-00-22-0	2/27/2007	10:15:00	8.77E+03	1.34E+03	1.01E+04		1107	1007
9514-01-SL-00-22-0	2/27/2007	10:16:00	8.97E+03				1107	1007
9514-01-BL-00-23-0	2/27/2007	10:18:00	8.97E+03	1.35E+03	1.03E+04		1107	1007
9514-01-SL-00-23-0	2/27/2007	10:19:00	8.60E+03				1107	1007

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SCAN AREA SURVEY RESULTS

Survey Location Number	Log Date	Log Time	Reading (cpm)	MDCR (cpm)	Action L. (cpm)	>AL ("+"=Yes)	E-600 Serial #	Probe Serial #
9514-01-BC-01-01-0	2/22/2007	9:51:00	7.15E+03	1.21E+03	8.36E+03		1107	1007
9514-01-SC-01-01-0	2/22/2007	9:55:00	6.04E+03				1107	1007
9514-01-BC-01-02-0	2/22/2007	9:56:00	6.51E+03	1.15E+03	7.66E+03		1107	1007
9514-01-SC-01-02-0	2/22/2007	10:00:00	6.00E+03				1107	1007
9514-01-BC-01-03-0	2/22/2007	10:01:00	6.34E+03	1.14E+03	7.48E+03		1107	1007
9514-01-SC-01-03-0	2/22/2007	10:06:00	6.47E+03				1107	1007
9514-01-BC-01-04-0	2/22/2007	10:07:00	6.59E+03	1.16E+03	7.75E+03		1107	1007
9514-01-SC-01-04-0	2/22/2007	10:09:00	6.09E+03				1107	1007
9514-01-BC-01-05-0	2/22/2007	10:11:00	6.71E+03	1.17E+03	7.88E+03		1107	1007
9514-01-SC-01-05-0	2/22/2007	10:14:00	6.78E+03				1107	1007
9514-01-BC-01-06-0	2/22/2007	10:16:00	6.34E+03	1.14E+03	7.48E+03		1107	1007
9514-01-SC-01-06-0	2/22/2007	10:22:00	7.19E+03				1107	1007
9514-01-BC-02-01-0	2/22/2007	9:49:00	6.12E+03	1.12E+03	7.24E+03		1110	1010
9514-01-SC-02-01-0	2/22/2007	9:53:00	6.00E+03				1110	1010
9514-01-BC-02-02-0	2/22/2007	9:53:00	5.43E+03	1.05E+03	6.48E+03		1110	1010
9514-01-SC-02-02-0	2/22/2007	9:57:00	5.98E+03				1110	1010
9514-01-BC-02-03-0	2/22/2007	9:58:00	6.45E+03	1.15E+03	7.60E+03		1110	1010
9514-01-SC-02-03-0	2/22/2007	10:01:00	5.55E+03				1110	1010
9514-01-BC-02-04-0	2/22/2007	10:02:00	5.69E+03	1.08E+03	6.77E+03		1110	1010
9514-01-SC-02-04-0	2/22/2007	10:04:00	5.53E+03				1110	1010
9514-01-BC-02-05-0	2/22/2007	10:07:00	5.49E+03	1.06E+03	6.55E+03		1110	1010
9514-01-SC-02-05-0	2/22/2007	10:10:00	5.48E+03				1110	1010
9514-01-BC-03-01-0	2/22/2007	13:14:00	6.32E+03	1.14E+03	7.46E+03		1107	1007
9514-01-SC-03-01-0	2/22/2007	13:29:00	6.85E+03				1107	1007
9514-01-BC-03-02-0	2/22/2007	13:40:00	6.70E+03	1.17E+03	7.87E+03		1107	1007
9514-01-SC-03-02-0	2/22/2007	13:45:00	6.48E+03				1107	1007
9514-01-BC-03-03-0	2/22/2007	13:48:00	6.71E+03	1.17E+03	7.88E+03		1107	1007
9514-01-SC-03-03-0	2/22/2007	13:56:00	6.05E+03				1107	1007
9514-01-BC-03-04-0	2/22/2007	13:57:00	7.13E+03	1.21E+03	8.34E+03		1107	1007
9514-01-SC-03-04-0	2/22/2007	14:00:00	6.41E+03				1107	1007

SURVEY UNIT 9514-0001
SCAN AREA SURVEY RESULTS

Survey Location Number	Log Date	Log Time	Reading (cpm)	MDCR (cpm)	Action L. (cpm)	>AL ("+"=Yes)	E-600 Serial #	Probe Serial #
9514-01-BC-03-05-0	2/22/2007	14:02:00	6.39E+03	1.14E+03	7.53E+03		1107	1007
9514-01-SC-03-05-0	2/22/2007	14:05:00	7.19E+03				1107	1007
9514-01-BC-03-06-0	2/22/2007	14:06:00	7.37E+03	1.23E+03	8.60E+03		1107	1007
9514-01-SC-03-06-0	2/22/2007	14:10:00	6.09E+03				1107	1007
9514-01-BC-03-07-0	2/22/2007	14:14:00	6.02E+03	1.11E+03	7.13E+03		1107	1007
9514-01-SC-03-07-0	2/22/2007	14:17:00	6.49E+03				1107	1007
9514-01-BC-03-08-0	2/22/2007	14:18:00	7.87E+03	1.27E+03	9.14E+03		1107	1007
9514-01-SC-03-08-0	2/22/2007	14:21:00	6.24E+03				1107	1007
9514-01-BC-03-09-0	2/22/2007	13:15:00	5.13E+03	1.02E+03	6.15E+03		1110	1010
9514-01-SC-03-09-0	2/22/2007	13:31:00	4.61E+03				1110	1010
9514-01-ER-03-09-1	2/23/2007	8:10:00	6.24E+03			+	1110	1010
9514-01-BC-03-10-0	2/22/2007	13:35:00	5.42E+03	1.05E+03	6.47E+03		1110	1010
9514-01-SC-03-10-0	2/22/2007	13:42:00	5.46E+03				1110	1010
9514-01-BC-03-11-0	2/22/2007	13:43:00	5.17E+03	1.03E+03	6.20E+03		1110	1010
9514-01-SC-03-11-0	2/22/2007	13:52:00	5.75E+03				1110	1010
9514-01-BC-03-12-0	2/22/2007	13:53:00	5.71E+03	1.08E+03	6.79E+03		1110	1010
9514-01-SC-03-12-0	2/22/2007	13:56:00	4.95E+03				1110	1010
9514-01-BC-03-13-0	2/22/2007	13:59:00	5.00E+03	1.01E+03	6.01E+03		1110	1010
9514-01-SC-03-13-0	2/22/2007	14:04:00	5.77E+03				1110	1010
9514-01-ER-03-13-1	2/23/2007	8:12:00	6.08E+03			+	1110	1010
9514-01-ER-03-13-2	2/23/2007	8:13:00	7.54E+03			+	1110	1010
9514-01-BC-03-14-0	2/22/2007	14:06:00	5.74E+03	1.08E+03	6.82E+03		1110	1010
9514-01-SC-03-14-0	2/22/2007	14:09:00	4.86E+03				1110	1010
9514-01-BC-03-15-0	2/23/2007	12:51:00	6.31E+03	1.13E+03	7.44E+03		1110	1010
9514-01-SC-03-15-0	2/23/2007	13:00:00	4.48E+03				1110	1010
9514-01-BC-03-16-0	2/23/2007	13:01:00	5.97E+03	1.10E+03	7.07E+03		1110	1010
9514-01-SC-03-16-0	2/23/2007	13:05:00	6.22E+03				1110	1010
9514-01-BC-03-17-0	2/23/2007	13:07:00	5.71E+03	1.08E+03	6.79E+03		1110	1010
9514-01-SC-03-17-0	2/23/2007	13:10:00	4.79E+03				1110	1010
9514-01-BC-03-18-0	2/23/2007	13:12:00	5.16E+03	1.03E+03	6.19E+03		1110	1010
9514-01-SC-03-18-0	2/23/2007	13:15:00	5.84E+03				1110	1010
9514-01-BC-03-19-0	2/23/2007	13:16:00	5.60E+03	1.07E+03	6.67E+03		1110	1010
9514-01-SC-03-19-0	2/23/2007	13:20:00	5.18E+03				1110	1010
9514-01-BC-03-20-0	2/23/2007	13:21:00	5.72E+03	1.08E+03	6.80E+03		1110	1010
9514-01-SC-03-20-0	2/23/2007	13:25:00	5.42E+03				1110	1010
9514-01-BC-03-21-0	2/23/2007	13:26:00	5.73E+03	1.08E+03	6.81E+03		1110	1010
9514-01-SC-03-21-0	2/23/2007	13:29:00	5.35E+03				1110	1010
9514-01-BC-03-22-0	2/23/2007	13:31:00	6.66E+03	1.17E+03	7.83E+03		1110	1010
9514-01-SC-03-22-0	2/23/2007	13:34:00	5.10E+03				1110	1010

SURVEY UNIT 9514-0001
SCAN AREA SURVEY RESULTS

Survey Location Number	Log Date	Log Time	Reading (cpm)	MDCR (cpm)	Action L. (cpm)	>AL ("+"=Yes)	E-600 Serial #	Probe Serial #
9514-01-BC-03-23-0	2/23/2007	12:50:00	6.92E+03	1.19E+03	8.11E+03		1107	1007
9514-01-SC-03-23-0	2/23/2007	13:00:00	6.67E+03				1107	1007
9514-01-ER-03-23-1	2/26/2007	10:09:00	8.43E+03			+	1107	1007
9514-01-BC-03-24-0	2/23/2007	13:00:00	7.40E+03	1.23E+03	8.63E+03		1107	1007
9514-01-SC-03-24-0	2/23/2007	13:04:00	6.83E+03				1107	1007
9514-01-BC-03-25-0	2/23/2007	13:06:00	7.01E+03	1.20E+03	8.21E+03		1107	1007
9514-01-SC-03-25-0	2/23/2007	13:12:00	6.80E+03				1107	1007
9514-01-ER-03-25-1	2/26/2007	10:12:00	1.38E+04			+	1107	1007
9514-01-BC-03-26-0	2/23/2007	13:12:00	7.19E+03	1.21E+03	8.40E+03		1107	1007
9514-01-SC-03-26-0	2/23/2007	13:18:00	7.21E+03				1107	1007
9514-01-ER-03-26-1	2/26/2007	10:16:00	1.72E+04			+	1107	1007
9514-01-BC-03-27-0	2/23/2007	13:19:00	7.52E+03	1.24E+03	8.76E+03		1107	1007
9514-01-SC-03-27-0	2/23/2007	13:23:00	6.71E+03				1107	1007
9514-01-BC-03-28-0	2/23/2007	13:26:00	4.76E+03	9.85E+02	5.75E+03		1107	1007
9514-01-SC-03-28-0	2/23/2007	13:27:00	5.47E+03				1107	1007
9514-01-BC-03-29-0	2/23/2007	13:28:00	4.70E+03	9.79E+02	5.68E+03		1107	1007
9514-01-SC-03-29-0	2/23/2007	13:29:00	5.22E+03				1107	1007
9514-01-BC-03-30-0	2/23/2007	13:29:00	4.76E+03	9.85E+02	5.75E+03		1107	1007
9514-01-SC-03-30-0	2/23/2007	13:31:00	4.41E+03				1107	1007
9514-01-BC-03-31-0	2/23/2007	13:31:00	4.92E+03	1.00E+03	5.92E+03		1107	1007
9514-01-SC-03-31-0	2/23/2007	13:32:00	4.28E+03				1107	1007
9514-01-BC-03-32-0	2/23/2007	13:32:00	4.91E+03	1.00E+03	5.91E+03		1107	1007
9514-01-SC-03-32-0	2/23/2007	13:33:00	4.57E+03				1107	1007
9514-01-BC-03-33-0	2/23/2007	13:34:00	4.52E+03	9.60E+02	5.48E+03		1107	1007
9514-01-SC-03-33-0	2/23/2007	13:35:00	4.97E+03				1107	1007
9514-01-BC-03-34-0	2/23/2007	13:35:00	4.77E+03	9.86E+02	5.76E+03		1107	1007
9514-01-SC-03-34-0	2/23/2007	13:36:00	4.77E+03				1107	1007
9514-01-BC-03-35-0	2/23/2007	13:37:00	5.05E+03	1.01E+03	6.06E+03		1107	1007
9514-01-SC-03-35-0	2/23/2007	13:38:00	4.64E+03				1107	1007
9514-01-BC-03-36-0	2/23/2007	13:39:00	4.90E+03	1.00E+03	5.90E+03		1107	1007
9514-01-SC-03-36-0	2/23/2007	13:39:00	5.52E+03				1107	1007
9514-01-BC-03-37-0	2/23/2007	13:41:00	5.62E+03	1.07E+03	6.69E+03		1107	1007
9514-01-SC-03-37-0	2/23/2007	13:42:00	5.35E+03				1107	1007
9514-01-BC-03-38-0	2/23/2007	13:42:00	5.21E+03	1.03E+03	6.24E+03		1107	1007
9514-01-SC-03-38-0	2/23/2007	13:43:00	4.71E+03				1107	1007
9514-01-BC-03-39-0	2/23/2007	13:44:00	5.27E+03	1.04E+03	6.31E+03		1107	1007
9514-01-SC-03-39-0	2/23/2007	13:45:00	5.87E+03				1107	1007
9514-01-BC-03-40-0	2/23/2007	13:46:00	5.82E+03	1.09E+03	6.91E+03		1107	1007
9514-01-SC-03-40-0	2/23/2007	13:47:00	5.07E+03				1107	1007

EAST PRIMARY PARKING LOT
SURVEY UNIT 9514-0001

RELEASE RECORD

ATTACHMENT 3 (LABORATORY DATA)



Connecticut Yankee Atomic Power Co.
Soils PO# 002332
Work Order: 181554
SDG: MSR#07-00100

<u>Laboratory ID</u>	<u>Client ID</u>
181554001	9514-0001-001F
181554002	9514-0001-002F
181554003	9514-0001-003F
181554004	9514-0001-004F
181554005	9514-0001-004FS
181554006	9514-0001-005F
181554007	9514-0001-006F
181554008	9514-0001-007F
181554009	9514-0001-009F
181554010	9514-0001-010F
181554011	9514-0001-010FS
181554012	9514-0001-011F
181554013	9514-0001-012F
181554014	9514-0001-013F
181554015	9514-0001-014F
181554016	9514-0001-015F
181554017	9514-0001-016F
181554018	9514-0001-024F
181554019	9514-0001-025F
181554020	9514-0001-026F
181554021	9514-0001-027F
181554022	9514-0001-028F
181554023	9514-0001-029F
181554024	9514-0001-019J
181554025	9514-0001-020J
181554026	9514-0001-021J
181554027	9514-0001-022J
181554028	9514-0001-023J

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Data Review Qualifier Definitions	12
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General Narrative

**General Narrative
for
Connecticut Yankee Atomic Power Co.
Work Order: 181554
SDG: MSR#07-00100**

March 06, 2007

Laboratory Identification:

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

Summary

Sample receipt

The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on March 01, 2007 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>
181554001	9514-0001-001F
181554002	9514-0001-002F
181554003	9514-0001-003F
181554004	9514-0001-004F
181554005	9514-0001-004FS
181554006	9514-0001-005F
181554007	9514-0001-006F
181554008	9514-0001-007F
181554009	9514-0001-009F
181554010	9514-0001-010F
181554011	9514-0001-010FS
181554012	9514-0001-011F
181554013	9514-0001-012F
181554014	9514-0001-013F
181554015	9514-0001-014F
181554016	9514-0001-015F
181554017	9514-0001-016F
181554018	9514-0001-024F
181554019	9514-0001-025F
181554020	9514-0001-026F
181554021	9514-0001-027F
181554022	9514-0001-028F
181554023	9514-0001-029F
181554024	9514-0001-019J
181554025	9514-0001-020J

181554026 9514-0001-021J
181554027 9514-0001-022J
181554028 9514-0001-023J

Items of Note

There are no items to note.

Case Narrative

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (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

Twenty-six 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 06 March 2007

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. 2007-00040

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 & Sr-90	FSSALL						Comments: <div style="text-align: right; font-size: 1.2em;">181554</div>	
Analytical Lab (Name, City, State): General Engineering Laboratories 2040 Savage Road Charleston, SC 29407 ATT: Cheryl Jones (843-556-8171)														
Priority: <input type="checkbox"/> 30 D. <input type="checkbox"/> 15 D. <input checked="" type="checkbox"/> 7 D. Other:														
Sample Designation	Date	Time								Comment, Preservation	Lab Sample ID			
9514-0001-011F	2/23/07	0911	TS	G	BP	X								
9514-0001-012F	2/23/07	0920	TS	G	BP	X								
9514-0001-013F	2/23/07	0922	TS	G	BP		X							
9514-0001-014F	2/23/07	0925	TS	G	BP	X								
9514-0001-015F	2/23/07	0920	TS	G	BP	X								
9514-0001-016F	2/23/07	0906	TS	G	BP	X								
9514-0001-024F	2/23/07	0900	TS	G	BP	X								
9514-0001-025F	2/23/07	0901	TS	G	BP	X								
9514-0001-026F	2/23/07	0902	TS	G	BP	X								
NOTES: PO #: 002332 MSR #: 07-00100 <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? <input checked="" type="checkbox"/> N Custody Seal Intact? <input checked="" type="checkbox"/> N	
1) Relinquished By <i>[Signature]</i> Date/Time <u>2/23/07 1340</u>			2) Received By <i>[Signature]</i> Date/Time <u>3/14/07 9:00</u>			Bill of Lading # _____								
3) Relinquished By Date/Time			4) Received By Date/Time											
5) Relinquished By Date/Time			6) 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. 2007-00041

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 & Sr-90	FSSALL						Comments:	
Analytical Lab (Name, City, State): General Engineering Laboratories 2040 Savage Road Charleston, SC 29407 ATT: Cheryl Jones (843-556-8171)													181554	
Priority: <input type="checkbox"/> 30 D. <input type="checkbox"/> 15 D. <input checked="" type="checkbox"/> 7 D. Other:													Comment, Preservation	Lab Sample ID
Sample Designation	Date	Time												
9514-0001-027F	2/26/07	1009	TS	G	BP	X								
9514-0001-028F	2/26/07	1012	TS	G	BP	X								
9514-0001-029F	2/26/07	1016	TS	G	BP	X								
NOTES: PO #: 002332 MSR #: 07-00100 <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.: 14 Deg. C Custody Sealed? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Custody Seal Intact? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N					
1) Relinquished By <i>[Signature]</i>		Date/Time 2/28/07 1340		2) Received By <i>[Signature]</i>		Date/Time 3/1/07 9:00		Bill of Lading #						
3) Relinquished By		Date/Time		4) Received By		Date/Time								
5) Relinquished By		Date/Time		6) Received By		Date/Time								

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Figure 1. Sample Check-in List

Date/Time Received: 3/1/07 9:00

SDG#: MSR # 07-00100

Work Order Number: 181554

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

1. Custody Seals on shipping container intact? Yes No
2. Custody Seals dated and signed? Yes No
3. Chain-of-Custody record present? Yes No
4. Cooler temperature See cont. form
5. Vermiculite/packing materials is: Wet Dry
6. Number of samples in shipping container: 28
7. Sample holding times exceeded? Yes No

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

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

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

Sample Custodian/Laboratory: Jessie Roberts Date: 3/1/07

Telephoned to: _____ On _____ By _____

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 181554**

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:	613994
Prep Batch Number:	613800
Dry Soil Prep GL-RAD-A-021 Batch Number:	613798

Sample ID	Client ID
181554001	9514-0001-001F
181554014	9514-0001-013F
1201287982	Method Blank (MB)
1201287983	181554001(9514-0001-001F) Sample Duplicate (DUP)
1201287984	181554001(9514-0001-001F) Matrix Spike (MS)
1201287985	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: 181554001 (9514-0001-001F).

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

Sample 181554014 (9514-0001-013F) was recounted due to a suspected false positive.

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: 613995
Prep Batch Number: 613800
Dry Soil Prep GL-RAD-A-021 Batch Number: 613798

Sample ID	Client ID
181554001	9514-0001-001F
181554014	9514-0001-013F
1201287986	Method Blank (MB)
1201287987	181554001(9514-0001-001F) Sample Duplicate (DUP)
1201287988	181554001(9514-0001-001F) Matrix Spike (MS)
1201287989	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: 181554001 (9514-0001-001F).

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

Sample 181554001 (9514-0001-001F) was recounted due to a suspected false positive.

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:	613997
Prep Batch Number:	613800
Dry Soil Prep GL-RAD-A-021 Batch Number:	613798

Sample ID	Client ID
181554001	9514-0001-001F
181554014	9514-0001-013F
1201287994	Method Blank (MB)
1201287995	181554001(9514-0001-001F) Sample Duplicate (DUP)
1201287996	181554001(9514-0001-001F) Matrix Spike (MS)
1201287997	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# 9.

Calibration Information:

Calibration Information

All initial and continuing calibration requirements have been met.

Standards Information

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

Sample Geometry

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

Quality Control (QC) Information:

Blank Information

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

Designated QC

The following sample was used for QC: 181554001 (9514-0001-001F).

QC Information

All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time

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

Preparation Information

All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis

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

Miscellaneous Information:

NCR Documentation

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

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

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:	614269
Prep Batch Number:	613798

Sample ID	Client ID
181554001	9514-0001-001F
181554002	9514-0001-002F
181554003	9514-0001-003F
181554004	9514-0001-004F
181554005	9514-0001-004FS
181554006	9514-0001-005F
181554007	9514-0001-006F
181554008	9514-0001-007F
181554009	9514-0001-009F
181554010	9514-0001-010F
181554011	9514-0001-010FS
181554012	9514-0001-011F
181554013	9514-0001-012F
181554014	9514-0001-013F
181554015	9514-0001-014F
181554016	9514-0001-015F
181554017	9514-0001-016F
181554018	9514-0001-024F
181554019	9514-0001-025F
181554020	9514-0001-026F
1201288621	Method Blank (MB)
1201288622	181554011(9514-0001-010FS) Sample Duplicate (DUP)
1201288623	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: 181554011 (9514-0001-010FS).

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.	Cesium-134	181554014	
		Europium-155	181554010 181554014	
UI	Data rejected due to low abundance.	Americium-241	181554011 181554012	
			Cesium-134	181554006 181554007 181554008 181554009 181554010 181554011 181554012 181554013 181554015
		Cobalt-60		181554015 181554017
				Manganese-54
		Silver-108m		

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: 614271
Prep Batch Number: 613799

Sample ID	Client ID
181554021	9514-0001-027F
181554022	9514-0001-028F
181554023	9514-0001-029F
181554024	9514-0001-019J
181554025	9514-0001-020J
181554026	9514-0001-021J
181554027	9514-0001-022J
181554028	9514-0001-023J
1201288624	Method Blank (MB)
1201288625	181545014(07-LE24-0047) Sample Duplicate (DUP)
1201288627	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: 181545014 (07-LE24-0047).

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, 1201288625 (07-LE24-0047), for TI-208 did not meet the relative percent difference requirement, however they do meet the relative error ratio requirement with value of 2.333.

Qualifier information

Qualifier	Reason	Analyte	Sample
UI	Data rejected due to high peak-width.	Bismuth-212	181554026
		Cobalt-57	1201288624
UI	Data rejected due to interference.	Beryllium-7	1201288625
UI	Data rejected due to low abundance.	Cerium-141	1201288625
		Cesium-134	181554023
			181554025
			181554027
			1201288625
		Lead-214	1201288624
		Niobium-95	1201288625

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:	613959
Prep Batch Number:	613800
Dry Soil Prep GL-RAD-A-021 Batch Number:	613798

Sample ID	Client ID
181554001	9514-0001-001F
181554002	9514-0001-002F
181554003	9514-0001-003F
181554004	9514-0001-004F
181554005	9514-0001-004FS
181554006	9514-0001-005F
181554007	9514-0001-006F
181554008	9514-0001-007F
181554009	9514-0001-009F
181554010	9514-0001-010F
181554011	9514-0001-010FS
181554012	9514-0001-011F
181554013	9514-0001-012F
181554014	9514-0001-013F
181554015	9514-0001-014F
181554016	9514-0001-015F
181554017	9514-0001-016F
181554018	9514-0001-024F
181554019	9514-0001-025F
181554020	9514-0001-026F
1201287892	Method Blank (MB)
1201287893	181554003(9514-0001-003F) Sample Duplicate (DUP)
1201287894	181554003(9514-0001-003F) Matrix Spike (MS)
1201287895	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# 11.

Calibration Information:

Calibration Information

All initial and continuing calibration requirements have been met.

Standards Information

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

Sample Geometry

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

Quality Control (QC) Information:

Blank Information

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

Designated QC

The following sample was used for QC: 181554003 (9514-0001-003F).

QC Information

All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time

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

Preparation Information

All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis

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

Chemical Recoveries

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

Miscellaneous Information:

NCR Documentation

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

Additional Comments

Additional comments were not required for this sample set.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

Product:	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:	613960
Prep Batch Number:	613843
Dry Soil Prep GL-RAD-A-021 Batch Number:	613799

Sample ID	Client ID
181554021	9514-0001-027F
181554022	9514-0001-028F
181554023	9514-0001-029F
181554024	9514-0001-019J
181554025	9514-0001-020J
181554026	9514-0001-021J
181554027	9514-0001-022J
181554028	9514-0001-023J
1201287896	Method Blank (MB)
1201287897	181554022(9514-0001-028F) Sample Duplicate (DUP)
1201287898	181554022(9514-0001-028F) Matrix Spike (MS)
1201287899	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# 11.

Calibration Information:

Calibration Information

All initial and continuing calibration requirements have been met.

Standards Information

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

Sample Geometry

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

Quality Control (QC) Information:

Blank Information

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

Designated QC

The following sample was used for QC: 181554022 (9514-0001-028F).

QC Information

All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time

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

Preparation Information

All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis

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

Chemical Recoveries

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

Miscellaneous Information:

NCR Documentation

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

Additional Comments

Additional comments were not required for this sample set.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

Product: Liquid Scint Tc99, Solid-ALL FSS
Analytical Method: DOE EML HASL-300, Tc-02-RC Modified
Analytical Batch Number: 614001

Sample ID	Client ID
181554001	9514-0001-001F
181554014	9514-0001-013F
1201288002	Method Blank (MB)
1201288003	181554001(9514-0001-001F) Sample Duplicate (DUP)
1201288004	181554001(9514-0001-001F) Matrix Spike (MS)
1201288005	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 volumes in this batch.

Designated QC

The following sample was used for QC: 181554001 (9514-0001-001F).

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 1201288002 (MB), 1201288003 (9514-0001-001F), 181554001 (9514-0001-001F) and 181554014 (9514-0001-013F) were recounted to verify sample results. Second counts being reported..

Miscellaneous Information:**NCR Documentation**

Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. 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: 613996
Prep Batch Number: 613800
Dry Soil Prep GL-RAD-A-021 Batch Number: 613798

Sample ID	Client ID
181554001	9514-0001-001F
181554014	9514-0001-013F
1201287990	Method Blank (MB)
1201287991	181554001(9514-0001-001F) Sample Duplicate (DUP)
1201287992	181554001(9514-0001-001F) Matrix Spike (MS)
1201287993	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: 181554001 (9514-0001-001F).

QC Information

All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time

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

Preparation Information

All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis

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

Miscellaneous Information:

NCR Documentation

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

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:	613999
Prep Batch Number:	613800
Dry Soil Prep GL-RAD-A-021 Batch Number:	613798

Sample ID	Client ID
181554001	9514-0001-001F
181554014	9514-0001-013F
1201287998	Method Blank (MB)
1201287999	181554001(9514-0001-001F) Sample Duplicate (DUP)
1201288000	181554001(9514-0001-001F) Matrix Spike (MS)
1201288001	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: 181554001 (9514-0001-001F).

QC Information

All of the QC samples met the required acceptance limits.

Technical Information:**Holding Time**

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

Preparation Information

All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis

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

Miscellaneous Information:**NCR Documentation**

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

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: 614003

Sample ID	Client ID
181554001	9514-0001-001F
181554014	9514-0001-013F
1201288006	Method Blank (MB)
1201288007	181554014(9514-0001-013F) Sample Duplicate (DUP)
1201288008	181554014(9514-0001-013F) Matrix Spike (MS)
1201288009	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 volume in this batch.

Designated QC

The following sample was used for QC: 181554014 (9514-0001-013F).

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 C14, Solid All,FSS

Analytical Method: EPA EERF C-01 Modified

Analytical Batch Number: 614005

Sample ID	Client ID
181554001	9514-0001-001F
181554014	9514-0001-013F
1201288010	Method Blank (MB)
1201288011	181554014(9514-0001-013F) Sample Duplicate (DUP)
1201288012	181554014(9514-0001-013F) Matrix Spike (MS)
1201288013	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: 181554014 (9514-0001-013F).

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 1201288011 (9514-0001-013F), 181554001 (9514-0001-001F) and 181554014 (9514-0001-013F) were recounted due to a negative result greater than three times the error.

Miscellaneous Information:

NCR Documentation

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

Additional Comments

Additional comments were not required for this sample set.

Qualifier information

Manual qualifiers were not required.

Certification Statement

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#07-00100 GEL Work Order: 181554

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: March 8, 2007

Client Sample ID:	9514-0001-001F	Project:	YANK01204
Sample ID:	181554001	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	23-FEB-07		
Receive Date:	01-MAR-07		
Collector:	Client		
Moisture:	5.6%		

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N
Rad Alpha Spec Analysis													
<i>Alphaspec Am241, Cm, Solid ALL FSS</i>													
Americium-241	U	0.027	+/-0.101	0.0714	+/-0.101	0.219	pCi/g		MXA	03/03/07	1706	613994	
													1
Curium-242	U	0.0292	+/-0.0572	0.00	+/-0.0573	0.0791	pCi/g						
Curium-243/244	U	0.0563	+/-0.119	0.0757	+/-0.119	0.228	pCi/g						
<i>Alphaspec Pu, Solid-ALL FSS</i>													
Plutonium-238	U	-0.0213	+/-0.106	0.099	+/-0.106	0.288	pCi/g		MXA	03/08/07	0958	613995	
													1
Plutonium-239/240	U	0.0612	+/-0.138	0.0895	+/-0.139	0.269	pCi/g						
<i>Liquid Scint Pu241, Solid-ALL FSS</i>													
Plutonium-241	U	1.13	+/-7.38	6.14	+/-7.38	13.0	pCi/g		MXA	03/05/07	2211	613997	
													1
Rad Gamma Spec Analysis													
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>													
<i>Waived</i>													
Actinium-228		0.229	+/-0.111	0.0511	+/-0.111	0.102	pCi/g		MJH1	03/05/07	1020	614269	
Americium-241	U	-0.00525	+/-0.0639	0.0631	+/-0.0639	0.126	pCi/g						
Bismuth-212	U	0.147	+/-0.140	0.130	+/-0.140	0.260	pCi/g						
Bismuth-214		0.227	+/-0.0551	0.0268	+/-0.0551	0.0535	pCi/g						
Cesium-134	U	0.0203	+/-0.0176	0.0171	+/-0.0176	0.0342	pCi/g						
Cesium-137	U	0.0271	+/-0.0199	0.0145	+/-0.0199	0.029	pCi/g						
Cobalt-60	U	0.00288	+/-0.0172	0.015	+/-0.0172	0.0299	pCi/g						
Europium-152		0.344	+/-0.0676	0.0342	+/-0.0676	0.0683	pCi/g						
Europium-154	U	0.0102	+/-0.0518	0.0452	+/-0.0518	0.0904	pCi/g						
Europium-155	U	0.0211	+/-0.0463	0.0451	+/-0.0463	0.0902	pCi/g						
Lead-212		0.257	+/-0.0424	0.0201	+/-0.0424	0.0402	pCi/g						
Lead-214		0.268	+/-0.0569	0.0252	+/-0.0569	0.0504	pCi/g						
Manganese-54	U	-0.0141	+/-0.0164	0.0136	+/-0.0164	0.0271	pCi/g						
Niobium-94	U	0.00364	+/-0.0146	0.013	+/-0.0146	0.0259	pCi/g						
Potassium-40		4.88	+/-0.604	0.130	+/-0.604	0.259	pCi/g						
Radium-226		0.227	+/-0.0551	0.0268	+/-0.0551	0.0535	pCi/g						
Silver-108m	U	-0.00662	+/-0.0129	0.0113	+/-0.0129	0.0225	pCi/g						
Thallium-208		0.0699	+/-0.0243	0.0149	+/-0.0243	0.0297	pCi/g						
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid-ALL FSS</i>													
Strontium-90	U	-0.000887	+/-0.0206	0.0174	+/-0.0206	0.0414	pCi/g		KSD1	03/06/07	1616	613959	

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: March 8, 2007

Client Sample ID: 9514-0001-001F
Sample ID: 181554001

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	NA
Rad Liquid Scintillation Analysis													
<i>LSC, Tritium Dist, Solid – 3 pCi/g</i>													
Tritium	U	0.330	+/-1.23	1.02	+/-1.23	2.12	pCi/g		AXD2	03/03/07	0040	614003	
<i>Liquid Scint C14, Solid All,FSS</i>													
Carbon-14	U	-0.0471	+/-0.0885	0.0753	+/-0.0885	0.154	pCi/g		AXD2	03/05/07	1153	614005	
<i>Liquid Scint Fe55, Solid-ALL FSS</i>													
Iron-55	U	30.3	+/-45.6	29.4	+/-45.6	62.0	pCi/g		MXP1	03/07/07	1010	613996	
<i>Liquid Scint Ni63, Solid-ALL FSS</i>													
Nickel-63	U	-7.41	+/-7.32	6.50	+/-7.32	13.7	pCi/g		MXP1	03/06/07	1446	613999	
<i>Liquid Scint Tc99, Solid-ALL FSS</i>													
Technetium-99	U	0.221	+/-0.245	0.200	+/-0.245	0.411	pCi/g		MXP1	03/03/07	2013	614001	

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TMB1	03/01/07	1037	613798

The following Analytical Methods were performed

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

Surrogate/Tracer recovery	Test	Recovery %	Acceptable Limits
Americium-243 Tracer	Alphaspec Am241, Cm, Solid ALL	88	(15%-125%)
Americium-243 Tracer	Alphaspec Am241, Cm, Solid ALL	88	(15%-125%)
Plutonium-242 Tracer	Alphaspec Pu, Solid-ALL FSS	80	(15%-125%)

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

Report Date: March 8, 2007

Client Sample ID: 9514-0001-001F
Sample ID: 181554001

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time Batch	N
Plutonium-242 Tracer		Alphaspec Pu, Solid-ALL	FSS		80		(15%-125%)					
Plutonium-241		Liquid Scint Pu241, Solid-ALL	FS		89		(25%-125%)					
Plutonium-242 Tracer		Liquid Scint Pu241, Solid-ALL	FS		89		(25%-125%)					
Plutonium-242 Tracer		Liquid Scint Pu241, Solid-ALL	FS		89		(25%-125%)					
Strontium Carrier		GFPC, Sr90, solid-ALL	FSS		71		(25%-125%)					
Strontium Carrier		GFPC, Sr90, solid-ALL	FSS		71		(25%-125%)					
Iron-59 Tracer		Liquid Scint Fe55, Solid-ALL	FS		66		(15%-125%)					
Iron-59 Tracer		Liquid Scint Fe55, Solid-ALL	FS		66		(15%-125%)					
Nickel Carrier		Liquid Scint Ni63, Solid-ALL	FS		100		(25%-125%)					
Nickel Carrier		Liquid Scint Ni63, Solid-ALL	FS		100		(25%-125%)					
Technetium-99		Liquid Scint Tc99, Solid-ALL	FS		76		(15%-125%)					
Technetium-99m Tracer		Liquid Scint Tc99, Solid-ALL	FS		76		(15%-125%)					
Technetium-99m Tracer		Liquid Scint Tc99, Solid-ALL	FS		76		(15%-125%)					

Notes:

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 - < Result is less than value reported
 - > Result is greater than value reported
 - A The TIC is a suspected aldol-condensation product
 - B For General Chemistry and Organic analysis the 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
 - ND Analyte concentration is not detected above the detection limit
 - 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: March 8, 2007

Client Sample ID: 9514-0001-002F
Sample ID: 181554002
Matrix: TS
Collect Date: 23-FEB-07
Receive Date: 01-MAR-07
Collector: Client
Moisture: 11.9%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch
Rad Gamma Spec Analysis												
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>												
<i>Waived</i>												
Actinium-228		0.583	+/-0.139	0.0551	+/-0.139	0.110	pCi/g		MJH1	03/05/07	1021	614269
Americium-241	U	-0.00801	+/-0.0643	0.0521	+/-0.0643	0.104	pCi/g					
Bismuth-212		0.361	+/-0.237	0.118	+/-0.237	0.237	pCi/g					
Bismuth-214		0.362	+/-0.0914	0.0295	+/-0.0914	0.059	pCi/g					
Cesium-134	U	0.0308	+/-0.0266	0.0202	+/-0.0266	0.0403	pCi/g					
Cesium-137		0.0623	+/-0.0288	0.0153	+/-0.0288	0.0306	pCi/g					
Cobalt-60	U	0.00782	+/-0.0224	0.0195	+/-0.0224	0.0389	pCi/g					
Europium-152	U	0.038	+/-0.0429	0.0439	+/-0.0429	0.0877	pCi/g					
Europium-154	U	-0.0436	+/-0.0638	0.0492	+/-0.0638	0.0984	pCi/g					
Europium-155	U	0.0292	+/-0.0523	0.048	+/-0.0523	0.0959	pCi/g					
Lead-212		0.537	+/-0.0633	0.0233	+/-0.0633	0.0465	pCi/g					
Lead-214		0.427	+/-0.0805	0.0291	+/-0.0805	0.0583	pCi/g					
Manganese-54	U	-0.00035	+/-0.0195	0.0169	+/-0.0195	0.0338	pCi/g					
Niobium-94	U	-0.013	+/-0.0193	0.0153	+/-0.0193	0.0307	pCi/g					
Potassium-40		9.93	+/-0.935	0.131	+/-0.935	0.262	pCi/g					
Radium-226		0.362	+/-0.0914	0.0295	+/-0.0914	0.059	pCi/g					
Silver-108m	U	-0.00619	+/-0.0177	0.0151	+/-0.0177	0.0302	pCi/g					
Thallium-208		0.136	+/-0.0439	0.0159	+/-0.0439	0.0317	pCi/g					

Rad Gas Flow Proportional Counting

GFPC, Sr90, solid-ALL FSS

Strontium-90	U	-0.0205	+/-0.0201	0.0202	+/-0.0201	0.0471	pCi/g		KSD1	03/06/07	1616	613959
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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	TMB1	03/01/07	1037	613798

The following Analytical Methods were performed

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
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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: March 8, 2007

Client Sample ID: 9514-0001-002F
Sample ID: 181554002

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 Carrier		GFPC, Sr90, solid-ALL FSS			57		(25%-125%)						
Strontium Carrier		GFPC, Sr90, solid-ALL FSS			57		(25%-125%)						

Notes:

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- ** Analyte is a surrogate compound
 - < Result is less than value reported
 - > Result is greater than value reported
 - A The TIC is a suspected aldol-condensation product
 - B For General Chemistry and Organic analysis the 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
 - ND Analyte concentration is not detected above the detection limit
 - 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: March 8, 2007

Client Sample ID: 9514-0001-003F
Sample ID: 181554003
Matrix: TS
Collect Date: 23-FEB-07
Receive Date: 01-MAR-07
Collector: Client
Moisture: .419%

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		0.473	+/-0.118	0.0398	+/-0.118	0.0796	pCi/g		MJH1	03/05/07	1022	614269
Americium-241	U	0.0213	+/-0.0847	0.0734	+/-0.0847	0.147	pCi/g					
Bismuth-212		0.441	+/-0.347	0.0923	+/-0.347	0.185	pCi/g					
Bismuth-214		0.348	+/-0.0644	0.024	+/-0.0644	0.0479	pCi/g					
Cesium-134	U	0.0159	+/-0.0207	0.0153	+/-0.0207	0.0306	pCi/g					
Cesium-137	U	0.0157	+/-0.0152	0.014	+/-0.0152	0.0279	pCi/g					
Cobalt-60	U	0.00703	+/-0.0144	0.013	+/-0.0144	0.026	pCi/g					
Europium-152	U	-0.0203	+/-0.0466	0.0318	+/-0.0466	0.0636	pCi/g					
Europium-154	U	-0.000222	+/-0.0447	0.0381	+/-0.0447	0.0761	pCi/g					
Europium-155	U	0.0382	+/-0.0453	0.0427	+/-0.0453	0.0853	pCi/g					
Lead-212		0.431	+/-0.0516	0.0201	+/-0.0516	0.0403	pCi/g					
Lead-214		0.422	+/-0.0666	0.0232	+/-0.0666	0.0464	pCi/g					
Manganese-54	U	0.00505	+/-0.0138	0.0125	+/-0.0138	0.0249	pCi/g					
Niobium-94	U	0.0132	+/-0.0139	0.0126	+/-0.0139	0.0251	pCi/g					
Potassium-40		9.99	+/-0.843	0.0956	+/-0.843	0.191	pCi/g					
Radium-226		0.348	+/-0.0644	0.024	+/-0.0644	0.0479	pCi/g					
Silver-108m	U	-0.00707	+/-0.0129	0.0111	+/-0.0129	0.0222	pCi/g					
Thallium-208		0.137	+/-0.0391	0.0116	+/-0.0391	0.0231	pCi/g					
Rad Gas Flow Proportional Counting												
<i>GFPC, Sr90, solid-ALL FSS</i>												
Strontium-90	U	0.00352	+/-0.0252	0.0207	+/-0.0252	0.0475	pCi/g		KSD1	03/06/07	1616	613959

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TMB1	03/01/07	1037	613798

The following Analytical Methods were performed

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
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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: March 8, 2007

Client Sample ID: 9514-0001-003F
Sample ID: 181554003

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 Carrier		GFPC, Sr90, solid-ALL FSS			70		(25%-125%)						
Strontium Carrier		GFPC, Sr90, solid-ALL FSS			70		(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
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 - BD Results are either below the MDC or tracer recovery is low
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 - 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: March 8, 2007

Client Sample ID: 9514-0001-004F
Sample ID: 181554004
Matrix: TS
Collect Date: 23-FEB-07
Receive Date: 01-MAR-07
Collector: Client
Moisture: 9.7%

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		0.541	+/-0.158	0.0561	+/-0.158	0.112	pCi/g		MJH1	03/05/07	1023	614269
Americium-241	U	0.0601	+/-0.062	0.0523	+/-0.062	0.105	pCi/g					
Bismuth-212	U	0.331	+/-0.315	0.172	+/-0.315	0.344	pCi/g					
Bismuth-214		0.352	+/-0.0847	0.0345	+/-0.0847	0.0689	pCi/g					
Cesium-134	U	0.0373	+/-0.026	0.0245	+/-0.026	0.049	pCi/g					
Cesium-137		0.105	+/-0.050	0.0196	+/-0.050	0.0392	pCi/g					
Cobalt-60	U	0.0206	+/-0.0226	0.0208	+/-0.0226	0.0415	pCi/g					
Europium-152	U	-0.0273	+/-0.0671	0.0469	+/-0.0671	0.0937	pCi/g					
Europium-154	U	-0.0201	+/-0.0656	0.0531	+/-0.0656	0.106	pCi/g					
Europium-155	U	0.0766	+/-0.0694	0.0512	+/-0.0694	0.102	pCi/g					
Lead-212		0.492	+/-0.0696	0.027	+/-0.0696	0.0539	pCi/g					
Lead-214		0.426	+/-0.0893	0.0357	+/-0.0893	0.0714	pCi/g					
Manganese-54	U	0.0039	+/-0.0228	0.020	+/-0.0228	0.040	pCi/g					
Niobium-94	U	-0.015	+/-0.0192	0.015	+/-0.0192	0.030	pCi/g					
Potassium-40		10.4	+/-0.992	0.158	+/-0.992	0.315	pCi/g					
Radium-226		0.352	+/-0.0847	0.0345	+/-0.0847	0.0689	pCi/g					
Silver-108m	U	-0.00146	+/-0.0229	0.0183	+/-0.0229	0.0366	pCi/g					
Thallium-208		0.169	+/-0.0342	0.0167	+/-0.0342	0.0334	pCi/g					
Rad Gas Flow Proportional Counting												
<i>GFPC, Sr90, solid-ALL FSS</i>												
Strontium-90		0.0464	+/-0.0297	0.0182	+/-0.0298	0.0433	pCi/g		KSD1	03/06/07	1616	613959

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TMB1	03/01/07	1037	613798

The following Analytical Methods were performed

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
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2040 Savage Road Charleston SC 29407 – (843) 556-8171 – www.gel.com

Certificate of Analysis

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

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

Report Date: March 8, 2007

Client Sample ID: 9514-0001-004F
Sample ID: 181554004

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 Carrier		GFPC, Sr90, solid-ALL FSS			77		(25%-125%)						
Strontium Carrier		GFPC, Sr90, solid-ALL FSS			77		(25%-125%)						

Notes:

The Qualifiers in this report are defined as follows :

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 - > Result is greater than value reported
 - A The TIC is a suspected aldol-condensation product
 - B For General Chemistry and Organic analysis the 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
 - ND Analyte concentration is not detected above the detection limit
 - 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: March 8, 2007

Client Sample ID: 9514-0001-004FS
Sample ID: 181554005
Matrix: TS
Collect Date: 23-FEB-07
Receive Date: 01-MAR-07
Collector: Client
Moisture: 9%

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		0.432	+/-0.225	0.0848	+/-0.225	0.170	pCi/g		MJH1	03/05/07	1024	614269
Americium-241	U	0.0472	+/-0.0358	0.0296	+/-0.0358	0.0591	pCi/g					
Bismuth-212		0.535	+/-0.276	0.122	+/-0.276	0.244	pCi/g					
Bismuth-214		0.402	+/-0.110	0.0417	+/-0.110	0.0833	pCi/g					
Cesium-134	U	0.0167	+/-0.0315	0.0284	+/-0.0315	0.0568	pCi/g					
Cesium-137		0.151	+/-0.0497	0.0245	+/-0.0497	0.0489	pCi/g					
Cobalt-60	U	0.0265	+/-0.0334	0.0307	+/-0.0334	0.0613	pCi/g					
Europium-152	U	-0.0531	+/-0.0749	0.0486	+/-0.0749	0.0972	pCi/g					
Europium-154	U	-0.00853	+/-0.0985	0.0811	+/-0.0985	0.162	pCi/g					
Europium-155	U	0.0316	+/-0.0576	0.0472	+/-0.0576	0.0944	pCi/g					
Lead-212		0.358	+/-0.0822	0.0335	+/-0.0822	0.067	pCi/g					
Lead-214		0.354	+/-0.0886	0.0388	+/-0.0886	0.0775	pCi/g					
Manganese-54	U	-0.0119	+/-0.0284	0.0234	+/-0.0284	0.0467	pCi/g					
Niobium-94	U	-0.0108	+/-0.0242	0.0201	+/-0.0242	0.0402	pCi/g					
Potassium-40		11.1	+/-1.09	0.169	+/-1.09	0.338	pCi/g					
Radium-226		0.402	+/-0.110	0.0417	+/-0.110	0.0833	pCi/g					
Silver-108m	U	-0.0152	+/-0.0227	0.0183	+/-0.0227	0.0366	pCi/g					
Thallium-208		0.171	+/-0.0599	0.022	+/-0.0599	0.044	pCi/g					
Rad Gas Flow Proportional Counting												
<i>GFPC, Sr90, solid-ALL FSS</i>												
Strontium-90		0.0776	+/-0.0346	0.0204	+/-0.0347	0.047	pCi/g		KSD1	03/06/07	1616	613959

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TMB1	03/01/07	1037	613798

The following Analytical Methods were performed

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

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

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

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

Report Date: March 8, 2007

Client Sample ID: 9514-0001-004FS
Sample ID: 181554005

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 Carrier		GFPC, Sr90, solid-ALL FSS			74		(25%-125%)						
Strontium Carrier		GFPC, Sr90, solid-ALL FSS			74		(25%-125%)						

Notes:

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- B For General Chemistry and Organic analysis the 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
- ND Analyte concentration is not detected above the detection limit
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- UI Gamma Spectroscopy--Uncertain identification
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- Y QC Samples were not spiked with this compound
- ^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
- h Preparation or preservation holding time was exceeded

The above sample is reported on a dry weight basis.

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Certificate of Analysis

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Address : 362 Injun Hollow Rd

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

Report Date: March 8, 2007

Client Sample ID: 9514-0001-005F
Sample ID: 181554006
Matrix: TS
Collect Date: 23-FEB-07
Receive Date: 01-MAR-07
Collector: Client
Moisture: 4.63%

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		0.549	+/-0.106	0.0294	+/-0.106	0.0588	pCi/g		MJH1	03/05/07	1333	614269
Americium-241	U	0.0391	+/-0.0596	0.0496	+/-0.0596	0.0991	pCi/g					
Bismuth-212		0.420	+/-0.141	0.0651	+/-0.141	0.130	pCi/g					
Bismuth-214		0.421	+/-0.0588	0.0165	+/-0.0588	0.033	pCi/g					
Cesium-134	UI	0.00	+/-0.0163	0.0109	+/-0.0163	0.0217	pCi/g					
Cesium-137		0.0504	+/-0.0182	0.00886	+/-0.0182	0.0177	pCi/g					
Cobalt-60	U	0.000247	+/-0.0104	0.00868	+/-0.0104	0.0174	pCi/g					
Europium-152	U	0.0306	+/-0.0498	0.0249	+/-0.0498	0.0498	pCi/g					
Europium-154	U	0.000487	+/-0.0348	0.0293	+/-0.0348	0.0585	pCi/g					
Europium-155	U	0.042	+/-0.0389	0.0284	+/-0.0389	0.0567	pCi/g					
Lead-212		0.525	+/-0.0503	0.0139	+/-0.0503	0.0279	pCi/g					
Lead-214		0.466	+/-0.057	0.0171	+/-0.057	0.0343	pCi/g					
Manganese-54	U	0.00475	+/-0.014	0.00916	+/-0.014	0.0183	pCi/g					
Niobium-94	U	0.00256	+/-0.0116	0.00859	+/-0.0116	0.0172	pCi/g					
Potassium-40		9.47	+/-0.766	0.0826	+/-0.766	0.165	pCi/g					
Radium-226		0.421	+/-0.0588	0.0165	+/-0.0588	0.033	pCi/g					
Silver-108m	U	0.00359	+/-0.00922	0.00818	+/-0.00922	0.0164	pCi/g					
Thallium-208		0.153	+/-0.0248	0.00858	+/-0.0248	0.0172	pCi/g					
Rad Gas Flow Proportional Counting												
<i>GFPC, Sr90, solid-ALL FSS</i>												
Strontium-90	U	0.00928	+/-0.0234	0.0181	+/-0.0234	0.0431	pCi/g		KSD1	03/06/07	1616	613959

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TMB1	03/01/07	1037	613798

The following Analytical Methods were performed

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

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

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

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

Report Date: March 8, 2007

Client Sample ID: 9514-0001-005F Project: YANK01204
Sample ID: 181554006 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 Carrier		GFPC, Sr90, solid-ALL FSS			75		(25%-125%)						
Strontium Carrier		GFPC, Sr90, solid-ALL FSS			75		(25%-125%)						

Notes:

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 - B For General Chemistry and Organic analysis the 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
 - ND Analyte concentration is not detected above the detection limit
 - 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: March 8, 2007

Client Sample ID: 9514-0001-006F
Sample ID: 181554007
Matrix: TS
Collect Date: 23-FEB-07
Receive Date: 01-MAR-07
Collector: Client
Moisture: 5.72%

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		0.564	+/-0.103	0.0312	+/-0.103	0.0624	pCi/g		MJH1	03/05/07	1333	614269
Americium-241	U	0.0469	+/-0.0515	0.0434	+/-0.0515	0.0868	pCi/g					
Bismuth-212		0.405	+/-0.134	0.0654	+/-0.134	0.131	pCi/g					
Bismuth-214		0.482	+/-0.0647	0.0166	+/-0.0647	0.0332	pCi/g					
Cesium-134	UI	0.00	+/-0.0141	0.0106	+/-0.0141	0.0211	pCi/g					
Cesium-137		0.0402	+/-0.0193	0.0084	+/-0.0193	0.0168	pCi/g					
Cobalt-60	U	0.0076	+/-0.0108	0.00888	+/-0.0108	0.0178	pCi/g					
Europium-152	U	-0.038	+/-0.0306	0.0225	+/-0.0306	0.045	pCi/g					
Europium-154	U	-0.0238	+/-0.034	0.0275	+/-0.034	0.0549	pCi/g					
Europium-155	U	0.0285	+/-0.0326	0.0271	+/-0.0326	0.0543	pCi/g					
Lead-212		0.534	+/-0.0486	0.0126	+/-0.0486	0.0252	pCi/g					
Lead-214		0.492	+/-0.0584	0.0163	+/-0.0584	0.0325	pCi/g					
Manganese-54	U	0.00553	+/-0.0103	0.00919	+/-0.0103	0.0184	pCi/g					
Niobium-94	U	0.0119	+/-0.0097	0.00858	+/-0.0097	0.0172	pCi/g					
Potassium-40		9.45	+/-0.715	0.0736	+/-0.715	0.147	pCi/g					
Radium-226		0.482	+/-0.0647	0.0166	+/-0.0647	0.0332	pCi/g					
Silver-108m	U	0.00167	+/-0.00949	0.00765	+/-0.00949	0.0153	pCi/g					
Thallium-208		0.169	+/-0.026	0.00867	+/-0.026	0.0173	pCi/g					
Rad Gas Flow Proportional Counting												
<i>GFPC, Sr90, solid-ALL FSS</i>												
Strontium-90		0.681	+/-0.0845	0.0195	+/-0.0864	0.0465	pCi/g		KSD1	03/06/07	1617	613959

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TMB1	03/01/07	1037	613798

The following Analytical Methods were performed

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

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

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

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

Report Date: March 8, 2007

Client Sample ID: 9514-0001-006F
Sample ID: 181554007

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 Carrier		GFPC, Sr90, solid-ALL FSS			66		(25%-125%)						
Strontium Carrier		GFPC, Sr90, solid-ALL FSS			66		(25%-125%)						

Notes:

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 - B For General Chemistry and Organic analysis the 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
 - ND Analyte concentration is not detected above the detection limit
 - 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: March 8, 2007

Client Sample ID: 9514-0001-007F
Sample ID: 181554008
Matrix: TS
Collect Date: 23-FEB-07
Receive Date: 01-MAR-07
Collector: Client
Moisture: 9.67%

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		0.808	+/-0.126	0.0324	+/-0.126	0.0647	pCi/g					
Americium-241	U	0.0505	+/-0.0579	0.0443	+/-0.0579	0.0885	pCi/g		MJH1	03/05/07	1334	614269
Bismuth-212		0.486	+/-0.139	0.071	+/-0.139	0.142	pCi/g					
Bismuth-214		0.571	+/-0.0689	0.0179	+/-0.0689	0.0358	pCi/g					
Cesium-134	UI	0.00	+/-0.0183	0.0125	+/-0.0183	0.025	pCi/g					
Cesium-137		0.0641	+/-0.023	0.00988	+/-0.023	0.0198	pCi/g					
Cobalt-60	U	0.00166	+/-0.0113	0.00954	+/-0.0113	0.0191	pCi/g					
Europium-152	U	0.00825	+/-0.041	0.025	+/-0.041	0.050	pCi/g					
Europium-154	U	-0.018	+/-0.0391	0.0269	+/-0.0391	0.0537	pCi/g					
Europium-155	U	0.0291	+/-0.0402	0.0289	+/-0.0402	0.0577	pCi/g					
Lead-212		0.782	+/-0.0675	0.0147	+/-0.0675	0.0293	pCi/g					
Lead-214		0.593	+/-0.069	0.0175	+/-0.069	0.035	pCi/g					
Manganese-54	U	-0.00894	+/-0.0135	0.010	+/-0.0135	0.020	pCi/g					
Niobium-94	U	0.0128	+/-0.0116	0.00907	+/-0.0116	0.0181	pCi/g					
Potassium-40		11.0	+/-0.869	0.0803	+/-0.869	0.161	pCi/g					
Radium-226		0.571	+/-0.0689	0.0179	+/-0.0689	0.0358	pCi/g					
Silver-108m	U	-0.00979	+/-0.0102	0.00855	+/-0.0102	0.0171	pCi/g					
Thallium-208		0.257	+/-0.034	0.00912	+/-0.034	0.0182	pCi/g					

Rad Gas Flow Proportional Counting

GFPC, Sr90, solid-ALL FSS

Strontium-90	U	0.0158	+/-0.0266	0.0201	+/-0.0267	0.0469	pCi/g		KSD1	03/06/07	1617	613959
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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	TMB1	03/01/07	1037	613798

The following Analytical Methods were performed

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

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

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

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

Report Date: March 8, 2007

Client Sample ID: 9514-0001-007F
Sample ID: 181554008

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

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

Notes:

The Qualifiers in this report are defined as follows :

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 - > Result is greater than value reported
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 - C Analyte has been confirmed by GC/MS analysis
 - D Results are reported from a diluted aliquot of the sample
 - H Analytical holding time was exceeded
 - J Value is estimated
 - N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
 - ND Analyte concentration is not detected above the detection limit
 - 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: March 8, 2007

Client Sample ID: 9514-0001-009F
Sample ID: 181554009
Matrix: TS
Collect Date: 23-FEB-07
Receive Date: 01-MAR-07
Collector: Client
Moisture: 2.92%

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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Rad Gamma Spec Analysis

Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth

Waived

Actinium-228		0.521	+/-0.0902	0.0278	+/-0.0902	0.0555	pCi/g		MJH1	03/05/07	1335	614269	
Americium-241	U	0.034	+/-0.0315	0.0264	+/-0.0315	0.0528	pCi/g						
Bismuth-212		0.401	+/-0.123	0.0613	+/-0.123	0.123	pCi/g						
Bismuth-214		0.479	+/-0.0593	0.0154	+/-0.0593	0.0308	pCi/g						
Cesium-134	UI	0.00	+/-0.0171	0.0102	+/-0.0171	0.0205	pCi/g						
Cesium-137		0.0249	+/-0.0124	0.0079	+/-0.0124	0.0158	pCi/g						
Cobalt-60	U	0.00594	+/-0.00965	0.0084	+/-0.00965	0.0168	pCi/g						
Europium-152	U	0.0114	+/-0.0304	0.0226	+/-0.0304	0.0452	pCi/g						
Europium-154	U	-0.0236	+/-0.0315	0.0253	+/-0.0315	0.0506	pCi/g						
Europium-155	U	0.0329	+/-0.0334	0.0224	+/-0.0334	0.0447	pCi/g						
Lead-212		0.552	+/-0.0503	0.0123	+/-0.0503	0.0247	pCi/g						
Lead-214		0.573	+/-0.0604	0.0147	+/-0.0604	0.0294	pCi/g						
Manganese-54	UI	0.00	+/-0.0153	0.00864	+/-0.0153	0.0173	pCi/g						
Niobium-94	U	0.00631	+/-0.00909	0.00787	+/-0.00909	0.0157	pCi/g						
Potassium-40		9.48	+/-0.668	0.0706	+/-0.668	0.141	pCi/g						
Radium-226		0.479	+/-0.0593	0.0154	+/-0.0593	0.0308	pCi/g						
Silver-108m	U	0.000548	+/-0.00844	0.00742	+/-0.00844	0.0148	pCi/g						
Thallium-208		0.165	+/-0.0248	0.0081	+/-0.0248	0.0162	pCi/g						

Rad Gas Flow Proportional Counting

GFPC, Sr90, solid-ALL FSS

Strontium-90	U	0.0258	+/-0.0283	0.0199	+/-0.0283	0.047	pCi/g		KSD1	03/06/07	1617	613959	
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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	TMB1	03/01/07	1037	613798

The following Analytical Methods were performed

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

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

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

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

Report Date: March 8, 2007

Client Sample ID: 9514-0001-009F
Sample ID: 181554009

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 Carrier		GFPC, Sr90, solid-ALL FSS			69		(25%-125%)					
Strontium Carrier		GFPC, Sr90, solid-ALL FSS			69		(25%-125%)					

Notes:

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 - ND Analyte concentration is not detected above the detection limit
 - 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: March 8, 2007

Client Sample ID: 9514-0001-010F
Sample ID: 181554010
Matrix: TS
Collect Date: 23-FEB-07
Receive Date: 01-MAR-07
Collector: Client
Moisture: 5.13%

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

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		0.613	+/-0.0924	0.0227	+/-0.0924	0.0454	pCi/g		MJH1	03/05/07	1335	614269
Americium-241	U	0.0505	+/-0.0501	0.0427	+/-0.0501	0.0852	pCi/g					
Bismuth-212		0.348	+/-0.147	0.051	+/-0.147	0.102	pCi/g					
Bismuth-214		0.544	+/-0.0657	0.0135	+/-0.0657	0.027	pCi/g					
Cesium-134	UI	0.00	+/-0.0136	0.00833	+/-0.0136	0.0167	pCi/g					
Cesium-137		0.0359	+/-0.0112	0.00669	+/-0.0112	0.0134	pCi/g					
Cobalt-60	U	-0.00376	+/-0.00824	0.00692	+/-0.00824	0.0138	pCi/g					
Europium-152	U	-0.015	+/-0.0246	0.0181	+/-0.0246	0.0362	pCi/g					
Europium-154	U	-0.00414	+/-0.0258	0.0222	+/-0.0258	0.0443	pCi/g					
Europium-155	UI	0.00	+/-0.0347	0.0227	+/-0.0347	0.0453	pCi/g					
Lead-212		0.622	+/-0.0551	0.011	+/-0.0551	0.022	pCi/g					
Lead-214		0.583	+/-0.0604	0.0133	+/-0.0604	0.0265	pCi/g					
Manganese-54	U	0.0123	+/-0.0123	0.00635	+/-0.0123	0.0127	pCi/g					
Niobium-94	U	0.00134	+/-0.00776	0.00663	+/-0.00776	0.0132	pCi/g					
Potassium-40		10.6	+/-0.698	0.059	+/-0.698	0.118	pCi/g					
Radium-226		0.544	+/-0.0657	0.0135	+/-0.0657	0.027	pCi/g					
Silver-108m	U	-0.00882	+/-0.00811	0.00615	+/-0.00811	0.0123	pCi/g					
Thallium-208		0.180	+/-0.024	0.00665	+/-0.024	0.0133	pCi/g					

Rad Gas Flow Proportional Counting

GFPC, Sr90, solid-ALL FSS

Strontium-90	U	0.033	+/-0.0292	0.0202	+/-0.0292	0.0468	pCi/g		KSD1	03/06/07	1617	613959
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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	TMB1	03/01/07	1037	613798

The following Analytical Methods were performed

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

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

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

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

Report Date: March 8, 2007

Client Sample ID: 9514-0001-010F
Sample ID: 181554010

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 Carrier		GFPC, Sr90, solid-ALL FSS			62	(25%-125%)						
Strontium Carrier		GFPC, Sr90, solid-ALL FSS			62	(25%-125%)						

Notes:

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- ** Analyte is a surrogate compound
 - < Result is less than value reported
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 - A The TIC is a suspected aldol-condensation product
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 - C Analyte has been confirmed by GC/MS analysis
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 - H Analytical holding time was exceeded
 - J Value is estimated
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 - ND Analyte concentration is not detected above the detection limit
 - 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: March 8, 2007

Client Sample ID:	9514-0001-010FS	Project:	YANK01204
Sample ID:	181554011	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	23-FEB-07		
Receive Date:	01-MAR-07		
Collector:	Client		
Moisture:	5.07%		

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	+/-0.105	0.0327	+/-0.105	0.0653	pCi/g		MJH1	03/05/07	1336	614269
Americium-241	UI	0.00	+/-0.0338	0.0283	+/-0.0338	0.0567	pCi/g					
Bismuth-212		0.358	+/-0.133	0.0706	+/-0.133	0.141	pCi/g					
Bismuth-214		0.584	+/-0.066	0.0177	+/-0.066	0.0354	pCi/g					
Cesium-134	UI	0.00	+/-0.0198	0.0119	+/-0.0198	0.0237	pCi/g					
Cesium-137		0.0286	+/-0.0158	0.00957	+/-0.0158	0.0191	pCi/g					
Cobalt-60	U	0.0087	+/-0.0112	0.00977	+/-0.0112	0.0195	pCi/g					
Europium-152	U	-0.00597	+/-0.0342	0.0262	+/-0.0342	0.0525	pCi/g					
Europium-154	U	-0.0172	+/-0.0317	0.0257	+/-0.0317	0.0515	pCi/g					
Europium-155	U	0.0355	+/-0.0322	0.0267	+/-0.0322	0.0533	pCi/g					
Lead-212		0.601	+/-0.057	0.0145	+/-0.057	0.029	pCi/g					
Lead-214		0.688	+/-0.0705	0.0186	+/-0.0705	0.0372	pCi/g					
Manganese-54	UI	0.00	+/-0.0192	0.0102	+/-0.0192	0.0204	pCi/g					
Niobium-94	U	-0.00829	+/-0.0107	0.00875	+/-0.0107	0.0175	pCi/g					
Potassium-40		9.85	+/-0.733	0.0742	+/-0.733	0.148	pCi/g					
Radium-226		0.584	+/-0.066	0.0177	+/-0.066	0.0354	pCi/g					
Silver-108m	UI	0.00	+/-0.0186	0.00914	+/-0.0186	0.0183	pCi/g					
Thallium-208		0.222	+/-0.0307	0.00868	+/-0.0307	0.0174	pCi/g					
Rad Gas Flow Proportional Counting												
<i>GFPC, Sr90, solid-ALL FSS</i>												
Strontium-90	U	-0.0146	+/-0.0212	0.020	+/-0.0212	0.0463	pCi/g		KSD1	03/06/07	1617	613959

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TMB1	03/01/07	1037	613798

The following Analytical Methods were performed

Method	Description
1	EML HASL 300, 4.5.2.3
2	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: March 8, 2007

Client Sample ID: 9514-0001-010FS
Sample ID: 181554011

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 Carrier		GFPC, Sr90, solid-ALL FSS			63		(25%-125%)						
Strontium Carrier		GFPC, Sr90, solid-ALL FSS			63		(25%-125%)						

Notes:

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 - D Results are reported from a diluted aliquot of the sample
 - H Analytical holding time was exceeded
 - J Value is estimated
 - N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
 - ND Analyte concentration is not detected above the detection limit
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 - U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
 - UI Gamma Spectroscopy--Uncertain identification
 - X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
 - Y QC Samples were not spiked with this compound
 - ^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
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Certificate of Analysis

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

Report Date: March 8, 2007

Client Sample ID: 9514-0001-011F
Sample ID: 181554012
Matrix: TS
Collect Date: 23-FEB-07
Receive Date: 01-MAR-07
Collector: Client
Moisture: 2.19%

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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Rad Gamma Spec Analysis

Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth

Waived

Actinium-228		0.753	+/-0.125	0.0409	+/-0.125	0.0818	pCi/g		MJH1	03/05/07	1337	614269	
Americium-241	UI	0.00	+/-0.0206	0.0168	+/-0.0206	0.0336	pCi/g						
Bismuth-212		0.424	+/-0.169	0.0888	+/-0.169	0.178	pCi/g						
Bismuth-214		0.702	+/-0.092	0.0226	+/-0.092	0.0452	pCi/g						
Cesium-134	UI	0.00	+/-0.0307	0.0159	+/-0.0307	0.0317	pCi/g						
Cesium-137		0.370	+/-0.0468	0.0121	+/-0.0468	0.0241	pCi/g						
Cobalt-60	U	0.0169	+/-0.0182	0.016	+/-0.0182	0.0319	pCi/g						
Europium-152	U	-0.0111	+/-0.0488	0.0286	+/-0.0488	0.0572	pCi/g						
Europium-154	U	-0.0414	+/-0.0502	0.0398	+/-0.0502	0.0795	pCi/g						
Europium-155	U	0.0236	+/-0.0342	0.0257	+/-0.0342	0.0513	pCi/g						
Lead-212		0.749	+/-0.0734	0.0155	+/-0.0734	0.0309	pCi/g						
Lead-214		0.714	+/-0.0823	0.0208	+/-0.0823	0.0415	pCi/g						
Manganese-54	U	-0.00128	+/-0.0145	0.0125	+/-0.0145	0.0249	pCi/g						
Niobium-94	U	-0.0117	+/-0.013	0.011	+/-0.013	0.0219	pCi/g						
Potassium-40		10.4	+/-0.588	0.123	+/-0.588	0.246	pCi/g						
Radium-226		0.702	+/-0.092	0.0226	+/-0.092	0.0452	pCi/g						
Silver-108m	U	0.00224	+/-0.012	0.0104	+/-0.012	0.0208	pCi/g						
Thallium-208		0.264	+/-0.0397	0.0108	+/-0.0397	0.0216	pCi/g						

Rad Gas Flow Proportional Counting

GFPC, Sr90, solid-ALL FSS

Strontium-90	U	0.0326	+/-0.0291	0.0201	+/-0.0292	0.0468	pCi/g		KSD1	03/06/07	1617	613959	
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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	TMB1	03/01/07	1037	613798

The following Analytical Methods were performed

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

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

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Address : 362 Injun Hollow Rd

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

Report Date: March 8, 2007

Client Sample ID: 9514-0001-011F
Sample ID: 181554012

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 Carrier		GFPC, Sr90, solid-ALL FSS			82		(25%-125%)						
Strontium Carrier		GFPC, Sr90, solid-ALL FSS			82		(25%-125%)						

Notes:

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- The above sample is reported on a dry weight basis.

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Certificate of Analysis

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Address : 362 Injun Hollow Rd

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

Report Date: March 8, 2007

Client Sample ID: 9514-0001-012F
Sample ID: 181554013
Matrix: TS
Collect Date: 23-FEB-07
Receive Date: 01-MAR-07
Collector: Client
Moisture: 5.34%

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		0.545	+/-0.102	0.0292	+/-0.102	0.0584	pCi/g		MJH1	03/05/07	1422	614269
Americium-241	U	0.0447	+/-0.0499	0.0411	+/-0.0499	0.0821	pCi/g					
Bismuth-212		0.392	+/-0.184	0.0672	+/-0.184	0.134	pCi/g					
Bismuth-214		0.581	+/-0.0677	0.0166	+/-0.0677	0.0332	pCi/g					
Cesium-134	UI	0.00	+/-0.0185	0.0107	+/-0.0185	0.0215	pCi/g					
Cesium-137		0.0555	+/-0.0241	0.00878	+/-0.0241	0.0176	pCi/g					
Cobalt-60	U	0.00527	+/-0.0111	0.00958	+/-0.0111	0.0192	pCi/g					
Europium-152	U	-0.0175	+/-0.0362	0.0237	+/-0.0362	0.0475	pCi/g					
Europium-154	U	-0.00245	+/-0.0341	0.0284	+/-0.0341	0.0568	pCi/g					
Europium-155	U	0.0206	+/-0.0348	0.0278	+/-0.0348	0.0555	pCi/g					
Lead-212		0.555	+/-0.0539	0.014	+/-0.0539	0.028	pCi/g					
Lead-214		0.632	+/-0.0716	0.0168	+/-0.0716	0.0335	pCi/g					
Manganese-54	U	0.00136	+/-0.0119	0.00895	+/-0.0119	0.0179	pCi/g					
Niobium-94	U	0.00516	+/-0.0104	0.00889	+/-0.0104	0.0178	pCi/g					
Potassium-40		9.34	+/-0.717	0.0757	+/-0.717	0.151	pCi/g					
Radium-226		0.581	+/-0.0677	0.0166	+/-0.0677	0.0332	pCi/g					
Silver-108m	U	-0.00363	+/-0.00933	0.00801	+/-0.00933	0.016	pCi/g					
Thallium-208		0.181	+/-0.028	0.00841	+/-0.028	0.0168	pCi/g					

Rad Gas Flow Proportional Counting

GFPC, Sr90, solid-ALL FSS

Strontium-90	U	0.0459	+/-0.0311	0.0196	+/-0.0311	0.0464	pCi/g		KSD1	03/06/07	1617	613959
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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	TMB1	03/01/07	1037	613798

The following Analytical Methods were performed

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

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

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

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

Report Date: March 8, 2007

Client Sample ID: 9514-0001-012F
Sample ID: 181554013

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 Carrier		GFPC, Sr90, solid-ALL FSS			72	(25%-125%)							
Strontium Carrier		GFPC, Sr90, solid-ALL FSS			72	(25%-125%)							

Notes:

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 - > Result is greater than value reported
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 - BD Results are either below the MDC or tracer recovery is low
 - C Analyte has been confirmed by GC/MS analysis
 - D Results are reported from a diluted aliquot of the sample
 - H Analytical holding time was exceeded
 - J Value is estimated
 - N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
 - ND Analyte concentration is not detected above the detection limit
 - 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: March 8, 2007

Client Sample ID: 9514-0001-013F
Sample ID: 181554014
Matrix: TS
Collect Date: 23-FEB-07
Receive Date: 01-MAR-07
Collector: Client
Moisture: 6.8%

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N
Rad Alpha Spec Analysis													
<i>Alphaspec Am241, Cm, Solid ALL FSS</i>													
Americium-241	U	0.0153	+/-0.0466	0.0223	+/-0.0466	0.112	pCi/g		MXA	03/05/07	1619	613994	
													1
Curium-242	U	-0.00625	+/-0.0525	0.0234	+/-0.0526	0.117	pCi/g						
Curium-243/244	U	-0.0658	+/-0.0389	0.0741	+/-0.0397	0.216	pCi/g						
<i>Alphaspec Pu, Solid-ALL FSS</i>													
Plutonium-238	U	0.0302	+/-0.0933	0.0606	+/-0.0934	0.203	pCi/g		MXA	03/03/07	1706	613995	
													1
Plutonium-239/240	U	0.121	+/-0.123	0.0271	+/-0.123	0.136	pCi/g						
<i>Liquid Scint Pu241, Solid-ALL FSS</i>													
Plutonium-241	U	-7.24	+/-7.27	6.48	+/-7.27	13.7	pCi/g		MXA	03/05/07	2227	613997	
													1
Rad Gamma Spec Analysis													
<i>Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth</i>													
<i>Waived</i>													
Actinium-228		0.806	+/-0.141	0.0329	+/-0.141	0.0657	pCi/g		MJH1	03/05/07	1610	614269	
Americium-241	U	0.0059	+/-0.0542	0.043	+/-0.0542	0.086	pCi/g						
Bismuth-212		0.325	+/-0.148	0.072	+/-0.148	0.144	pCi/g						
Bismuth-214		0.824	+/-0.0912	0.0159	+/-0.0912	0.0319	pCi/g						
Cesium-134	UI	0.00	+/-0.0178	0.0102	+/-0.0178	0.0204	pCi/g						
Cesium-137		0.119	+/-0.0194	0.0095	+/-0.0194	0.019	pCi/g						
Cobalt-60	U	0.0059	+/-0.0113	0.00992	+/-0.0113	0.0198	pCi/g						
Europium-152	U	-0.00908	+/-0.034	0.0254	+/-0.034	0.0507	pCi/g						
Europium-154	U	-0.00201	+/-0.0394	0.0289	+/-0.0394	0.0577	pCi/g						
Europium-155	UI	0.00	+/-0.0471	0.0295	+/-0.0471	0.059	pCi/g						
Lead-212		0.890	+/-0.0747	0.0152	+/-0.0747	0.0304	pCi/g						
Lead-214		0.891	+/-0.0894	0.0188	+/-0.0894	0.0376	pCi/g						
Manganese-54	U	0.0133	+/-0.015	0.00927	+/-0.015	0.0185	pCi/g						
Niobium-94	U	0.0023	+/-0.0103	0.00894	+/-0.0103	0.0179	pCi/g						
Potassium-40		10.4	+/-0.793	0.0807	+/-0.793	0.161	pCi/g						
Radium-226		0.824	+/-0.0912	0.0159	+/-0.0912	0.0319	pCi/g						
Silver-108m	U	-0.00585	+/-0.0101	0.00839	+/-0.0101	0.0168	pCi/g						
Thallium-208		0.294	+/-0.0358	0.00938	+/-0.0358	0.0187	pCi/g						
Rad Gas Flow Proportional Counting													
<i>GFPC, Sr90, solid-ALL FSS</i>													
Strontium-90	U	0.0165	+/-0.0231	0.0165	+/-0.0231	0.0399	pCi/g		KSD1	03/06/07	1617	613959	
Rad Liquid Scintillation Analysis													

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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: March 8, 2007

Client Sample ID: 9514-0001-013F
Sample ID: 181554014

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	N
Rad Liquid Scintillation Analysis													
<i>LSC, Tritium Dist, Solid – 3 pCi/g</i>													
Tritium	U	-0.0488	+/-1.61	1.35	+/-1.61	2.82	pCi/g		AXD2	03/03/07	0143	614003	
<i>Liquid Scint C14, Solid ALL,FSS</i>													
Carbon-14	U	0.0483	+/-0.0978	0.081	+/-0.0978	0.166	pCi/g		AXD2	03/05/07	1255	614005	
<i>Liquid Scint Fe55, Solid-ALL FSS</i>													
Iron-55	U	12.7	+/-46.0	30.0	+/-46.0	63.1	pCi/g		MXP1	03/07/07	1026	613996	
<i>Liquid Scint Ni63, Solid-ALL FSS</i>													
Nickel-63	U	-3.79	+/-8.02	6.91	+/-8.02	14.5	pCi/g		MXP1	03/06/07	1502	613999	
<i>Liquid Scint Tc99, Solid-ALL FSS</i>													
Technetium-99	U	0.0425	+/-0.223	0.186	+/-0.223	0.384	pCi/g		MXP1	03/03/07	2045	614001	

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TMB1	03/01/07	1037	613798

The following Analytical Methods were performed

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium-243 Tracer	Alphaspec Am241, Cm, Solid ALL	90	(15%-125%)
Americium-243 Tracer	Alphaspec Am241, Cm, Solid ALL	90	(15%-125%)

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

Report Date: March 8, 2007

Client Sample ID: 9514-0001-013F
Sample ID: 181554014

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

Parameter	Qualifier	Result	Uncertainty	LC	TPU	MDA	Units	DF	Analyst	Date	Time	Batch	NA
Plutonium-242 Tracer		Alphaspec Pu, Solid-ALL FSS			77		(15%-125%)						
Plutonium-242 Tracer		Alphaspec Pu, Solid-ALL FSS			77		(15%-125%)						
Plutonium-241		Liquid Scint Pu241, Solid-ALL FS			82		(25%-125%)						
Plutonium-242 Tracer		Liquid Scint Pu241, Solid-ALL FS			82		(25%-125%)						
Plutonium-242 Tracer		Liquid Scint Pu241, Solid-ALL FS			82		(25%-125%)						
Strontium Carrier		GFPC, Sr90, solid-ALL FSS			76		(25%-125%)						
Strontium Carrier		GFPC, Sr90, solid-ALL FSS			76		(25%-125%)						
Iron-59 Tracer		Liquid Scint Fe55, Solid-ALL FS			75		(15%-125%)						
Iron-59 Tracer		Liquid Scint Fe55, Solid-ALL FS			75		(15%-125%)						
Nickel Carrier		Liquid Scint Ni63, Solid-ALL FS			96		(25%-125%)						
Nickel Carrier		Liquid Scint Ni63, Solid-ALL FS			96		(25%-125%)						
Technetium-99		Liquid Scint Tc99, Solid-ALL FS			82		(15%-125%)						
Technetium-99m Tracer		Liquid Scint Tc99, Solid-ALL FS			82		(15%-125%)						
Technetium-99m Tracer		Liquid Scint Tc99, Solid-ALL FS			82		(15%-125%)						

Notes:

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 - N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
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 - R Sample results are rejected
 - U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
 - UI Gamma Spectroscopy—Uncertain identification
 - X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
 - Y QC Samples were not spiked with this compound
 - ^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
 - h Preparation or preservation holding time was exceeded
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Certificate of Analysis

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

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

Report Date: March 8, 2007

Client Sample ID: 9514-0001-014F
Sample ID: 181554015
Matrix: TS
Collect Date: 23-FEB-07
Receive Date: 01-MAR-07
Collector: Client
Moisture: 6.07%

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		0.654	+/-0.147	0.045	+/-0.147	0.090	pCi/g		MJH1	03/05/07	1612	614269
Americium-241	U	0.0292	+/-0.0258	0.0209	+/-0.0258	0.0417	pCi/g					
Bismuth-212		0.292	+/-0.236	0.102	+/-0.236	0.204	pCi/g					
Bismuth-214		0.701	+/-0.0931	0.0247	+/-0.0931	0.0494	pCi/g					
Cesium-134	UI	0.00	+/-0.0234	0.0158	+/-0.0234	0.0315	pCi/g					
Cesium-137		0.844	+/-0.0843	0.0143	+/-0.0843	0.0285	pCi/g					
Cobalt-60	UI	0.00	+/-0.0245	0.0144	+/-0.0245	0.0288	pCi/g					
Europium-152	U	-0.0107	+/-0.0511	0.0341	+/-0.0511	0.0682	pCi/g					
Europium-154	U	-0.0145	+/-0.0477	0.0394	+/-0.0477	0.0788	pCi/g					
Europium-155	U	0.0406	+/-0.0401	0.032	+/-0.0401	0.064	pCi/g					
Lead-212		0.628	+/-0.0679	0.0186	+/-0.0679	0.0373	pCi/g					
Lead-214		0.746	+/-0.0878	0.0245	+/-0.0878	0.0489	pCi/g					
Manganese-54	U	0.00896	+/-0.0178	0.0134	+/-0.0178	0.0269	pCi/g					
Niobium-94	U	0.00112	+/-0.015	0.0126	+/-0.015	0.0252	pCi/g					
Potassium-40		9.09	+/-0.720	0.119	+/-0.720	0.238	pCi/g					
Radium-226		0.701	+/-0.0931	0.0247	+/-0.0931	0.0494	pCi/g					
Silver-108m	U	-0.00378	+/-0.0142	0.0123	+/-0.0142	0.0246	pCi/g					
Thallium-208		0.191	+/-0.0443	0.0129	+/-0.0443	0.0257	pCi/g					
Rad Gas Flow Proportional Counting												
<i>GFPC, Sr90, solid-ALL FSS</i>												
Strontium-90	U	-0.00344	+/-0.0216	0.0186	+/-0.0216	0.0435	pCi/g		KSD1	03/06/07	1617	613959

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TMB1	03/01/07	1037	613798

The following Analytical Methods were performed

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

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

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

Report Date: March 8, 2007

Client Sample ID: 9514-0001-014F
Sample ID: 181554015

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 Carrier		GFPC, Sr90, solid-ALL FSS			69		(25%-125%)						
Strontium Carrier		GFPC, Sr90, solid-ALL FSS			69		(25%-125%)						

Notes:

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 - H Analytical holding time was exceeded
 - J Value is estimated
 - N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
 - ND Analyte concentration is not detected above the detection limit
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 - U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
 - UI Gamma Spectroscopy--Uncertain identification
 - X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
 - Y QC Samples were not spiked with this compound
 - ^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
 - h Preparation or preservation holding time was exceeded
- The above sample is reported on a dry weight basis.

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Certificate of Analysis

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Address : 362 Injun Hollow Rd

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

Report Date: March 8, 2007

Client Sample ID: 9514-0001-015F
Sample ID: 181554016
Matrix: TS
Collect Date: 23-FEB-07
Receive Date: 01-MAR-07
Collector: Client
Moisture: 5.62%

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		0.578	+/-0.174	0.0508	+/-0.174	0.102	pCi/g		MJH1	03/06/07	0917	614269
Americium-241	U	0.00594	+/-0.098	0.0825	+/-0.098	0.165	pCi/g					
Bismuth-212		0.270	+/-0.233	0.135	+/-0.233	0.269	pCi/g					
Bismuth-214		0.411	+/-0.102	0.0338	+/-0.102	0.0676	pCi/g					
Cesium-134	U	0.0222	+/-0.0297	0.0215	+/-0.0297	0.043	pCi/g					
Cesium-137	U	-0.00162	+/-0.0194	0.0165	+/-0.0194	0.033	pCi/g					
Cobalt-60	U	0.015	+/-0.0219	0.0199	+/-0.0219	0.0397	pCi/g					
Europium-152	U	0.0211	+/-0.0549	0.0445	+/-0.0549	0.0889	pCi/g					
Europium-154	U	-0.0136	+/-0.0688	0.057	+/-0.0688	0.114	pCi/g					
Europium-155	U	0.0268	+/-0.0573	0.0538	+/-0.0573	0.108	pCi/g					
Lead-212		0.542	+/-0.0656	0.0258	+/-0.0656	0.0516	pCi/g					
Lead-214		0.459	+/-0.0763	0.0309	+/-0.0763	0.0618	pCi/g					
Manganese-54	U	-0.00761	+/-0.0234	0.017	+/-0.0234	0.034	pCi/g					
Niobium-94	U	0.0192	+/-0.0175	0.0162	+/-0.0175	0.0324	pCi/g					
Potassium-40		9.57	+/-0.945	0.125	+/-0.945	0.250	pCi/g					
Radium-226		0.411	+/-0.102	0.0338	+/-0.102	0.0676	pCi/g					
Silver-108m	U	0.00409	+/-0.0176	0.0139	+/-0.0176	0.0278	pCi/g					
Thallium-208		0.210	+/-0.0407	0.0159	+/-0.0407	0.0318	pCi/g					
Rad Gas Flow Proportional Counting												
<i>GFPC, Sr90, solid-ALL FSS</i>												
Strontium-90	U	-0.0201	+/-0.0214	0.0207	+/-0.0214	0.047	pCi/g		KSD1	03/06/07	1617	613959

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TMB1	03/01/07	1047	613799

The following Analytical Methods were performed

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

Surrogate/Tracer recovery	Test	Recovery %	Acceptable Limits
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Contact: Mr. Jack McCarthy
Project: Soils PO# 002332

Report Date: March 8, 2007

Client Sample ID: 9514-0001-015F
Sample ID: 181554016

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 Carrier		GFPC, Sr90, solid-ALL FSS			61		(25%-125%)					
Strontium Carrier		GFPC, Sr90, solid-ALL FSS			61		(25%-125%)					

Notes:

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- N/A Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
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- 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: March 8, 2007

Client Sample ID: 9514-0001-016F
Sample ID: 181554017
Matrix: TS
Collect Date: 23-FEB-07
Receive Date: 01-MAR-07
Collector: Client
Moisture: 5.65%

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	+/-0.151	0.0604	+/-0.151	0.121	pCi/g		MJH1	03/06/07	0917	614269
Americium-241	U	0.0188	+/-0.066	0.0551	+/-0.066	0.110	pCi/g					
Bismuth-212		0.636	+/-0.228	0.130	+/-0.228	0.259	pCi/g					
Bismuth-214		0.551	+/-0.0932	0.0362	+/-0.0932	0.0723	pCi/g					
Cesium-134	U	0.042	+/-0.0228	0.0222	+/-0.0228	0.0444	pCi/g					
Cesium-137	U	0.0191	+/-0.0217	0.017	+/-0.0217	0.034	pCi/g					
Cobalt-60	UI	0.00	+/-0.0379	0.0236	+/-0.0379	0.0472	pCi/g					
Europium-152	U	-0.0446	+/-0.0617	0.0423	+/-0.0617	0.0845	pCi/g					
Europium-154	U	0.0245	+/-0.0623	0.0546	+/-0.0623	0.109	pCi/g					
Europium-155	U	0.0672	+/-0.0518	0.049	+/-0.0518	0.098	pCi/g					
Lead-212		0.662	+/-0.072	0.0251	+/-0.072	0.0501	pCi/g					
Lead-214		0.562	+/-0.0884	0.0319	+/-0.0884	0.0638	pCi/g					
Manganese-54	U	0.0213	+/-0.0223	0.0171	+/-0.0223	0.0342	pCi/g					
Niobium-94	U	0.00191	+/-0.0175	0.015	+/-0.0175	0.0299	pCi/g					
Potassium-40		10.7	+/-1.01	0.142	+/-1.01	0.283	pCi/g					
Radium-226		0.551	+/-0.0932	0.0362	+/-0.0932	0.0723	pCi/g					
Silver-108m	U	-0.00779	+/-0.0172	0.0147	+/-0.0172	0.0293	pCi/g					
Thallium-208		0.217	+/-0.0405	0.016	+/-0.0405	0.0319	pCi/g					
Rad Gas Flow Proportional Counting												
<i>GFPC, Sr90, solid-ALL FSS</i>												
Strontium-90	U	0.00655	+/-0.0245	0.0195	+/-0.0245	0.0466	pCi/g		KSD1	03/06/07	1618	613959

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TMB1	03/01/07	1047	613799

The following Analytical Methods were performed

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

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

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

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

Report Date: March 8, 2007

Client Sample ID: 9514-0001-016F
Sample ID: 181554017

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 Carrier		GFPC, Sr90, solid-ALL FSS			69		(25%-125%)					
Strontium Carrier		GFPC, Sr90, solid-ALL FSS			69		(25%-125%)					

Notes:

The Qualifiers in this report are defined as follows :

- ** Analyte is a surrogate compound
 - < Result is less than value reported
 - > Result is greater than value reported
 - A The TIC is a suspected aldol-condensation product
 - B For General Chemistry and Organic analysis the 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
 - ND Analyte concentration is not detected above the detection limit
 - 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: March 8, 2007

Client Sample ID: 9514-0001-024F
Sample ID: 181554018
Matrix: TS
Collect Date: 23-FEB-07
Receive Date: 01-MAR-07
Collector: Client
Moisture: 3.3%

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		0.635	+/-0.190	0.0789	+/-0.190	0.158	pCi/g		MJH1	03/06/07	0918	614269
Americium-241	U	0.0097	+/-0.0307	0.0365	+/-0.0307	0.0729	pCi/g					
Bismuth-212		0.579	+/-0.433	0.174	+/-0.433	0.347	pCi/g					
Bismuth-214		0.435	+/-0.123	0.0452	+/-0.123	0.0903	pCi/g					
Cesium-134	U	0.0353	+/-0.0225	0.0258	+/-0.0225	0.0515	pCi/g					
Cesium-137	U	-0.0073	+/-0.0316	0.0245	+/-0.0316	0.049	pCi/g					
Cobalt-60	U	-0.0111	+/-0.0286	0.0231	+/-0.0286	0.0461	pCi/g					
Europium-152	U	-0.0529	+/-0.0737	0.0576	+/-0.0737	0.115	pCi/g					
Europium-154	U	-0.0334	+/-0.0826	0.067	+/-0.0826	0.134	pCi/g					
Europium-155	U	0.0777	+/-0.0859	0.0554	+/-0.0859	0.111	pCi/g					
Lead-212		0.657	+/-0.0843	0.0317	+/-0.0843	0.0633	pCi/g					
Lead-214		0.544	+/-0.0999	0.0399	+/-0.0999	0.0798	pCi/g					
Manganese-54	U	-0.00686	+/-0.0262	0.0225	+/-0.0262	0.045	pCi/g					
Niobium-94	U	0.00362	+/-0.0281	0.0241	+/-0.0281	0.0481	pCi/g					
Potassium-40		9.49	+/-1.04	0.202	+/-1.04	0.403	pCi/g					
Radium-226		0.435	+/-0.123	0.0452	+/-0.123	0.0903	pCi/g					
Silver-108m	U	-0.0083	+/-0.0229	0.0198	+/-0.0229	0.0395	pCi/g					
Thallium-208		0.187	+/-0.0635	0.0244	+/-0.0635	0.0488	pCi/g					
Rad Gas Flow Proportional Counting												
<i>GFPC, Sr90, solid-ALL FSS</i>												
Strontium-90	U	-0.0178	+/-0.0207	0.0205	+/-0.0207	0.0482	pCi/g		KSD1	03/06/07	1618	613959

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TMB1	03/01/07	1047	613799

The following Analytical Methods were performed

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

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

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

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

Report Date: March 8, 2007

Client Sample ID: 9514-0001-024F
Sample ID: 181554018

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 Carrier		GFPC, Sr90, solid-ALL FSS			72		(25%-125%)						
Strontium Carrier		GFPC, Sr90, solid-ALL FSS			72		(25%-125%)						

Notes:

The Qualifiers in this report are defined as follows :

- ** Analyte is a surrogate compound
 - < Result is less than value reported
 - > Result is greater than value reported
 - A The TIC is a suspected aldol-condensation product
 - B For General Chemistry and Organic analysis the 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
 - ND Analyte concentration is not detected above the detection limit
 - 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: March 8, 2007

Client Sample ID: 9514-0001-025F
Sample ID: 181554019
Matrix: TS
Collect Date: 23-FEB-07
Receive Date: 01-MAR-07
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
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Rad Gamma Spec Analysis

Gamma, Solid-FSS GAM & ALL FSS 226 Ingrowth

Waived

Actinium-228		0.647	+/-0.176	0.0635	+/-0.176	0.127	pCi/g		MJH1	03/06/07	0919	614269
Americium-241	U	0.0147	+/-0.0297	0.027	+/-0.0297	0.054	pCi/g					
Bismuth-212	U	0.221	+/-0.244	0.140	+/-0.244	0.281	pCi/g					
Bismuth-214		0.519	+/-0.0983	0.0358	+/-0.0983	0.0716	pCi/g					
Cesium-134	U	0.0332	+/-0.0277	0.0223	+/-0.0277	0.0446	pCi/g					
Cesium-137	U	-0.000896	+/-0.0251	0.0214	+/-0.0251	0.0428	pCi/g					
Cobalt-60	U	-0.00686	+/-0.0223	0.0178	+/-0.0223	0.0356	pCi/g					
Europium-152	U	0.041	+/-0.0612	0.044	+/-0.0612	0.088	pCi/g					
Europium-154	U	-0.0228	+/-0.0638	0.0509	+/-0.0638	0.102	pCi/g					
Europium-155	U	0.0173	+/-0.048	0.0439	+/-0.048	0.0878	pCi/g					
Lead-212		0.580	+/-0.0734	0.0236	+/-0.0734	0.0471	pCi/g					
Lead-214		0.562	+/-0.0804	0.0279	+/-0.0804	0.0558	pCi/g					
Manganese-54	U	-0.0148	+/-0.0261	0.0186	+/-0.0261	0.0372	pCi/g					
Niobium-94	U	-0.00565	+/-0.0209	0.0174	+/-0.0209	0.0347	pCi/g					
Potassium-40		8.92	+/-0.978	0.159	+/-0.978	0.319	pCi/g					
Radium-226		0.519	+/-0.0983	0.0358	+/-0.0983	0.0716	pCi/g					
Silver-108m	U	-0.00539	+/-0.0174	0.0153	+/-0.0174	0.0305	pCi/g					
Thallium-208		0.203	+/-0.0432	0.0172	+/-0.0432	0.0343	pCi/g					

Rad Gas Flow Proportional Counting

GFPC, Sr90, solid-ALL FSS

Strontium-90	U	-0.00416	+/-0.0217	0.019	+/-0.0217	0.0455	pCi/g		KSD1	03/06/07	1618	613959
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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	TMB1	03/01/07	1047	613799

The following Analytical Methods were performed

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

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

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

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

Report Date: March 8, 2007

Client Sample ID: 9514-0001-025F
Sample ID: 181554019

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 Carrier		GFPC, Sr90, solid-ALL FSS			69		(25%-125%)							
Strontium Carrier		GFPC, Sr90, solid-ALL FSS			69		(25%-125%)							

Notes:

The Qualifiers in this report are defined as follows :

- ** Analyte is a surrogate compound
 - < Result is less than value reported
 - > Result is greater than value reported
 - A The TIC is a suspected aldol-condensation product
 - B For General Chemistry and Organic analysis the 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
 - ND Analyte concentration is not detected above the detection limit
 - 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: March 8, 2007

Client Sample ID: 9514-0001-026F
Sample ID: 181554020
Matrix: TS
Collect Date: 23-FEB-07
Receive Date: 01-MAR-07
Collector: Client
Moisture: 5.6%

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

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		0.624	+/-0.148	0.0644	+/-0.148	0.129	pCi/g		MJH1	03/06/07	0919	614269
Americium-241	U	0.103	+/-0.0655	0.0575	+/-0.0655	0.115	pCi/g					
Bismuth-212	U	0.277	+/-0.257	0.141	+/-0.257	0.281	pCi/g					
Bismuth-214		0.897	+/-0.118	0.0323	+/-0.118	0.0645	pCi/g					
Cesium-134	U	0.0204	+/-0.0293	0.0219	+/-0.0293	0.0437	pCi/g					
Cesium-137	U	0.0235	+/-0.0219	0.0191	+/-0.0219	0.0382	pCi/g					
Cobalt-60	U	-0.00736	+/-0.0234	0.0179	+/-0.0234	0.0359	pCi/g					
Europium-152	U	0.0216	+/-0.0635	0.0507	+/-0.0635	0.101	pCi/g					
Europium-154	U	-0.00936	+/-0.067	0.0558	+/-0.067	0.112	pCi/g					
Europium-155	U	0.0575	+/-0.062	0.0537	+/-0.062	0.107	pCi/g					
Lead-212		0.554	+/-0.0704	0.0302	+/-0.0704	0.0605	pCi/g					
Lead-214		0.977	+/-0.116	0.0356	+/-0.116	0.0712	pCi/g					
Manganese-54	U	0.00664	+/-0.0212	0.019	+/-0.0212	0.0379	pCi/g					
Niobium-94	U	0.0119	+/-0.0184	0.0163	+/-0.0184	0.0326	pCi/g					
Potassium-40		10.9	+/-0.997	0.125	+/-0.997	0.249	pCi/g					
Radium-226		0.897	+/-0.118	0.0323	+/-0.118	0.0645	pCi/g					
Silver-108m	U	0.0178	+/-0.0221	0.019	+/-0.0221	0.0379	pCi/g					
Thallium-208		0.195	+/-0.0434	0.0187	+/-0.0434	0.0373	pCi/g					

Rad Gas Flow Proportional Counting

GFPC, Sr90, solid-ALL FSS

Strontium-90	U	-0.00229	+/-0.0236	0.0201	+/-0.0236	0.0463	pCi/g		KSD1	03/06/07	1618	613959
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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	TMB1	03/01/07	1047	613799

The following Analytical Methods were performed

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
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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: March 8, 2007

Client Sample ID: 9514–0001–026F
Sample ID: 181554020

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 Carrier		GFPC, Sr90, solid–ALL FSS			68		(25%–125%)						
Strontium Carrier		GFPC, Sr90, solid–ALL FSS			68		(25%–125%)						

Notes:

The Qualifiers in this report are defined as follows :

- ** Analyte is a surrogate compound
 - < Result is less than value reported
 - > Result is greater than value reported
 - A The TIC is a suspected aldol–condensation product
 - B For General Chemistry and Organic analysis the 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
 - ND Analyte concentration is not detected above the detection limit
 - 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: March 8, 2007

Client Sample ID:	9514-0001-027F	Project:	YANK01204
Sample ID:	181554021	Client ID:	YANK001
Matrix:	TS	Vol. Recv.:	
Collect Date:	26-FEB-07		
Receive Date:	01-MAR-07		
Collector:	Client		
Moisture:	9.31%		

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		0.629	+/-0.137	0.0461	+/-0.137	0.0921	pCi/g		MJH1	03/06/07	1034	614271
Americium-241	U	0.0522	+/-0.0917	0.0812	+/-0.0917	0.162	pCi/g					
Bismuth-212		0.424	+/-0.206	0.0959	+/-0.206	0.192	pCi/g					
Bismuth-214		0.648	+/-0.0872	0.0234	+/-0.0872	0.0468	pCi/g					
Cesium-134	U	0.0244	+/-0.0229	0.0168	+/-0.0229	0.0335	pCi/g					
Cesium-137	U	0.0107	+/-0.0315	0.0122	+/-0.0315	0.0243	pCi/g					
Cobalt-60	U	0.0113	+/-0.0155	0.0142	+/-0.0155	0.0284	pCi/g					
Europium-152	U	-0.0123	+/-0.0447	0.0358	+/-0.0447	0.0715	pCi/g					
Europium-154	U	-0.00794	+/-0.0725	0.0369	+/-0.0725	0.0738	pCi/g					
Europium-155	U	0.021	+/-0.0514	0.048	+/-0.0514	0.0959	pCi/g					
Lead-212		0.670	+/-0.070	0.0216	+/-0.070	0.0432	pCi/g					
Lead-214		0.636	+/-0.0843	0.0252	+/-0.0843	0.0503	pCi/g					
Manganese-54	U	-0.0172	+/-0.0153	0.0125	+/-0.0153	0.025	pCi/g					
Niobium-94	U	0.00807	+/-0.0131	0.0117	+/-0.0131	0.0234	pCi/g					
Potassium-40		10.7	+/-0.880	0.122	+/-0.880	0.243	pCi/g					
Radium-226		0.648	+/-0.0872	0.0234	+/-0.0872	0.0468	pCi/g					
Silver-108m	U	-0.008	+/-0.0136	0.0118	+/-0.0136	0.0235	pCi/g					
Thallium-208		0.225	+/-0.0357	0.0112	+/-0.0357	0.0224	pCi/g					

Rad Gas Flow Proportional Counting

GFPC, Sr90, solid-ALL FSS

Strontium-90	U	0.00632	+/-0.0268	0.0222	+/-0.0268	0.0467	pCi/g		KSD1	03/06/07	1734	613960
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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	TMB1	03/01/07	1047	613799

The following Analytical Methods were performed

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

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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: March 8, 2007

Client Sample ID: 9514-0001-027F Project: YANK01204
Sample ID: 181554021 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 Carrier	GFPC, Sr90, solid-ALL FSS				55		(25%-125%)					
Strontium Carrier	GFPC, Sr90, solid-ALL FSS				55		(25%-125%)					

Notes:

The Qualifiers in this report are defined as follows :

- ** Analyte is a surrogate compound
 - < Result is less than value reported
 - > Result is greater than value reported
 - A The TIC is a suspected aldol-condensation product
 - B For General Chemistry and Organic analysis the 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
 - ND Analyte concentration is not detected above the detection limit
 - 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: March 8, 2007

Client Sample ID: 9514-0001-028F
Sample ID: 181554022
Matrix: TS
Collect Date: 26-FEB-07
Receive Date: 01-MAR-07
Collector: Client
Moisture: 5.22%

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

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		0.609	+/-0.178	0.061	+/-0.178	0.122	pCi/g		MJH1	03/06/07	1035	614271
Americium-241	U	0.0228	+/-0.102	0.0816	+/-0.102	0.163	pCi/g					
Bismuth-212		0.434	+/-0.300	0.143	+/-0.300	0.286	pCi/g					
Bismuth-214		0.812	+/-0.127	0.0348	+/-0.127	0.0695	pCi/g					
Cesium-134	U	0.042	+/-0.0308	0.0229	+/-0.0308	0.0458	pCi/g					
Cesium-137	U	0.0196	+/-0.0225	0.0206	+/-0.0225	0.0413	pCi/g					
Cobalt-60	U	-0.0277	+/-0.0222	0.0159	+/-0.0222	0.0317	pCi/g					
Europium-152	U	-0.0664	+/-0.0733	0.0467	+/-0.0733	0.0934	pCi/g					
Europium-154	U	-0.00276	+/-0.075	0.0549	+/-0.075	0.110	pCi/g					
Europium-155	U	0.0314	+/-0.0605	0.0572	+/-0.0605	0.114	pCi/g					
Lead-212		0.676	+/-0.076	0.0281	+/-0.076	0.0561	pCi/g					
Lead-214		0.950	+/-0.125	0.0343	+/-0.125	0.0686	pCi/g					
Manganese-54	U	0.0112	+/-0.023	0.0202	+/-0.023	0.0405	pCi/g					
Niobium-94	U	0.00356	+/-0.0197	0.0172	+/-0.0197	0.0344	pCi/g					
Potassium-40		9.85	+/-0.997	0.178	+/-0.997	0.357	pCi/g					
Radium-226		0.812	+/-0.127	0.0348	+/-0.127	0.0695	pCi/g					
Silver-108m	U	-0.00239	+/-0.0186	0.0156	+/-0.0186	0.0311	pCi/g					
Thallium-208		0.233	+/-0.0432	0.017	+/-0.0432	0.034	pCi/g					

Rad Gas Flow Proportional Counting

GFPC, Sr90, solid-ALL FSS

Strontium-90	U	0.00562	+/-0.0278	0.0231	+/-0.0278	0.0487	pCi/g		KSD1	03/06/07	1734	613960
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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	TMB1	03/01/07	1047	613799

The following Analytical Methods were performed

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

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

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

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

Report Date: March 8, 2007

Client Sample ID: 9514-0001-028F Project: YANK01204
Sample ID: 181554022 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 Carrier		GFPC, Sr90, solid-ALL FSS			53		(25%-125%)					
Strontium Carrier		GFPC, Sr90, solid-ALL FSS			53		(25%-125%)					

Notes:

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 - > Result is greater than value reported
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 - B For General Chemistry and Organic analysis the 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
 - ND Analyte concentration is not detected above the detection limit
 - 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: March 8, 2007

Client Sample ID: 9514-0001-029F
Sample ID: 181554023
Matrix: TS
Collect Date: 26-FEB-07
Receive Date: 01-MAR-07
Collector: Client
Moisture: 5.92%

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		0.770	+/-0.168	0.0563	+/-0.168	0.113	pCi/g		MJH1	03/06/07	1036	614271
Americium-241	U	0.0742	+/-0.0692	0.0592	+/-0.0692	0.118	pCi/g					
Bismuth-212		0.302	+/-0.244	0.134	+/-0.244	0.268	pCi/g					
Bismuth-214		0.603	+/-0.102	0.0311	+/-0.102	0.0621	pCi/g					
Cesium-134	UI	0.00	+/-0.0332	0.0218	+/-0.0332	0.0436	pCi/g					
Cesium-137	U	-0.00866	+/-0.022	0.0171	+/-0.022	0.0343	pCi/g					
Cobalt-60	U	0.0139	+/-0.0218	0.0195	+/-0.0218	0.0389	pCi/g					
Europium-152	U	-0.0125	+/-0.0579	0.0427	+/-0.0579	0.0854	pCi/g					
Europium-154	U	-0.0176	+/-0.0587	0.0476	+/-0.0587	0.0951	pCi/g					
Europium-155	U	0.058	+/-0.0745	0.0502	+/-0.0745	0.100	pCi/g					
Lead-212		0.562	+/-0.0683	0.0247	+/-0.0683	0.0493	pCi/g					
Lead-214		0.663	+/-0.0967	0.0317	+/-0.0967	0.0634	pCi/g					
Manganese-54	U	0.00708	+/-0.0189	0.0169	+/-0.0189	0.0338	pCi/g					
Niobium-94	U	-0.00962	+/-0.0184	0.0148	+/-0.0184	0.0296	pCi/g					
Potassium-40		10.2	+/-0.976	0.135	+/-0.976	0.270	pCi/g					
Radium-226		0.603	+/-0.102	0.0311	+/-0.102	0.0621	pCi/g					
Silver-108m	U	0.00154	+/-0.0163	0.0143	+/-0.0163	0.0286	pCi/g					
Thallium-208		0.218	+/-0.0408	0.0156	+/-0.0408	0.0312	pCi/g					
Rad Gas Flow Proportional Counting												
<i>GFPC, Sr90, solid-ALL FSS</i>												
Strontium-90	U	-0.0246	+/-0.0207	0.0186	+/-0.0207	0.0391	pCi/g		KSD1	03/06/07	1734	613960

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TMB1	03/01/07	1047	613799

The following Analytical Methods were performed

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

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

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

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

Report Date: March 8, 2007

Client Sample ID: 9514-0001-019J
Sample ID: 181554024
Matrix: TS
Collect Date: 27-FEB-07
Receive Date: 01-MAR-07
Collector: Client
Moisture: 30.9%

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		0.549	+/-0.226	0.0775	+/-0.226	0.155	pCi/g		MJH1	03/06/07	1152	614271
Americium-241	U	0.0829	+/-0.123	0.0973	+/-0.123	0.195	pCi/g					
Bismuth-212		0.414	+/-0.341	0.150	+/-0.341	0.300	pCi/g					
Bismuth-214		0.549	+/-0.118	0.0402	+/-0.118	0.0804	pCi/g					
Cesium-134	U	0.0428	+/-0.033	0.0263	+/-0.033	0.0526	pCi/g					
Cesium-137		0.522	+/-0.0792	0.020	+/-0.0792	0.040	pCi/g					
Cobalt-60	U	0.0525	+/-0.0336	0.032	+/-0.0336	0.0641	pCi/g					
Europium-152	U	-0.0543	+/-0.101	0.0624	+/-0.101	0.125	pCi/g					
Europium-154	U	-0.0852	+/-0.0802	0.0567	+/-0.0802	0.113	pCi/g					
Europium-155	U	0.00883	+/-0.0778	0.0669	+/-0.0778	0.134	pCi/g					
Lead-212		0.717	+/-0.0939	0.0345	+/-0.0939	0.069	pCi/g					
Lead-214		0.690	+/-0.123	0.043	+/-0.123	0.0859	pCi/g					
Manganese-54	U	-0.00585	+/-0.0261	0.0219	+/-0.0261	0.0437	pCi/g					
Niobium-94	U	-0.00188	+/-0.0259	0.0212	+/-0.0259	0.0424	pCi/g					
Potassium-40		9.96	+/-1.22	0.221	+/-1.22	0.443	pCi/g					
Radium-226		0.549	+/-0.118	0.0402	+/-0.118	0.0804	pCi/g					
Silver-108m	U	-0.0134	+/-0.0288	0.0203	+/-0.0288	0.0405	pCi/g					
Thallium-208		0.231	+/-0.058	0.0197	+/-0.058	0.0394	pCi/g					

Rad Gas Flow Proportional Counting

GFPC, Sr90, solid-ALL FSS

Strontium-90		0.0739	+/-0.0323	0.0225	+/-0.0326	0.0484	pCi/g		KSD1	03/06/07	1733	613960
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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	TMB1	03/01/07	1047	613799

The following Analytical Methods were performed

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

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

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

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

Report Date: March 8, 2007

Client Sample ID: 9514–0001–019J Project: YANK01204
 Sample ID: 181554024 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 Carrier		GFPC, Sr90, solid–ALL FSS			76	(25%–125%)						
Strontium Carrier		GFPC, Sr90, solid–ALL FSS			76	(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
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 - B For General Chemistry and Organic analysis the 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
 - ND Analyte concentration is not detected above the detection limit
 - 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: March 8, 2007

Client Sample ID: 9514-0001-020J
Sample ID: 181554025
Matrix: TS
Collect Date: 27-FEB-07
Receive Date: 01-MAR-07
Collector: Client
Moisture: 31.9%

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		0.746	+/-0.172	0.0634	+/-0.172	0.127	pCi/g		MJH1	03/06/07	1153	614271
Americium-241	U	0.0491	+/-0.105	0.0831	+/-0.105	0.166	pCi/g					
Bismuth-212		0.368	+/-0.295	0.137	+/-0.295	0.274	pCi/g					
Bismuth-214		0.622	+/-0.102	0.0318	+/-0.102	0.0636	pCi/g					
Cesium-134	UI	0.00	+/-0.0266	0.0239	+/-0.0266	0.0477	pCi/g					
Cesium-137		0.465	+/-0.0551	0.0169	+/-0.0551	0.0338	pCi/g					
Cobalt-60	U	0.0232	+/-0.0247	0.0223	+/-0.0247	0.0446	pCi/g					
Europium-152	U	-0.0155	+/-0.0642	0.0474	+/-0.0642	0.0948	pCi/g					
Europium-154	U	0.0523	+/-0.0729	0.0643	+/-0.0729	0.129	pCi/g					
Europium-155	U	0.0239	+/-0.0627	0.0549	+/-0.0627	0.110	pCi/g					
Lead-212		0.748	+/-0.087	0.028	+/-0.087	0.056	pCi/g					
Lead-214		0.626	+/-0.113	0.0348	+/-0.113	0.0696	pCi/g					
Manganese-54	U	-0.0143	+/-0.0226	0.0177	+/-0.0226	0.0353	pCi/g					
Niobium-94	U	-0.00322	+/-0.0209	0.0171	+/-0.0209	0.0342	pCi/g					
Potassium-40		9.54	+/-1.04	0.178	+/-1.04	0.356	pCi/g					
Radium-226		0.622	+/-0.102	0.0318	+/-0.102	0.0636	pCi/g					
Silver-108m	U	0.0015	+/-0.0192	0.0165	+/-0.0192	0.0329	pCi/g					
Thallium-208		0.256	+/-0.0521	0.0173	+/-0.0521	0.0347	pCi/g					
Rad Gas Flow Proportional Counting												
<i>GFPC, Sr90, solid-ALL FSS</i>												
Strontium-90	U	0.0346	+/-0.0282	0.0211	+/-0.0282	0.0459	pCi/g		KSD1	03/06/07	1733	613960

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TMB1	03/01/07	1047	613799

The following Analytical Methods were performed

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

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

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

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

Report Date: March 8, 2007

Client Sample ID: 9514-0001-020J
Sample ID: 181554025

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 Carrier		GFPC, Sr90, solid-ALL FSS			67		(25%-125%)						
Strontium Carrier		GFPC, Sr90, solid-ALL FSS			67		(25%-125%)						

Notes:

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 - > Result is greater than value reported
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 - B For General Chemistry and Organic analysis the 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
 - ND Analyte concentration is not detected above the detection limit
 - 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: March 8, 2007

Client Sample ID: 9514-0001-021J
Sample ID: 181554026
Matrix: TS
Collect Date: 27-FEB-07
Receive Date: 01-MAR-07
Collector: Client
Moisture: 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		0.844	+/-0.178	0.0546	+/-0.178	0.109	pCi/g		MJH1	03/06/07	1223	614271
Americium-241	U	-0.015	+/-0.116	0.0902	+/-0.116	0.180	pCi/g					
Bismuth-212	UI	0.00	+/-0.382	0.139	+/-0.382	0.278	pCi/g					
Bismuth-214		0.682	+/-0.120	0.0349	+/-0.120	0.0697	pCi/g					
Cesium-134	U	0.0431	+/-0.0339	0.0241	+/-0.0339	0.0481	pCi/g					
Cesium-137		0.305	+/-0.0523	0.0192	+/-0.0523	0.0384	pCi/g					
Cobalt-60	U	0.00923	+/-0.0247	0.0212	+/-0.0247	0.0425	pCi/g					
Europium-152	U	0.0373	+/-0.0675	0.0502	+/-0.0675	0.100	pCi/g					
Europium-154	U	-0.0666	+/-0.0697	0.0516	+/-0.0697	0.103	pCi/g					
Europium-155	U	-0.0191	+/-0.0655	0.0563	+/-0.0655	0.113	pCi/g					
Lead-212		0.750	+/-0.0825	0.0281	+/-0.0825	0.0562	pCi/g					
Lead-214		0.724	+/-0.110	0.0355	+/-0.110	0.071	pCi/g					
Manganese-54	U	0.00743	+/-0.0237	0.0207	+/-0.0237	0.0414	pCi/g					
Niobium-94	U	0.00346	+/-0.021	0.0176	+/-0.021	0.0352	pCi/g					
Potassium-40		8.64	+/-0.945	0.180	+/-0.945	0.360	pCi/g					
Radium-226		0.682	+/-0.120	0.0349	+/-0.120	0.0697	pCi/g					
Silver-108m	U	0.00859	+/-0.0209	0.0182	+/-0.0209	0.0364	pCi/g					
Thallium-208		0.249	+/-0.0569	0.0189	+/-0.0569	0.0377	pCi/g					
Rad Gas Flow Proportional Counting												
<i>GFPC, Sr90, solid-ALL FSS</i>												
Strontium-90		0.0501	+/-0.0312	0.0228	+/-0.0314	0.0493	pCi/g		KSD1	03/06/07	1733	613960

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TMB1	03/01/07	1047	613799

The following Analytical Methods were performed

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
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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: March 8, 2007

Client Sample ID: 9514-0001-021J
Sample ID: 181554026

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 Carrier		GFPC, Sr90, solid-ALL FSS			62		(25%-125%)						
Strontium Carrier		GFPC, Sr90, solid-ALL FSS			62		(25%-125%)						

Notes:

The Qualifiers in this report are defined as follows :

- ** Analyte is a surrogate compound
 - < Result is less than value reported
 - > Result is greater than value reported
 - A The TIC is a suspected aldol-condensation product
 - B For General Chemistry and Organic analysis the 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
 - ND Analyte concentration is not detected above the detection limit
 - 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: March 8, 2007

Client Sample ID: 9514-0001-022J
Sample ID: 181554027
Matrix: TS
Collect Date: 27-FEB-07
Receive Date: 01-MAR-07
Collector: Client
Moisture: 22.2%

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		0.829	+/-0.201	0.0764	+/-0.201	0.153	pCi/g		MJH1	03/06/07	1224	614271
Americium-241	U	0.00365	+/-0.0933	0.0723	+/-0.0933	0.145	pCi/g					
Bismuth-212		0.557	+/-0.322	0.172	+/-0.322	0.344	pCi/g					
Bismuth-214		0.892	+/-0.144	0.0408	+/-0.144	0.0815	pCi/g					
Cesium-134	UI	0.00	+/-0.0477	0.028	+/-0.0477	0.0559	pCi/g					
Cesium-137		0.519	+/-0.0692	0.0231	+/-0.0692	0.0461	pCi/g					
Cobalt-60	U	0.0153	+/-0.0249	0.0222	+/-0.0249	0.0444	pCi/g					
Europium-152	U	0.0264	+/-0.087	0.063	+/-0.087	0.126	pCi/g					
Europium-154	U	-0.0534	+/-0.0874	0.0676	+/-0.0874	0.135	pCi/g					
Europium-155	U	0.0453	+/-0.104	0.0572	+/-0.104	0.114	pCi/g					
Lead-212		0.897	+/-0.100	0.035	+/-0.100	0.070	pCi/g					
Lead-214		1.10	+/-0.141	0.0458	+/-0.141	0.0916	pCi/g					
Manganese-54	U	-0.0149	+/-0.0252	0.0204	+/-0.0252	0.0408	pCi/g					
Niobium-94	U	-0.00852	+/-0.0256	0.0206	+/-0.0256	0.0412	pCi/g					
Potassium-40		12.3	+/-1.21	0.216	+/-1.21	0.432	pCi/g					
Radium-226		0.892	+/-0.144	0.0408	+/-0.144	0.0815	pCi/g					
Silver-108m	U	0.0133	+/-0.0378	0.0233	+/-0.0378	0.0465	pCi/g					
Thallium-208		0.322	+/-0.0581	0.0214	+/-0.0581	0.0429	pCi/g					
Rad Gas Flow Proportional Counting												
<i>GFPC, Sr90, solid-ALL FSS</i>												
Strontium-90		0.0546	+/-0.0281	0.0198	+/-0.0283	0.0429	pCi/g		KSD1	03/06/07	1733	613960

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	TMB1	03/01/07	1047	613799

The following Analytical Methods were performed

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

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

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

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

Report Date: March 8, 2007

Client Sample ID: 9514-0001-022J
Sample ID: 181554027

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 Carrier		GFPC, Sr90, solid-ALL FSS			70		(25%-125%)						
Strontium Carrier		GFPC, Sr90, solid-ALL FSS			70		(25%-125%)						

Notes:

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 - > Result is greater than value reported
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 - B For General Chemistry and Organic analysis the 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
 - ND Analyte concentration is not detected above the detection limit
 - 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: March 8, 2007

Client Sample ID: 9514-0001-023J
Sample ID: 181554028
Matrix: TS
Collect Date: 27-FEB-07
Receive Date: 01-MAR-07
Collector: Client
Moisture: 9.88%

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

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		0.559	+/-0.314	0.117	+/-0.314	0.233	pCi/g		MJH1	03/06/07	1224	614271
Americium-241	U	0.0165	+/-0.0641	0.0497	+/-0.0641	0.0992	pCi/g					
Bismuth-212		0.592	+/-0.465	0.262	+/-0.465	0.523	pCi/g					
Bismuth-214		0.978	+/-0.185	0.0621	+/-0.185	0.124	pCi/g					
Cesium-134	U	0.0153	+/-0.0477	0.0415	+/-0.0477	0.0829	pCi/g					
Cesium-137		0.334	+/-0.0797	0.0403	+/-0.0797	0.0806	pCi/g					
Cobalt-60	U	0.0306	+/-0.0508	0.0388	+/-0.0508	0.0775	pCi/g					
Europium-152	U	-0.0077	+/-0.118	0.0878	+/-0.118	0.175	pCi/g					
Europium-154	U	0.0828	+/-0.137	0.0912	+/-0.137	0.182	pCi/g					
Europium-155	U	0.104	+/-0.122	0.0758	+/-0.122	0.152	pCi/g					
Lead-212		0.760	+/-0.110	0.046	+/-0.110	0.092	pCi/g					
Lead-214		1.00	+/-0.161	0.0581	+/-0.161	0.116	pCi/g					
Manganese-54	U	0.0091	+/-0.0434	0.0326	+/-0.0434	0.0651	pCi/g					
Niobium-94	U	0.00391	+/-0.037	0.0306	+/-0.037	0.0612	pCi/g					
Potassium-40		11.6	+/-1.33	0.274	+/-1.33	0.548	pCi/g					
Radium-226		0.978	+/-0.185	0.0621	+/-0.185	0.124	pCi/g					
Silver-108m	U	-0.0207	+/-0.0358	0.0293	+/-0.0358	0.0586	pCi/g					
Thallium-208		0.201	+/-0.0857	0.0315	+/-0.0857	0.0629	pCi/g					

Rad Gas Flow Proportional Counting

GFPC, Sr90, solid-ALL FSS

Strontium-90		0.0694	+/-0.033	0.0233	+/-0.0333	0.0503	pCi/g		KSD1	03/06/07	1733	613960
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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	TMB1	03/01/07	1047	613799

The following Analytical Methods were performed

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

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
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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: March 8, 2007

Client Sample ID: 9514-0001-023J
Sample ID: 181554028

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 Carrier		GFPC, Sr90, solid-ALL FSS			63		(25%-125%)					
Strontium Carrier		GFPC, Sr90, solid-ALL FSS			63		(25%-125%)					

Notes:

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 - U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
 - UI Gamma Spectroscopy--Uncertain identification
 - X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
 - Y QC Samples were not spiked with this compound
 - ^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
 - h Preparation or preservation holding time was exceeded
- The above sample is reported on a dry weight basis.

QUALITY CONTROL DATA

GEL LABORATORIES LLC

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

QC Summary

Report Date: March 8, 2007
Page 1 of 13

Client : Connecticut Yankee Atomic Power
362 Injun Hollow Rd

Contact: East Hampton, Connecticut
Mr. Jack McCarthy

Workorder: 181554

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Alpha Spec											
Batch	613994										
QC1201287983	181554001 DUP										
Americium-241	U	0.027	U	-0.0285	pCi/g	7400		(0% - 100%)	AXA1	03/03/07	17:06
		Uncert:		+/-0.0632							
		TPU:		+/-0.0632							
Curium-242	U	0.0292	U	0.00	pCi/g	200		(0% - 100%)			
		Uncert:		+/-0.0323							
		TPU:		+/-0.0323							
Curium-243/244	U	0.0563	U	-0.0756	pCi/g	1370		(0% - 100%)			
		Uncert:		+/-0.0778							
		TPU:		+/-0.0785							
QC1201287985	LCS										
Americium-241		13.1		12.0	pCi/g		92	(75%-125%)		03/03/07	17:06
		Uncert:		+/-1.08							
		TPU:		+/-1.87							
Curium-242			U	0.0507	pCi/g						
		Uncert:		+/-0.080							
		TPU:		+/-0.0803							
Curium-243/244		15.7		14.3	pCi/g		91	(75%-125%)			
		Uncert:		+/-1.18							
		TPU:		+/-2.16							
QC1201287982	MB										
Americium-241			U	0.00304	pCi/g					03/03/07	17:07
		Uncert:		+/-0.0192							
		TPU:		+/-0.0192							
Curium-242			U	0.0318	pCi/g						
		Uncert:		+/-0.0623							
		TPU:		+/-0.0625							
Curium-243/244			U	-0.0227	pCi/g						
		Uncert:		+/-0.0257							
		TPU:		+/-0.0259							
QC1201287984	181554001 MS										
Americium-241	U	0.027		15.0	pCi/g		111	(75%-125%)		03/03/07	17:06
		Uncert:		+/-1.33							
		TPU:		+/-2.38							
Curium-242	U	0.0292	U	0.0319	pCi/g						
		Uncert:		+/-0.0625							
		TPU:		+/-0.0626							
Curium-243/244	U	0.0563		17.2	pCi/g		106	(75%-125%)			
		Uncert:		+/-1.43							
		TPU:		+/-2.67							
Batch	613995										
QC1201287987	181554001 DUP										
Plutonium-238	U	-0.0213	U	0.0781	pCi/g	350		(0% - 100%)	AXA1	03/03/07	17:06

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

QC Summary

Workorder: 181554

Page 2 of 13

Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Alpha Spec									
Batch	613995								
Plutonium-239/240									
	Uncert:	+/-0.106	+/-0.104						
	TPU:	+/-0.106	+/-0.105						
	U	0.0612	U	0.026	pCi/g	81	(0% - 100%)		
	Uncert:	+/-0.138	+/-0.0581						
	TPU:	+/-0.139	+/-0.0582						
QC1201287989	LCS								
Plutonium-238			0.117	pCi/g			(75%-125%)		03/03/07 17:06
	Uncert:		+/-0.114						
	TPU:		+/-0.115						
Plutonium-239/240	13.0		12.3	pCi/g		95	(75%-125%)		
	Uncert:		+/-1.18						
	TPU:		+/-1.84						
QC1201287986	MB								
Plutonium-238			U	-0.0103	pCi/g				03/03/07 17:06
	Uncert:			+/-0.0202					
	TPU:			+/-0.0203					
Plutonium-239/240			U	-0.0413	pCi/g				
	Uncert:			+/-0.0405					
	TPU:			+/-0.0408					
QC1201287988	181554001	MS							
Plutonium-238	U	-0.0213	U	0.00	pCi/g		(75%-125%)		03/03/07 17:06
	Uncert:	+/-0.106		+/-0.100					
	TPU:	+/-0.106		+/-0.100					
Plutonium-239/240	13.4	U	0.0612	13.8	pCi/g	103	(75%-125%)		
	Uncert:	+/-0.138		+/-1.21					
	TPU:	+/-0.139		+/-1.99					
Batch	613997								
QC1201287995	181554001	DUP							
Plutonium-241	U	1.13	U	-8.93	pCi/g	0	(0% - 100%)	MXA1	03/05/07 22:59
	Uncert:	+/-7.38		+/-7.37					
	TPU:	+/-7.38		+/-7.37					
QC1201287997	LCS								
Plutonium-241	139			114	pCi/g	82	(75%-125%)		03/05/07 23:31
	Uncert:			+/-13.6					
	TPU:			+/-18.5					
QC1201287994	MB								
Plutonium-241			U	-10.2	pCi/g				03/05/07 22:43
	Uncert:			+/-7.27					
	TPU:			+/-7.27					
QC1201287996	181554001	MS							
Plutonium-241	140	U	1.13	131	pCi/g	93	(75%-125%)		03/05/07 23:15
	Uncert:	+/-7.38		+/-14.3					
	TPU:	+/-7.38		+/-19.4					
Rad Gamma Spec									
Batch	614269								
QC1201288622	181554011	DUP							
Actinium-228				0.663	pCi/g	13	(0% - 100%)	MJH1	03/06/07 09:20
	Uncert:	+/-0.105		+/-0.165					
				+/-0.165					

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QC Summary

Workorder: 181554

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch	614269										
Americium-241	TPU:	+/-0.105									
	UI	0.00	U	0.0426	pCi/g	32		(0% - 100%)			
	Uncert:	+/-0.0338									
Bismuth-212	TPU:	+/-0.0338									
		0.358		0.426	pCi/g	17		(0% - 100%)			
	Uncert:	+/-0.133									
Bismuth-214	TPU:	+/-0.133									
		0.584		0.574	pCi/g	2		(0% - 100%)			
	Uncert:	+/-0.066									
Cesium-134	TPU:	+/-0.066									
	UI	0.00	U	0.0285	pCi/g	38		(0% - 100%)			
	Uncert:	+/-0.0198									
Cesium-137	TPU:	+/-0.0198									
		0.0286		0.0524	pCi/g	59		(0% - 100%)			
	Uncert:	+/-0.0158									
Cobalt-60	TPU:	+/-0.0158									
	U	0.0087	U	-0.00623	pCi/g	1210		(0% - 100%)			
	Uncert:	+/-0.0112									
Europium-152	TPU:	+/-0.0112									
	U	-0.00597	U	0.0301	pCi/g	299		(0% - 100%)			
	Uncert:	+/-0.0342									
Europium-154	TPU:	+/-0.0342									
	U	-0.0172	U	0.0353	pCi/g	579		(0% - 100%)			
	Uncert:	+/-0.0317									
Europium-155	TPU:	+/-0.0317									
	U	0.0355	U	0.00712	pCi/g	133		(0% - 100%)			
	Uncert:	+/-0.0322									
Lead-212	TPU:	+/-0.0322									
		0.601		0.561	pCi/g	7		(0% - 20%)			
	Uncert:	+/-0.057									
Lead-214	TPU:	+/-0.057									
		0.688		0.636	pCi/g	8		(0% - 20%)			
	Uncert:	+/-0.0705									
Manganese-54	TPU:	+/-0.0705									
	UI	0.00	U	0.0172	pCi/g	29		(0% - 100%)			
	Uncert:	+/-0.0192									
Niobium-94	TPU:	+/-0.0192									
	U	-0.00829	U	0.00806	pCi/g	14200		(0% - 100%)			
	Uncert:	+/-0.0107									
Potassium-40	TPU:	+/-0.0107									
		9.85		10.5	pCi/g	6		(0% - 20%)			
	Uncert:	+/-0.733									
Radium-226	TPU:	+/-0.733									
		0.584		0.574	pCi/g	2		(0% - 100%)			
	Uncert:	+/-0.066									
Silver-108m	TPU:	+/-0.066									
	UI	0.00	U	-0.00294	pCi/g	269		(0% - 100%)			
	Uncert:	+/-0.0186									

GEL LABORATORIES LLC

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

QC Summary

Workorder: 181554

Page 4 of 13

Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gamma Spec									
Batch	614269								
Thallium-208	TPU:	+/-0.0186	+/-0.0184						
		0.222	0.206	pCi/g	8		(0% - 100%)		
	Uncert:	+/-0.0307	+/-0.0422						
	TPU:	+/-0.0307	+/-0.0422						
QC1201288623 LCS Actinium-228			U -0.131	pCi/g					03/06/07 09:21
	Uncert:		+/-0.424						
	TPU:		+/-0.424						
Americium-241	23.4		24.8	pCi/g		106	(75%-125%)		
	Uncert:		+/-2.79						
	TPU:		+/-2.79						
Bismuth-212			U -0.185	pCi/g					
	Uncert:		+/-0.725						
	TPU:		+/-0.725						
Bismuth-214			U -0.0169	pCi/g					
	Uncert:		+/-0.157						
	TPU:		+/-0.157						
Cesium-134			U 0.0492	pCi/g					
	Uncert:		+/-0.104						
	TPU:		+/-0.104						
Cesium-137	9.47		10.5	pCi/g		111	(75%-125%)		
	Uncert:		+/-0.974						
	TPU:		+/-0.974						
Cobalt-60	13.6		14.3	pCi/g		105	(75%-125%)		
	Uncert:		+/-0.902						
	TPU:		+/-0.902						
Europium-152			U 0.334	pCi/g					
	Uncert:		+/-0.226						
	TPU:		+/-0.226						
Europium-154			U 0.119	pCi/g					
	Uncert:		+/-0.194						
	TPU:		+/-0.194						
Europium-155			U -0.242	pCi/g					
	Uncert:		+/-0.250						
	TPU:		+/-0.250						
Lead-212			U 0.0261	pCi/g					
	Uncert:		+/-0.119						
	TPU:		+/-0.119						
Lead-214			U 0.234	pCi/g					
	Uncert:		+/-0.199						
	TPU:		+/-0.199						
Manganese-54			U 0.0316	pCi/g					
	Uncert:		+/-0.0961						
	TPU:		+/-0.0961						
Niobium-94			U -0.00244	pCi/g					
	Uncert:		+/-0.0784						
	TPU:		+/-0.0784						
Potassium-40			U 0.382	pCi/g					

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Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec Batch 614269										
	Uncert:		+/-0.684							
	TPU:		+/-0.684							
Radium-226		U	-0.0169	pCi/g			(75%-125%)			
	Uncert:		+/-0.157							
	TPU:		+/-0.157							
Silver-108m		U	-0.0103	pCi/g						
	Uncert:		+/-0.0823							
	TPU:		+/-0.0823							
Thallium-208		U	-0.0347	pCi/g						
	Uncert:		+/-0.0835							
	TPU:		+/-0.0835							
QC1201288621 MB Actinium-228		U	-0.0652	pCi/g					03/06/07	09:20
	Uncert:		+/-0.0589							
	TPU:		+/-0.0589							
Americium-241		U	0.00251	pCi/g						
	Uncert:		+/-0.0115							
	TPU:		+/-0.0115							
Bismuth-212		U	0.00644	pCi/g						
	Uncert:		+/-0.102							
	TPU:		+/-0.102							
Bismuth-214		U	0.0459	pCi/g						
	Uncert:		+/-0.0496							
	TPU:		+/-0.0496							
Cesium-134		U	0.0112	pCi/g						
	Uncert:		+/-0.0149							
	TPU:		+/-0.0149							
Cesium-137		U	-0.00466	pCi/g						
	Uncert:		+/-0.0129							
	TPU:		+/-0.0129							
Cobalt-60		U	-0.00808	pCi/g						
	Uncert:		+/-0.0183							
	TPU:		+/-0.0183							
Europium-152		U	0.00549	pCi/g						
	Uncert:		+/-0.0299							
	TPU:		+/-0.0299							
Europium-154		U	0.015	pCi/g						
	Uncert:		+/-0.0479							
	TPU:		+/-0.0479							
Europium-155		U	-0.00213	pCi/g						
	Uncert:		+/-0.0211							
	TPU:		+/-0.0211							
Lead-212		U	0.0126	pCi/g						
	Uncert:		+/-0.0264							
	TPU:		+/-0.0264							
Lead-214		U	0.0268	pCi/g						
	Uncert:		+/-0.0225							
	TPU:		+/-0.0225							

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch	614269										
Manganese-54			U	-0.000197	pCi/g						
	Uncert:			+/-0.0136							
	TPU:			+/-0.0136							
Niobium-94			U	0.00221	pCi/g						
	Uncert:			+/-0.0126							
	TPU:			+/-0.0126							
Potassium-40			U	-0.025	pCi/g						
	Uncert:			+/-0.200							
	TPU:			+/-0.200							
Radium-226			U	0.0459	pCi/g						
	Uncert:			+/-0.0496							
	TPU:			+/-0.0496							
Silver-108m			U	-0.00878	pCi/g						
	Uncert:			+/-0.00978							
	TPU:			+/-0.00978							
Thallium-208			U	0.00629	pCi/g						
	Uncert:			+/-0.0153							
	TPU:			+/-0.0153							
Batch	614271										
QC1201288625	181545014 DUP										
Actinium-228		0.904		0.957	pCi/g	6		(0% - 100%)	MJH1	03/06/07	15:09
	Uncert:	+/-0.254		+/-0.154							
	TPU:			+/-0.154							
Americium-241	U	-0.0532	U	0.0447	pCi/g	2320		(0% - 100%)			
	Uncert:	+/-0.172		+/-0.0681							
	TPU:			+/-0.0681							
Bismuth-212		0.851		0.735	pCi/g	15		(0% - 100%)			
	Uncert:	+/-0.336		+/-0.185							
	TPU:			+/-0.185							
Bismuth-214		0.684		0.699	pCi/g	2		(0% - 100%)			
	Uncert:	+/-0.135		+/-0.0882							
	TPU:			+/-0.0882							
Cesium-134	UI	0.00	UI	0.00	pCi/g	16		(0% - 100%)			
	Uncert:	+/-0.0361		+/-0.020							
	TPU:			+/-0.020							
Cesium-137		0.180		0.159	pCi/g	12		(0% - 100%)			
	Uncert:	+/-0.0492		+/-0.0226							
	TPU:			+/-0.0226							
Cobalt-60	UI	0.00	U	0.00959	pCi/g	115		(0% - 100%)			
	Uncert:	+/-0.0429		+/-0.0115							
	TPU:			+/-0.0115							
Europium-152	U	0.0188	U	-0.0235	pCi/g	1810		(0% - 100%)			
	Uncert:	+/-0.084		+/-0.0315							
	TPU:			+/-0.0315							
Europium-154	U	-0.00496	U	-0.0267	pCi/g	137		(0% - 100%)			
	Uncert:	+/-0.0988		+/-0.0354							
	TPU:			+/-0.0354							
Europium-155	U	-0.0215	U	0.0334	pCi/g	926		(0% - 100%)			

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch 614271											
Lead-212		Uncert: +/-0.0932		+/-0.0444							
		TPU:		+/-0.0444							
		1.15		1.11	pCi/g	3		(0% - 20%)			
		Uncert: +/-0.123		+/-0.0951							
		TPU:		+/-0.0951							
Lead-214		0.694		0.747	pCi/g	7		(0% - 20%)			
		Uncert: +/-0.120		+/-0.0797							
		TPU:		+/-0.0797							
Manganese-54		U 0.00553	U	0.0078	pCi/g	34		(0% - 100%)			
		Uncert: +/-0.0327		+/-0.0146							
		TPU:		+/-0.0146							
Niobium-94		UI 0.00	U	-0.0046	pCi/g	277		(0% - 100%)			
		Uncert: +/-0.0476		+/-0.0105							
		TPU:		+/-0.0105							
Potassium-40		15.6		16.7	pCi/g	7		(0% - 20%)			
		Uncert: +/-1.57		+/-1.08							
		TPU:		+/-1.08							
Radium-226		0.684		0.699	pCi/g	2		(0% - 20%)			
		Uncert: +/-0.135		+/-0.0882							
		TPU:		+/-0.0882							
Silver-108m		U 0.0169	U	-0.015	pCi/g	3400*		(0%-20%)			
		Uncert: +/-0.0272		+/-0.0118							
		TPU:		+/-0.0118							
Thallium-208		0.431		0.328	pCi/g	27*		(0%-20%)			
		Uncert: +/-0.078		+/-0.0375							
		TPU:		+/-0.0375							
QC1201288627	LCS										
Actinium-228			U	0.569	pCi/g					03/06/07	10:34
		Uncert: +/-0.765		+/-0.765							
		TPU:		+/-0.765							
Americium-241		23.4		26.5	pCi/g		113	(75%-125%)			
		Uncert: +/-3.15		+/-3.15							
		TPU:		+/-3.15							
Bismuth-212			U	-0.0201	pCi/g						
		Uncert: +/-1.00		+/-1.00							
		TPU:		+/-1.00							
Bismuth-214			U	-0.0978	pCi/g						
		Uncert: +/-0.230		+/-0.230							
		TPU:		+/-0.230							
Cesium-134			U	0.0117	pCi/g						
		Uncert: +/-0.142		+/-0.142							
		TPU:		+/-0.142							
Cesium-137		9.47		10.1	pCi/g		107	(75%-125%)			
		Uncert: +/-0.899		+/-0.899							
		TPU:		+/-0.899							
Cobalt-60		13.6		13.8	pCi/g		102	(75%-125%)			
		Uncert: +/-1.09		+/-1.09							
		TPU:		+/-1.09							

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Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec										
Batch 614271										
Europium-152		U	0.278	pCi/g						
	Uncert:		+/-0.344							
	TPU:		+/-0.344							
Europium-154		U	0.243	pCi/g						
	Uncert:		+/-0.300							
	TPU:		+/-0.300							
Europium-155		U	-0.279	pCi/g						
	Uncert:		+/-0.297							
	TPU:		+/-0.297							
Lead-212		U	0.0605	pCi/g						
	Uncert:		+/-0.165							
	TPU:		+/-0.165							
Lead-214		U	-0.0593	pCi/g						
	Uncert:		+/-0.222							
	TPU:		+/-0.222							
Manganese-54		U	-0.00776	pCi/g						
	Uncert:		+/-0.140							
	TPU:		+/-0.140							
Niobium-94		U	-0.0288	pCi/g						
	Uncert:		+/-0.114							
	TPU:		+/-0.114							
Potassium-40		U	0.170	pCi/g						
	Uncert:		+/-0.533							
	TPU:		+/-0.533							
Radium-226		U	-0.0978	pCi/g			(75%-125%)			
	Uncert:		+/-0.230							
	TPU:		+/-0.230							
Silver-108m		U	0.0732	pCi/g						
	Uncert:		+/-0.129							
	TPU:		+/-0.129							
Thallium-208		U	-0.0278	pCi/g						
	Uncert:		+/-0.125							
	TPU:		+/-0.125							
QC1201288624 MB										
Actinium-228		U	0.0458	pCi/g					03/06/07	12:25
	Uncert:		+/-0.0547							
	TPU:		+/-0.0547							
Americium-241		U	-0.00491	pCi/g						
	Uncert:		+/-0.0131							
	TPU:		+/-0.0131							
Bismuth-212		U	0.0485	pCi/g						
	Uncert:		+/-0.115							
	TPU:		+/-0.115							
Bismuth-214		U	0.0501	pCi/g						
	Uncert:		+/-0.0327							
	TPU:		+/-0.0327							
Cesium-134		U	0.00236	pCi/g						
	Uncert:		+/-0.0146							

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Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec										
Batch	614271									
Cesium-137	TPU:		+/-0.0146							
		U	0.00471	pCi/g						
	Uncert:		+/-0.0145							
Cobalt-60	TPU:		+/-0.0145							
		U	0.00496	pCi/g						
	Uncert:		+/-0.0196							
Europium-152	TPU:		+/-0.0196							
		U	0.0178	pCi/g						
	Uncert:		+/-0.0365							
Europium-154	TPU:		+/-0.0365							
		U	-0.00467	pCi/g						
	Uncert:		+/-0.0456							
Europium-155	TPU:		+/-0.0456							
		U	0.00865	pCi/g						
	Uncert:		+/-0.0249							
Lead-212	TPU:		+/-0.0249							
		U	-0.0173	pCi/g						
	Uncert:		+/-0.0241							
Lead-214	TPU:		+/-0.0241							
		UI	0.00	pCi/g						
	Uncert:		+/-0.0465							
Manganese-54	TPU:		+/-0.0465							
		U	0.0133	pCi/g						
	Uncert:		+/-0.0158							
Niobium-94	TPU:		+/-0.0158							
		U	0.00628	pCi/g						
	Uncert:		+/-0.0139							
Potassium-40	TPU:		+/-0.0139							
		U	0.0693	pCi/g						
	Uncert:		+/-0.199							
Radium-226	TPU:		+/-0.199							
		U	0.0501	pCi/g						
	Uncert:		+/-0.0327							
Silver-108m	TPU:		+/-0.0327							
		U	0.00102	pCi/g						
	Uncert:		+/-0.0122							
Thallium-208	TPU:		+/-0.0122							
		U	0.00736	pCi/g						
	Uncert:		+/-0.0204							
	TPU:		+/-0.0204							
Rad Gas Flow										
Batch	613959									
QC1201287893	181554003 DUP									
Strontium-90	U	0.00352	U	0.00451	pCi/g	0	(0% - 100%)	KSD1	03/06/07	16:15
	Uncert:	+/-0.0252		+/-0.0231						
	TPU:	+/-0.0252		+/-0.0231						
QC1201287895	LCS									
Strontium-90	1.47			1.44	pCi/g	98	(75%-125%)		03/06/07	16:16

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Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gas Flow									
Batch	613959								
			Uncert:						+/-0.102
			TPU:						+/-0.111
QC1201287892	MB								
Strontium-90		U	0.0158	pCi/g					03/06/07 16:15
			Uncert:						+/-0.0212
			TPU:						+/-0.0212
QC1201287894	181554003	MS							
Strontium-90		4.21 U	0.00352	pCi/g		95	(75%-125%)		03/06/07 16:16
			Uncert:						+/-0.0252
			TPU:						+/-0.0252
Batch	613960								
QC1201287897	181554022	DUP							
Strontium-90		U	0.00562	pCi/g	0		(0% - 100%) KSD1		03/06/07 17:33
			Uncert:						+/-0.0278
			TPU:						+/-0.0278
QC1201287899	LCS								
Strontium-90		1.46		pCi/g		104	(75%-125%)		03/06/07 16:32
			Uncert:						+/-0.118
			TPU:						+/-0.150
QC1201287896	MB								
Strontium-90		U	0.0103	pCi/g					03/06/07 17:33
			Uncert:						+/-0.0208
			TPU:						+/-0.0208
QC1201287898	181554022	MS							
Strontium-90		4.74 U	0.00562	pCi/g		95	(75%-125%)		03/06/07 16:32
			Uncert:						+/-0.0278
			TPU:						+/-0.0278
									+/-0.457
Rad Liquid Scintillation									
Batch	613996								
QC1201287991	181554001	DUP							
Iron-55		U	30.3	pCi/g	0		(0% - 100%) MXP1		03/07/07 10:58
			Uncert:						+/-45.6
			TPU:						+/-45.6
QC1201287993	LCS								
Iron-55		1190		pCi/g		87	(75%-125%)		03/07/07 11:31
			Uncert:						+/-74.0
			TPU:						+/-97.9
QC1201287990	MB								
Iron-55		U	24.8	pCi/g					03/07/07 10:42
			Uncert:						+/-38.0
			TPU:						+/-38.1
QC1201287992	181554001	MS							
Iron-55		1220 U	30.3	pCi/g		86	(75%-125%)		03/07/07 11:15
			Uncert:						+/-45.6
			TPU:						+/-45.6
Batch	613999								
QC1201287999	181554001	DUP							
Nickel-63		U	-7.41	pCi/g	0		(0% - 100%) MXP1		03/06/07 15:35
			Uncert:						+/-5.76

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Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Liquid Scintillation									
Batch	613999								
		Uncert:	+/-7.32	+/-7.95					
		TPU:	+/-7.32	+/-7.95					
QC1201288001	LCS								
Nickel-63		567		451	pCi/g	80	(75%-125%)		03/06/07 16:07
		Uncert:		+/-21.4					
		TPU:		+/-26.9					
QC1201287998	MB								
Nickel-63			U	-1.36	pCi/g				03/06/07 15:19
		Uncert:		+/-7.77					
		TPU:		+/-7.77					
QC1201288000	181554001	MS							
Nickel-63		592	U	-7.41	pCi/g	79	(75%-125%)		03/06/07 15:51
		Uncert:		+/-7.32					
		TPU:		+/-7.32					
Batch	614001								
QC1201288003	181554001	DUP							
Technetium-99			U	0.221	pCi/g	0	(0% - 100%)	MXPI	03/03/07 21:48
		Uncert:		+/-0.245					
		TPU:		+/-0.245					
QC1201288005	LCS								
Technetium-99		19.7		19.7	pCi/g	100	(75%-125%)		03/02/07 19:22
		Uncert:		+/-0.445					
		TPU:		+/-0.659					
QC1201288002	MB								
Technetium-99			U	-0.0689	pCi/g				03/03/07 21:17
		Uncert:		+/-0.188					
		TPU:		+/-0.188					
QC1201288004	181554001	MS							
Technetium-99		19.7	U	0.221	pCi/g	99	(75%-125%)		03/02/07 18:35
		Uncert:		+/-0.245					
		TPU:		+/-0.245					
Batch	614003								
QC1201288007	181554014	DUP							
Tritium			U	-0.0488	pCi/g	0	(0% - 100%)	AXD2	03/03/07 03:48
		Uncert:		+/-1.61					
		TPU:		+/-1.61					
QC1201288009	LCS								
Tritium		11.2		12.5	pCi/g	111	(75%-125%)		03/03/07 05:52
		Uncert:		+/-1.71					
		TPU:		+/-1.72					
QC1201288006	MB								
Tritium			U	-0.309	pCi/g				03/03/07 02:45
		Uncert:		+/-1.19					
		TPU:		+/-1.19					
QC1201288008	181554014	MS							
Tritium		11.5	U	-0.0488	pCi/g	105	(75%-125%)		03/03/07 04:50
		Uncert:		+/-1.61					
		TPU:		+/-1.61					
Batch	614005								

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Liquid Scintillation											
Batch	614005										
QC1201288011	181554014	DUP									
Carbon-14		U	0.0483	U	0.0496	pCi/g	0	(0% - 100%)	AXD2	03/05/07	13:58
			Uncert: +/-0.0978		+/-0.0988						
			TPU: +/-0.0978		+/-0.0988						
QC1201288013	LCS										
Carbon-14	6.93				6.78	pCi/g	98	(75%-125%)		03/03/07	14:25
			Uncert: +/-0.203								
			TPU: +/-0.229								
QC1201288010	MB										
Carbon-14				U	-0.0452	pCi/g				03/03/07	11:16
			Uncert: +/-0.0947								
			TPU: +/-0.0947								
QC1201288012	181554014	MS									
Carbon-14	7.05	U	0.0483		6.87	pCi/g	97	(75%-125%)		03/03/07	13:23
			Uncert: +/-0.0978		+/-0.205						
			TPU: +/-0.0978		+/-0.231						

Notes:

The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the 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
- ND Analyte concentration is not detected above the detection limit
- 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

GEL LABORATORIES LLC

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

QC Summary

Workorder: 181554

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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.

EAST PRIMARY PARKING LOT
SURVEY UNIT 9514-0001

RELEASE RECORD

ATTACHMENT 4 (DQA RESULTS)

EAST PRIMARY PARKING LOT
SURVEY UNIT 9514-0001

RELEASE RECORD

ATTACHMENT 4A (PRELIMINARY DATA REVIEW)

Preliminary Data Review Form - Samples for the Sign Test

Survey Unit: 9514 0001
 Survey Unit Name: East Primary Parking Lot
 Classification: 2
 Survey Media: Soil
 Type of Survey: Final Status Survey
 Type of Measurement: Gross Measurement
 Number of Measurements: 15
 Operational DCGL: 1

BASIC STATISTICAL QUANTITIES

	Cs-137	Co-60	Sr-90
Minimum Value:	-1.62E-03	-3.76E-03	-2.05E-02
Maximum Value:	8.44E-01	2.06E-02	6.81E-01
Mean:	1.22E-01	6.21E-03	6.18E-02
Median:	5.04E-02	5.90E-03	1.62E-02
Standard Deviation:	2.25E-01	6.81E-03	1.80E-01
Skew:	3.02E+00	8.05E-01	3.65E+00

RADIONUCLIDE CONCENTRATION (pCi/g)

NUMBER	Cs-137	Co-60	Sr-90	Cs Identified?	Co Identified?	Sr Ided
9514-0001-001F	2.71E-02	2.88E-03	-8.87E-04	YES	NO	NO
9514-0001-002F	6.23E-02	7.82E-03	-2.05E-02	YES	NO	NO
9514-0001-003F	1.57E-02	7.03E-03	3.52E-03	YES	NO	NO
9514-0001-004F	1.05E-01	2.06E-02	4.64E-02	YES	NO	YES
9514-0001-005F	5.04E-02	2.47E-04	9.28E-03	YES	NO	NO
9514-0001-006F	4.02E-02	7.60E-03	6.81E-01	YES	NO	YES
9514-0001-007F	6.41E-02	1.66E-03	1.58E-02	YES	NO	NO
9514-0001-009F	2.49E-02	5.94E-03	2.58E-02	YES	NO	NO
9514-0001-010F	3.59E-02	-3.76E-03	3.30E-02	YES	NO	YES
9514-0001-011F	3.70E-01	1.69E-02	3.26E-02	YES	NO	YES
9514-0001-012F	5.55E-02	5.27E-03	4.59E-02	YES	NO	YES
9514-0001-013F	1.19E-01	5.90E-03	1.65E-02	YES	NO	NO
9514-0001-014F	8.44E-01	0.00E+00	-3.44E-03	YES	NO	NO
9514-0001-015F	-1.62E-03	1.50E-02	-2.01E-02	NO	NO	NO
9514-0001-016F	1.91E-02	0.00E+00	6.55E-03	NO	NO	NO

Performed By: R. Massengill

Date: 3-19-07

Independent Review: [Signature]

Date: 3/19/07

Preliminary Data Review Form - Judgemental Samples

Survey Unit: 9514- 0001
 Survey Unit Name: East Primary Parking Lot
 Classification: 2
 Survey Media: Soil
 Type of Survey: Final Status Survey
 Type of Measurement: Gross Measurement
 Number of Measurements: 4
 Operational DCGL: 1

BASIC STATISTICAL QUANTITIES

	Cs-137	Co-60	Sr-90
Minimum Value:	-8.66E-03	2.19E-02	-2.46E-02
Maximum Value:	5.22E-01	7.97E-02	7.39E-02
Mean:	1.98E-01	4.46E-02	2.23E-02
Median:	2.35E-02	3.16E-02	6.32E-03
Standard Deviation:	2.30E-01	2.33E-02	3.53E-02

RADIONUCLIDE CONCENTRATION (pCi/g)

NUMBER	Cs-137	Cs ID'ed?	Co-60	Co ID'ed	Sr-90	Sr ID'ed	> DCGL
9514-0001-024F	-7.30E-03	NO	3.16E-02	NO	-1.78E-02	NO	NO
9514-0001-025F	-8.96E-04	NO	2.51E-02	NO	-4.16E-03	NO	NO
9514-0001-026F	2.35E-02	YES	2.19E-02	NO	-2.29E-03	NO	NO
9514-0001-027F	1.07E-02	NO	3.15E-02	NO	6.32E-03	NO	NO
9514-0001-028F	1.96E-02	NO	2.25E-02	NO	5.62E-03	NO	NO
9514-0001-029F	-8.66E-03	NO	2.20E-02	NO	-2.46E-02	NO	NO
9514-0001-019J	5.22E-01	YES	7.92E-02	YES	7.39E-02	YES	NO
9514-0001-020J	4.65E-01	YES	5.51E-02	NO	3.46E-02	YES	NO
9514-0001-021J	3.05E-01	YES	5.23E-02	NO	5.01E-02	YES	NO
9514-0001-022J	5.19E-01	YES	6.92E-02	NO	5.46E-02	YES	NO
9514-0001-023J	3.34E-01	YES	7.97E-02	NO	6.94E-02	YES	NO

Performed By: R. Massengill

Date: 3-27-2007

Independent Review: [Signature]

Date: 3/27/07

EAST PRIMARY PARKING LOT
SURVEY UNIT 9514-0001

RELEASE RECORD

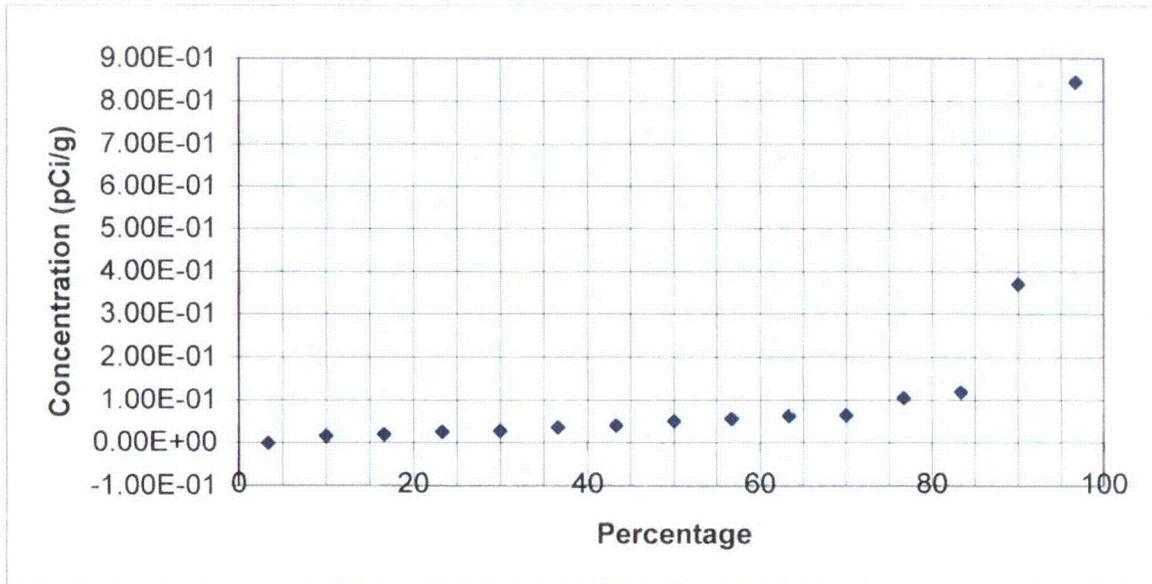
ATTACHMENT 4B (GRAPHICAL REPRESENTATION OF DATA)

Quantile Plot For Cesium - 137

Survey Unit: 9514-0001

Survey Unit Name: East Primary Parking Lot

Mean: 1.22E-01 pCi/g



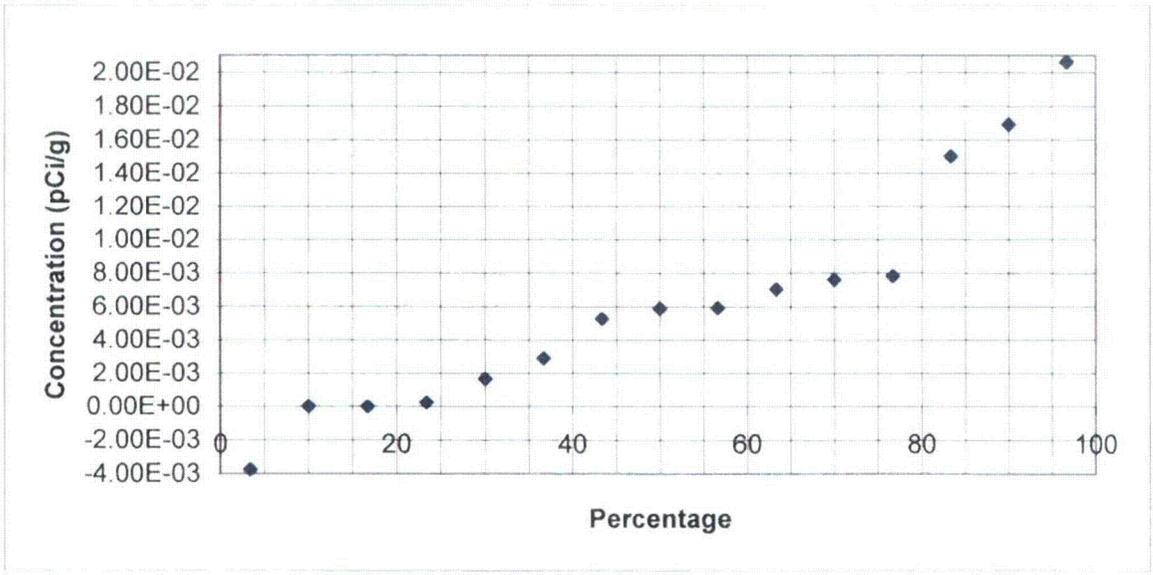
Cs-137	Rank	Percentage
-1.62E-03	1	3 %
1.57E-02	2	10 %
1.91E-02	3	17 %
2.49E-02	4	23 %
2.71E-02	5	30 %
3.59E-02	6	37 %
4.02E-02	7	43 %
5.04E-02	8	50 %
5.55E-02	9	57 %
6.23E-02	10	63 %
6.41E-02	11	70 %
1.05E-01	12	77 %
1.19E-01	13	83 %
3.70E-01	14	90 %
8.44E-01	15	97 %

Prepared By: R. Masserji #
 Reviewed By: [Signature]

Date: 3-14-07
 Date: 3/15/07

Quantile Plot For Cobalt - 60

Survey Unit: 9514-0001
 Survey Unit Name: East Primary Parking Lot
 Mean: 6.21E-03 pCi/g



Co-60	Rank	Percentage
-3.76E-03	1	3 %
0.00E+00	2	10 %
0.00E+00	3	17 %
2.47E-04	4	23 %
1.66E-03	5	30 %
2.88E-03	6	37 %
5.27E-03	7	43 %
5.90E-03	8	50 %
5.94E-03	9	57 %
7.03E-03	10	63 %
7.60E-03	11	70 %
7.82E-03	12	77 %
1.50E-02	13	83 %
1.69E-02	14	90 %
2.06E-02	15	97 %

Prepared By: Robert Massicelli
 Reviewed By: [Signature]

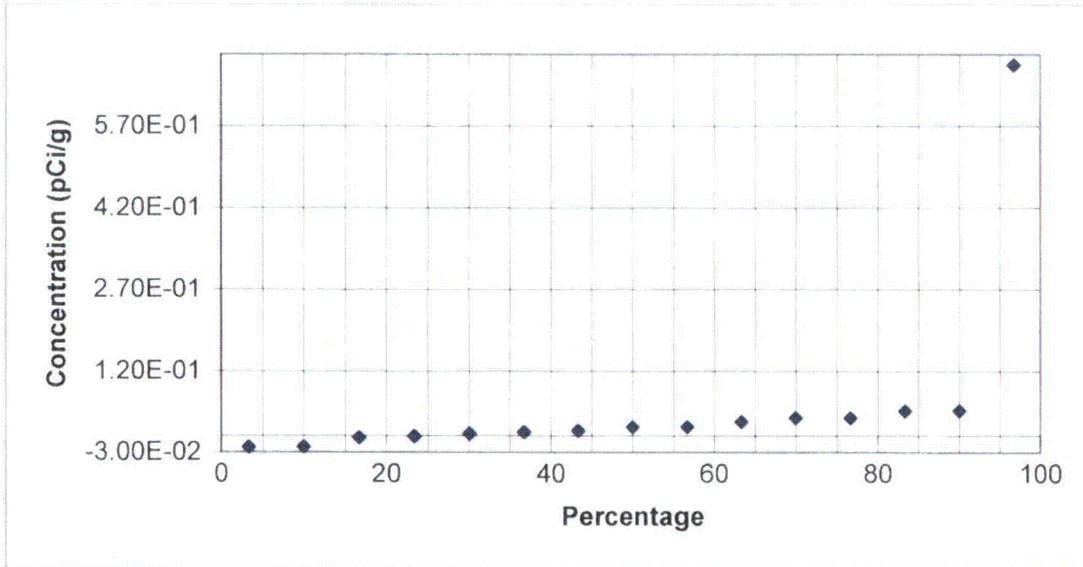
Date: 3-19-07
 Date: 3/19/07

Quantile Plot For Strontium-90

Survey Unit: 9514-0001

Survey Unit Name: East Primary Parking Lot

Mean: 6.18E-02 pCi/g



	Rank	Percentage
-2.05E-02	1	3 %
-2.01E-02	2	10 %
-3.44E-03	3	17 %
-8.87E-04	4	23 %
3.52E-03	5	30 %
6.55E-03	6	37 %
9.28E-03	7	43 %
1.58E-02	8	50 %
1.65E-02	9	57 %
2.58E-02	10	63 %
3.26E-02	11	70 %
3.30E-02	12	77 %
4.59E-02	13	83 %
4.64E-02	14	90 %
6.81E-01	15	97 %

Prepared By: Robert Massesill *RM*

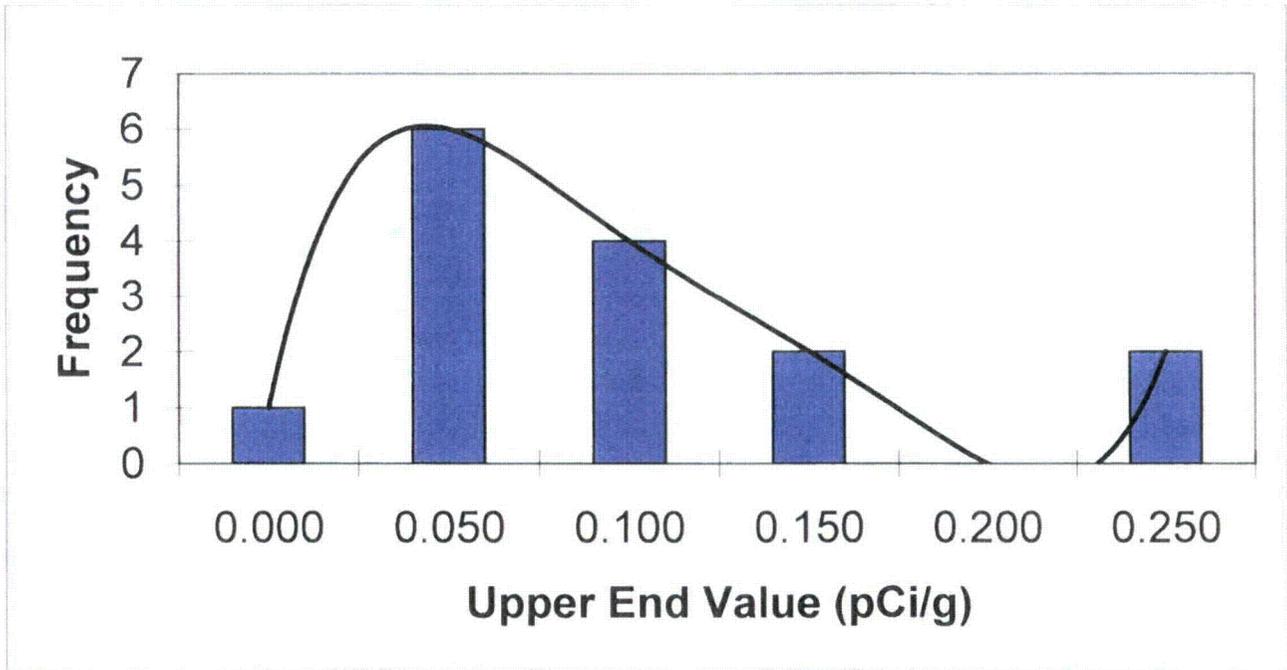
Reviewed By: [Signature]

Date: 3-19-07

Date: 3/19/07

Frequency Plot For Cesium-137

Survey Unit: 9514-0001
 Survey Unit Name: East Primary Parking Lot
 Mean: 0.122 pCi/g



Upper End Value	Observation Frequency	Observation % Frequency
0.000	1	7%
0.050	6	40%
0.100	4	27%
0.150	2	13%
0.200	0	0%
0.250	2	13%
Total	15	100%

Prepared By: *R. Massey*

Date: 3-14-07

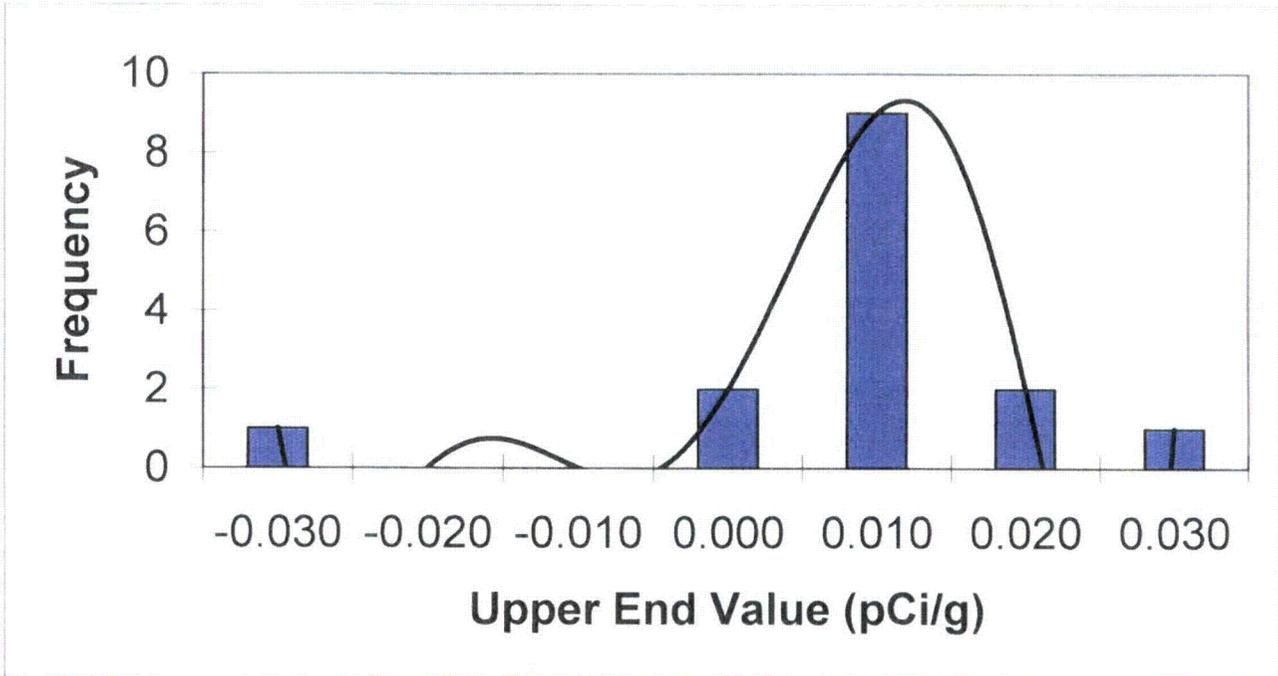
Reviewed By: *[Signature]*

Date: 3/15/07

Frequency Plot For Cobalt-60

Survey Unit: 9514-0001
 Survey Unit Name: East Primary Parking Lot

Mean: 0.006 pCi/g



Upper End Value	Observation Frequency	Observation % Frequency
-0.030	1	7%
-0.020	0	0%
-0.010	0	0%
0.000	2	13%
0.010	9	60%
0.020	2	13%
0.030	1	7%
Total	15	100%

Prepared By: R. Massengill

Date: 3-14-07

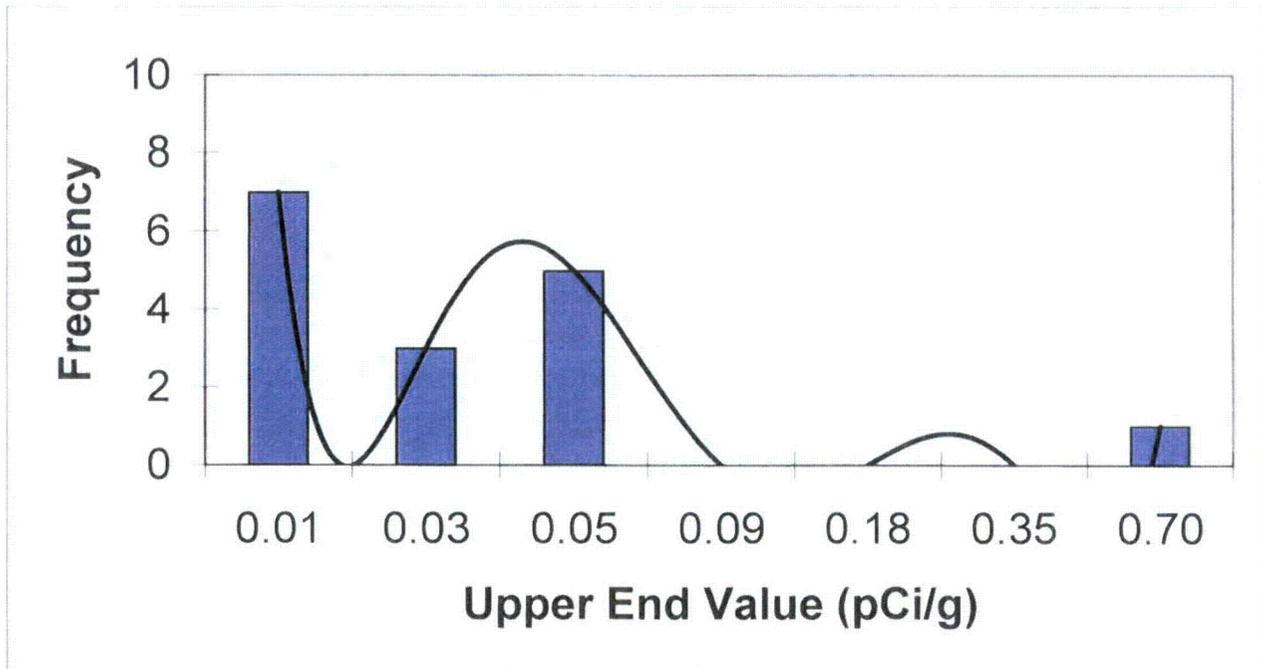
Reviewed By: [Signature]

Date: 3/19/07

Frequency Plot For Sr - 90

Survey Unit: 9514-0001
 Survey Unit Name: East Primary Parking Lot

Mean: 0.062 pCi/g



Upper End Value	Observation Frequency	Observation % Frequency
0.01	7	44%
0.03	3	19%
0.05	5	31%
0.09	0	0%
0.18	0	0%
0.35	0	0%
0.70	1	6%
Total	16	100%

Prepared By: Robert Massengill

Date: 3-27-07

Reviewed By: [Signature]

Date: 3/27/07

EAST PRIMARY PARKING LOT
SURVEY UNIT 9514-0001

RELEASE RECORD

ATTACHMENT 4C (SIGN TEST)

Sign Test Calculation Sheet For Multiple Radionuclides

Survey Unit Number: 9514-0001					
Survey Unit Name: East Primary Parking Lot					
WP&IR#: NA					
Classification : 2		TYPE I (α error):0.05		TYPE I (β error):0.05	
Radionuclides:			Cs-137	Co-60	Sr-90
Operational DCGL (pCi/g):			5.38	2.59	1.05
Results Cs-137	Results Co-60	Results Sr-90	Weighted Sum (W_s)	DCGL-Result	Sign
2.71E-02	2.88E-03	-8.87E-04	5.30E-03	9.95E-01	1
6.23E-02	7.82E-03	-2.05E-02	-4.92E-03	1.00E+00	1
1.57E-02	7.03E-03	3.52E-03	8.98E-03	9.91E-01	1
1.05E-01	2.06E-02	4.64E-02	7.17E-02	9.28E-01	1
5.04E-02	2.47E-04	9.28E-03	1.83E-02	9.82E-01	1
4.02E-02	7.60E-03	6.81E-01	6.59E-01	3.41E-01	1
6.41E-02	1.66E-03	1.58E-02	2.76E-02	9.72E-01	1
2.49E-02	5.94E-03	2.58E-02	3.15E-02	9.69E-01	1
3.59E-02	-3.76E-03	3.30E-02	3.66E-02	9.63E-01	1
3.70E-01	1.69E-02	3.26E-02	1.06E-01	8.94E-01	1
5.55E-02	5.27E-03	4.59E-02	5.61E-02	9.44E-01	1
1.19E-01	5.90E-03	1.65E-02	4.01E-02	9.60E-01	1
8.44E-01	0.00E+00	-3.44E-03	1.54E-01	8.46E-01	1
-1.62E-03	1.50E-02	-2.01E-02	-1.37E-02	1.01E+00	1
1.91E-02	0.00E+00	6.55E-03	9.79E-03	9.90E-01	1
Number of Positive Differences (S+):				15	

Critical Value: 13

Survey Unit: Meets Acceptance Criterion

Performed By: Robert Massesgill *RM*

Date: 3-19-07

Independent Review: *[Signature]*

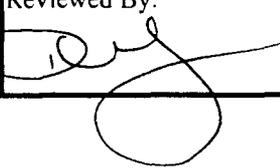
Date: 3/19/07

EAST PRIMARY PARKING LOT
SURVEY UNIT 9514-0001

RELEASE RECORD

ATTACHMENT 4D (QC SPLIT RESULTS)

Split Sample Assessment Form

Survey Area#:	9514	Survey Unit #:	0001	Survey Unit Name: East Primary Parking Lot				
Sample Plan or WPIR#:				NA	SML #:		0	
Sample Description: Comparison of split samples collected from sample measurement location #04 and analyzed using gamma spectroscopy by an off-site vendor laboratory. The standard sample was <u>9514-0001-004F</u> , the comparison sample was <u>9514-0001-004FS</u> .								
STANDARD				COMPARISON				
Radionuclide	Activity Value	Standard Error	Resolution	Agreement Range	Activity Value	Standard Error	Comparison Ratio	Acceptable (Y/N)
Cs-137	1.05E-01	5.00E-02	2	NONE -	1.51E-01	4.97E-02	1.44	NA
Co-60	2.06E-02	2.26E-02	1	NONE -	2.65E-02	3.34E-02	1.29	NA
K-40	1.04E+01	9.92E-01	10	0.6 - 1.66	1.11E+01	1.09E+00	1.07	Y
Comments/Corrective Actions: With regard to the Cs-137 and Co-60 results, guidance for agreement ranges, obtained from USNRC Inspection Procedure 84750, does not address resolution ratios less than 4, therefore, a determination of acceptability for such ratios cannot be made. However, K-40 was found to be present at an acceptable level of agreement. Therefore, no further action is warranted.					Table is provided to show acceptance criteria used to assess split samples.			
					Resolution	Agreement Range		
4	7	0.50	2.00					
8	15	0.60	1.66					
16	50	0.75	1.33					
51	200	0.80	1.25					
> 200		0.85	1.18					
Performed By:			Date:	3-14-07		Reviewed By:		
						Date:	3/15/07	

WPIR – Work Plan and Inspection Record
SML – Sample Measurement Location designation

Split Sample Assessment Form

Survey Area#:	9514	Survey Unit #:	0001	Survey Unit Name: East Primary Parking Lot				
Sample Plan or WPIR#:				NA	SML #:		0	
Sample Description: Comparison of split samples collected from sample measurement location #10 and analyzed using gamma spectroscopy by an off-site vendor laboratory. The standard sample was <u>9514-0001-010E</u> , the comparison sample was <u>9514-0001-010FS</u> .								
STANDARD				COMPARISON				
Radionuclide	Activity Value	Standard Error	Resolution	Agreement Range	Activity Value	Standard Error	Comparison Ratio	Acceptable (Y/N)
Cs-137	3.59E-02	5.60E-03	6	0.5-2	2.86E-02	7.90E-03	0.80	Y
Co-60	-3.76E-03	-1.88E-03	2	NONE -	8.70E-03	5.60E-03	-2.31	NA
K-40	1.06E+01	5.30E+00	2	NONE -	9.85E+00	3.67E-01	0.93	NA
Comments/Corrective Actions: Cs-137 was found to be present at an acceptable level of agreement. Therefore, no further action is warranted. With regard to the Co-60 and K-40 results, guidance for agreement ranges, obtained from USNRC Inspection Procedure 84750, does not address resolution ratios less than 4, therefore, a determination of acceptability for such ratios cannot be made.				Table is provided to show acceptance criteria used to assess split samples.				
								Resolution
4		7		0.50		2.00		
8		15		0.60		1.66		
16		50		0.75		1.33		
51		200		0.80		1.25		
> 200				0.85		1.18		
Performed By: <i>R. Massergill</i>			Date: 3-14-07		Reviewed By: <i>[Signature]</i>		Date: 3/14/07	

WPIR – Work Plan and Inspection Record
SML – Sample Measurement Location designation

EAST PRIMARY PARKING LOT
SURVEY UNIT 9514-0001

RELEASE RECORD

ATTACHMENT 4E (COMPASS DQA WITH POWER CURVE)



DQA Surface Soil Report

Assessment Summary

Site: 9514-0001
Planner(s): rwm
Survey Unit Name: open land area
Report Number: 1
Survey Unit Samples: 15
Reference Area Samples: 0
Test Performed: Sign Test Result: Not Performed
Judgmental Samples: 0 EMC Result: Not Performed
Assessment Conclusion: **Reject Null Hypothesis (Survey Unit PASSES)**

Retrospective Power Curve

